Volume
2

COMPREHENSIVE HANDBOOK OF SOCIAL WORK AND SOCIAL WELFARE

HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT

Volume Editor
Bruce A. Thyer

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Karen M. Sowers **Catherine N. Dulmus**



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This volume is dedicated to social workers seeking useful knowledge to guide social work practice and research from theories of human behavior. Good luck.

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Handbook Preface

The profession of social work spans more than 100 years. Over this period, the profession has changed in scope and depth. Despite the varied functions and methods of our profession, it has always been committed to social justice and the promotion of well-being for all. The profession has made great strides and is experiencing a resurgence of energy, commitment, and advancement as we face new global realities and challenges and embrace new and innovative technologies.

In considering how the field of social work has evolved over the past century with the resulting explosion of new knowledge and technologies, it seemed imperative to create a resource (*Comprehensive Handbook of Social Work and Social Welfare*) that provides a manageable format of information for researchers, clinicians, educators, and students. Our editors at John Wiley & Sons, the volume editors (Ira Colby, William Rowe, Lisa Rapp-Paglicci, Bruce Thyer, and Barbara W. White) and we as editors-in-chief, developed this four-volume handbook to serve as a resource to the profession.

The *Comprehensive Handbook of Social Work and Social Welfare* includes four volumes (*The Profession of Social Work, Human Behavior in the Social Environment, Social Work Practice*, and *Social Policy and Policy Practice*). Each volume editor did an outstanding job of assembling the top social work scholars from around the globe to contribute chapters in their respective areas of expertise. We are enormously grateful to the chapter authors who have contributed their expert knowledge to this work. Each volume includes a Preface written by the respective volume editor(s) that provides a general overview to the volume. In developing the *Comprehensive Handbook*, we attempted to focus on evidence supporting our theoretical underpinnings and our practice interventions across multiple systems. Content was designed to explore areas critically and to present the best available knowledge impacting the well-being of social systems, organizations, individuals, families, groups, and communities. The content is contemporaneous and is reflective of demographic, social, political, and economic current and emerging trends. Authors have paid close attention to contextual factors that shape the profession and will have a future impact on practice. Our profession strives to understand the dimensions of human difference that we value and engage to ensure excellence in practice. These dimensions of diversity are multiple and include factors such as disability, religion, race, culture, sexual orientation, social class, and gender. Each of the volumes addresses how difference characterizes and shapes our profession and our daily practice. New knowledge, technology, and ideas that may have a bearing on contemporary and future social work practice are infused throughout each of the volumes.

We challenged the chapter authors to not only provide an overview of specific content, but to feel free to raise controversial issues and debates within the profession. In the interest of intellectual freedom, many of our chapter authors have done just that in ways that are intriguing and thought provoking. It was our objective to be comprehensive but not encyclopedic. Readers wishing to obtain even greater specificity are encouraged to access works listed in the references for each chapter.

The *Handbook*'s focus on evidence should assist the reader with identifying opportunities to strengthen their own understanding of the amount of science that does or does not support our social work theory and practice. Social work researchers must expand the scientific evidence that supports social work theory and practice as well as informing policy, and enhance their functional scope to overcome the more than 10-year lag between research and practice. We are rightfully proud of our social work history, and its future will be driven by our success in demonstrating that as a profession we can achieve credible and verifiable outcomes across the spectrum of services that utilize our skills. As a profession, we must assure we value science so that even the most vulnerable populations receive the best available services.

We hope that you find this *Handbook* useful. We have endeavored to provide you, the reader and user, with a comprehensive work that will serve as a guide for your own work in this wonderful profession. We welcome your comments and suggestions.

Karen M. Sowers
Catherine N. Dulmus

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An endeavor of this magnitude required the efforts of many people, and we are indebted to their unique and valuable contributions. First, we would like to thank Tracey Belmont, our initial editor at John Wiley & Sons, for recognizing the importance of this project to the profession of social work and for her commitment to making it a reality. It was Tracey's vision that allowed this project to get off the ground, and we are grateful to her. A special thanks to Lisa Gebo, our current editor at John Wiley & Sons, who provided us with expert guidance and technical support to see this project to fruition. Others to thank at John Wiley & Sons include Isabel Pratt and Sweta Gupta who assisted us with all aspects of the contractual and prepublication processes. They were invaluable in assisting with a project of this size, and we are grateful to them.

Most important, we would like to thank the volume editors and contributors who made this *Handbook* a reality. The volume editors did an excellent job of developing their respective volumes. We particularly thank them for their thoughtful selection and recruitment of chapter contributors. The contributor lists for each volume read like a "Who's Who" of social work scholars. We are pleased that each contributor recognized the importance of a seminal piece such as this *Handbook* for the profession of social work and willingly contributed their time and knowledge. We extend a special debt of gratitude to these eminent contributors from around the globe who so graciously and willingly shared their expertise with us. It is the work of these scholars that continues to move our profession forward.

K. M. S.
C. N. D.

Preface

From the beginnings of the professionalization of social work, our discipline has been concerned with the possible applications of valid social and behavioral science theory to the world of practice. As we transitioned from a paraprofessional and apprenticeship model of training to a university-based academic or professional school model, behavioral science theory increasingly became an important component of our curriculum (see Bruno, 1936). We draw on theory for a variety of purposes: to understand normative individual human development across the life span; to understand the etiology and maintenance of dysfunctional behavior, including so-called mental disorders; to assess clients; to provide guidance in the development and application of social work intervention; to help us understand how intervention may work; and to extend these individualistic applications of theory to ever larger systems of human functioning—family life, the dynamics of couples, the interaction of small groups, the behavior of organizations and communities, and of even more complex systems.

We have drawn from an increasingly diverse array of theory. Early adoption of simple classical conditioning theory (e.g., Mateer, 1918; Rovee-Collier, 1986) and psychoanalytic theory gave way to more complex and encompassing derivatives, such as operant learning theory, ego psychology, and attachment theory. The disciplines of mathematics and cybernetics gave us general systems theory, which saw widespread endorsement in the 1970s. Each new edition of Frank Turner's (1974) classic text *Social Work Theory: Interlocking Theoretical Approaches* grew ever plumper as more and more chapters were included that addressed the newest theoretical orientations. Client-centered theory and cognitive-behavioral theory also arose in the 1970s and 1980s, as well as myriad other approaches. Some older readers will remember transactional analysis and neurolinguistic programming, and the contemporary avant-garde among social worker theorists are busy bringing us their interpretations of chaos and complexity theory, also perspectives rich in complex mathematics (as was general systems theory), but fortunately absent such challenging aspects in their social work translations.

Practically speaking, a major stimulus for social work's continued focus on theory rests in the accrediting standards of the Council on Social Work Education (CSWE; 2004, p. 7), which clearly stipulates among the objectives of the professional foundation year of training that students be taught to "use theoretical frameworks supported by empirical evidence to understand and support individual development and behavior across the life span and the interactions among individuals and between individuals and families, groups,

organizations, and communities." The CSWE's *Educational Policies and Accreditation Standards* document goes on to say that required:

> content includes empirically based theories and knowledge that focus on the interactions between and among individuals, groups, societies, and economic systems. It includes theories and knowledge of biological, sociological, cultural, psychological, and spiritual development across the life span; the range of social systems in which people live (individual, family, group, organizational, and community); and the ways social systems promote or deter people in maintaining or achieving health and well-being. (p. 9)

This is quite an ambitious undertaking, especially given the brief time in which students have to earn their BSW or MSW degree! But for the student grumpily scratching her head, asking, "Why do I have to learn all this theory?" the short answer is that the CSWE says that it must be taught, as it is seen as an essential component of the BSW and MSW programs of study.

There are other reasons, of course, why our field has stressed training in theoretical content. Charlotte Towle (1964, p. vii) implied one function that is seldom explicitly articulated: "Certainly a profession does not come of age *until it develops its own theory*" (italics added). As far back as 1915 Abraham Flexner (1915/2001) concluded that social work was not a true profession, in part because of its lack of a solid foundation of indigenous theory, and to some extent we have been trying to remedy this embarrassing deficiency ever since. It must be admitted that to some extent, for the past 90 or so years, our preoccupation with theory, mostly borrowed and little new, has been stimulated by our sense that our discipline is somehow less than fully developed due to our theoretical inadequacies.

The view that possession of a strong theory or theories is crucial to the legitimacy of a discipline is widespread within the scientific community. For example, Simonton (2006, pp. 98, 104) contends, "In the absence of some theoretical framework, there is no way of separating critical findings from trivial results," and "the most scientific of the sciences tend to be the most theoretical. Or more precisely, the hard disciplines possess strong theories that provide a consensus on what are the key concepts and questions that underlie scientific research."

By incorporating theory legitimately into social work education, practice, and research, our claim to being a genuine profession and science-based discipline is seen as enhanced. Sometimes, however, our use of theory in these areas is spurious, misguided, uninformed, and harmful, more akin to the workings of what Feynman (1974) called a "cargo-cult science," a discipline with the outward appearance of being science-based but lacking any true understanding of what is going on as the researchers go through the motions of investigation.

WHAT IS A THEORY?

It is always helpful when addressing a complex subject to begin by defining fundamental terms. Since the subject matter of this volume is theories of *Human Behavior in the Social Environment*, let us begin with the concept of *theory.* Turning to the social work dictionary, we find theory defined as:

> A group of related hypotheses, concepts, and constructs, based on facts and observations, that attempts to explain a particular phenomenon. (Barker, 2003, p. 434)

> Theory consists of an interlocking set of hypotheses that are logically related, and it seeks to explain the inter-relationships among empirical generalizations. (Tripodi, Fellin, & Meyer, 1969, p. 13)
>
> Theories are sets of concepts and constructs that describe and explain natural phenomena. (Tolson, Reid, & Garvin, 1994, p. 21)

So theories are first and foremost efforts to *explain* something, and hence the focus of this book is on some selected theoretical orientations that try to explain the phenomena of human behavior as it develops and is influenced by our social environment, across our life span. Some theories are genuinely comprehensive and provide accounts of human development from birth through death; others are more limited in scope, addressing a circumscribed range of phenomena, such as cognitive development, moral reasoning, psychosexual development, or juvenile delinquency.

> A theory is not a *model of practice*. Theories *explain*, whereas models provide direction to practitioners on what they are *to do*, to wit:
>
> A theory consists essentially of definitions and propositions; it defines, explains, and it predicts, but it does not direct. In contrast a model prescribes what the practitioner is to do. (Reid, 1978, p. 12)
>
> [A] practice model, which consists of prescriptive statements or directives about how intervention *should* be conducted. (Tolson et al., 1994, p. 23, emphasis in original)
>
> A model is derived from a theory but it is put together differently . . . . A model is an analog of a theory, built to solve a problem. It has outcomes. It is a problem-solving device, while a theory may be said to be a hypothesis-generating system. (Loeb, 1959, p. 4)

Task-centered practice and empirical clinical practice are two practice models indigenous to social work, whereas solution-focused treatment is a more interdisciplinary model.

A theory is also not a *perspective on practice*.

> [The ecosystems perspective] is not a model, with prescriptions for addressing cases; it does not draw from a particular theory of personality; it does not specify treatment outcomes. It is often misunderstood as being a treatment model. (Meyer, 1988, p. 275)
>
> The ecosystems idea is a perspective, or a way or looking. It is not a practice model and hence does not tell one what to do. It only directs one's vision toward the complex variables in cases. . . . Once a practitioner has done this, his or her choice of interventions will be guided by the practice theories, knowledge and values the practitioner has. (Meyer, 1995, p. 19)

This ecosystems approach, so widely endorsed within social work, is one example of a perspective on practice, as are the strengths perspective and the person-in-environment perspective.

One's preferred social work theory is not the same as one's philosophy, with the latter being defined as "a discipline that attempts to understand the first principles of all knowledge based primarily on reason and logic, and covering such topics as theology, metaphysics, epistemology, ethics, politics, history, and aesthetics" (Corsini, 2003, p. 720).

Another way of distinguishing behavioral science theory from philosophy is by the former's reliance on empirical observations, for example:

> Social scientific theory addresses what is, not what should be. Theory should not be confused with philosophy or belief. (Rubin & Babbie, 1997, p. 56)

> Theories, models, and systems must fit the facts. Again, that criterion is what separates science from natural philosophy. (Simonton, 2006, pp. 98–99)

Thus, while theories and philosophies share the common element of trying to explain things, theories primarily rely on facts and empirical observations, whereas philosophy places a far greater emphasis on logical reasoning, sometimes irrespective of how philosophically derived conclusions correspond with external reality.

Most of the chapters in this volume clearly relate to highly complex theories, not to practice perspectives, models, or the philosophical underpinnings of professional social work. While these domains are of considerable significance to our field, a strong case may be made that these are considerably different topics, hence they are not addressed here.

SELECTED PHILOSOPHICAL ASSUMPTIONS OF SOCIAL WORK THEORY

Both early and contemporary efforts to locate existing theory that could be applied to social work issues and to develop indigenous theory, created by and for social workers themselves, were motivated by a set of explicit and implicit philosophical assumptions. Quite separate from our discipline's religious, ethical, or value-based foundations, there resides an underlying philosophy shared by most social workers who are concerned with theory, and these views can be broadly labeled our *philosophy of science*. An embrace of a scientific philosophy, as an orientation to conceptualizing social issues and interpersonal problems and in the design and conduct of social work research, is what distinguishes truly professional social work from other forms of altruistic helping. This has moved us from the church, temple, synagogue, community organization, and settlement house into the academy and the university-based nature of contemporary social work education.

The social work historian John Graham (1992, p. 304) described how one charitable agency in Toronto made this transition in the early part of the twentieth century, a transitional experience shared by many social service programs in North America:

> Professional social work . . . had been firmly installed at *The Haven*, and the last vestiges of the benevolent philanthropy of the nineteenth century were abandoned. A growing sense of professional identity moreover demanded a strict delineation between the social worker and the social agency volunteer. Differentiating the former from the latter was a *scientific knowledge base and specialized skills* which were the social worker's alone. (emphasis added)

This shift to a more scientific orientation was given a great shove forward by the critical appraisal of Abraham Flexner (1915/2001) regarding the primitive state of social work education about 90 years ago, an impetus similar to the one he gave medical education

(Flexner, 1910), but with less far-reaching results for social work. However, the language and perspectives of science were not totally alien to the profession of social work in the pre-Flexner era. An early article published in the influential journal *The Charities Review* was titled "A Scientific Basis for Charity" (Wayland, 1894), and a paper presented at the 1889 meeting of the National Conference of Charities and Corrections was titled *Scientific Charity.* A rough outline of U.S. social work organizations with an avowed interest in empirical research and dedicated to promoting a more scientific orientation within the discipline follows:

Science-Friendly Social Service Professional Organizations in the United States

American Social Science Association (1865 to 1909)
—From the ASSA emerged an affiliated organization, the

Conference of Charities (1879 to 1884)
—Which itself evolved into the

National Conference of Charities and Corrections (1884 to 1917)
—Which changed into the

National Conference on Social Work (1917 to 1957)
—Which transmogrified into the

National Conference on Social Welfare (1957 to 1980s, when it expired)
—See also the independent but contemporaneous

Social Work Research Group (1949 to 1956)
—Which was one of the six organizations that merged to form the current

National Association of Social Workers (1956 to present)
—But maintained a recognizable identity as the

NASW's Research Section (1956 to 1963)
—Which changed to the

NASW's Council on Social Work Research (1963 to middle 1960s, when it quietly lapsed, apparently unmourned)
—See also the independent contemporary organization called the

Society for Social Work and Research (1994 to present, www.sswr.org)
—Which arose due to the lack of attention given to research issues by the NASW. The SSWR is now a thriving and vibrant international research organization, with membership open to all social workers.

Note our earliest beginnings in the middle of the 1800s (see Haskell, 1997) in the organization called the American Social Science Association, a lineage that can be traced, with some fits and starts, up to the present.

What is meant by this concept called research? One common definition is deceptively simple: "systematic procedures used in seeking facts or principles" (Barker, 2003, p. 368). The definition of "scientific method" is more informative:

> a set of rigorous procedures used in social and physical research to obtain and interpret facts. The procedures include defining the problem, operationally stating in advance the method for measuring the problem, defining in advance the criteria to be used to reject hypotheses, using measurement instruments

> that have validity and reliability, observing and measuring all the cases or a representative sample of those cases, presenting for public scrutiny the findings and the methods used in accumulating them in such detail as to permit replication, and limiting any conclusions to those elements that are supported by the findings. (p. 383)

There are a handful of points to be expanded upon in this definition, but one worth pointing out is in the first sentence, the clear statement that scientific methods can be applied to both the physical sciences *and* the social sciences. This assumption, of course, is the hallmark of the philosophy of science called *positivism*, established by August Comte in the early nineteenth century. Interestingly, the original label he used to describe the science of human affairs was *social physics*, reflecting his view that the same methods used to study the natural world could be fruitfully applied to study people and their behavior. Understandably, perhaps, social physics never really caught on as a disciplinary title and it was eventually superseded by the now more familiar Comtean term, *sociology.*

Theory, of course, is an integral component of the scientific research enterprise, and when social work adopted a more scientific orientation, theory, perforce, came along as an important part of the package. Scientific theories rest on a bedrock of philosophical foundations, and some of these are outlined, albeit briefly:

Some Selected Philosophical Assumptions of Scientific Theories of Human Behavior

- An acceptance of:
  - *Determinism:* The assumption that all phenomena, including psychosocial ones, have physical causes (as opposed to purely supernatural or metaphysical causes) that are potentially amenable to scientific investigation.
  - *Empiricism:* A preference to rely on evidence gathered systematically through observation or experiment and capable of being replicated (e.g., reproduced and verified) by others, using satisfactory standards of evidence.
  - *Operationalism:* The view that concepts or variables used in scientific research must be definable in terms of identifiable and repeatable operations that can be reliably replicated by others.
  - *Pragmatism:* The view that the meaning of the truth of anything (e.g., a theory) resides in its consequences in action.
  - *Parsimony:* A preference to seriously consider the simpler of the available and adequate explanations of a phenomenon prior to accepting a more complex account. This does *not* imply that the simplest answer is always right.
  - *Positivism:* The belief that valid knowledge about the objective aspects of the world can be arrived at via scientific inquiry.
  - *Progressivism:* The belief that society can be gradually improved through the application of scientific methods and expertise.
  - *Rationalism:* The belief that reason and logic are useful tools for scientific inquiry and that, ultimately, truthful or valid accounts of human behavior will be rational or logically understandable. This is not to say that human beings always behave in a rational or logical manner.

- *Realism:* The point of view that the world has an independent existence apart from the perceptions of the observer. This does not deny the idea that some aspects of our world are socially constructed, but merely asserts that much of it is not a social construction.
- *Scientific skepticism:* The point of view that all scientific claims (e.g., social work intervention X helps clients) should be considered of doubtful validity until substantiated by credible empirical data. The more unusual the claim, the greater the amount of evidence is needed to support it. Scientific skepticism represents the attitude of *doubting claims,* not of *denying* them.

- A denial of:
  - *Anecdotalism:* The belief that anecdotes, by themselves, can constitute credible empirical evidence.
  - *Circular reasoning:* An explanation for human behavior in which causes and effects cannot be distinguished from each other. A circular explanation provides a superficial but logically untenable causal accounting.
  - *Dualism:* The doctrine that the world consists of two different aspects, material matter and immaterial mind. If the mind exists at all, a scientific account places its origin in the brain, arising from physical processes.
  - *Metaphysics:* Explanations involving supernatural, incorporeal, or immaterial entities or factors. This does not deny the possible reality of these influences, only that they cannot be invoked in a proper scientific account of some phenomena.
  - *Nihilism:* The doctrine that all values are baseless and that nothing is known or can be learned. Also known as *radical or Pyrrhonian skepticism.*
  - *Reification:* Attributing reality status to an abstract or hypothetical construct, in the absence of credible evidence of the existence of that construct.
  - *Scientism:* The assumption that the research methods used in the natural sciences can and should be applied to *all* aspects of human affairs (including moral and ethical issues) and provide definitive guidance thereto.
  - *Teleology:* The assumption that humanity, as a species, is striving toward some future goal (e.g., a state of advanced intelligence, spiritual perfection).

The views articulated here can be seen as axiomatic, incapable of definitive proof or of repudiation. In some deep philosophical sense, the assumption of realism cannot be conclusively proven. We might simply exist as a brain in a vat of chemicals, with our world merely a complex and lucid dream, as in the movie *The Matrix.* Similar caveats might be made for the other positions put forward in this list. They are axiomatic, not provable, but be that as it may, these views do form the foundations of contemporary scientific theorizing about human behavior and development across the life span, and virtually all of the perspectives represented in this volume subscribe to a large degree to these views. Of course, legitimate discussion of the merits of these views, or the lack thereof, is also a part of the discourse called philosophy of science, and sincere people of goodwill and keen intellect take issue with some of these axioms all the time. But the existence of debate should not overshadow the fact that these philosophical assumptions remain widely accepted by those scientists who focus on the development of scientific theories of human behavior across the life span.

The distinguished social work educator and theorist Frank Bruno (1936, pp. 192–193) summarized this mainstream scientific orientation in social work:

> Social work holds as its primary axiom that knowledge of human behavior can be acquired and interpreted by the senses and that inferences drawn from such knowledge can be tested by the principles of logic. The difference between the social work of the present and all of the preceding ages is the assumption that human behavior can be understood and is determined by causes that can be explained. We may not at present have a mastery of the methods of understanding human behavior, but any scientific approach to behavior presupposed that it is not in its nature incomprehensible by sensory perceptions and inference therefrom. It follows from such a theory that understanding is the first step in the direction of control and that the various forms of human misery are susceptible not only of amelioration, which our predecessors attempted, but also of prevention or even of elimination, when once their nature is understood.

Some Characteristics of Good Theories

Scientifically oriented theories themselves should possess a number of desirable characteristics in order for them to provide the greatest utility for social work. Obviously, and understandably, these characteristics are closely related to some of the philosophical assumptions undergirding mainstream science outlined on pp. xviii–xix. Here are a few of these features characteristic of a genuinely viable theory of human development across the life span.

They Are Comprehensive

The theory should provide an explanation for a very wide array of human phenomena across the life span. A theory that is focused only on infant and toddler development is not as potentially useful as one whose propositions extend through adolescence. In turn, a theory for human development extending from infancy through senescence is potentially more valuable than one encompassing a more limited span of human existence. Moreover, a good theory should address many different phenomena. One explaining language development only is not as useful as one that accounts for language as well as cognitive development, juvenile delinquency, and so on. Even more challenging is the task of accounting not only for the behavior of individuals, but also for the social interactions we call a family, a small group, an organization, or an even larger entity, and to do so while utilizing a similar set of explanatory or causal factors across all these foci of human activity. Are the principles governing one's economic behavior fundamentally different from those that may account for one's political activities? Or our marital interactions? A theory that explains only family behavioral development but not small group processes is less satisfactory in a scientific sense than one that addresses both aspects of our functioning. And if it can explain both aspects using the *same set of causal mechanisms*, then such a theory is superior to one that relies on one set of principles to account for behavior in one sphere, but invokes a different set of principles to explain actions in another area of human activity.

They Are Cross-Cultural

A theory's origins should not reside in one narrow cultural milieu or cultural background, nor should it be limited to explaining human development for only one or a small number of groups (e.g., people of European ancestry, people of African origins, Hispanics). The database of a good theory should encompass processes and issues that cut across cultures,

races, and ethnicities, invoking explanatory mechanisms of broad applicability that are not specific to one group. A good theory will explain those differences that do appear to exist between different groups of people. The book *Black Rage*, authored by two African American psychiatrists, exemplifies the viewpoint that theoretical principles should apply across groups:

> There is nothing reported in the literature or in the experience of any clinician known to the authors that suggests that black people *function* differently psychologically from anyone else. Black men's mental functioning is governed by the same *rules* as that of any other group of men. Psychological principles understood first in the study of white men are true no matter what the man's color. . . . While the *experiences* of black people in this country are unique, the *principles* of psychological functioning are by definition universal. (Grier & Cobbs, 1968, p. 129, emphasis in original)

A bit earlier, similar views were reported in the book *Black Like Me*, a wonderful example of qualitative inquiry undertaken by a White man who disguised himself and passed for several months while traveling in the Deep South as a Black man: "If you want to know about the sexual morals of the Negro—his practices and ideals—it's no mystery. These are human matters, and the Negro is the same human as the white man" (Griffin, 1960, p. 89).

They Are Heuristic

A good theory is one whose propositions yield testable hypotheses capable of being falsified via scientific analysis (e.g., via descriptive study, correlational investigations, experimentation). Moreover, the really good theories are those that not only produce testable, directional, and specific hypotheses, but are those that induce researchers to actually conduct research testing that theory. In other words, theories that tend to produce more good research are generally seen as superior to those that do not. Theories that only stimulate lots of talk or writing, in the absence of generating new empirical research, are less valuable scientifically in applied fields such as social work.

They Are Falsifiable

A good theory is one capable of being proved incorrect or false. The more specific and directional the hypotheses (e.g., predictions) a theory yields, the more testable it is. In general, when the results of a study are in the direction predicted by a hypothesis derived from some theory of human development, the most we can claim is that the theory was supported or corroborated. Only very rarely can we assert that the theory has been proven to be true. The reason is that although Theory A may have predicted Outcome Z from a given study, and Z is obtained, it is very possible that Theory B, Theory C, . . . Theory *n* might all have predicted Outcome Z. Thus the same study could be said to support *all* theories predicting Outcome Z, not just Theory A. However, if Theory A predicts Outcome Z (but not Outcome Y), and Outcome Y is found, then it is legitimate to claim that Theory A has been weakened, or perhaps even, depending on the magnitude of the evidence, disconfirmed. In sum, the results of scientific research tend to shout *No!* rather loudly, but only whisper *yes*. And even then hesitantly. The more Theory A is corroborated by research results, the more it can be said to have survived efforts to falsify it, and our confidence in its validity grows. But this is tempered by the knowledge that a new study, better designed and more comprehensive in scope, may topple Theory A in favor of some new perspective

that accounts for all of the phenomena explained by Theory A, as well as a whole lot more, and perhaps reconciles some problems present in A's account.

They Are Rational

A good theory is one that generates propositions that do not contradict each other, and its derivative propositions, concepts, hypotheses, predictions, and laws should all conform to the principles of scientific reasoning and logic. Requiring that a theory be rational does not assure that the conclusions derived from that theory will be empirically valid, but it is almost a certainty that illogical conclusions cannot be true. And that all valid conclusions or observations about the world have the potential (at least) of being rationally explicable. As noted by Polansky (1975, p. 20), "If deductions made 'logically' from theory do not fit what we observe about our world, we are quite justified in questioning the system of logic—as well as the theory."

They Are Parsimonious

A good theory is parsimonious, meaning that it adequately explains a large proportion of human phenomena using the fewest number of theoretical principles. Abstractly, a theory that uses five major principles to explain some aspect of human development, and does a good job doing so, is to be preferred over one that needs 20 major theoretical principles to explain the same thing. Corsini (2003, p. 696) defines parsimony as "explaining a phenomenon in the simplest manner and with the fewest terms, in keeping hypotheses and explanations simple," but I would add here the important caveat that these simple explanations must provide a *sufficient* account. A mere preference for simplicity is not what parsimony is all about—otherwise we could explain everything by saying that God did it! But science deals with naturalistic accounts, not supernatural ones. An elegantly simple theory that failed to provide an adequate explanation would not conform to this principle of parsimony.

Over 100 years ago the distinguished psychologist Lloyd Morgan (1894, p. 54) extended this preference for parsimony in psychological theorizing a bit further, in postulating what became known as Morgan's canon of parsimony: "In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of one which stands lower in the psychological scale." Colloquially this preference for parsimonious accounts is expressed in the dictum "When you hear hoofbeats, think horses, not zebras." If a person's delusional ravings are accompanied a very high fever or preceded by the recent ingestion of hallucinogenic drugs, a competent psychiatrist is more likely to ascribe the bizarre speech to the fever or drugs, rather than assume the person has experienced a so-called psychotic break requiring immediate treatment with powerful antipsychotic drugs.

The social work educator Norman Polansky (1975, p. 27) addressed this principle in his early research textbook:

> If a theory is to simplify life, it should fit the rule of parsimony. Parsimony in theory means that one should add propositions grudgingly. The same thought is imbedded in the principle called "Occam's razor": "That entities should not be multiplied beyond necessity." . . . Before proposing a new concept or a new law, one asks: Cannot this discovery be explained by theory already in existence? Is there not an existing law which might be modified to embrace not only the new finding but also what is previously known? Occam's razor prunes toward the magnificent terseness and pyramidal shape which are the marks of parsimonious theory.

They Are Practical

A good theory for social work practice first and foremost should be generative of genuinely effective methods of psychosocial intervention. A theory that does not provide guidance on how to assess and intervene with clients is, quite literally, a useless theory, a theory without uses. Apart from producing assessment and treatment methods, evaluative research should demonstrate that these interventions really do help clients improve their lives! A theory that yields methods of assessment and intervention that properly designed investigations reveal to not be effective is similarly a useless theory. Perhaps even more damaging, because it provides a patina of respectability (after all, it does convey clear applications to practice, which is a characteristic of a good theory), the theory and its ineffective practices may persist for many decades as a widely accepted approach to social care, absent any real impacts on improving the human condition at the individual or macro levels. Most damaging of all are theories that yield interventions that are actively harmful to clients. This all too common circumstance, the consequences of harmful theories, is further discussed in the final chapter of this volume.

I invite the reader to examine the following chapters on human behavior theory in light of the philosophical principles described in these prefatory remarks. Other writers have devised various formal rating scales by which social work theories can be critically evaluated (see Dixon et al., 1992), but I will not burden the reader with such a task. Instead, periodically ask yourself a few simple questions about each chapter after you read it, questions such as the following:

- Does this theory cover a wide range of developmental phenomena across the life span?
- Does this theory embrace human behavior at the micro, mezzo, and macro levels?
- Does this theory make sense, logically, and is it consistent with my own lived experience?
- Is this theory composed of a limited number of fundamental principles, or it is more complex than it needs to be to do a good job of explaining things?
- Has this theory generated any assessment or intervention methods for social work practice?
- If it has, have these methods been critically examined and tested via research studies?
- If it has, have these methods been shown to be genuinely helpful in improving clients' lives?

If you do this you may find yourself appraising some of these approaches more favorably than others. This is a good thing: to get interested in a particular theoretical orientation and to be inspired to learn more about it, especially the evidentiary foundations of the approach. In time you may find yourself actually using legitimate theory in your own practice as a professional social worker, to help you conceptualize client problems, to assist in your assessment process, and to deliver interventions. This integration of theory and practice is one of the hallmarks of a fully developed professional, and it is toward this end that I and the other authors contributing to this volume dedicate this work. But please, be discriminating in your personal adoption of theory, as an awful lot of it out there is inaccurate or useless, if not actively harmful.

BRUCE A. THYER

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Contributors

Michael J. Austin, PhD
School of Social Welfare
University of California—Berkeley
Berkeley, California

Stephanie Berzin, PhD
Graduate School of Social Work
Boston College
Chestnut Hill, Massachusetts

Frederick P. Buttell, PhD, LCSW
School of Social Work
Tulane University
New Orleans, Louisiana

Michelle Mohr Carney, PhD
School of Social Work
University of Georgia
Athens, Georgia

Martha Morrison Dore, PhD
The Guidance Center, Inc.
Cambridge, Massachusetts

Jacob L. Gewirtz, PhD
Department of Psychology
Florida International University
Miami, Florida

Eda Goldstein, DSW
School of Social Work
New York University
New York, New York

Roberta R. Greene, PhD
School of Social Work
University of Texas—Austin
Austin, Texas

Michael J. Holosko, PhD
School of Social Work
University of Georgia
Athens, Georgia

Craig Winston LeCroy, PhD
School of Social Work—Tucson Component
Arizona State University
Tucson, Arizona

Rebecca J. Macy, PhD
School of Social Work
University of North Carolina
Chapel Hill, North Carolina

Mark A. Mattaini, DSW, ACSW
Jane Addams College of Social Work
University of Illinois at Chicago
Chicago, Illinois

Paula S. Nurius, PhD
School of Social Work
University of Washington
Seattle, Washington

Joseph Palombo, MA
Institute for Clinical Social Work
Chicago, Illinois

Laura J. Pankow, PhD
South Bend, Indiana

Martha Pelaez, PhD
Department of Educational and
Psychological Studies
College of Education
Florida International University
Miami, Florida

Ra'Shanda S. Robinson, MSW
School of Social Work
University of Georgia
Athens, Georgia

Dominique Roe-Sepowitz, PhD
School of Social Work
Arizona State University
Phoenix, Arizona

Tammie Ronen, PhD
The Bob Shapell School of Social Work
Tel-Aviv University
Ramat-Aviv, Tel-Aviv, Israel

Lorraine Moya Salas, PhD
School of Social Work
Arizona State University
Phoenix, Arizona

Jeffrey Skinner, MSSW
School of Social Work
University of Georgia
Athens, Georgia

Susan I. Stone, PhD
School of Social Welfare
University of California—Berkeley
Berkeley, California

Sarah Taylor, MSW
School of Social Welfare
University of California—Berkeley
Berkeley, California

Bruce A. Thyer, PhD
College of Social Work
Florida State University
Tallahassee, Florida

John E. Tropman, PhD
School of Social Work
University of Michigan
Ann Arbor, Michigan

Stephen E. Wong, PhD
School of Social Work
Florida International University
Miami, Florida

Chapter 1

HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT: EXPLORING CONCEPTUAL FOUNDATIONS

Susan I. Stone, Stephanie Berzin, Sarah Taylor, and Michael J. Austin

Social and behavioral science theories represent a key source of knowledge for social work practice. One core function of social work scholarship is to select, synthesize, and translate this knowledge for specific use within the profession, including research, practice, and social work education. Because these theories have been generated for purposes that are oftentimes loosely related to goals and needs of the social work profession, a complex set of factors shape the "borrowing" process, including assessments of fit between theories and professional values, their evidentiary base, and their applicability and transportability to practice.

There is surprisingly little social work literature explicitly addressing theory selection, synthesis, and translation in terms of constructs related to human behavior and development, environmental influences, and their interrelationship (Zaparanick & Wodarski, 2004). Indirect evidence related to theory *selection* can be culled from research on the HB&SE (human behavior and the social environment) curriculum and related Council on Social Work Education (CSWE) standards. Content analyses of HB&SE syllabi indicate considerable heterogeneity in theoretical approaches utilized as well as overrepresentation of explanatory theory related to human behavior and development relative to theories related to the social environment (Taylor, Austin, & Mulroy, 2004; Taylor, Mulroy, & Austin, 2004). While CSWE standards call for selection of theoretical content related to "reciprocal relationships" between human behavior and social environments, there are few theoretical accounts that elaborate the nature and quality of these relationships (see Wakefield, 1996a, 1996b), though this gap is characteristic of the behavioral and social sciences in general (Lewis, 2000). Even if there was a general consensus around theory selection, the processes related to synthesis and translation still need elaboration.

This volume summarizes explanatory theories that are (a) related to human behavior and development in the social environment and (b) can be used to inform social work practice. It represents, in many ways, an important attempt at selection, synthesis (summarizing core theoretical content, assessments of the evidentiary bases of theories), and translation (assessments of applicability to practice). While an introductory chapter to a volume such as this might attempt to classify, compare, and/or integrate the various theories presented, there would need to be shared understanding and definitions of cross-cutting dimensions. We

are skeptical that these shared understandings exist. Instead, our goal is to complement the theories summarized in this volume by describing key scholarly and professional dilemmas related to theorizing about the interrelationship between human behavior and the social environment. Because these dilemmas contribute to substantial debate about the focus and scope of the HB&SE curriculum (Bloom & Klein, 1996), we explicitly discuss potential instructional applications.

In short, this chapter includes issues and discussion of concepts that have implications for social work education as well as research related to the profession. As a general strategy, the chapter approaches constructs related to human behavior and the social environment from multiple perspectives: historical, conceptual and empirical, and pedagogical. It is designed to generate and engage fellow scholars in discussion of the critical issues that emerge from the utilization of social and behavioral science.

The chapter is organized into the following sections: (a) a discussion of the role of theory in social work research and practice, especially as it relates to the HB&SE knowledge base as well as enduring tensions related to the profession; (b) highlights of the historical evolution of the HB&SE curriculum as reflected in curriculum standards developed by CSWE and related debates; (c) presentation of selected frameworks that link human behavior with the social environment and can facilitate translation of HB&SE knowledge into practice; (d) pedagogical applications that emerge from these frameworks; (e) suggestions for reframing HB&SE; and (f) conclusions and implications for further dialogue.

SCHOLARLY AND PROFESSIONAL DILEMMAS RELATED TO HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT

A hallmark of the social work profession is its long-standing contextualist orientation (Weick, 1999), in which person-environment perspectives serve as core components of the social work knowledge base. At the same time, there has been considerable debate about specific elaboration of the relationship between human development, behavior, and the social environment (e.g., Bloom & Klein, 1996). We briefly sketch these debates as they relate to four overarching themes: (1) development of the social work knowledge base, (2) the utility of midrange (domain-specific) theory, (3) appropriate specification of units of analysis (individual, group, community, etc.), and (4) the nature of the relationship between persons and their environments.

Development of the Social Work Knowledge Base

Some social work scholars (Goldstein, 1990) use a three-part model of explicit and implicit theories, accumulated research, and practice-related knowledge (e.g., skills, practice wisdom). This model suggests that optimal knowledge development occurs when there is a seamless interconnection between theory, research, and practice. Although there are a variety of factors relevant to linkages between theory, research, and practice, some relate knowledge development in the social sciences in general, and others to the social work profession in particular.

Theory-Research Linkages

Philosophers of science generally agree that formal theory building and testing is uneven and nonlinear, often serendipitous, related to historical and social contextual factors, and dependent on methodological innovation (Committee on Scientific Principles in Education Research, 2001). Because public support for research also influences the extent to and speed with which theory is developed, limited support for social work research represents an important constraint.

Different mechanisms underlie the linkages between theory, research, and practice, and it is important to underscore key differences between basic and applied research processes. For example, strategies used to test formal theory (theory-research links) may, at times, be quite distinct from those used to assess the efficacy and effectiveness of practice (research-practice links; see Pedhazur & Schmelkin, 1991).

Theory-Practice Linkages

Because formal theories are necessarily abstract, a complex set of steps may be necessary to link theoretical concepts to practice techniques and principles. Because the social work profession generally borrows formal theories from other social science disciplines, it is reasonable to expect some degree of mismatch between available theory and practice applications. For these reasons, scholars from other helping professions (e.g., education and nursing) argue for the development and use (and development) of midrange (also referred to as domain-specific) theory because of its potential translatability into practice (Committee on Scientific Principles in Education Research, 2001; McKenna, 1997).

Due to the heterogeneity of goals related to theory, research, and practice, the development of the social work knowledge base is complex. Some scholars find little use for the theory-research-practice model and argue that theoretical and empirical knowledge are essentially incompatible or, at best, loosely coupled with practice knowledge (Goldstein, 1990; Weick, 1999). More recently, Thyer (2001) documented fundamental misunderstandings about research processes unique to formal theory testing and a tendency toward the overvaluation of theory building in relationship to other research endeavors that support the development of social work practice.

It is notable that these sources of tension within social work stand in marked contrast to recent appraisals of knowledge development within the professions of education and nursing. In general, these appraisals reflect a shared understanding of (a) the current state of the relevant knowledge base, (b) the types of theory building and integration necessary to further the profession, (c) critical areas for research, and (d) strategies that focus on particularly promising midrange theories that promote linkages to practice (Committee on Scientific Principles in Education Research, 2001; McKenna, 1997).

The lack of consensus about the conceptual foundation of the relationship between human behavior and the social environment provides the context of this chapter. Each chapter in this volume traces the development of a particular midrange theory in relationship to empirical support and applicability to practice. This approach to explicating an array of explanatory theories raises larger sets of questions about their salience for knowledge development and utilization. For example, is there a common knowledge base related to

human behavior and the social environment? If there is, to what extent do we agree, as a profession, that our current theoretical coverage is complete?

The Utility of Midrange Theory

Midrange theory may be particularly amenable to translation into practice principles (Committee on Scientific Principles in Education Research, 2001; McKenna, 1997), given that constructs are often quite tightly coupled with empirical findings. A key limitation of midrange theory is that it is generally designed to explain narrow attributes (e.g., single domains or dimensions) of more complex phenomena. Relatedly, these theories are often overlapping. In this volume, for example, there are multiple conceptualizations of human development as well as how and what levels of the social environment shape behavior.

Turner (1990) argues that social work needs a diverse set of theoretical accounts to capture the complex and ever-changing nature of persons, the settings in which they are embedded, and the realities of practice, but this position poses several dilemmas. From the perspective of the social sciences, a proliferation of theory suggests the need for pruning and/or synthesis (Merton, 1949). Synthesis and integration clearly are complex processes—especially in relation to the concepts underlying human behavior and the social environment. Drawing on the work of the philosopher David Pepper, Goldhaber (2000) argues that alternative conceptualizations of human development (genetic, psychodynamic) emerge from different explanatory mechanisms or "root metaphors" that make them fundamentally incompatible and, in some respects, virtually incomparable. A more pluralistic perspective (Cowan, 1988) suggests that alternative conceptualizations are essential to explain different domains of functioning or subgroups of persons. In this case, the key task would be to match particular theories with appropriate subdomains or subgroups of persons.

Reliance on midrange theory, moreover, can limit one's capacity to conceptualize the attributes of both persons and environments simultaneously. For example, how do psychodynamic theories incorporate concepts related to the social environment? Few would argue that our knowledge base is skewed toward individualized versus contextualized accounts of human behavior. Others raise concerns about the lack of theoretical accounts of how the social environment impacts families and groups (Mulroy & Austin, 2004). Indeed, this volume reflects this tension, including only a few chapters on explanatory theory (e.g., organizational theory) explicitly focused on the social environment as the primary focus of analysis.

In short, there are two issues here. The first is the extent to which multiple theoretical accounts are understood, managed, and organized. The second is consideration of the costs and benefits of utilizing particular midrange theory, especially in terms of considering which attributes of persons and/or environments are brought to the forefront, which are left in the background, and which are not included in the account.

Issues Related to Levels of Analysis

The use of multiple levels of analysis (e.g., individual, family, group, community, organization, etc.) raises several theoretical and methodological issues. Social work's long-standing focus on contextualized accounts of human behavior suggests at least two levels of analysis: person and environment. There are multiple levels of analysis within persons (e.g.,

genetic, psychological) and environments (e.g., families, groups, institutions, macrosocial forces). A rich literature documents the theoretical and methodological dilemmas associated with accurate specification of units of analysis, the relationships between and among varying units of analysis, as well as various sources of aggregation and disaggregation bias (Cicchetti & Dawson, 2002; Edward, 1979). Alternative conceptions of poverty reduction strategies, for example, may best be understood as a reflection of different levels of analysis (e.g., cultural versus structural accounts of poverty; Popple & Leighninger, 2002).

Conceptualizing the process of selecting multiple units of analysis is highly salient to social work knowledge development. On the one hand, these processes are very relevant to maximizing ecological and external validity. In essence, these processes aid in evaluating the extent to which a particular explanatory theory is universal or relevant only to individuals or subgroups of individuals (Runyan, 1988). Unit sensitivity is also critical to identifying and, in the end, selecting appropriate points of intervention.

Characterizing the Nature of the Relationship between Persons and Their Environments

It should not be surprising that tensions exist when conceptualizing the complex nature and consequences of interactions between humans and their social environments. For example, Wakefield's (1996a, 1996b) critique of the ecosystemic perspective and subsequent interchanges with Alex Gitterman (1996) capture the central theoretical challenges inherent in this endeavor, namely, the need for frameworks that can capture the complexity of person-environment interaction (Gitterman), and the need to use midrange theory to explain and/or derive practice applications for such social problems as mental illness and domestic violence (Wakefield).

At the very minimum, there are multiple ways to conceptualize the nature of human behavior in its environmental context. For example, Messick (1983), writing from the perspective of child psychopathology, argues that there are at least three perspectives needed to understand persons in context: (1) *person as context,* where the attributes of persons themselves shape their behavior and development; (2) *person of context,* where development and behavior are shaped by the settings in which a person is embedded; and (3) *person in context,* which elaborates on the developmental or situational constraints under which a particular behavior or set of behaviors occurs. These considerations are useful in terms of locating the focus of a particular explanatory theory. For example, psychodynamic perspectives generally address the person-as-context, social learning perspectives are particularly salient to understanding the person-in-context, and political-economic theory provides explanations for the choices people make based on the situations in which they find themselves.

In social work and other social sciences, there is growing attention being given to the so-called reciprocal relationships between persons and their environments, that is, the extent to which both are mutually influential and in what ways. However, there are two important dilemmas here. The first relates to the definition of "reciprocity" and how best to measure and appropriately analyze it (Lewis, 2000). Second, it is unclear how to link individual and small group functioning to larger macro forces (economic, historical) beyond more proximal environmental settings (e.g., families; Stone, 2004). This theoretical gap may be

particularly germane to social work's concern for social justice and the ways in which larger institutions and economic forces constrain individual life opportunities.

In the remaining sections of this chapter, we trace the evolution of the HB&SE curriculum through periodically updated CSWE standards and the ongoing curriculum debates. In response to these intellectual dilemmas, we present various approaches to address them. The first dilemma relates to the attempt to link human behavior to the social environment and how it informs their "reciprocal interaction." Second, in response to concern about the lack of substantive attention to theories focusing on the larger social environment, we present a framework that delineates key cross-cutting concepts. Third, we highlight conceptual frameworks that may facilitate translation of HB&SE knowledge into social work practice. Because the scope, focus, and content of the HBSE curriculum generates such divergent views, we include illustrations of instructional applications as well as the identification of implications for practice.

DEVELOPMENT OF THE HUMAN BEHAVIOR AND SOCIAL ENVIRONMENT CONSTRUCT

General Background

Although courses on human behavior and the social environment have always played a key role in the social work curriculum, they have undergone substantive change over time, from a primary focus on human behavior and development heavily influenced by psychoanalytic theory to a focus informed by ecological perspectives. This expansion reflects a confluence of historical factors and changes in social work scholarship and CSWE standards.

Key historical events of the 1960s and 1970s, including the civil rights movement, the War on Poverty, and the Vietnam War, coincided with the inclusion of varying perspectives on human development (including behavioral and social learning traditions) and theories of race, gender, and political economy. More recently, and related to theoretical and empirical advances in biological and neurobehavioral sciences, content related to genetics and the biological bases of human behavior gained increasing attention (Mohan, 1980).

A simultaneous shift occurred in pedagogical strategy. In the 1970s, nearly 66% of BSW-level HB&SE courses were taught outside of social work departments (e.g., in education, psychology, or sociology; Gibbs, 1986). By the 1980s, fully 90% were being taught within social work departments. Additionally, the focus and titles of HB&SE courses changed over time. The content shifted from psychoanalytic theory to human development across the life span, as well as from one foundation HB&SE course to two courses, one focusing on human behavior and development and the other on the social environment (in many, but not all, social work programs). As a result, titles of foundation courses changed from Human Development or Human Growth and Development to Human Behavior *in* the Social Environment to Human Behavior *and* the Social Environment.

These trends reflect the scope and complexity of the theoretical underpinnings of HB&SE courses. Levande (1987) argued that this expansion created an "add and stir" approach to teaching HB&SE, especially when introducing the demographics of race, gender, ability, and sexual orientation along with an array of social problems.

Council on Social Work Education Standards

In 1969 (revised in 1971), the Council on Social Work Education outlined the content for courses on human behavior and the social environment. This first set of standards on human behavior emphasized the importance of knowledge related to multiple units of analysis (the individual, group, organizational, institutional, and cultural contexts) that impact human behavior by drawing on theories from the biological, psychological, and social sciences. The CSWE acknowledged that many relevant theories existed for possible curricular inclusion. Irrespective of the wide range of theories and systems of knowledge, students were required to master the relevant content, critically assess the content's application to social work practice, and identify implications for theory development in social work.

In the second accreditation manual (published in 1984), standards continued to require a focus on the individual's interactions with families, groups, organizations, and communities, but changed to reflect an emphasis on how individuals develop over the life span (CSWE, 1984). In addition to reemphasizing the importance of theory from the biological, psychological, and social sciences, the standards called for more attention to the differences between theories, as well as their interrelationships, especially those that could inform the "reciprocal relationship" between human behavior and the social environment (reflecting biological, social, psychological, and cultural systems). A new emphasis was included that called for content on diversity related to ethnic background, race, class, sexual orientation, and culture. The standards continued to emphasize that the curriculum should reflect the goals of individual programs and the ways HB&SE content informs social work practice.

The third set of policies and standards emphasized the need to explicate the values embedded within theories (CSWE, 1994). In addition to requiring content on the interactions among biological, psychological, social, and cultural systems and their reciprocal relationship with human behavior, new standards required attention to the impact of social and economic forces and larger social institutions on individuals and how these systems impact health and well-being. Finally, there was a renewed emphasis on the evaluation of theories and their application to social work practice.

The most recent HB&SE accreditation standards (CSWE, 2001, p. 35; amended in 2002) have been reduced to the following guidelines:

> Social work education programs provide content on the reciprocal relationships between human behavior and social environments. Content includes empirically based theories and knowledge that focus on the interactions between and among individuals, groups, societies, and economic systems. It includes theories and knowledge of biological, sociological, cultural, psychological, and spiritual development across the life span; the range of social systems in which people live (individual, family, group, organizational, and community); and the ways social systems promote or deter people in maintaining or achieving health and well-being.

In summary, over the past 30 years, CSWE curriculum standards were refined and changed four times. The standards consistently emphasized theories related to biological, psychological, and social development within multiple contexts (i.e., individual, family, group, organizational, institutional, and cultural). They also emphasized the importance of theory for practice. While these elements remained consistent, key changes included

an emphasis on (a) the reciprocal relationship between human behavior and the social environment, (b) life course development, (c) cultural and spiritual dimensions of HB&SE, and (d) the role of social systems in promoting or deterring individual health and well-being. Notably, the CSWE removed language in the standards related to the roles of students in evaluating and developing theory (which are often seen as doctoral-level expectations).

Empirical Perspectives

While HB&SE courses ostensibly reflect the core theoretical knowledge for the profession, there has been very little research on HB&SE content as reflected in course outlines or textbooks or its role in social work education. One way to assess HB&SE content is to review the way courses and the most frequently cited textbooks are structured. Recent research on HB&SE textbooks and course outlines reveals the lack of agreement among social work educators about what constitutes HB&SE (Taylor, Austin, et al., 2004; Taylor, Mulroy, et al., 2004). These two studies consisted of a detailed review of 14 HB&SE textbooks (most frequently used in foundation courses for MSW students) and an analysis of 117 HB&SE course outlines submitted by 60 schools of social work in response to a request sent in 2003.

In both studies, the focal point for analysis was the most current CSWE (2001) curriculum statement on HB&SE content. The studies built on previous research, primarily Brooks (1986) and Farley, Smith, Boyle, and Ronnau (2002). Farley et al. evaluated 116 HB&SE course outlines used in 61 MSW programs during the 1998–1999 academic year and found that HB&SE courses reflected a lack of agreement about core content and theoretical constructs.

Variation in HB&SE courses in social work programs mirror continuing debates about how social and behavioral science theories should inform social work practice (Brooks, 1986; Farley et al., 2002; Mailick & Vigilante, 1987). The debate focuses primary attention either on the behavior of individuals or on the impact of the social environment on the behavior of individuals and families. Since the "rise and fall" of the psychoanalytic perspective (Mohan, 1980, p. 26), social work educators have searched for ways to include more content on the social environment as well as alternative theoretical constructs, especially as they seek to balance the concepts of pathology with those of well-being. According to Levande (1987, p. 59), this process "can result in HBSE content that is contradictory [and] fragmented."

Based on the current CSWE (2001) standards and a social environment framework discussed later in this section (Mulroy & Austin, 2004), assessment forms were developed and applied to each text and course outline to guide the analysis and ensure consistency of data collected. A summary of factors evaluated in textbooks and course outlines is provided in Table 1.1.

Based on Taylor, Austin, et al. (2004), the majority of HB&SE textbooks and course outlines are organized by stages of the *life cycle, systems* of varying sizes, or *theory.* A small but significant number of HB&SE course outlines were described as *combination* because they covered material in at least two of these areas but were not dominated by any one approach. The characteristics of each of these formats are described next.

The *life cycle* textbooks and outlines are organized by the developmental stages of individuals and/or families from birth through death. Some of the courses and textbooks

Table 1.1 Factors Evaluated in Human Behavior and the Social Environment Textbooks and Course Outlines

Textbooks	Course Outlines
Structure	Structure
General content	Content
Intended audience	Logical flow
Emphasis on diversity	Emphasis on:
Specific social environment content:	–Reciprocal relationship between human behavior and the social environment
–Social justice	–Well-being
–Political economy	–Comparative perspectives
–Social problems	–Diversity
–Social policies	–Theory for practice
–Collective responses	
–Communities	
–Organizations	
–Groups	

also include sections on various systems (groups, organizations, and communities), but the majority of the content emphasizes the life cycle. The strengths of this approach include comprehensive coverage of human development, family issues, and the biopsychosocial or ecological perspective and a format in which HB&SE theory seeks to inform social work practice. Analyses also indicated considerably less emphasis on groups, organizations, and communities. Emphasis focused on different ways the individual experiences or is affected by groups, organizations, or communities rather than treating these structures of the social environment as dynamic, interdependent systems in and of themselves.

Systems textbooks and course outlines are structured around the concepts of the social environment, often with one or more separate chapters on individuals, families, groups, organizations, and communities. Many of the systems textbooks and course outlines reviewed in Taylor, Austin, et al. (2004) and Taylor, Mulroy, et al. (2004) also devote significant attention to the role of social justice issues, social work ethics, and a broad array of social science theories. They provide explicit definitions of the social environment and its structures, with detailed content on groups, organizations, and communities. Individuals are often described as being one type or size of system, and all systems are described as interdependent entities irrespective of how individuals experience them.

Finally, the *theory* textbooks and course outlines provided content on ecological, psychodynamic, cognitive-behavioral, and other theories commonly used in social work. They emphasize comparative perspectives and critical thinking skills needed for evaluating the usefulness of a given theory for social work practice and research. The textbooks and course outlines using this approach to HB&SE varied in their treatment of the social environment, social work ethics, and social problems.

In addition to the variation in the structure of HB&SE textbooks and course outlines, social work programs differ in how many courses are devoted to the teaching of foundation HB&SE courses. Of the 60 schools that submitted 117 course outlines for the study, 58% (35) offer two foundation HB&SE courses, 33% (20) offer one, and the remaining 8% of schools (5) offer three or more. The findings reflect a diverse array of approaches to

structuring HB&SE. Of the 35 schools offering two HB&SE courses, 31% (11) devoted one semester to life cycle and the second semester to systems, and 17% (6) presented a combination of life cycle, systems, and theory material over two semesters. Another 11% of schools (4) covered life cycle in the first semester and a combination of theory, systems, and diversity in the second semester. Three schools (9%) focused on systems during the first semester and theory in the second semester. One school presented the life cycle over two semesters, and another school presented systems over two semesters. The remaining 3% (9) taught systems, theory, or life cycle in one semester and diversity, psychopathology, or a combination of topics in the other.

Of the 20 schools requiring only one foundation HB&SE course (several schools sent different versions of the same course outline, thus proportions given are based on the outlines received), 35% (9) focused on the life cycle, 19% (5) emphasized systems, and another 19% (5) presented primarily theories. The remaining outlines (8) reflected a combination of theory, diversity, life cycle, and systems.

In summary, these findings identify at least two central issues for social work scholarship in terms of ways to conceptualize (1) the *integration* of human behavior *and* the social environment and (2) the *reciprocal relationship* or wholeness of understanding human behavior *in* the social environment.

Debates around the Human Behavior and the Social Environment Curriculum

Current research on textbooks and course outlines needs to be placed in historical context. Beginning in the 1920s, debates over the merits of psychoanalytic and behavioral frameworks contributed to controversies about the social and behavioral science foundation of social work practice. Mailick and Vigilante (1987) identified the following HB&SE issues: (a) overemphasis on psychoanalytic theories in the teaching of HB&SE, (b) the need for additional content on diversity and stress and coping, and (c) the limitations of organizing content by developmental stages. A more recent review of the major controversial issues in the field of HB&SE identified tensions related to the purpose, content, conceptualization, and teaching approaches of human behavior and the social environment (as noted in Table 1.2; Bloom & Klein, 1996). We summarize the key issues raised in this review in the following sections.

Purpose

Educators continue to struggle with the purpose of HB&SE content. Is the purpose to describe explanatory theory in order to understand problems facing client populations or to inform the assessment phases of social work practice? Or is the purpose to promote critical assessment of the theoretical social science foundation of the profession? Gibbs (1996) suggests that learning critical thinking skills is an important part of studying the explanatory theory because these skills lay the foundation for critical thinking about the intervention theory that underlies social work practice. Others see the potential purposes of HB&SE as including a venue for promoting multiple levels of analysis (micro, mezzo, macro), different lenses, or frames of reference with which to examine behavior in context.

Table 1.2 Controversial Issues Identified by Bloom and Klein (1996)

Topic	Issue	Relevance to the Discussion of Human Behavior and the Social Environment
Purpose	Knowledge expansion and theory assessment	Multiple purposes: theory for practice, theory for policy, theory for understanding the social science perspective, or theory analysis to refine critical thinking skills
Content	Environmental versus individual theories	Theories related to the individual versus the environment continue as major point of contention
	Specialized course content	Tension between the use of a breadth perspective or a depth perspective in conceptualization
	Empirically supported and unsupported theories	Adding content to human behavior and the social environment courses such as religion and spirituality, disabilities, values, genetics and sociobiology, and theories of international development
Conceptualization	Epistemological framework	Distinguishing between what is believed and what is empirically supported
	Strengths perspective	Tension between a wellness or strengths perspective and a pathology or problem focus
	Developmental perspectives	Stage perspectives versus life course perspectives
	Life history	Use of life experience to illustrate key human behavior and the social environment concepts
Teaching	Single courses versus multiple courses versus integrating theory into practice courses	Beyond the structure and curriculum, considering how socially sensitive topics are incorporated, related to race, gender, age, sexual orientation, and disability

Content

Debates also center on the extent to which emphasis should be placed on individual or environmental theories as well as their reciprocal relationships in an HB&SE course. The theoretical content thought to be relevant to HB&SE has continued to expand, raising the ongoing need to evaluate theory in terms of its historical context, explicit and implicit values, and breadth and depth of empirical support.

Conceptualization

Aside from debates related to the utility of midrange versus unifying or universal theories and concepts, larger philosophical debates are also apparent. These include the relative merits of adopting strengths versus social problem perspectives and whether neopositivism

is a suitable epistemological framework for HB&SE given the proliferation of postmodern (e.g., interpretive, constructionist, and constructivist) paradigms. Similarly, newer life span or life course theories raise serious concern about the utility of stage theories in characterizing developmental processes.

Teaching Human Behavior and the Social Environment Content

Finally, several pedagogical tensions are apparent. These include concerns about how HB&SE content is integrated into other parts of the curriculum, the implications of HB&SE for practice and research, and the intersection of HB&SE with diversity content (Abramson, 1997; Cournoyer, 1997). Little attention has been given to learner readiness for HB&SE content, such as undergraduate preparation related to the social sciences and understanding of social problems (e.g., poverty, crime and delinquency, disability, diversity and disparities). Similarly, faculty readiness to teach HB&SE concepts has not received much attention in the literature.

Our brief review of the evolution of HB&SE content from the perspective of CSWE standards, research on texts and course outlines, and debates around the general purpose, scope, and focus of courses provides a context for and explicates the larger tensions embedded in the processes through which social work scholars select, synthesize, and translate social and behavioral science theory for the professions' particular use. The next sections focus on two enduring tensions. The first concerns a search for frameworks that potentially illuminate the reciprocal relationship between persons and their environments. The second provides a heuristic for conceptualizing larger environmental influences. In response to empirical research indicating widespread heterogeneity in HB&SE instruction, we also provide brief instructional applications.

FRAMEWORKS THAT ADDRESS LINKAGES BETWEEN HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT

In this section, we identify a selected group of explanatory frameworks that explicitly link individual and environmental concepts. These frameworks include the life course perspective, social capital theory, cultural understanding of human development, opportunity frameworks, and neighborhood effects. These frameworks are potentially useful in that they highlight mechanisms and processes through which forces in the social environmental shape behavior and development and thus may aid in conceptualizing reciprocity. In addition, they have the capacity to provide integrative functions as a superstructure for more narrowly constructed midrange theories (Merton, 1949).

Life Course Perspectives

Sociological perspectives on the life course may have particular utility in conceptualizing social environmental influences on human development. Indeed, Elder's (1995) life course perspective is increasingly viewed as an important potential explanatory framework for social work (Hutchison, 2005; Stone, 2004). In general, Elder suggests that several overriding

principles have central explanatory roles in developmental processes and outcomes. First, individual development is best understood as a trajectory. That is, prior developmental experience influences later development. Second, the timing and sequencing of developmental and social transitions influence persons' life trajectories. Third, agency-related attributes of individuals (their human capital characteristics, meaning-making abilities, and efficacy) influence development. Notably, however, human agency is constrained by the availability, structure, and quality of social opportunity structures. Fourth, according to Elder, immediate relationships represent the key context in which human development is actualized. In Elder's formulation, proximal relationships often mediate larger social forces. Finally, historical time and place shape developmental pathways. In other words, cohort effects are central to the understanding of developmental processes.

A key implication of Elder's (1995) theory is that these factors intersect to create a unique set of "turning points" for any individual life trajectory. In other words, the combination of these influences pinpoint key points of intersection between human behavior and the social environment (person-environment fit) and potential points of intervention. Elder's work is both representative and an extension of the larger sociological life course tradition, which highlights the importance of social role–related transitions. We next describe both Elder's perspective as well as a more general life course framework by Hunt (2005).

Specifically, Elder's (1995) principles include *lives in time and place, human agency and self-regulation, the timing of lives,* and *linked lives*. *Lives in time and place* refers to the interplay between human development and the larger social context, including both historical time and physical place. *Human agency and self-regulation* refers to the choices people make in their lives. Though Elder acknowledges the social constraints on these choices, he also believes that human decision plays a role in the occurrence and sequencing of life events. Individuals' ability to select and construct their environment impacts their trajectory and indeed represents a key way to conceptualize reciprocity. *Timing of lives* refers to influences of both historical time and the social timing of developmental and social transitions and normative and nonnormative events across the life span. Timing is thought to be as important as, if not more important than, the occurrence of an event. Last, *linked lives* refers to the interdependence of human beings. Relationships across generations, marriage, kin, work, and so on all relate to the social context in which people live. Being embedded in a particular network of relationships has significant consequences for life course development. The life course can be viewed in part through social ties.

Elder's (1995) framework is useful for various reasons. It specifies mechanisms of influence between persons and their environments and, indeed, starts by explicitly including attributes of the social environment (including historical and social forces) as well as social opportunity structures (e.g., institutions, communities). In addition, the framework includes multiple units of analysis from historical time and place to more immediate relationships such as family interactions. In particular, large or rapid changes are thought to have significant consequences on human behavior and the life course. As a perspective emphasizing transitions and life trajectories, this framework also informs our understanding of the nature of the developmental process and the related social constraints. Ultimately, this perspective provides a key set of principles from which a person and a situation can be assessed. That is, attention to social context, timing, age, and relationships is key in understanding individual behavior.

Although the life course perspective is useful, it has clear limitations. It treats human life trajectories as the primary unit of analysis, leaving less room for understanding groups, neighborhoods, communities, and other social organizations as well as the ways they combine to create opportunity structures. This framework is relatively new and complex. Although there is an increasing body of research in support of many of the principles, few studies consider the various perspectives simultaneously, and hence, the interrelationships among concepts derived from each principle are not well understood.

Extensions of Life Course Approaches

A second reconceptualization of life course theory is outlined by Hunt (2005). Hunt argues that Elder (1995) does not adequately address so-called postmodern phenomena (e.g., significant transformations of the macrosocial context). This framework focuses on the impact of institutions and processes, including economic, technological, cultural, and political, on human behavior.

This interpretation of the life course reflects the changing postmodern world. Specifically, Hunt (2005) focuses on the impact of the increased life span, changes in age-associated transitions, globalization, technology, consumerism, and individualism.

Hunt (2005) argues that a lengthening life span provides individuals with increased capacity to predict and calculate risks as well as plan accordingly. This ability to predict future events allows us, in some ways, to control parts of our environment. In addition, these macrosocial changes impact the way people develop and behave. As life expectancy approaches life span potential, human beings begin to deny aging and believe in timelessness. This pursuit of youth and pleasure shapes human behavior. Further, Hunt challenges the notion that, in this context, human development takes place in age-defined stages. He discusses changes in the meaning of marriage, family, and old age. In preindustrial societies, people of the same age behaved the same way and experienced things at the same time. This became less true in industrial societies and is even less true in the postmodern age. Though he acknowledges the role of biology in maintaining particular transitions in the life span, he argues that sociological constructs define the phases in the life course. Further, our perception of biology and its psychological implications are impacted by societal views.

Moreover, Hunt (2005) sees globalization as a key force. As global culture develops, systemic social ties are fundamentally altered. In short, this redefinition of society through the global marketplace influences local culture, which in turn influences the social construction of the life course. Norms that were part of one culture may now transcend into this global culture. As a result, changes in one area bring about changes elsewhere. In no other time have global connections been available. Life course norms, which previously developed in each culture, are now part of this global culture. One of the reasons for these emergent global trends is major technological advances that have been made in recent years. Communication has grown tremendously, and technology has made it possible. Further, advances in medicine and science are, in part, responsible for the growing life span. Accompanying these technological changes is the ability to change our environment in ways that were never possible. All of these changes affect human behavior in a way that is unique in the current context. Last, consumerism affects the life course. Hunt argues that our new consumerism and cultural notions of choice strongly affect development. Individuals now enter life stages based on choice rather than inevitability. Stages such as marriage and

parenthood have become optional. With these changes, individual development includes a new search for self-identity. Societies no longer define our identity or provide moral guidelines. Individualism also becomes increasingly important in this context. People have fewer ties to social contracts and roles. In short, Hunt argues that each of these aspects of postmodernity has changed the life course dramatically.

As we conceptualize HB&SE, we must consider the influence of these rapid cultural changes in terms of both social structures and individual behavior and development. In short, this work extends Elder's (1995) conceptualization of the life course and encourages the consideration of postmodernity as more than a cohort effect.

Cultural Understanding of Human Development

Rogoff's (2003) theoretical work is based on the premise that human development is a cultural process. Human behavior, though inherently tied to biological processes, is also bound by culture. Culture is constantly redefined in each place and time, which impacts the individual's particular experience. Individual behavior, in turn, impacts cultural processes in a reciprocal relationship. This framework suggests that human development takes place in a particular culture and that development can be understood only by understanding cultural context.

Although her work is influenced by Vygotsky (1962) and Bronfenbrenner (1979), Rogoff (2003) argues that these theorists treated person and context separately, as separate entities or as one producing the other. She describes the reciprocal relationship between culture and development, explaining that they "mutually create" (p. 37) and "mutually constitute" (p. 51) each other. Human development is the process of people's continued and changing participation in sociocultural activities. As individuals develop through this participation, culture is simultaneously developed as a result.

Rogoff (2003) defines several key concepts for understanding cultural processes and argues that the study of human development is an explicit cross-cultural endeavor. Further, it is important to be aware that culture is not constant; cultures continue to change, as do individuals. Rogoff acknowledges the importance of life transitions tied to both biology and chronological age. However, she believes that the transitions themselves are influenced by culture. Though age defines certain transitions, developmental milestones are culturally defined.

Current explanatory theories of human behavior can be enhanced by such concepts as cultural processes and cultural tools, as well as people's involvement in cultural traditions, institutions, family life, and community practices. These concepts can also inform the client assessment process. In short, the cultural processes and their evolution represent another important approach for understanding reciprocity.

Opportunity Framework

Cloward and Ohlin (1960) argue that traditional approaches to understanding delinquency relied too heavily on individual behavior and delinquent acts. Rather, cultural norms, beliefs, and values promote a set of behaviors that allows delinquency to take place. Extending the work of Durkheim (1997) and Merton (1949), they argue that discrepancies between aspirations and opportunity are in part responsible for leading youth to delinquency. These

works discuss the ways in which different opportunity structures, particularly as they relate to institutions, contribute to delinquency.

Because this earlier work could not explain why youth lacking in opportunity choose delinquency rather than other outlets (e.g., alcoholism, suicide), Cloward and Ohlin (1960) include additional concepts related to adverse circumstance (including lack of opportunity), problems of adjustment, and social conformity and norms. Youth have aspirations that go beyond what is readily available given their current circumstances. This causes major problems in adjustment, since frustration results as they are unable to achieve conventional goals. This leads to the formation of delinquent subcultures and other nonconformity. As these subcultures evolve, they create new norms that further influence these youth toward maladaptive behavior.

By theorizing on the reasons for delinquency, Cloward and Ohlin (1960) provide an additional framework for understanding reciprocity. Their theory suggests the importance of the relationship between the larger social context, the specific subculture, and the individual's adjustment in this environment. Cloward and Ohlin focus on structural rather than individual forces that create disparities in opportunities.

Social Capital Theory

The concept of social capital represents resources deriving from connections among individuals (Bourdieu, 1985; Coleman, 1988; Putnam, 2000). The social environment is thought to exert influences on human behavior and development through the nature and qualities of these social resources.

Loury (1977) argued that the income disparities between White and Black youth were in part related to their social context. He believed social origin and social position were related to the resources invested in an individual's development. Bourdieu (1985) expanded the definition of social capital to include networks of institutions and group memberships that provide individuals access to resources. Coleman's (1988) definition of social capital relies on the relationships between and among people. He identifies six forms of social capital: obligations and expectations, information, shared norms leading to pro-social behavior, transfers of power to a group member, use of organizations for purposes other than or in addition to what they were originally intended for, and intentional organizations created for the purpose of social capital. In these multiple forms, social capital benefits individual, groups, and the collective good. Putnam (2000), who popularized the notion of social capital, refers to social capital as the connections among individuals. These connections are further defined as social networks, trust, and reciprocity. Putnam also links social capital to civic participation and believes that civic virtue becomes more powerful when it is part of a network of reciprocal social relationships. He sees two types of social capital, that which comes from within-group relationships (i.e., bonding social capital) and that which comes from between-group relationships (i.e., bridging social capital).

These varied definitions and explanations of social capital all suggest that persons and environments intersect through social ties. In this way, social capital is an important framework that bridges concepts of human behavior and the social environment. However, it is limited in its application to understanding human behavior and development. Social capital theory also fails to take into account larger dimensions of the social environment that impact its utility in a particular community. As suggested by Foley and Edwards (1999), most conceptualizations of social capital theory neglect to consider power-related

contextual factors, including the availability of economic power, political power, and concrete resources.

Neighborhood Effects

The literature on neighborhood effects outlines the social processes by which communities and individuals interact. Early research into neighborhood effects indicated that neighborhood structures and processes (norms, competition, and socialization) influence individual behaviors (Jencks & Mayer, 1990). Taken as a whole, *epidemic, collective socialization,* and *institutional* models suggested that the negative neighborhood effects operated through several mechanisms: peer influences on behavior, the effect of community adults on children, and the influence of neighborhood institutions, respectively. Reviewing past studies on neighborhood and school socioeconomic status and racial mix, Jencks and Mayer (1990) reported neighborhood effects related to educational attainment, cognitive skills, crime, teenage sexual behavior, and employment.

Research reviewed by Sampson, Morenoff, and Gannon-Rowley (2002) highlights the importance of dynamic processes and institutional mechanisms in neighborhood settings. In their review, they noted four different neighborhood processes that influence individual well-being. The first, *neighborhood ties,* relates to social capital. This construct highlights the importance of neighborhood interactions and social relationships. The second construct, *norms and collective efficacy,* refers to the trust and expectations shared by neighborhood residents. Collective efficacy relates to the willingness to get involved for the collective good, social control, and cohesion. The third effect, *mutual resources,* refers to the availability of resources that address community needs. The presence, quality, and diversity of institutions facilitate a neighborhood's ability to support its members. The fourth neighborhood effect, *routine activities,* refers to how the patterns of land use and locations of community institutions affect daily routines. Each of these contributes to the way neighborhoods influence the individual behavior and outcomes of their members. Though these process effects are evident, structural neighborhood characteristics are still salient in determining outcomes.

Concepts related to neighborhood effects help us understand the different mechanisms through which neighborhoods and communities influence behavior. Importantly, this model pays little attention to individual variation within a specific neighborhood context.

In conclusion, these explanatory frameworks shed light on alternative ways in which the term "reciprocity" might be conceptualized. Life course perspectives draw attention to the intersection between current historical context, available opportunity structures, and individual agency in patterning life trajectories. The opportunity framework emphasizes the relative match between individual characteristics and aspirations and the current array of opportunity structures. Cultural psychological perspectives involve the local cultural processes needed to understand reciprocity. Finally, both social capital and neighborhood effects frameworks underscore the importance of social relationships for understanding person-environment interaction. Despite these various conceptualizations of reciprocity, each of these frameworks underscores the importance of social relationships (e.g., family, cultural, social, and community networks). However, a key limitation across all the frameworks is the insufficient attention to developmental processes. In addition, questions can be raised about the capacities of these theories to inform practice.

INSTRUCTIONAL APPLICATION: ELDER'S LIFE COURSE PERSPECTIVE

At least three attributes of Elder's (1995) theory present challenges for translation. First, life course theory is quite complex, requiring the integration of variable individual developmental trajectories with larger structural forces. Indeed, Hutchison (2003) suggests that the complexity of Elder's framework may interfere with its practical application. Second, predicting the direction of any individual life course trajectory is clearly not an exact science. Patterns within and across individuals generally can be discerned retrospectively, generally through longitudinal methods. Finally, key concepts in Elder's framework are quite broad and need elaboration.

Acknowledging the diversity of individual trajectories and their complex interplay with larger social forces, we employ three general strategies. First, for each life phase, we focus on a single, highly salient life course principle. Second, we identify a set of plausible sources of turning points and of structural constraints. Third, we highlight areas in which current explanatory theories presented in this volume may be particularly applicable (see Table 1.3).

Highlighting Historical Time and Place: Mid- and Late Adulthood

Few would argue that dramatic growth in the aging population, its implications for the economy and the workforce, and its implications for aging policy and practice (Administration on Aging, 2002) represent a key social transformation. Moreover, gerontologists argue that this demographic change will dramatically alter public perceptions and attitudes toward those over 65 and will also dramatically alter service provision to this population. In other words, what is unique about contemporary mid- to late adulthood is that adults are moving into and through this developmental phase at the same time that there are significant demographic shifts. From the life course perspective, these demographic shifts represent a unique historical and situational context that is likely to have marked impacts on the current aging population and uniquely affect their subsequent trajectories relative to past and future cohorts.

These demographic shifts shape the current opportunity structures available to mid- and later adulthood. These generally include the formal social security system and social services that may be available to the elderly. Newman (2003) documents how current formal arrangement of services for aging adults are largely mismatched to the needs of poor and minority aging subpopulations, especially in terms of the provision of health services. Of increasing relevance are existent workforce and workplace structures that may shape the timing of retirement decisions and the responsiveness to older employees in the workforce. In addition, a vast majority of elderly living in the community receives key supports from relatives. The nature and quality of family caregiving support structures as well as additional formal and informal supports to caregivers represent an interesting set of ties between mid- and late adulthood.

Given this current social context, the period between mid- and late adulthood is associated with a unique set of physiological, biological, psychological, and social transitions. Between mid- and late adulthood there is a general move from peak physical and intellectual

Table 1.3 Summary of Life Course Concepts and Application to Developmental Stages

Principle	Late Life	Midlife	Early Adulthood	Adolescence	School age	Early childhood
Time and place	Changing demographics of elderly population; Social Security resources	Women in the middle Entrance of women in the labor force Family-centered policies	Emergent adulthood; few supports when evidence of need for increased mentorship	Emergent adulthood; few supports when evidence of need for increased mentorship	Structure and quality of schooling Child and family supports	Valuation of infants Parent-friendly policies Moms and work
Linked lives	Key others (spouses, children) Caregiving relationships	Familial relationships/ parenting functions	Peer and romantic relationships	Peers, parents, teachers	Parents, teachers, peers	Caregivers
Agency and opportunities	Generative functions Differential access to resources that facilitate healthy aging (structure of work, health system)	Family- and work-related efficacies Structure of work and family supports	Cognitive skills Access to work and educational opportunity	Cognitive capacities Quality of peer, school, neighborhood contexts	Individual abilities valued by schools Parenting environments Classroom environments	Sensitivity and structure of caregiving environment
Timing and transitions	Physical: Cognitive and physical aging Social: Retirement, grandparenting, widowhood	Physical: Menopause Social: Sequencing of work and family time clocks	Physical: Identity consolidation, formal cognitive functioning Social: Leaving home, family formation	Physical: Puberty and key cognitive transitions	Physical: Cognitive change (perspective taking) Social: transition to school	Physical: Rapid physical, cognitive, social growth

functioning to normative decrements in select domains of physiological functioning. For some subpopulations, aging is associated with increasing risk of particular health problems (Newman, 2003). There are also changes in memory and changes in overall rates of encoding and processing of information. Aside from this set of physical transitions, key social transitions (generally signaling changes in role) include retirement, widowhood, grandparenthood, and, for some, transitions into caregiving and recipient roles. Aside from these normative transitions associated with aging, Elder's (1995) theory underscores the importance of personal agency in development. Among adults, key agency-related variables include planful competence and efficacy, coping skills, and financial resources (Settersten & Lovegreen, 1998).

Three sets of relationships are relevant to life trajectories at this phase. These include relationships with significant others and relationships with children. Social networks at mid- and later life are populated by family members and a few close friends. Empirical research in the life course tradition generally focuses on the relationship between supportive marital relationships and health and mental health. In other words, the nature and quality of significant relationships represent key developmentally related processes at this time period.

In summary, the application of Elder's (1995) life course perspective to mid- and later adult life features the occurrence (or nonoccurrence), timing, and specific overlap of key social transitions in the current social context of demographic change. It predicts, for example, that simultaneously experiencing retirement, the death of a spouse, and decrements in intellectual functioning will generally place a person at risk for worse outcomes. In addition, it highlights the historical time effects that will likely have salient influence on work (and retirement) trajectories and opportunities (e.g., structure and availability of services) that facilitate healthy aging.

The life course perspective also directs us to two central explanatory theoretical systems. Given work- and family-related social transitions that mark mid- to late life, role theory represents a key explanatory framework for this life stage. Psychosocial theory covers integrity and generative meaning-making strategies that are hypothesized to be particularly salient during this period (Galatzer-Levy & Cohler, 1993). In short, generative meaning-making processes and coping strategies suggest two potential domains from which to approach human behavior processes past midlife.

Adolescence and Early Adulthood: Timing, Agency, and Opportunity

The period of adolescence and early adulthood is distinguished by the intersection of both developmental and social transitions. Aside from changes related to puberty, which is unique to early adolescence, two developmental processes unfold over this life phase. First, there is ongoing cognitive development between adolescence and early adulthood marked by increasing capacity for foresight, contemplation, and abstract thinking. These changes in cognition form the basis of identity development processes. Adolescence and early adulthood represent a period when identity formation across multiple domains is under way.

As we move from adolescence into early adulthood, we enter and negotiate a series a key social transitions, from school to work, to independent living, to relationship formation (that is increasingly intimacy-based), and to parenthood.

In light of these developmental and social transitions, a key characteristic of early adulthood is that it offers unique opportunities to act as an independent person in increasingly widening, socially defined contexts outside of families. Besharov (1999) identifies differential access to work and educational opportunities by race and class as key opportunity constraints during this time. For adolescents in particular, current research indicates that peer networks (pro-sociality, academic orientation), junior high and high schools (safety, opportunities for challenge and support), and neighborhood contexts act as salient constraints on optimal adolescent functioning (Eccles & Roeser, 1999).

Finally, developmental theorists argue that young adults currently are experiencing a protraction in the transition to traditional adult roles (Arnett, 2000). In short, timing and sequencing of key transition-to-adulthood markers (from school to work, to independent living, to parenthood) are in flux and generally are taking place over longer periods of time. It is notable that the current historical context is unique in that key socialization units, notably schools, are peer segregated, offering few opportunities for meaningful interactions between adolescents and nonrelated adults. In addition, although there appears to be a greater need for mentorship, few formal structural arrangements are available in this respect.

In summary, adolescence and early adulthood provide important examples of the intersection between the development of individual capacity (in terms of cognitive development, increased independence, and individual identity formation processes) and situational constraints around key social structures, including the structure of the secondary and postsecondary education system and the structure of the workforce. Cognitive theory, psychosocial theory, and role theory are salient explanatory systems at this life stage.

Linked Lives: Infants and Young Children

Given that infancy and early childhood are marked by rapid physical, cognitive, and social growth, the concept of linked lives is perhaps most saliently represented in this period. Parents and key caregivers represent key developmental contexts for infant and young children. Moreover, the sensitivity, structure, and responsiveness of the caregiving environments represent the key social opportunity structure for young children. Environmental forces are almost completely mediated by the qualities of caregiving and caregiver-child relationships (Duncan & Brooks-Gunn, 2000). Of particular relevance to school-age children, the quality of relationships with teachers and peers can generally enhance and optimize the academic and psychosocial trajectories of children. It is notable, however, that the quality of parenting environments generally sets the stage for these relationships (Deater-Decker, 2001).

Behavioral, genetic, attachment, and social learning paradigms provide important explanatory theoretical lenses through which to understand the nature and qualities of these relationships. In short, they specify the key mechanisms by which the principle of linked lives operates by explicating the conditions under which caregiver-child relationships develop and are maintained.

THE SOCIAL ENVIRONMENT: KEY CONCEPTS AND APPLICATION

While the previous applications focused on frameworks that potentially can link human behavior and the social environment, this section focuses on conceptualization of the social

environment. This approach to the social environment differs from the previous applications in that it does not rely on one specific macro linking theory. Instead, it uses the perspective of systems theory to isolate key concepts that emerge from three bodies of social science theory: group dynamics, community theory, and organizational theory.

These systems theory perspectives include such universal concepts as interactions (e.g., within and between groups), subsystems that are parts of a system (e.g., voluntary and governmental organizations), and functions and patterns (e.g., production and consumption, socialization, social control, social participation, and mutual support in communities). This approach to the social environment reflects very little overlap with the human behavior content. Some exceptions include the concept of stages of development (e.g., life span of a group, organization, or community), leadership behaviors, communications, and conflict. This situation is not ideal but needs more dialogue and instructional planning to foster integration and the identification of key concepts in multiple contexts.

In addition, a systems perspective reflects a strong orientation to the value of theory for practice, especially focusing on concepts relevant for conducting trifocal assessments at the group, organizational, and community level. This trifocal perspective is needed to understand the social environment that impacts clients, staff members, and volunteers (both governing and service delivery). The core concepts that are described in this section are placed in the context of a local community as a way to describe the social environment.

A set of concepts provides a framework for understanding the social environment at the local level (Mulroy & Austin, 2004). Because social policies are often implemented at the local level through city or county government as well as by nonprofit and for-profit provider organizations, it is important to be able to assess this community of organizations. Their interorganizational network may reflect an array of integrated and/or fragmented service delivery relationships. These relationships include contracted services with shared responsibilities for financing and client services, co-located services with shared responsibility for maintaining access to client services, and integrated services with shared responsibility for promoting the availability of client services (e.g., one-stop shopping). All of these relationships call upon an understanding of the local perspective of the social environment, namely, the nature of community at the neighborhood level, the nature of community-based human service organizations, and the dynamics of group behavior that underlie citizen involvement in neighborhoods as well as staff involvement inside and outside human service organizations.

Structure and Process

The two most all-encompassing concepts needed to understand communities, groups, and organizations at the local or neighborhood level are *structure* and *process*. Structure refers, in this context, to the arrangement and mutual relationship of the constituent parts to the whole (Brown, 1993). Process is defined, for this discussion, as a continuous series of actions, events, or changes that are directed toward some end and/or performed in a specific manner (Brown, 1993). In essence, how are community neighborhoods and organizations structured? How do groups of citizens and staff behave among themselves and with each other? These are critical questions for understanding the social environment of community neighborhoods and organizations that seek to meet the needs of its residents or clients.

These community organizations can include public schools, neighborhood service centers, places of worship, child care agencies, senior centers, group homes, women's shelters, and neighborhood health clinics.

Community Neighborhoods

The structure of a neighborhood includes both formal and informal organizations and associations. These may be an informal network of local clergy, an association of neighborhood merchants, a neighborhood after-school program, or a neighborhood substation for the police and fire department. These are all part of the formal and informal structure of a neighborhood community. The concept of structure can be used to identify and assess the processes that underlie a neighborhood's horizontal and vertical relationships (Warren, 1963). For example, the horizontal dimension of process dynamics might include regular neighborhood meetings between the clergy, police, school principals, and service center director. The vertical dimension could include the maintenance of relationships between the neighborhood and the larger community (e.g., city, county, or region). Examples of the vertical dimension are organizational relationships with the county social service and public health departments, school districts, nonprofit organizations serving the region, and city police and fire departments. These horizontal and vertical relationships provide another perspective on the vitality of a neighborhood community.

One of the process concepts applicable to a neighborhood community involves community competence (Fellin, 2001, p. 70), that is, the capacity of the neighborhood residents and service providers to engage in a process of identifying community needs, coordinating services, and/or facilitating problem solving related to community concerns or resolving conflicts.

Community-Based Organizations

Just as for neighborhood communities, the concepts of structure and process can also inform our understanding of organizations. For example, all human service organizations have a service mission or purpose. Within such a mission, they can be characterized as primarily people processing, people sustaining, or people changing (Hasenfeld, 1983, p. 5). *People-processing* organizations are structured to make sure that those who are eligible for benefits (e.g., food stamps, immunizations) are processed in an effective and efficient manner. *People-sustaining* organizations are designed to provide a level of care that is high enough to help individuals and/or families attain self-sufficiency (e.g., group homes, service centers). *People-changing* organizations are structured in a way to provide services that help individuals grow and thrive in their community (e.g., schools, mental health and substance abuse services).

In addition to the structure of the organization influencing its internal processes, organizations must also contend with their external environment. Examples of the environment that have direct bearing on their neighborhood location are accessible bus routes and well-established referral relationships with related organizations. The task environment of an agency can be defined in terms of community involvement (client advisory committees and agency boards of directors), sources of funding (city or county government, United Way), and political support (elected officials, opinion leaders, and philanthropic funds).

Groups in Communities and Organizations

In addition to their impact on the community and organizational dimensions of the social environment, the concepts of structure and process have relevance for understanding groups that operate within the social environment. How are neighborhood groups organized (by blocks or shared concerns)? What are the patterns of communications between neighborhood groups and within groups? Similarly, group process concepts focus on the array of systems and behaviors demonstrated by group members (Patton & Downs, 2003). How are leaders identified? How invested are members in their neighborhood groups? Are the behaviors of group members focused primarily on neighborhood improvement projects or on advocacy efforts focused on city hall?

These same group structure and process concepts can be applied to a neighborhood organization, whether it is the staff of an agency or its board members. How are staff members organized (organization chart, labor-management agreement)? How is the board structured (15 members meeting frequently versus 60 members meeting infrequently or active use of standing versus ad hoc committees)? In addition to the structural dimensions, it is important to note the process or group dynamics dimensions. What role do staff members play in organizational decision making? Are there regularly scheduled staff meetings? Who leads them? What is the nature of interdisciplinary collaboration (e.g., neighborhood health clinic staffed by many disciplines)? What is the nature of teamwork and problem solving between staff representatives and neighborhood client advisory groups? All these questions illustrate the centrality of understanding group processes inside and outside a human service organization.

As noted in Table 1.3, the concepts of structure and process are primary elements in fostering an understanding of the social environment that includes neighborhood communities, organizations, and groups. These key concepts are also connected to a set of related concepts that elaborate or drill down deeper to understand the complexity of structure and process. For example, central to the concept of structure and process are the concepts of *development, exchange,* and *diversity* (see Figure 1.1). Each of these concepts is described in the next section and illustrated in terms of a group, a community, or an organization.

Elements of Structure

Stages of Development

The term "stages of development" refers to the location of the community, group, and organization along a continuum of time and evolution. Such a continuum is important for understanding the social environment of a community in terms of its stability over time or its changing nature (improving or declining). The same stage of development continuum applies to neighborhood organizations, whether they are new and still finding their way in terms of mission and goals or old and established. The history of an organization is important for understanding its present realities and future opportunities.

The development continuum can be seen most vividly in the evolution of a group (e.g., a citizen's neighborhood crime watch group or an agency staff group working together to develop a funding proposal for a new service). For any group, the beginning or *forming* stage involves clarifying common interests and roles to be played (Tuchman & Jensen, 1977). The *storming* stage may involve the evolution of problem-solving processes (e.g.,

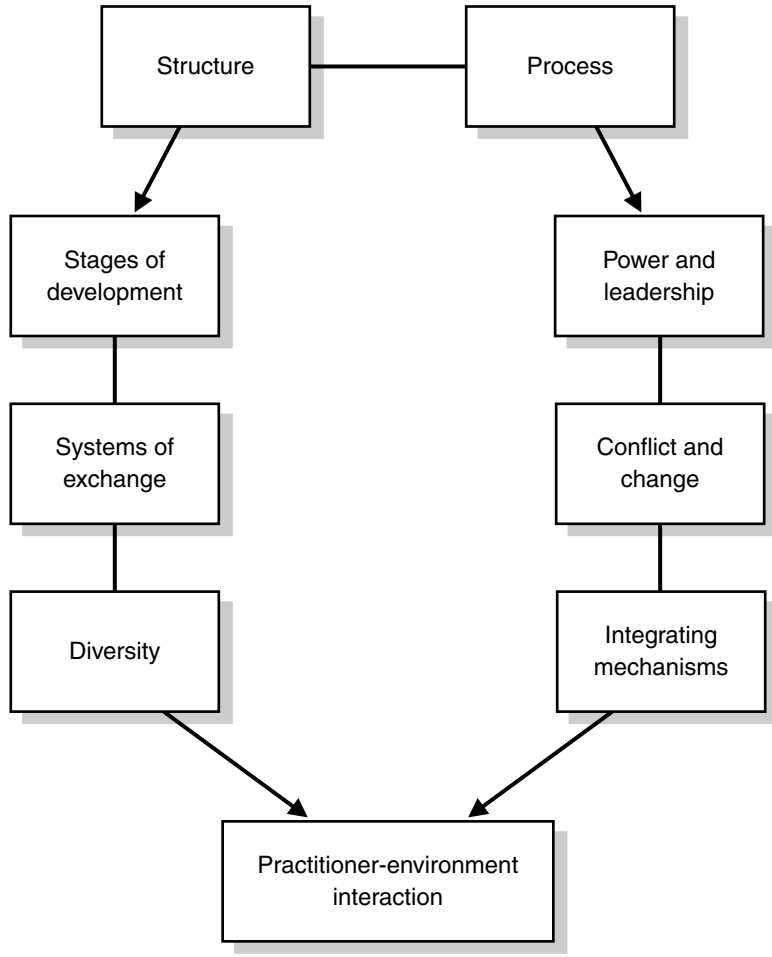


Figure 1.1 The Concepts of Structure and Process in Understanding the Micro-systems of the Social Environment. ***Note:*** **Article copies available from the Haworth Document Delivery Service: 1-800-HAWORTH; e-mail: orders@haworthpress.com. From "Toward a Comprehensive Framework for Understanding the Social Environment: In Search of Theory for Practice," by E. Mulroy and M. Austin, 2004,** ***Journal of Human Behavior and the Social Environment, 10*****(3), pp. 25–59. Copyright 2004 by The Haworth Press.**

multiple short meetings versus fewer long meetings). The *norming* stage usually involves the clarification and codification of some rules or guidelines for future behavior (e.g., establishing an agenda, taking minutes, determining voting procedures). The *performing* stage involves the allocation, implementation, and evaluation of different group-identified tasks to be completed. Finally, the *adjourning* stage can include the celebration of project completion or the designation of further work to be done by another group.

Systems of Exchange

Systems of exchange are structures designed to foster mutual support in a social environment that recognizes the central role of self-interest. In essence, collaborators on a particular issue want to know "What's in it for me?" In this context, self-interest is a neutral term

(in contrast to some of the negative connotations associated with being self-centered) that seeks to capture the nature of exchange in all human interaction (e.g., I give you money in exchange for services). Systems of exchange involve an arrangement of reciprocal giving and receiving.

When applying the concept "systems of exchange" to understanding the social environment of neighborhood communities, several dimensions emerge in relationship to community building. According to Weil (1996, p. 482), community building involves the development of structures that include "activities, practices, and policies that support and foster positive connections among individuals, groups, organizations, neighborhoods, and geographic and functional communities." In essence, community building involves systems of exchange. For example, engaging members of the community to invest in the improvement of their own neighborhood includes the implicit question "What's in it for me?" The structure might be a neighborhood advisory committee, and the exchange might be the transaction of devoting time to attend or participate in meetings in exchange for a cleaner or safer neighborhood.

Diversity

The concept of diversity has come to acquire many different meanings. Understanding and responding to the diversity of clients when providing human services represents the most prevalent meaning, but there are other meanings with respect to communities, groups, and organizations. When focusing on the neighborhood, diversity can be reflected in the different socioeconomic statuses of the residents (e.g., a blue-collar neighborhood). Diversity can also be seen in the demography of residents who are retired, single, and have young families as well as the race and ethnicity of a diverse or homogeneous neighborhood. The extent to which neighborhoods are segregated or integrated represents another aspect of communal diversity (Fellin, 2001, p. 152).

Diversity in human service organizations can be viewed from at least three perspectives: the clients served, the staff employed, and the composition of the board of directors. The diversity of client problems or needs requires organizations to develop ways of classifying clients to provide them with the services that meet their needs. In contrast to client diversity, the diversity of staff can be understood, in part, by the organization's commitment to affirmative action (e.g., promoting racial and ethnic diversity) and/or staff development (e.g., promoting career advancement). Clearly, the diversity of staff competence and experience affect career advancement. Other issues of diversity can be seen in the composition of the organization's board of directors with respect to age, sex, race, ethnicity, and sexual orientation.

This discussion of diversity completes the description of the concepts related to structure in Table 1.3. The next section focuses on the process concepts of leadership and power, conflict and change, and integration.

Elements of Process

Power and Leadership

The concepts of power and leadership are complex and can be defined in many different ways. When thinking about both concepts at the neighborhood level, the roles of political

and economic power come to mind. Political power may be reflected in the capacity of the neighborhood residents to promote neighborhood improvement (e.g., through the power of a local church) or lobby city hall for changes in the zoning ordinance to promote economic development and job growth in the neighborhood. In contrast, neighborhood leadership might be reflected in the cosmopolitan or local behaviors of neighborhood leaders (Warren, 1963). *Cosmopolitans* are those who have developed networks of relationships beyond the neighborhood with elected officials, business leaders, or leaders of nonprofit organizations. *Locals* are those who have spent most of their time cultivating relationships and coordinating local projects with less emphasis on those outside the neighborhood. Understanding these leadership styles can help explain the use of power at the neighborhood level.

In the context of groups, power can be displayed in terms of expertise, position, and access to rewards and related networks (French & Raven, 1960). Power may be displayed through the concepts of task and process, namely, the ability to help the group stay on task and/or use debriefing sessions to reflect on the dynamics of the group's process. The leadership capacities of group members are essential ingredients for understanding the behaviors of a group. Those group members who practice leadership behaviors are also able to demonstrate followership behaviors (Fiedler, 1967).

Conflict and Change

The concepts of conflict and change are also interconnected. At the neighborhood level, conflicts between renters and landlords can be a source of great tension until there is a change (e.g., housing repairs, rent adjustments). Positive and negative conflicts are important components of the social environment (Coser, 1956). Positive conflict relates to issues that help bind the community together, either in opposition to an external force or as a source for engaging in a dialogue over differences (e.g., mediating property disputes). Negative conflict relates to issues that create such polarization that resolution requires considerable time and energy to resolve.

Conflict and change in most organizations are facts of life. In essence, organizations are in a constant transition from maintaining stability (frequently accompanied by a resistance to change) to fostering improvement and change (Hasenfeld, 1983). Organizations have different capacities to manage change. This capacity is often impacted by the organization's environment (e.g., financial resources and public support). Organizational resistance to change can take many forms and needs to be understood as a critical element of the organization's internal and external environment.

Integrating Mechanisms

Integrating mechanisms can be viewed as networks of relationships that hold communities, groups, and organizations together or as institutionalized processes or procedures that can be used to monitor their health and well-being. In neighborhood communities, such networks include both formal and informal relationships that seek to foster the integration of the individual resident into the larger community. Tenant councils in housing complexes and neighborhood block watch groups serve as integrating mechanisms for a community. They can foster formal and informal relationships over time, as do regular meetings among the clergy whose congregations are located in the same neighborhood.

The use of integrating mechanisms in a group can be seen in the use of feedback processes or debriefing sessions at the end of each meeting to gather the perceptions

and concerns of the members. Other integrating mechanisms are brainstorming and problem-solving processes (Patton & Downs, 2003). These processes provide a venue to bring latent group issues to the surface and allow members to voice their concerns through a mechanism adopted by the group. In essence, the integrating mechanisms of the group provide individuals with opportunities to engage in sharing and problem solving.

This discussion of process concepts provides a foundation, along with the previous discussion of structure concepts, for integrating both of these dimensions of the social environment when focusing on the role of the practitioner.

Practitioner-Environment Interaction

Different from the elaboration of the previous concepts related to the social environment, the interaction between practitioners and their environment represents a significantly overlooked dimension of the social environment. The focus here is on the degree to which a practitioner is able to conceptualize his or her role as an influential factor when engaging with neighbor residents, colleagues in a staff meeting, or the supervisor or supervisees in an organizational setting. The interaction is a two-way street whereby the community, group, and organization can also influence the behaviors of the practitioner.

The interaction represents a key element of self-reflective practice (Schon, 1984). The manager as a practitioner in a human service organization can have significant influence over how staff members are treated, issues resolved, funds allocated, and information processed. At the same time, staff members can significantly influence managerial behaviors with respect to the quality of the workplace environment, the management of conflict and change, and the representation of the organization in the larger community. An understanding of the history and customs of the organization can greatly influence a practitioner's effectiveness in working with the internal and external environment of the organizations (Austin, 1996).

The array of concepts relevant to understanding the social environment at the local level is infinite. As a result, choices need to be made. One approach to displaying those choices can be seen in Table 1.4, where the major constructs are identified on the left-hand side and the trifocal view of the local social environment is noted across the top with respect to communities, organizations, and groups. This is only one instructional approach to introducing students to the array of concepts relevant to understanding the social environment at the local level.

FRAMEWORKS FOR LINKING KNOWLEDGE TO PRACTICE

Although the previous frameworks provide different ways to conceptualize the interaction between HB&SE and the larger social environment, they constitute abstract theoretical concepts that are not easy to apply in everyday social work practice. One approach to utilizing these larger frameworks is to specify conceptual frameworks that operate closer to the realities of practice. The related concepts of risk and resilience and stress and coping cut across most fields of practice (e.g., child welfare, mental health, aging, and physical health). We briefly highlight them in this section.

Table 1.4 A Trifocal Perspective on Communities, Groups, and Organizations

Major Constructs	Community Concepts	Group Concepts	Organizational Concepts
I. Structures and processes	Community competence Functional/geographic Horizontal/vertical	Communications Member orientation and behaviors	Types (processing, sustaining, changing) Political economy and related organizational theories
II. Stages of development	Urbanization and gentrification Population diversity/immigration	Forming, storming, norming, performing	Evolution of organizational goals and technology
III. Power and leadership	Economic power Political power Locals/cosmopolitans	Task/process orientation Leadership/followership group dynamics	Loosely coupled Sources of control Leadership styles
IV. Systems of exchange	Community building Voluntary organizations and associations Public sector organizations	Problem solving as exchange of views, expertise, resources	General/task environment Power dependence
V. Conflict and change	Positive/negative conflict Change capacity	Norms regarding managing tensions Superordinate goals	Stability/resistance Innovation capacity
VI. Diversity	Socioeconomic stratification Neighborhood integration and segregation	Diversity of members (race, gender, age, sexual orientation)	Client classification Client's organizational career
VII. Integrating mechanisms	Formal and informal networks Client reintegration	Feedback/debriefing Idea generating	Assessing performance Ongoing operations
VIII. Practitioner-environment interaction	Impact of community organizer/enabler on community and vice versa	Impact of group facilitator/leader on group and vice versa	Impact of organization's manager/leader on organization and vice versa

Risk and Resilience

Fraser, Richman, and Galinsky (1999) define risk as the probability of a negative outcome given a set of individual and environmental circumstances. In short, risk factors may be conceptualized as causing, marking, or correlating a particular negative outcome. Resilience refers to the process of successful adjustment given a particular risk or set of risk factors. Cumulative risk is currently considered to be a better predictor of outcomes than specific

risk factors. Both types of risk (specific and cumulative) can lead to individual vulnerability, but they also can be mediated or moderated by other individual or environmental factors. Fraser et al. suggest that resilience can be conceptualized in three ways: occasional success (despite high levels of risk), continuous success (despite prolonged exposure to the risk), and recovery (e.g., from exposure to trauma). Notably, resilient behavior must be understood from the perspective of both individual and environmental characteristics.

Stress and Coping

The concepts of stress and coping are empirical generalizations tied to practice with clients, especially in the fields of practice related to physical health and mental health. The concept of stress has varying definitions; one overarching definition "refers to that quality of experience, produced through a person-environment transaction, that through either over-arousal or under-arousal, results in psychological or physiological distress" (Aldwin, 1994, p. 22). Mason (1975) identified three causes of stress: (1) an internal state or strain, (2) an external event, or (3) an interaction between the person and environment that can lead to positive or negative responses. Internal stresses can be related to both physiological and emotional reactions. External stressors can include traumas, life events, environmental characteristics, hassles of daily life, or relationship issues. Considering stress as a manifestation of the interaction between person and environment draws attention to the fit or mismatch between individual capacities and the demands of a situation. In other words, the concept of stress is inherently "transactional" (Lazarus & Folkman, 1984).

The current conceptualization of stress and coping emerged out of earlier theoretical work in evolutionary theory and behavior adaptation, psychoanalytic concepts, life cycle theories, and case studies of how individuals manage life crises (Moos & Schaefer, 1993). Evolutionary theory proposes that organisms adapt to their environment in order to survive. Psychoanalytic theory suggests that individuals develop in order to promote personal growth. Life cycle theories promote the idea that individuals acquire skills and capacities to negotiate each stage of human development in order to move to the next stage of life. Behavioral adaptation to life crises involves the use of human competence and coping to deal with life transitions and crises. Each of these theories could contribute to a comprehensive framework of stress and coping that features the interactions among environmental systems, individual attributes, and the availability of resources. Life crises can then be interpreted by appraising the stress and coping responses that influence an individual's health and well-being.

Coping strategies, beyond dealing with the daily challenges of life, involve actions for dealing with stressful situations that are rooted in historical and social contexts that create norms for dealing with stress. Coping also involves a learned behavior by which individuals can be taught the skills and mechanisms needed to effectively cope with stress. Resources for coping include a set of personal, attitudinal, and cognitive factors. These include demographic and personality factors, social context (including familial resources), and the interplay of personal and social factors (Moos & Schaefer, 1993). Coping processes can be thought of as both the focus of coping (the person's orientation to the stressor) and the method of coping (the cognitive or behavioral response).

Clearly, these concepts, by themselves, do not constitute explanatory frameworks. However, they provide one way of using the explanatory theories and frameworks covered in

this volume to define potential sources of risk and resilience. There are multiple sources of developmental risk and stress and the mechanisms by which risk and stress lead to negative outcomes. There are also multiple sources of resilience and coping strategies. It is notable that both of these concepts indicate the importance of person-environment interactions. The complementary frameworks are suggestive of how particular person-environment interactions and attributes of the social environment may contribute to risk or stress and resilience or coping. As noted earlier, the larger frameworks identify specific social relationships and interactions as well as environmental opportunity structures as contexts for understanding risk and stress and resilience and coping.

REFRAMING HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT: IMPLICATIONS FOR THE CURRICULUM

As should be apparent from the preceding discussion, the understanding of human behavior and the social environment depends on what and how social science knowledge is applied to the challenges facing the social work profession, the life histories of those doing the conceptualization, and scholarly dilemmas about how to convey and integrate such knowledge. However, there is consensus on the goal of finding the most effective way to integrate the social and behavioral sciences into both social work education and research. The traditional views of human behavior in the HB&SE context involve life stages, personality theories, and biopsychosocial perspectives; the traditional view of the social environment has included a systems perspective on the interrelationships of groups, organizations, and communities. These traditional perspectives need to be challenged if we are to address the interactions between human behavior and the social environment as well as help students really understand how human behaviors are impacted by the social environment (oppression or privilege) and how human behavior can influence the social environment (strengths and empowerment). This same understanding is relevant for how we frame and conduct social work research; theory can inform practice and theory can inform research.

If HB&SE content is to be viewed as the compilation and distillation of explanatory theories related to the human condition, then we need a guiding question for HB&SE, such as, "How do social workers explain (understand) the behaviors of an adult (or child) who is experiencing one or more of the following social problems?"

- Poverty (homeless, single parent, unemployed, etc.)—demographics and explanatory theories.
- Disability (substance abuser, chronically ill, mentally ill, frail elderly, physically disabled, learning disabled, etc.)—demographics and explanatory theories.
- Crime and delinquency (incarcerated, perpetrator of domestic violence, abusive or neglectful parent, gang violence, etc.)—demographics and explanatory theories.
- Disparities and disproportionalities (How do the social problems differentially impact and/or oppress people based on race, ethnicity, gender, age, sexual orientation, religion?)—demographics and explanatory theories.

Although it can be argued that this is not an exhaustive list of social problems or that the problems could be configured in a different way, the guiding question is still important.

The need for a guiding question has become evident when viewing the challenges faced by HB&SE faculty, who welcome a new group of students each year into the study of the social sciences and their influence on the social work profession. In addition to the challenges related to educating a group of students with a wide variety of majors and experiences, the most significant disparity appears to be the students' limited exposure to and understanding of social problems. For example, an informal poll of current (2005) first-year MSW students taking HB&SE courses found that very few had completed an undergraduate social problem course related to one or more of the four social problem areas just noted.

Our experience is that only a few students have completed a course on one of these topics, and very few have completed courses on all four. This does not mean that they might not have had some real-life experiences in one or more of these areas, but few are very knowledgeable about social problems. To be a student of one or more social problems suggests that time and effort has been expended in understanding the demographics, impact, and societal consequences of a social problem, while at the same time grasping the multiple theories that help to explain the social problem. For example, there are a wide variety of demographic statistics to describe poverty, multiple ethnographic studies to describe the impact of poverty, and multiple social science theories to explain poverty. Depending on which social science discipline is chosen to explain the demographics and theories of poverty, a different perspective will emerge. Each of the core social science disciplines (anthropology, economics, political science, psychology, sociology, and the interdisciplinary disciplines) would provide students with a different perspective on the nature of poverty.

If students begin their study of HB&SE without an understanding of the social problems that are linked to the field of social welfare, how will they acquire a context for utilizing their understanding of the basic HB&SE concepts? One approach to this question is to provide a set of readings, hopefully chapters in a future HB&SE textbook that addresses the demographics and explanatory theories related to each of the four major social problems.

While the study of social problems can be viewed as the macro perspective of the guiding HB&SE question, the impact of social problems on the behaviors of individuals and families can be seen as the micro perspective for understanding social welfare problems. In the context of reframing HB&SE, it seems important to identify major social problems but to also identify specific social welfare problems that can be viewed as a subset of a major social problem. For example, the following are conditions in the social environment that social workers confront on a daily basis that need to be understood in order to deliver effective human services:

- Poverty neighborhoods.
- Failing public schools.
- Inaccessible physical health and mental health care.
- Fragmented systems of long-term care for the elderly.
- Unemployment in the marketplace.
- Overloaded foster care systems.
- Dismantled government social safety net programs.

Each of these illustrations includes a substantial body of knowledge related to demographics and explanatory theories, and it is important to link them to a comprehensive description of social problems. This linkage could be approached from several different directions. One approach might involve the concept of stigma, whereby social welfare problems are viewed from the perspective of the dominant culture or paradigm. Another approach could view these problems from the perspective of adaptive behaviors and the capacities and strengths displayed by those victimized by these social welfare problems. Either way, the rationale for this approach is to provide a foundation of understanding related to both major social problems and specific social welfare problems whereby explanatory theories are used to increase one's understanding of human behavior and the social environment. The linkages between social welfare problems (demographics and theories of poverty) and the topics that appear in social policy courses (poverty policies and programs) as well as other electives in the social work curriculum should be apparent. However, the connections between teaching HB&SE content and social policy content have been inadequately explored.

In a similar way, if HB&SE content is designed to inform the practice of future social workers, how does the understanding of social problems and the resulting human behaviors enter into the process of client engagement and assessment and, ultimately, interventions at the individual, group, organization, and community levels? This guiding question relates to making a candid assessment of how two major components in the social work curriculum (HB&SE and practice) actually relate to one another. In the process of reframing HB&SE, faculty in both sequences need to take responsibility for identifying the linkages for students to both understand and apply in their fieldwork and subsequent practice. For example, one approach would be to argue that foundation HB&SE courses are best utilized in the assessment phases of micro, mezzo, and macro practice. In essence, a set of HB&SE concepts could be viewed as part of a set of assessment tools that can be used to assess the presenting problems identified by individuals, families, groups, organizations, and communities. With this approach, students who work with adolescents or the elderly could see how explanatory theories related to their respective client populations may be used to inform their practice, particularly their capacity to assess the multiple factors contributing to both the behaviors of a client and the environment in which they are living or coping.

Finally, students may benefit from seeing the linkage between explanatory theories (HB&SE) described in this chapter (and elsewhere in the book) and these examples of intervention theories (practice):

- Micro practice intervention theory (strengths-based, task-centered, cognitive-behavioral, psychoanalytic, client-empowered, etc.).
- Mezzo practice intervention theory (therapeutic and task-centered group work, educational group work, etc.).
- Macro practice intervention theory (community practice, management practice, policy practice, etc.).

Each of these areas of practice is based on sets of practice principles that constitute the intervention theories utilized by members of the social work profession. This distinction between explanatory and intervention theories by Briar and Miller (1971) can be very

helpful to students who attempt to integrate their knowledge of HB&SE with the learning of practice skills.

CONCLUSION

In this chapter, we have attempted to identify the complexities of utilizing theories from the social and behavioral sciences, a set of conceptual frameworks that may aid in organizing knowledge particularly focused on the social environment side of HB&SE, an array of instructional applications, and a set of suggestions for reframing HB&SE. We noted that there are at least three tasks associated with the process of borrowing knowledge: selection, synthesis (and evaluation), and translation for social work professional use. Dialogue about these three very important and complex processes has received limited attention in the social work literature, especially as they apply to the knowledge base of HB&SE.

As social science and behavioral science knowledge develops over time, our profession will always grapple with how best to manage, organize, and utilize this information. Although it is unlikely that there will ever be a single metatheoretical framework that covers HB&SE (Turner, 1990), it is important to clarify how we intend to use this knowledge. Messick's (1983) distinction between person as context, person of context, and person in context may be a useful point of departure.

The central goal of this chapter is to offer several alternative frameworks for organizing, synthesizing, and translating knowledge. Three themes cut across our discussion. The first is a need to utilize theoretical accounts that address both human behavior and the social environment, particularly as they aid our understanding of the reciprocal interaction between the two. The second is a need to specify key levels of analysis and concepts related to the larger social environment. The third is for a set of concepts that aid in the translation of theory into practice.

If we truly strive to understand the nature of the interaction between persons and their environments, there is considerable conceptual work to be done. We do not dispute that explanatory theories can also be informative of person-environment interaction, but they are generally framed from the perspective of the individual as the key unit of analysis. We advocate for increased attention to larger units of analysis (person-environment interaction, environment). Although we cannot imagine that this would be a highly controversial recommendation, in many ways it is easier said than done. Evidence of the diversity in the HB&SE curriculum (within and between social work programs) highlights the complexities of covering larger levels of analysis. In addition, these multiple levels of analysis complicate the process of describing how theory can inform practice. We attempted to grapple with these translation issues in three ways: (1) by presenting concepts (risk and resilience, stress and coping) that may link complex theoretical accounts back to practice, (2) through instructional applications, and (3) through a possible reframing of HB&SE knowledge use.

The frameworks we presented are clearly not exhaustive. We hope that they aid development of our HB&SE knowledge base by encouraging more discussion about these complexities. We ultimately conclude that the agenda for further dialogue is substantial and needs to be explored annually through special interest groups and faculty development institutes at social work professional conferences, in peer-reviewed journals, and through the wide dissemination of books like this one.

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Chapter 2

RESPONDENT LEARNING THEORY

Bruce A. Thyer

Most readers are familiar with the elemental principles of respondent learning theory, also known as classical conditioning theory, and tend to associate this approach to understanding human development across the life span with the work in the early twentieth century of the Russian physiologist and Nobel laureate Ivan Pavlov. However, as outlined by Gormenzano and Moore (1969), the scientific analysis of so-called reflexive behavior goes back several centuries prior to Pavlov, perhaps beginning in the modern era with the writings of René Descartes in 1660, although many earlier writers, such as Aristotle, at least touched on the topic. Descartes used the term "reflexes" to describe "stereotyped, innate muscular responses following sensory stimulation" (Gormenzano & Moore, 1969, p. 122). In 1751, Whytt asserted that certain forms of nonmuscular bodily reactions, such as pupils contracting when exposed to bright light and salivation, were also reflexive in nature. The Russian physiologist Sechenov undertook a series of empirical studies on reflexes, published in 1863, and he was in turn influential on his compatriots, the young Ivan Pavlov and Vladimir Bekhterev. These authors had a dramatic impact on American psychology, as transmogrified and disseminated by the influential John Watson (1916, 1925). Pavlov's (1927) work, for which he received the Nobel Prize, related in part to how physiological processes could be conditioned. Thus, from the earliest days, it is clear that the school of psychology called behaviorism dealt with far more than only the overt, observable actions of animals and people, also examining inner events, those occurring within the skin, such as one's physiological responses.

Respondent learning theory is one component of the general approach to social work that has been labeled "behaviorism" and has been occasionally mentioned by earlier social work textbooks (e.g., Fischer & Gochros, 1975; Jehu, Hardiker, Yelloly, & Shaw, 1972; Schwartz, 1982, 1983; Schwartz & Goldiamond, 1975; Sundel & Sundel, 1975). One of the earliest psychotherapy books describing the applications of respondent learning principles to helping clients solve problems was called *Conditioned Reflex Therapy* and appeared almost 60 years ago (Salter, 1949), so it is clear that this approach to social work theory and intervention has been with us for some time.

Generally, behaviorism proposes that human beings learn, that is to say, change their behavior, in response to environmental experiences through at least three distinct processes: respondent learning, operant learning, and learning via imitation, which is also called modeling. It is believed that these three learning mechanisms, combined with one's genetic endowment and relevant biological factors, are responsible for a very large proportion of human learning. Behaviorism provides a comprehensive theory of normal human development across the life span, an etiological approach toward understanding what is described

as "psychopathology," and effective approaches toward social work intervention. Indeed, it is one of the few models of social work practice that has applicability across the entire spectrum of social work intervention, micro through macro. One of the earliest textbooks dealing with social work theory was titled, appropriately enough, *The Theory of Social Work* and was written by Frank Bruno in 1936. Bruno provides a very favorable summary of the behavioral perspective as it was then understood. For example:

> Behaviorism may be described as the theory that learning is the association of a new impression with the circumstances present at the time of receiving it. It has several obvious merits. It integrates emotion and intellect in a manner which realistically reproduces actual experience. It is socially acceptable, in the main, as it places such large faith upon capacity to learn, given the right conditions for association. . . .
>
> Behaviorism affords a first class technic. . . . It is invaluable for the social worker in his efforts to understand the conduct of his clients, because it refers him back to the past experiences in which are to be found the particular circumstances which have determined the attitude of habitual responses of each individual. Thus behaviorism opens up endless possibilities for social work. . . .
>
> It is also of value in treatment, for some of the most interesting work of the behaviorists has been in the field of what is called reconditioning; that is, in the unlearning of the old and the learning of new response patterns. . . .
>
> Its simplicity is a real asset. Such incidents as the dropping of earth upon a coffin, the smelling of certain odors by worshippers in the Catholic Church, the hearing of the national anthem, the reading of certain words—all these under given conditions establish emotional and motor patterns which are powerful and constant, and which can be explained upon the theory of the conditioned reflex. (pp. 197–199)

Behaviorism, and respondent learning theory in particular, may be seen as one of the earliest and clearest explications of the person-in-environment approach that has long characterized social work theory. Given the statements just quoted, and as described elsewhere in this chapter, noting that behaviorism attempts to explain not only overt, observable actions, but also one's feelings and cognitive processes, it is both misleading and a shame that contemporary accounts of the behavioral perspective perpetuate the notion that it only focuses on overt action. For example, one widely used social work text titled *Understanding Human Behavior in the Social Environment* states: "*Behavioral or learning theories* differ from many other personality theories in one basic way. Instead of focusing on internal motivations, needs and perceptions, they focus on specific observable behaviors" (Zastrow & Kirst-Ashman, 2007, p. 90; italics in original).

It is detrimental to the acceptance of behaviorism that it is erroneously equated with a sole focus on explaining observable behavior since it is obvious that the domain of social work deals with clients' affective states, thoughts, dreams, aspirations, and other private events. By seeming to exclude such phenomena, as asserted by such secondhand accounts, social work students and practitioners may tend to overlook or dismiss the potential applications of behaviorism to these other important domains. Myers and Thyer (1994) and Thyer (1991a, 2005) provide overviews on how behaviorism has been consistently misrepresented in the social work literature, to the field's disadvantage. Regrettably, the topic of respondent learning theory is given very sparse coverage in the human behavior texts most commonly used in social work education, despite the pleadings of a few far-sighted writers urging such inclusion (e.g., Thyer, 1992a, 1992b). So in this chapter I will try to remedy this omission

and look at some of the fundamental concepts and processes of respondent learning theory, followed by illustrations of some naturally occurring examples. I review some aspects of respondent learning as etiologically linked, in a true example of a person-in-environment orientation, to selected psychosocial problems, and how this approach has been used in practice.

RESPONDENT LEARNING PROCESSES

Unconditioned Stimuli

Unconditioned stimuli are environmental events that our bodies naturally react to in some circumscribed manner. These are present generally from birth and do not have their origins in any specific learning experiences. Most of these unconditioned stimuli are familiar to you, given that you have reacted to them since birth or have witnessed them in others. Brushing a newborn's cheek elicits a reflexive rooting response; sucking results from inserting a nipple or other object into a baby's lips; a puff of air against the eye elicits blinking and tearing; our pupils constrict in bright light and dilate in dim conditions; tapping a knee tendon produces a jerk of the lower leg; a loud noise produces a flinch or startle reaction; a touch to the back of the throat produces coughing or gagging; a sharp pain (being poked, cut, burned, or shocked) causes a sudden withdrawal reaction. Not all of these unconditioned stimuli are equivalently capable of eliciting such reactions across the life span. The Moro reflex is present at birth, appearing as a startled look and sudden extension of the arms and legs when the baby experiences an abrupt loss of support (e.g., being slightly dropped) but disappears after a few months. The Babinski reflex, the extension of the big toe when the sole of the foot is stroked, disappears by the age of 2 years or so. By early childhood the rooting reflex or sucking response associated with nursing has disappeared. By late childhood or early puberty, genital stimulation in both sexes can produce sexual reactions such as erections (in males) and vaginal lubrication (in females), as well as orgasms if the stimulation is sufficiently intense. The acronym UCS is used to designate an unconditioned stimulus, and UCR refers to its associated reaction, or unconditioned response.

Some UCRs are associated with activation of the autonomic nervous system, producing elevations (to varying degrees) in various physiological functions such as heart rate, respiration, muscle tension, and blood flow, and certain hormones (e.g., adrenalin). Other bodily functions are reduced or slow down. For example, blood flow is reduced in the extremities (thus cold hands when frightened), salivation is reduced (thus dry mouth when scared), the digestive movements of our intestines slow down, and our pupils narrow. These autonomic reactions have been referred to as the body's "fight or flight" response. These functional relationships between UCSs and their associated UCRs are common to all human beings. They cut across both sexes and all races, cultures, and ethnic groups and can be considered universal human phenomena. And they go beyond human beings, in that we share such reactions with all other living animals. You can undoubtedly think of examples of dogs and cats displaying UCRs to obvious UCSs, and even single-celled organisms react in their own limited way (e.g., withdrawal) to relevant UCSs (Hennessey, Rucker, & McDiarmid, 1979). It has even been shown that individual human cells can react to UCSs with UCRs. The responsiveness of humans to UCSs is not only present from birth, but is also evident

prenatally! For example, many pregnant mothers have noted that their fetal baby will jump in response to a loud noise, in a manner similar to a newborn (or for that matter, to an elderly person). Thus is it apparent that we are dealing with a fundamental form of human behavior that functions across our entire life span, and the entire animal kingdom in general.

Conditioned Stimuli

Sometimes neutral events in one's environment are temporally present just prior to one's being exposed to a UCS. Imagine a young naive child being taken to the physician's office for her first vaccination. She sees with curiosity the syringe and needle. They are then plunged into her arm, and the vaccine is injected. The pain from the needle prick and tissue separation of the injection are clearly UCSs to which many children react with fear, flinching, and crying. This can be a very potent learning experience indeed! Now, a year later, the child finds herself once again at the pediatrician's office. When the physician enters the examination room and brings out the syringe (if not before), many children become fearful, try to withdraw, and begin crying, even prior to receiving the injection. At this point the previously neutral stimuli, the sight of the physician and the syringe, have become capable of eliciting reactions very similar (if not equivalent) to the UCS of the injection itself. These neutral stimuli have become conditioned stimuli (CS), and the reaction to the CS is known as a conditioned response (CR). This change in behavior is a learned response and represents one of the simplest forms of learning there is.

Prenatal temporal relationships between unconditioned stimuli and unconditioned responses can be used to establish conditioned stimuli and conditioned responses in fetuses (see Bernard & Sontag, 1947; Kisilevsky & Low, 1998; Kisilevsky & Muir, 1991; Kisilevsky, Muir, & Low, 1992; Ray, 1933). Newborns and very young infants have similar capacities, of course (Kasatkin & Levikova, 1935; Wickens & Wickens, 1940). Interestingly, it has been shown that newborns evidence preferences for hearing their mother's voice (a stimulus they had been exposed to during the last part of pregnancy), for a "familiar" story that had been read to the baby prenatally, and for prenatally sung melodies (Cooper & Aslin, 1989; DeCasper & Fifer, 1980; DeCasper, Lecanuet, Busnel, Granier-Deferre, & Maugeais, 1994; DeCasper & Spence, 1986), all clear evidence of some degree of learning *in utero!* These simple functions are the building blocks from which some very complex forms of learning can occur, ones that, as we shall see, influence both the everyday, so-called normal behavior of you and your social work clients, as well as so-called dysfunctional, abnormal, and pathological behavioral phenomena.

Timing Is Everything!

In respondent learning, as just described, timing is everything. Well, if not quite everything, it is certainly very important! Take the following examples:

A. You hear a mild tone, and 5 minutes later a sudden bang, to which you flinch.
B. You hear a mild tone, and half a second later a sudden bang, to which you flinch.

Which arrangement, if repeated, will be more likely to produce a CR to the tone, A or B? If you guessed B, you are obviously correct. The longer the delay between the presentation

of the neutral stimulus and the presentation of the UCS, the less likely it is that respondent learning will occur. This functional relationship between time delays and learning varies somewhat according to the duration and intensity of the stimuli being paired, but generally speaking, the interval separating the presentation of the neutral stimulus and the UCS must be very brief indeed (e.g., 1 second or less) in order for a CR to become easily established.

An exception to this temporal contiguity principle is in learning taste aversions. Nausea is a very powerful UCS, and anything paired with nausea is capable of producing aversions (CR), even given a considerable delay between the presentation of the neutral stimulus and the experience of the UCR. When I was a teenager I announced to my stepmother that I thought it would be good for me to experience my first episode of alcohol intoxication at home, where it was safe, rather than at some party with my friends and then have to face driving home. My stepmother smiled at me, sweetly agreed with my assessment of the situation, and promised to arrange things as I asked. A few nights later she brought home a bottle of inexpensive sherry from the local convenience store and invited me to partake of it. Quite excited, I filled a large glass with ice, prepared my notepad and pen, and consumed the entire bottle within 20 minutes. I took careful notes before, during, and after my imbibing, while seated in a reclining chair. The stuff was pretty awful tasting, and I had no idea (at age 16) that the pungent sherry was to be slowly sipped in modest quantities and savored, not guzzled like iced tea on a hot day. I began to experience the early signs of drunkenness, sensations undoubtedly familiar to some readers of this chapter, and continued my introspective notations. After an hour or so I lost my interest in taking notes, which by that time had anyway degenerated into an unreadable scrawl, and instead I developed a keen desire to relocate to the bathroom. I popped the recliner forward and pitched myself onto the living room floor. I could not manage to stand upright but made my way on all fours to the lavatory, trailed by my stepmother cackling with laughter. I was quite sick, experiencing the UCS of alcohol intoxication and the UCR of nausea and vomiting. The room spun and I hung on grimly to the toilet until I had no further contributions to make. Recovering slightly, I made my way to my bed, discovering how the room seemed to rotate around me as I lay there. All in all it was a very powerful learning experience! Unbeknownst to me, however, respondent learning was insidiously at work, without my awareness or consent. The pungent smell and taste of cheap sherry, originally neutral stimuli, through their association with powerful UCS acquired the ability to elicit similar responses. Weeks later, when I had occasion to smell a glass of sherry, I found the odor to be positively nauseating! Through this one experience, technically known as one-trial learning, the neutral smell and taste of sherry became a CS, eliciting a CR very similar to that evoked by alcohol intoxication, namely nausea. And to this day, some 35+ years on, I cannot bring myself to drink sherry. Or spirits with a similar smell or taste, such as port. Disgusting stuff!

Anyone who has eaten a bad oyster or suffered a bout of poisoning from some other clearly identifiable food will resonate with this episode. This particular form of respondent learning is called a conditioned taste aversion (CTA) and is somewhat special in that the temporal spacing between the presentation of the neutral stimulus and the UCS can be quite distant, several hours in fact, and still have learning occur. Such CTAs occur across all mammalian species and among birds, and their biological adaptive significance is obvious. If after a couple of tastes of a poisonous prey or toxic plant an animal gets sick, that animal will be very likely to avoid that type of food in the future, perhaps avoiding a future lethal dose of a

harmful food. Members of a species a bit more liable to developing CTAs will be more likely to survive (and reproduce), culminating in the contemporary animal species we see today, with most readily prone to developing CTAs. Some ranchers try to make use of this principle by lacing dead sheep with lithium chloride, an emetic drug that produces severe nausea, in an attempt to condition predatory coyotes so that they develop an aversion to the taste of sheep's flesh. This keeps the living sheep safe from predation without having to kill coyotes.

Respondent Extinction

Respondent extinction occurs when, after the establishment of a CR to CS, the CS is repeatedly presented *alone* with no subsequent pairings with the UCS. For complete respondent extinction to occur, it is important that the UCS never recur in association with the CS. If the UCS always follows the CS, then you can expect the CR to remain in place indefinitely. If it happens 90% of the time, 70%, 50%, or even 20% or less, the CS will remain capable of evoking a CR virtually indefinitely. If it is randomly associated, it will also remain in place for a very long time. For respondent extinction to occur effectively, the CS must be absolutely disconnected from being paired with the UCS. As we shall see later, the phenomenon of respondent extinction can be extensively used in psychotherapy. Another term for respondent extinction is habituation.

Vicarious Conditioning

Imagine two people, A and B, seated side by side in a laboratory, both connected to instruments that measure their individual bodily reactions, such as galvanic skin response (GSR) and heart rate. Person A is also connected to electrodes that can deliver a mildly painful electric shock. A tone sounds, and a moment later person A receives a mild but painful shock, producing a flinch and "ooch" exclamation. Person B did not get shocked but observed A's reactions. This occurs over a number of trials. What do you think will happen to hapless person A? Yes, A will develop a CR to the previously neutral tone, perhaps manifested by changes in GSR and heart rate. This makes sense of course, according to the principles of respondent learning. But what about B, who never experienced the pairing of the tone and being shocked? Suppose we disconnect the shock electrodes from A and connect them to person B, and then sound the tone. It is very likely that B, who was never shocked following the tone, will *also* display a mild CR to the tone! This phenomenon is called "vicarious conditioning" and illustrates that we ourselves need not *directly* experience associations between neutral stimuli and UCSs in order to develop CRs to these CSs.

Can you think of any possible operations of vicarious respondent learning to daily life?

A solider in combat lifts his head above the foxhole and is immediately shot, in front of his buddies. Can you see how the buddies would become fearful of peering above the foxhole?

You are watching television and learn of an airplane crash wherein there were no survivors. The photos are vivid and accompanied by images and sounds of weeping relatives. The next day you have a flight out of town.

You are in line for a flu shot and are not particularly anxious. But it appears that the nurse is clumsy, and several times patients in front of you give a loud yelp of pain when injected. Now it is your turn.

You see in a movie a character, someone of your own complexion, who is badly beaten and sexually assaulted by a person of a different color. Later that night, walking down the deserted street to your car, you encounter a person of the same color and sex as the perpetrator portrayed in the movie.

As you might suspect, vicarious conditioning via the observation of the experiences of others is not likely to produce conditioned responses of the same intensity as is directly and personally experiencing associations between neutral stimuli and UCSs. But the effect is nevertheless very real and influences our attitudes, beliefs, and bodily reactions to certain stimuli. See Hygge and Dimberg (1983), Hygge and Ohman (1976, 1978), and Kravetz (1974) for some experimental investigations of vicarious respondent learning in people.

Spontaneous Recovery

Sometimes a person can experience respondent extinction, so that a CS that previously evoked a CR loses the capacity to evoke that CR. But, at a later time, if the CS is presented again, a diminished version of the CR may recur. This reemergence of a previously extinguished CR is called "spontaneous recovery," and the CRs that appear with this phenomenon are usually of a considerably lesser magnitude than the CRs prior to extinction. Spontaneous recovery can occur many years after a CR was originally established and then underwent extinction.

Respondent Discrimination

A little girl is toying with a frayed electrical cord and gets a painful shock. Later in life, while changing a lightbulb with wet fingers, she gets another severe shock. As you might imagine, such experiences can make one very fearful of handling electrical appliances or wiring. An electrician comes to your home and undertakes some needed repairs on your air conditioner. One of the first things she does is go to the circuit breaker and turn off the power to the air conditioner. Next she opens the electrical box and tests the wires with a circuit breaker to verify that they indeed are not live. At that point, she confidently grasps the electrical wires with no apprehension at all, even though in the past she has received plenty of shocks for touching similarly appearing wires. This process is explained via respondent discrimination. An early experiment examined this process. Bass and Hull (1934) had human subjects acquire a CR to a vibration applied to the skin, a vibration that indicated a mild shock was forthcoming. Some subjects had the vibration applied to the shoulder, others to the calf. In short order, a CS to the previously neutral vibration (on the calf or the shoulder) was established, as measured by GSR when the CS was presented, absent a shock. On later trials the vibration was applied not to the original site, the calf or shoulder, but to other places on the body. There was a clear function between the magnitude of the CR and the distance the CS was applied: The farther away, the smaller the CR. When the vibration was applied to the shoulder, those who were trained using the shoulder site

got a strong CR. If the vibration was applied instead to the lower back or calf, the response got less and less, depending on the distance. Apparently the establishment of respondent learning responses is very sensitive to similarities and differences in the nature of the CSs. When they are quite different, the person discriminates these differences, and any CR evoked is weak, or even absent. But try letting the electrician who is working on your air conditioning unit while holding bare wires hear you snap on the circuit breakers she had turned off, to gain a vivid sense of how well she has developed a discriminated response to electrical wiring!

Sensitization

Sensitization refers to the enhanced learning effects of repeated presentations of a UCS on the establishment of a CR. The first time a UCS is presented, it produces a certain effect. Apart from the salient characteristics of the UCS itself, it is inevitably associated with a situational context during which the learning occurred. When people are placed in a similar situational context, not only will they respond to the original UCS, but they are more likely, or *sensitized,* to respond to other stimuli that are themselves similar to the UCS. Imagine a prisoner of war alone in a room and tied to a chair. The door opens and a man walks in. The prisoner has little initial reaction to this stranger, who then proceeds to abuse the prisoner. The next day, you can readily imagine that when the restrained prisoner sees the same man enter the room, the prisoner will react with extreme fear, physiological arousal, enhanced efforts to escape, and so on. Again the prisoner is abused. The third day, the prisoner is in the now horribly familiar room, the door opens, and a stranger enters. The prisoner will likely have a less severe reaction to this stranger than if the previous torturer had entered, but will also likely have a much more aroused and fearful response to this second stranger than to the first stranger. Quite apart from the first stranger becoming a CR, the second one, a person who had never tortured the prisoner, is something of a CR, eliciting similar, if milder, reactions, whereas, only a few days earlier, meeting a stranger produced little if any fearful response. This enhanced susceptibility to developing CRs to previously benign CSs represents the process of sensitization. It may well account for some of the responses of prisoners of war who have been tortured, who display what has been called Posttraumatic Stress Disorder (PTSD; e.g., exaggerated startle response, hypervigilance, suspicion of strangers).

Second-Order Conditioning (or Higher Order Conditioning)

If, following the establishment of a CS, a second neutral stimulus is paired with the original CS, the second neutral stimulus itself can come to evoke responses similar to those of the first CS_1, and in effect has become a second-order CS, or CS_2. Another neutral stimulus can itself become associated with this second CS, and in turn become a third-order CS, or CS_3, and so on.

Sexual stimulation is a very powerful UCS for most people, and neutral stimuli associated with sexual stimulation can quickly become second or higher order CSs themselves. In turn, neutral stimuli paired with previously established CSs can themselves become CSs. My wife is a powerful CS, having acquired this influence over me through 15 years of being associated with certain UCSs. When she wears a particular perfume while at dinner, one that

she reliably has worn on prior evenings that culminated in spousal intimacies, that perfume in turn has become a CS, and I now find it most alluring due to its past associations. This is an example of higher order conditioning, and such chains can be extended through many such pairings. Being beaten by an angry spouse is a UCS, with UCRs of autonomic arousal, fear, and avoidance. If prior episodes of being beaten have been paired with the husband drinking alcohol, the sound of that first beer being cracked open can become a CS. If the husband comes home angry, with a frowning face and irritable demeanor, and these in turn have been paired with his subsequently drinking beer, the frowning face can become a CS. And so on.

NATURALLY OCCURRING EXAMPLES OF RESPONDENT LEARNING IN REAL LIFE

In the best-selling book *Cheaper by the Dozen* the Gilbreth children related how their father provided instruction in touch-typing:

> Ern started slowly and then picked up speed, as her fingers jumped instinctively from key to key. Dad stood in back of her, with a pencil in one hand and a diagram in another. Every time she made a mistake, he brought the pencil down on the top of her head. "Stop it, Daddy. That hurts. I can't concentrate knowing that that pencil's about to descend on my head." "It's meant to hurt. You head has to teach your fingers not to make mistakes." Ern typed along. About every fifth word, she'd make a mistake and the pencil would descend with a bong. But the bongs became less and less frequent and finally Dad put the pencil away. "That's fine, Ernie," he said. . . . And some of us recoil today every time we touch the backspace key. (Gilbreth & Carey, 1948, pp. 58–59)

In this illustration, the pain caused by being hit with a pencil is a UCS, and flinching is the UCR. In the original learning, Ern would make a mistake, hit the backspace key, and get rapped with the pencil (UCS). She would then flinch. Over time, years later, and even in the absence of the threatening pencil, making a typing mistake and hitting the backspace key (CS) causes the conditioned response (CR) of flinching. I would like to thank my son John for bringing this literary example to my attention.

Sometimes, as winter approaches, humidity changes cause a buildup of static electricity so that one receives an mild electric shock upon touching the car door handle. In this instance, the static shock is a UCS, and flinching and withdrawal from the source of the pain (the door handle) is a UCR. Each year, after this has happened to me a few times in the winter, I find myself hesitating to grasp the door handle, which has become a CS, eliciting a mild withdrawal reaction as I reach for it (a CR). Now this is relatively easy to overcome, and with a mild effort I can force myself to touch the door, but the effect is very real and will be familiar to many readers. Respondent extinction occurs in the spring, when, as the climate becomes more humid, the buildup of static electricity diminishes and the shocks become milder and eventually disappear. Within a few weeks the hesitancy I learned during the winter toward touching the car door handle completely disappears (until next fall!). Technically, I am repeatedly exposed to the CS of touching the handle, *but* the shocks no longer happen (there is no UCS paired with the CS). Soon my CR falls by the wayside. This is an example of respondent extinction.

For one year, while I was serving in the U.S. Army, I lived in a military barracks, with communal showers and toilets on opposite ends of the bathroom. I liked to shower before going to bed, and I enjoyed very hot showers. Shortly after moving into this barracks, late one evening while I was enjoying a leisurely steaming shower, another soldier flushed a toilet from across the bathroom. A moment later my hot shower turned into a scalding inferno as the cold water pressure was cut off for a few moments, diverted to the task of flushing the toilet. I gave a yell of pain and hopped out of the stream of water, literally pushing my way through the shower curtain. A few nights later this occurred again. And again. What do you think happened? Soon I found myself immediately but seemingly involuntarily hopping out of the shower every time I heard the adjacent toilets flush, and thus avoiding getting scalded. I did not, however, develop a hopping or flinching response to the sound of the toilet flush when I was *not* in the shower! For the rest of my assignment to this station, about 1 year, I regularly hopped out of the shower when the toilet was flushed. Fast-forward a couple of years, when I was an MSW student living in an apartment with a roommate. One evening, shortly after moving into this new apartment and while I was enjoying my evening shower, I unexpectedly heard the toilet flush. I gave a yelp of dismay and hopped out of the shower, angrily yelling "Don't do that!" My roommate was astonished at my reaction. Our modern apartment did not have antiquated plumbing that reduced the flow of cold water when the toilets were flushed, and the shower temperature did not change. Nevertheless, to this day, over 30 years later, I still have a mild flinch if I hear the toilet flush while I am showering. In this illustration, the UCS is painfully hot water, the UCR is flinching and rapidly getting out of the stream of water, the CS is the sound of the toilet being flushed, and the CR is flinching to the sound of the flush.

I absolutely love hot and sour soup, one of my favorite Chinese delicacies. Some years ago I ordered my meal at a terrific Oriental restaurant in Ann Arbor, Michigan, and the waiter brought me my bowl of soup. As he placed it in front of me, even before I tasted it, even before I smelled it, just by looking at it, I found my mouth watering. A lot! I was struck by this response. In this case, hot and sour soup is a UCS. Just about anyone's mouth waters when they taste the combination of vinegar and hot pepper flavorings that go into this recipe. The salivation is a UCR. I have thus, over many years, experienced the following chain: Hot and sour soup comes, is seen, and is then smelled. My mouth responds to the taste (a UCS) of the soup by salivating (a UCR). Nowadays, soup comes, I see it, and I salivate. The mere sight of the soup has become a CS, and salivating to the sight of the soup (not only to its taste) has become a CR. In this response I am just like one of Pavlov's dogs!

My wife, Laura Myers, and I have four children. Laura breast-fed all of them and noticed the following respondent learning process occurring. During the months of breast-feeding, a mother's breasts engorge with milk. What usually happens is that when mothers feed a child, the nipple is presented to the hungry infant, who latches on and begins to suck. This causes the milk to reflexively begin to flow, or "let down." The baby's sucking stimulation is a UCS that produces the UCR of milk flow. Now something else frequently happens. The baby is hungry and begins to cry. Mother hears the crying, picks up the infant, and presents her breast for feeding. The baby latches on, milk lets down, and mother and baby enjoy a nice nursing experience. What Laura found is that after some time had passed after she began nursing, when she heard our infant son John begin to cry, her milk would let down even before she would begin nursing him. In this instance, the temporal pairing of the sound of crying, followed by the baby latching on, resulted in crying becoming a CS,

with the reflexive milk flow to the sound of crying being a CR. Previously, crying alone did not result in her milk letting down, but after some pairings, it did. This reflexive let down of breast milk can also be evoked by hearing another baby crying (as in a restaurant) or by watching and hearing a crying baby depicted in a movie. This is respondent learning, pure and simple.

Some years ago I underwent some very painful dental work. I heard the high-pitched whine of the air drill, experienced the sound and sensations of the drilling going into my teeth, and moments later, while these stimuli continued, I experienced an abrupt, very severe pain, a pain that continued throughout the drilling process. To this day, when I lie back in the dentist's chair and she activates the drill, I tense with anticipation. . . . Sound familiar?

Hopping out of the shower, salivating when anticipating soup, breast milk being secreted, and tensing while having dental work—all are examples of how we can be affected by respondent learning principles in our everyday lives. Can you think of similar examples in your own life? These naturally occurring examples are interesting and illustrate the processes of respondent conditioning, but it is useful from a scientific sense to see if such operations can be experimentally studied, perhaps even intentionally established and extinguished, in order to learn more about this type of learning. In the next section we will look at a few such laboratory studies.

EXPERIMENTAL EXAMPLES OF RESPONDENT LEARNING

Experimentally Induced Pupillary Constriction

One unconditioned response to an abrupt and loud noise is pupillary constriction. Most persons exhibit this reaction throughout their life. It is an unlearned and durable behavior. Now suppose the following occurred: A person is standing behind you and says the word "Contract" while your pupillary diameter is constantly being measured. What would happen? If you guessed "nothing," you are probably right. And if the person said "Contract" repeatedly, what would happen? Again, very likely nothing. This is because the diameter of your pupil is something you do not have much voluntary control over. Now suppose the hidden person said "Contract" and a second later fired a gun behind you. What would happen to your pupils? Yes, they would contract momentarily. Imagine this happening a number of times: The person says "Contract" and then fires the gun. Then, during one of these trials, the person says "Contract" but *does not* fire the gun. What would your pupils do? Yes, they would contract. At this point, we have established the following operations. The gunshot is a UCS, and pupillary contraction is a UCR to this UCS. After some learning trials, the word "contract" became a CS, and the contraction in reaction to hearing this word has morphed into a CR. See Hudgins (1933) for a description of an experimental demonstration of this phenomenon.

Conditioned Sucking in Newborn Babies

You will recall that mothers can develop conditioned responses to the sounds and sights of unfamiliar babies and experience their milk letting down even though their own baby is not nursing. Psychologists have not neglected infants in their experiments on respondent

learning. In one seemingly coldhearted study (Lipsett & Kaye, 1964), newborn babies were presented with hearing a tone, and then a moment later had a pacifier inserted in their mouth (which elicited the sucking reflex). What do you think happened when, after a few trials of this sequence, the tone alone was sounded, but the pacifier was *not* presented? If you guessed that the infants began to suck, even without the pacifier, you would be correct, and obviously well on your way to understanding the topic of this chapter. Let's check on this. In this example, can you identify the UCS, UCR, CS, and CR? Which of these represents the sound of tone *after* it came to elicit the baby's sucking? Are you sure?

Respondent Conditioning of Private Events

Interestingly, respondent conditioning processes are not limited to affecting observable behavior, but they also affect private events, behaviors occurring under the skin, so to speak. The psychologist Neal E. Miller (1955) describes one early series of experiments demonstrating this. He randomly presented subjects in a psychology experiment with a picture of the letter *T* or a picture of the number *4,* and they were asked to say aloud what they saw, *T* or *4*. Whenever the *T* was presented, it was always immediately followed by a brief but painful electric shock. The subject's GSR (a measure of anxiety) was constantly recorded throughout this presentation of a series of initially neutral stimuli. What do you think happened? Yes, after some trials, when they saw the picture of the *T* (originally a neutral stimulus), they developed a strong GSR reaction, evidence that the *T* had become a potent CS. No such GSR reactions were produced by seeing the number *4,* a neutral stimulus never associated with a painful shock. Interestingly, after this CR to the letter *T* was established, N. E. Miller also demonstrated that a similar GSR reaction could be evoked simply by having the subjects *say* the letter *T without* showing it to them. So you have a CR_1 established to seeing the stimulus *T* and a CR_2 to *simply saying it aloud!* N. E. Miller next asked his subjects to randomly *think* (on a cue) of either the letter *T* or the number *4,* without either seeing it or saying it aloud. What do you think happened? Yes, conditioned GSR reactions were evoked by the mere *thought* of the letter *T,* a CR_3, whereas no such reactions occurred when they thought of the number *4*. Thus respondent conditioning affects not only our simple leg twitches and eye blinks but also our visceral (in the literal sense of the word) bodily reactions as well as our *thoughts!*

The comedian Jerry Seinfeld alluded to this process, in a more positive example, in the following shtick:

> A man is paralyzed mentally by a beautiful woman, and advertisers really take advantage of this. Don't you love those ads where you see the woman in the bikini next to the 32-piece ratchet set? And we'll be looking at the girl in the bikini, and looking at the ratchet set, going "All right, well if she's right next to the ratchet set, and I had that ratchet set . . . I wonder if that would mean that . . . I better just buy the ratchet set." (Seinfeld, 1993, p. 53)

Contemporary advances in neurological research are extending the science behind Seinfeld's anecdotes. Using a sophisticated brain scanning technique called functional magnetic resonance imaging, researchers have shown that exposing people to stimuli such as pictures of automobiles can produce differential effects in the brain, with "sexy" sports cars producing more activation in the reward and reinforcement centers of the brain than

pictures of plain, vanilla small cars (Erk, Spitzer, Wunderlich, Galley, & Walter, 2002). Similar results are apparent when heterosexual males view pictures of attractive women and when consumers view favored brand names and logos (e.g., Coke versus Pepsi). These emotional reactions mediated by the brain are obviously learned responses acquired during one's lifetime through the contrived pairing via advertising and other experiences of UCSs and some CSs with new, neutral stimuli, so that the new neutral stimuli themselves acquire something of the valence of effect of the established UCSs or CSs. There are reasons why some cars are called "sexy" or "hot."

Of course, respondent conditioning can cause rather unpleasant reactions. In one classic study by Gale and Jacobson (1970), people were attached to various instruments to measure physiological indicators of anxiety. Then verbal insults were directed toward these persons, and, as you might imagine, they reacted with the mild physiological arousal associated with being frightened or angry. Simple words can cause CRs in normal people. How this comes about is not difficult to envision. A child is told "You are stupid" just before getting smacked by an angry parent. How many trials like this would it take before hearing the word "stupid" would come to elicit an automatic, unpleasant, autonomic response in a child? Not many. Maybe only one, if the smack was severe enough. Insulting someone who speaks only English by calling him a "Dummkopf," a German word for stupid, would produce no such anxious reactions, illustrating how it is not the intrinsic properties of words themselves that evoke responses, but their past associations with good or bad events.

Long chains of CRs can develop. A child is praised by her teacher for her good behavior and then given a delicious treat. Some episodes of this may result in words of praise becoming a positive CS. Later, the teacher breaks out in a big smile, then utters words of praise. The smile can become a positive CS. Ever more subtle cues can come to acquire big significance, as in the ever so slight nod of the head by the taciturn symphony conductor directed to the first violinist who just completed a difficult solo piece during a concerto.

Respondent conditioning processes clearly are significant in accounting for certain forms of muscular activity, but also are involved in the physiological processes mediating observable behavior. Many (but not all) phobic disorders seem to be acquired through respondent conditioning processes, and it has been shown that exposing phobic persons to their anxiety-evoking stimulus (e.g., a dog, cat, snake) can evoke very profound neuroendocrine reactions, including elevations in adrenaline, noradrenaline, insulin, cortisol, and growth hormone, as well as blood pressure and heart rate (e.g., Curtis, Nesse, Cameron, Thyer, & Liepman, 1982; Nesse et al., 1985). These elevations are clearly the types of conditioned responses seen in the processes of respondent learning. Stockhorst (2005) provides a recent overview of how human endocrine functioning can be affected by respondent learning processes. These are not unimportant processes. The conditioned release of insulin or changes in blood sugar levels can profoundly affect the health of diabetics, for example (Fehm-Wolfsdorf, Gnadler, Kern, Klosterhalfen, & Kerner, 1993; Stockhorst et al., 2004), and subjective craving among drug abusers is highly influenced by respondent learning processes (Childress, Ehrman, Rohsenow, Robbins, & O'Brien, 1992).

Here is another recent, fascinating study of respondent learning and private events. Happily married women were subjected to the threat of electric shock under one of three experimental conditions: while holding their husband's hand, while holding a male stranger's hand, or while not holding a hand. The wives heard a tone, then sometimes they were shocked. The experimenters looked for the development and magnitude of CR (fearful

anticipation) to the previously neutral tone, as measured by magnetic imagery of the brain. Holding their husband's hand resulted in significantly less of a stress reaction (e.g., a CR) to the threat of electric shock (hearing the tone, CS, previously associated with sometimes being shocked), compared to not holding a hand. Holding a male stranger's hand produced a middle-range effect—better than no hand, but not as comforting as holding onto one's beloved husband. It also turned out that the degree of comfort exerted by the husband's hand varied as a positive function of the reported quality of their marital relationship: The better the reported quality of the marital relationship, the more protective husbandly hand-holding turned out to be (see Coan, Schaefer, & Davidson, 2006, for details on this interesting experiment). Clearly, the processes by which holding one's husband's hand produces more of a comforting response than that of holding a stranger's hand involve respondent learning to some extent. The authors engaged in some fascinating speculation as to the neural mechanisms possibly involved in the protective functions of warm, interpersonal relationships (see also Dalton, Kalin, Grist, & Davidson, 2005).

I have reviewed a few examples of how respondent learning principles exert their influence in our everyday life and how some laboratory experiments can replicate and extend such observations in more controlled settings. I next examine some illustrations of how respondent learning theory may be relevant to our understanding of problematic behavior.

EXAMPLES OF RESPONDENT LEARNING OF PSYCHOSOCIAL PROBLEMS

Learned Social Anxiety

Small children, ages 12 to 24 months, observed their mothers interacting with a stranger under controlled laboratory conditions. Half the time the mothers acted (with prior coaching by the experimenters) in a nonanxious manner, and in the other half of the trials they acted socially anxious, in a manner consistent with what has been called Social Phobia. The children were then exposed to interacting with the same stranger. What do you think occurred? If you guessed that the children exposed to watching their mother act in a socially anxious manner themselves displayed more social anxiety (gaze aversion, crying, frozen posture, avoidance, etc.), you would be exactly correct. The acquisition of clinically significant social anxiety undoubtedly involves multiple elements, including modeling and operant reinforcement, but this study demonstrates the clear relevance of vicarious respondent learning as well, as potentially implicated in the etiology of Social Phobia (see de Rosnay, Cooper, Tsigaras, & Murray, 2006).

Anticipatory Nausea among Cancer Chemotherapy Patients

When many patients are diagnosed with certain forms of cancer, one of the common treatment regimens consists of chemotherapy, the intravenous administration of drugs that destroy cancer cells. Cancer chemotherapy usually takes place in outpatient treatment centers. Patients are placed in a treatment room and seated in a comfortable chair or recliner. An intravenous needle is inserted in the patient's arm and a saline drip is established.

Soon the toxic anticancer drugs are added to the saline drip, and the patient rests quietly until the prescribed dose is administered. An unfortunate frequent side effect of cancer chemotherapy is the development of severe nausea, and often debilitating vomiting, some hours after the chemotherapy session. Later on, a limited percentage of these patients come to experience conditioned or learned nausea upon entered the chemotherapy clinic or the familiar treatment room. In this example, the chemotherapy agents are UCSs and the nausea and vomiting they elicit are UCRs. By pairing the neutral stimuli of the chemotherapy clinic with the experience of nausea, the sights, sounds, and even smells of the clinic become CSs, which in turn elicit the CRs of nausea. Medically this can be significant if the anticipatory nausea is of such severity as to debilitate the patient, or even render it impossible to administer the chemotherapy (Boynton & Thyer, 1994; Burrish & Carey, 1986). A variety of medical treatments (e.g., antinausea drugs, medicinal marijuana) and psychosocial interventions (relaxation training, distracting stimuli) have been used to help prevent or treat conditioned nausea induced by cancer chemotherapy, with varying degrees of success.

Phobic Disorders

One of the most common categories of so-called mental illness are the anxiety disorders, and among the most common anxiety disorders are *phobias,* severe fear and avoidance evoked by objects or situations that do not reasonably warrant such a reaction. It is fairly well established that respondent learning plays an important etiological role in the establishment and maintenance of phobic disorders, especially Specific and Social Phobias (Mineka & Sutton, 2006), and my own clinical experience bears this out. One of the first clients I ever treated as a clinical social worker was a woman with a severe, disabling fear of dogs, a Specific Phobia that was clearly established after she was badly bitten on the head and buttocks by a large St. Bernard (see Thyer, 1981). Later, an adult client seen by one of my doctoral students had a severe fear of vaginal penetration, which seemed likely due to a playground accident involving the tearing of her vaginal wall, requiring surgical repairs at age 4 (Vonk & Thyer, 1995). Of course, asserting the role of respondent learning mechanisms involved in phobic disorders does not preclude the importance of other potential etiological factors, such as genetic and environmental risk factors, biological preparedness, parental modeling, instructions, faulty information, and the like. Saying that these processes are important does not necessarily mean that they are all-encompassing. King, Eleonora, and Ollendick (1998) and Field (2006) provide good overviews of the evidence linking respondent learning to the phobic disorders. To give one salient example, systematic assessments of how persons with clinically significant driving-related fears came to acquire their fears revealed that a very large majority had origins that could be directly attributed, at least in part, to respondent learning, for example, having been in or observed a vehicular accident (see Taylor & Deane, 1999).

Sexual Paraphilias

Sexual paraphilias are "recurrent, intense sexually arousing fantasies, sexual urges or behaviors generally involving (a) nonhuman objects, (b) the suffering or humiliation of oneself or one's partner, or (c) children or other nonconsenting persons that occur over a period

of at least six months" (American Psychiatric Association, 2000, p. 566). Paraphilias can be an essential and recurring feature for some persons' capacity for sexual arousal, while other paraphilias occur episodically. In either case, for the formal diagnosis to be made, the paraphilia must have caused some clinically significant distress or impairment in important areas of functioning for the person. Sexual pleasure related to physical stimulation in general, and the orgasmic experience in particular, is a very powerful unconditioned response, initially evoked by physical touch, and then through respondent conditioning processes. It can come to be evoked by a wide array of conditioned stimuli. One's initial sexual encounters, and the stimuli associated with these, are particularly salient learning experiences that can establish enduring patterns of sexual conditioned responses.

For most individuals these are pleasant and harmless associations, for example, a preference for a particular physical appearance in one's partners, type of clothing, hairstyle, perfume, social interactions, and so forth. Some of these responses are culturally determined. In countries with comparatively modest dress codes, the sight of a woman's ankle is very erotic indeed, whereas in Japan, the nape of the neck is the height of salaciousness. For some other persons, however, more troubling patterns of sexual responsivity can develop, as in individuals who develop a type of paraphilia called a sexual fetish, a strong erotic response to articles of clothing or to engaging in socially discouraged behaviors, such as exhibitionism, masochism, sadism, or pedophilia. How sexual paraphilias develop is not comprehensively established, but it has long been established that respondent learning experiences play an important role (McGuire, Carlisle, & Young, 1964). For example, in two fascinating studies, male subjects were exposed to a series of photographs, initially to pictures of sexually arousing nude women, followed by a picture of a pair of female boots. Sexual responsiveness was assessed via a device that measured penile diameter (e.g., size of erection). Initially the subjects developed erections to the pictures of the nude women but not to the boots, but by seeing a series of pictures of boots just before the nudes, the participants developed erections to the photographs of the boots alone. These conditioned reactions were also shown to undergo respondent extinction, as well as spontaneous recovery to some extent (Rachman, 1966; Rachman & Hodgson, 1968). Such reactions clearly appear to implicate responding learning principles, and not very complicated ones at that, as salient in establishing fetish-like conditioned responses, as well as nonproblematic sexual arousal patterns.

Once established, initial conditioned stimuli that evoke conditioned sexual responses may, through the processes of higher order learning, give rise to a very wide and complicated array of reactions through conditioning experiences in real life, or become established and maintained via erotic fantasies, especially those engaged in during masturbation (Aylwin, Reddon, & Burke, 2005). You will recall from earlier in this chapter that private events are themselves apparently subject to the same principles of respondent learning as are overt actions.

Other problems of a sexual nature, such as vaginismus among women, the involuntary, seemingly reflexive contractions of the outer muscles of the vagina, precluding intromission and genital intercourse, may well develop as a consequence of painful or frightening sexual experiences (Shortle & Jewelewicz, 1986), as may male erectile dysfunction associated with performance anxiety. If sexual activity has been associated with prior embarrassing, painful, or unpleasant experiences, the involuntary responses (e.g., anxiety) associated with

such reactions can effectively preclude the man's ability to achieve an erection, again a clear illustration of how respondent learning mechanisms are etiologically involved with this disorder.

Racism*

Classical learning principles apply not only to simple behaviors, but also to complex behaviors, reactions of our bodies that involve words, thinking, and attitudes. For example, if selected words are paired with unpleasant stimuli, soon those words themselves can come to evoke conditioned reactions similar to those caused by the unpleasant stimuli (Gale & Jacobson, 1970; N. E. Miller, 1955). Such emotional reactions can include sentiments such as fear, aversion, and distaste, and in part these emotional reactions are derived from the environmental contexts in which these words occur. Consider the circumstances in which one initially hears words such as *hillbilly, redneck, honky, spic, wetback, wop,* or *nigger.* If the circumstances surrounding exposure to these racially laden words are unpleasant and perhaps associated with strong emotions such as fear or dislike, then the very words themselves may evoke related affective states. Not only affective states but also attitudes seem influenced by respondent learning processes (Doyo, 1971; A. W. Miller, 1966; C. K. Staats & Staats, 1957). Such conditioned emotional states associated with initially neutral words seem to be particularly resistant to extinction (Baeyens, Van den Bergh, & Eelen, 1988). If one is raised in a society, culture, or family wherein certain words are more likely to be uttered in a pejorative context—said with disdain, disgust, suspicion, or fear—then these negative emotions become inextricably intertwined with the very words associated with them. This can occur at a very young age. For example, Bar-Tal (1996) found that Israeli children as young as 2.5 years rated a photograph of a male figure more negatively when he was verbally identified as an Arab than when the photo was not so labeled. The inculcation of racial prejudice in very young, perhaps even preverbal, children may well involve respondent learning processes through exposure to frightening images on television. These portrayals are conditioned stimuli that can come to elicit conditioned responses of fear and avoidance in young children.

Suppose one frequently witnesses real or simulated acts of violence on television, in the newspapers, and in videos and movies, and that a disproportionate share of the perpetrators are African Americans. What not very subtle message by our mass media is being conveyed to the audience of such portrayals? No one is immune to such influences. The Reverend Jesse Jackson once recounted how, walking late one night in Washington, DC, he heard footsteps behind him. Looking back, he saw that it was a White man, and Reverend Jackson confessed (sadly) that he felt *relieved* to see that it was not a Black man! If someone should have a real-life encounter with a mugger, rapist, or thief, he or she will have experienced these negative associations to salient characteristics connected with the perpetrator, and the perpetrator's *race* can be one of the most conspicuous features noticed. Through the processes of respondent learning, other similar-appearing individuals can come to evoke milder versions of the reactions (such as fear and avoidance) initially associated with the

*Portions of this section on racism originally appeared in Arhin and Thyer (2004).

original traumatic act. Even our verbal behavior is affected by respondent conditioning, with a number of experimental studies demonstrating how the very meaning of words (C. K. Staats & Staats, 1957), our attitudes (A. W. Staats & Staats, 1958), and related constructs, such as the prestige associated with certain words (Blandford & Sampson, 1964), can be impacted by such processes.

I hope that it seems evident to you that respondent learning is implicated in much of our normative behavior and is also involved in the acquisition of some psychosocial problems of concern to social workers. While this is most relevant to practice at the microlevel, mass-media influences and vicarious respondent learning are also important in understanding pervasive social problems such as racism, bigotry, and sexual discrimination.

USING RESPONDENT LEARNING IN SOCIAL WORK PRACTICE

Using Respondent Extinction

Respondent extinction occurs when a CS is repeatedly presented, without ever being paired with the subsequent presentation of the UCS, in an attempt to unlearn a CR. This approach is usefully employed by social workers and other mental health clinicians in the highly effective psychosocial treatment called exposure therapy and response prevention (ETRP). This treatment has been shown to be helpful for use with clients who wish to overcome Specific Phobia, Social Phobia, Agoraphobia, Panic Disorder, Obsessive-Compulsive Disorder (OCD), chronic grief, PTSD (Nathan & Gorman, 2007)—virtually all those conditions in which one or more anxiety- or distress-evoking stimuli can be clearly identified and reproduced in a safe and controlled manner, with full client informed consent. Exposure therapy and response prevention is most effective when used with real-life anxiety-evoking stimuli, but is also beneficial with less direct reconstructions, such as photos, pictures, movies, and drawings of feared situations, and also with troubling thoughts, images, or even nightmares. Over the years, variations of ETRP have been called systematic desensitization, implosive therapy, covert deconditioning, or flooding, but the more parsimonious and informative term, ETRP, is preferred because it more accurately captures the method.

There is a considerable social work literature describing the process of conducting ETRP, including my own book *Treating Anxiety Disorders* (Thyer, 1987b), as well as a number of other articles and chapters I have authored (e.g., Thyer, 1981, 1983, 1985a, 1985b, 1987a, 1987b, 1988, 1991b, 1992c, 2001, 2002; Thyer, Baum, & Reid, 1988; Thyer & Birsinger, 1994; Vonk & Thyer, 1995). However, a large number of social workers have contributed to this field over the years, including Gail Steketee (1993) and James Troester (2005). Steketee's contributions for several decades in applying respondent extinction techniques as part of multifaceted cognitive-behavioral therapy to treat clients with phobias, PTSD, OCD, and compulsive hoarding are especially praiseworthy.

Another respondent extinction technique is cue exposure, used with clients who are addicted to alcohol or to illicit substances. It has also been successfully used with clients suffering from anorexia, bulimia, and other conditions. In effect, cue exposure involves determining, with the client, what environmental, cognitive, or bodily cues (CSs) evoke a CR, such as fear, craving, or aversion. Those cues are then re-created, ideally in real

life, or in imagination if necessary, while the client is encouraged to refrain from leaving the situation or otherwise avoiding the cues. Clients then experience (and to some extent endure) their responses, and maintain this exposure to these CSs, until the CR gradually is reduced. One clinical example is the client who claims that seeing a bottle of liquor causes an uncontrollable craving, or urge to drink, or that other, more subtle cues, such as smoking or certain music, exacerbate the cravings. The social worker may, with proper informed consent, re-create such a situation, remaining with the client, for several hours if need be. A rather wonderful phenomenon usually occurs: Cravings (e.g., fear, urges to avoid, urge to purge) initially increase, increase still further, plateau, and then, with the passage of time, gradually diminish. Such an approach has been used with alcohol and other drug abusers (e.g., Blanken, Franken, Hendriks, Marissen, & Van Den Brink, 2005; Conklin & Tiffany, 2002; Dawe, Rees, Mattick, Sitharthan, & Heather, 2002; de Quiros Aragon, Labrador, & de Arce, 2005), persons suffering from Bulimia Nervosa (Toro et al., 2003), and those with an addiction to smoking (Lee et al., 2004).

Masturbatory Reconditioning

Masturbatory reconditioning is another respondent learning technique that attempts to help clients unlearn prior (deviant) conditioned responses and learn appropriate ones. This method is always used as part of a multimodal approach to treatment, since by itself it is an incomplete approach to comprehensive intervention. Masturbatory reconditioning is a controversial approach in which voluntary clients masturbate to orgasm while attending to nondeviant stimuli (videos, photographs) and talking aloud about appropriate sexual fantasies. Immediately following orgasm, the stimuli are switched to the client's deviant stimuli (child pornography, for example), and he or she is instructed to continue to masturbate for prolonged periods of time. This is all done privately, at home alone, with instructions from the social worker. These approaches most often are used in the treatment of pedophilia, fetishes, or aggression-related sexual assault. Crolley, Roys, Thyer, and Bordnick (1998) provide one illustration of evaluating outpatient therapy for sex offenders, an approach that involved masturbatory reconditioning. In these approaches, an orgasm is seen as a very powerful UCS, and repeated masturbation and orgasm to deviant stimuli (fantasies, pornography, sex with children, etc.) is seen as maintaining one's deviant arousal (a CR) to conditioned stimuli. By intentionally pairing masturbation to orgasm with appropriate stimuli (e.g., adult pornography, consensual sex), and having the client verbalize aloud nondeviant fantasies while doing so (these can be tape-recorded and later checked for content by the social worker for compliance and to ensure the client is not using deviant fantasies while masturbating), the intent is to create CRs to these more appropriate stimuli. Then, by having the client continue to engage in masturbation to deviant stimuli while in the refractory stage of sexual arousal, during which time masturbation is not pleasurable, it is hoped that the deviant CR to deviant stimuli will be attenuated. This approach makes use of respondent theory (e.g., Hall, Shondrick, & Hirschman, 1993) and what is known about the role of masturbatory fantasies in maintaining one's sexual arousal patterns (e.g., Langevin, Lang, & Curnoe, 1998). This treatment method lacks a strong empirical foundation due to the lack of adequate studies, but it remains a widely employed approach (see Maletzky, 2002).

CREATING CONDITIONED REACTIONS

Lamaze Training for Pregnant Women

Lamaze training is a method of preparation for natural childbirth without using anesthetics or artificial methods to induce labor or to extract the baby (e.g., Cesarean section, forceps). The Lamaze method was popularized in the West in the early 1950s by a French obstetrician, Ferdinand Lamaze, who learned of its practices in the Soviet Union, where it was an officially endorsed policy. A major part of early Lamaze training consisted of teaching the woman to acquire the skill of patterned breathing so as to enable her to relax during labor, as well as involving the prospective father in childbirth preparation classes, providing massage, and in general to serve as a relaxing conditioned stimulus. By associating certain types of patterned breathing with being relaxed, it was hoped that by reproducing these breathing exercises during labor the mother would be able to be more relaxed during birth, and hence experience less discomfort. Learning to relax on certain cues (a verbal prompt, the onset of a contraction) and the social support provided by the husband all make use of respondent learning principles (see Wideman & Singer, 1984) and illustrate the widespread application of these Pavlovian concepts to the general public and within the field of social work. For example, the distinguished social worker Stanley Witkin used single-subject designs to assess changes experienced by women undergoing Lamaze training, finding these designs to be highly effective as an empirical method of appraising individual responses to intervention (Schuchts & Witkin, 1989).

The Bell and Pad Device to Treat Enuresis

The bell and pad device was developed during the 1930s (Mower, 1938; Mower & Mower, 1938) as a behavioral method to treat nocturnal enuresis (bedwetting) that employed respondent learning principles to help establish a conditioned response where one was absent. As most children develop, the normal course of events is that they become continent of urine and feces without too much difficulty. However, some children fail to attain these developmental milestones, or some attain them and then relapse. For children incontinent of urine during nighttime, the bell and pad device is a proven approach to help them acquire the ability to wake up when their bladder is full, rather than urinating while asleep.

The pad is a multilayer blanket consisting of an outer blanket, a layer of thin metal mesh, a middle layer of a blanket, another layer of metal mesh, and a bottom outer layer of blanket. The two layers of mesh are insulated from each other by the middle layer of blanket. The child sleeps on this pad, and when he or she urinates, the initial stream of urine moistens the layers of blanket, completing an electric circuit between the two layers of mesh. These are connected to a bell or alarm, which then sounds, waking the child. At this point the child is to get up, use the toilet, and get back in bed, atop a fresh pad. In the theoretical model of the bell and pad device, the sound of the alarm is a UCS, producing the UCR of waking up. This is an unlearned response, present from birth among all human beings. The sensation of a full bladder in the enuretic child is initially a neutral stimulus; it does not wake the child. However, with repeated episodes of voiding and waking up, the sensation of the full bladder becomes a CS, resulting in the CR of waking up prior to voiding. A large number of studies have demonstrated the efficacy of the bell and pad

device as a treatment of enuresis, and social workers have been among those conducting such outcome evaluations (e.g., Morgan & Young, 1972; Turner & Taylor, 1974).

Aversion Therapies

Aversion therapy consists of the conscious and informed use of respondent learning principles to help clients eliminate conditioned responses that have proven to be problematic in their lives. Examples include the elimination of sexual fetishes and craving for alcohol or illicit substances. The social worker Patrick Bordnick and his colleagues (Bordnick, Elkins, Orr, Walters, & Thyer, 2004), for example, conducted a randomized controlled trial of three different forms of aversion therapy as a treatment for cocaine craving among veterans seeking treatment for drug abuse. Here, the client is exposed to cocaine-related stimuli (artificial smokable crack rocks, drug use paraphernalia, music associated with past drug use, etc.) and then presented with various potent aversive unconditioned stimuli, in this case, mild electric shocks, nausea induced by an emetic drug, or aversive imagery (the three active treatment conditions), in an attempt to unlearn prior pleasant associations with these drug-related CRs and to induce an aversion to such stimuli.

Aversion therapies of this nature are appropriate for use as options of last resort, with clients experiencing severe and intractable psychosocial problems that have not been amenable to treatment using other, less intense methods. Nevertheless, they have been subjected to extensive research as potentially effective interventions for persons who suffer from alcohol abuse, drug abuse, and chronic smoking. Studies by J. W. Smith and Frawley (1993) and J. W. Smith, Frawley, and Polissar (1997) are other examples of randomized controlled trials of aversion therapy undertaken by social workers. Respondent learning theory, and the development of conditioned aversions, has long been a part of the treatment picture for persons who abuse substances. Other social workers who have contributed to this vibrant practice-research literature are Butterfield (1975), J. W. Smith (1982), Howard (2001), Howard and Jensen (1990), T. A. Smith and Wolfe (1988), and Timms and Leukefeld (1993).

Respondent learning theory has been immensely productive in terms of its contributions to psychosocial interventions used by social workers and other mental health and health care professionals. I have provided only a brief review of illustrative applications of respondent learning theory to practice. Some are very well supported in terms of empirical research, whereas others currently lack a strong evidentiary foundation. Recently researchers have come to consider respondent learning theory as having far greater applications than heretofore thought in our understanding of complex phenomena such as problem solving, the placebo effect, and rule-governed behavior (Turkkan, 1989).

PHILOSOPHICAL FOUNDATIONS OF RESPONDENT LEARNING

The reader may have noticed the absence of any discussion related to the biological or psychological mechanisms that may give rise to our ability to learn via respondent processes. There are several reasons for this lacuna. The first is that the literature devoted to this topic is very largely speculative, or theoretical, if you prefer. It is also quite large, and doing justice to it is beyond the capacity of a single book chapter, or even a book. I also

believe that there is some virtue is presenting as parsimonious a description of empirically established respondent learning processes as possible, eschewing reification, Cartesian dualism and mentalism, circular reasoning, and physiological musings. What I have presented is a purely descriptive, environmentalist approach to some important features of a major form of learning enjoyed by humans that operates across our life span. I have outlined functional relationships between environmental events (e.g., the presentation of stimuli) and their effects on human beings as manifested by behavioral responses. I take the liberal position associated with the discipline of applied behavior analysis: Behavior is whatever a person *does,* irrespective of whether or not others can witness it. The term "behavior" thus subsumes not only overt or publicly observable actions, but also private events experienced only by the person himself or herself. This includes self-talk, thinking, feelings, dreaming, physiological reactions, cognition, perceptions, and recollections. Quite literally whatever the body does is grist for the behavior analyst's conceptual framework. This approach, promoted by the psychologist B. F. Skinner, among others, has been labeled *radical behaviorism,* with radical being used in its sense of a complete behaviorism, one that attempts to address *all* human activities, observable or not. This is in contrast to the earlier approach, called *methodological behaviorism,* promoted by the psychologist John D. Watson, who proclaimed that the subject matter of scientifically oriented psychology must be limited to the analysis of overt actions. This latter approach never really appealed to many folks, especially social workers, who have long been preoccupied with the inner world of clients, and it is a real shame that this distinction is so rarely articulated in our disciplinary literature.

Modern behaviorism, as exemplified in the work of B. F. Skinner and this chapter, does *not* restrict itself to studying the overt actions of people. Behavior analysis *is* very much interested in the inner lives of people. It is interested in these private events, however, as *phenomena to be explained,* not as causal mechanisms themselves. For the behavior analyst, feelings are something to be explained, but they are unlikely to prove to be useful in explaining behavior itself. For example, a depressed person may act in certain characteristic ways (psychomotor retardation, eats less, sleeps less, cries a lot, etc.) and may express certain characteristic ways of thinking or feeling (e.g., "There is no hope"; "I feel depressed"; "I am thinking of killing myself"). In many conventional accounts, these feelings are said to cause the depressed overt behavior, and this etiological theory leads to psychosocial therapies that devote a great deal of time to having the client recount his or her inner life and to attempt to improve these feelings and thoughts, with the expectation that a resolution of this inner conflict will produce outward, observable improvements. However, for the behavior analyst, the client's inner life of thoughts, feelings, and the like is not the cause of overt behavior, but rather simply behavior worthy of explanation itself. The client's inner life of private events is not the *cause* of depression but the *effect* of whatever is causing the client to generally behave in a dysphoric manner. Something is causing the client to *act* depressed, to *feel* depressed, and to *think* in a depressed manner. These causes may be biological in nature—genetic disorders, the consequences of a medical illness, the result of drugs, and so on—but behavior analytic answers are more often sought in the client's current environment and in the client's recent and distant past experiences. Exposure to an oversupply of aversive events can engender depression, as can a failure to receive sufficient reinforcing experiences. This can arise through a chance concatenation of environmental circumstances (an

illness piled atop a job dismissal, combined with a divorce), a steady exposure to low-grade stressors, one really grueling aversive event that eroded morale, or something else. Too much alcohol over too long a time, a severe economic depression, the death of a child, or more subtle factors, such as a client's lack of adequate social skills—these are the potential etiological features assessed by the behavior analyst. The intervention ramifications of this approach are obvious: Work with the client to alleviate future exposure to aversive events; remedy the consequences of past punishing experiences; improve social, educational, or economic skills. These are the environmentalist foci of social work intervention, foci that stand in stark contrast to the mentalist foci of the psychotherapeutically inclined. The reader may judge for himself or herself which perspective is more congruent with social work's historic person-in-environment perspective!

You may also have noted the absence of any reference, or even figures of speech, related to the person's thinking or mind. Any such mentalistic language is purely metaphorical at best, and distracting and misleading at worst, in terms of developing an understanding of the processes of respondent learning. Although respondent conditioning is sometimes called associative learning, the associations involved are those occurring between the person and his or her environment. There is no need to invoke any mentalistic language, as in hypothesizing "Bruce's mind associated the pairing of hot and sour soup with salivation, so that he came to salivate to the simple sight of the soup, not merely its taste." It is not Bruce's mind that did the pairing or associating; it was his environment. Using *mentalistic* (as opposed *environmentalistic*) language to try to explain respondent learning processes breaks down when one extrapolates such accounts of respondent learning down the phylogenetic chain (not that there is really such a hierarchy in nature, but it is commonly asserted; see Hodos & Campbell, 1969). For example, if my conditioned salivation is a function of my mind, then the identical phenomenon occurring among Pavlov's dogs needs to be similarly explained as the functioning of the canine mind. But how can such mental mechanism be invoked for organisms of supposedly lesser mental capacity? For example, respondent learning in utero by the human baby before birth? Is it reasonable to assert that fetuses of 6 months gestational age have a mind capable of producing the associations our vernacular language invokes to explain respondent learning? What about rats or mice? They too display the capacity for respondent learning. Insects also have this capacity, as do single-celled organisms, animals lacking any sort of brain worthy of saying they have a mind. It seems clear, as least to the behavior analyst, that we need not have recourse to the language of mentalism to try to explain the forms of respondent learning discussed in this chapter. There is a wonderful virtue of the philosophical principle of parsimony in developing explanations. As noted by Wickens (1973, p. 231), "A science should bend every effort toward explaining as broad a range of phenomena as possible with the fewest of principles." This principle has also been expressed by the psychologist Lloyd Morgan (1894, p. 54) in his so-called *Canon of Parsimony:* "In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of one which stands lower in the psychological scale." For example, if a patient has a fear of snakes, with an apparent origin during her teenage years after witnessing the movie *Snakes on a Plane,* it would not make much sense to spend much time exploring the phallic significance of snakes or automatically accepting the hypothesis that the "real" etiology of her snake phobia resides in unconscious memories of being sexually abused.

Similarly, if a client is delusional, rule out more parsimonious causal agents (e.g., high fever, drug use) before assuming he is experiencing Schizophrenia.

Also supporting a nonmentalistic view is that factors such as memory do not seem essential in the acquisition of respondent learning. This has been established by studies of persons with severe amnesia who can acquire conditioned responses in the absence of any recollection of prior conditioning trials (Gabrieli et al., 1995). Mentalistic conceptions of learning and development almost always ultimately invoke some sort of theory of the homunculus, an inner being who actually sees, reads, perceives, and reacts. The most common homunculus is called the mind, but there are others. Think of the scene in the movie *Men in Black* in which a tiny alien is revealed within the head of a man, an alien who was really directing all of the man's actions. The theory of the homunculus is both scientifically and philosophically unsatisfying since we are left with the question "Well, what is it within the homunculus that is seeing, perceiving, reacting, and so on? Is it yet another little being inside the homunculus? And so on, ad infinitum?" My edited book *The Philosophical Legacy of Behaviorism* (Thyer, 1999) provides a fairly comprehensive overview of how behaviorism addresses major philosophical issues, including free will, determinism, and self-control, for those readers who would like to pursue these topics further.

I close with a quote from a developmental psychology text:

> Students of child development should study respondent learning for a number of reasons. First . . . respondent learning plays a critical role in helping the child successfully adopt to her environment . . . the process of respondent learning helps explain the wide variety of emotional responses a child makes to the world. (Novak, 1996, p. 105)

At some point in the future the biological, cellular, and physiological mechanisms of respondent learning will be much better understood than they are at present. Although these are fascinating areas of research, it is not essential for them to be resolved in order for social workers to make use of the empirically established principles of learning outlined in this chapter to aid us in the conceptualization of how everyday life develops across the human life span. We can also use these concepts to understand the emergence of some abnormal and dysfunctional forms of behavior, and, perhaps most important, apply this theory to the world of social work practice to help our clients. Isn't that what theory is all about?

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Chapter 3

OPERANT LEARNING THEORY

Stephen E. Wong

HISTORICAL AND CONCEPTUAL ORIGINS

The earliest studies of operant learning can be traced back to the research of psychologist E. L. Thorndike with cats in puzzle boxes (Kimble, 1961). In Thorndike's experiments, hungry cats had to escape from boxes fastened shut in different ways to obtain food. Thorndike observed that after being placed in the boxes, the cats engaged in various behaviors such as pacing, visually exploring, and scratching at the walls. The animals performed these responses until they accidentally pressed the latch, pulled the string, or did something else that opened the box. On successive trials, the cats spent more time examining and scratching at the latch or the string, while the other responses gradually dropped out. Finally, the animal would perform the correct behavior as soon as it was placed in the box. Thorndike explained the learning of this new behavior with his "law of effect": In situations where responses are followed by events that give satisfaction, those responses become associated with and are more likely to recur in that situation.

B. F. Skinner, another American psychologist, greatly refined the experimental apparatus that permitted the study and conceptualization of operant learning. The "Skinner Box," a chamber with a lever that could be programmed to deliver food following lever presses, provided several improvements over Thorndike's puzzle boxes. One advantage was that the relationship between lever presses and food delivery was arbitrary and could be readily manipulated by the experimenter. This allowed for the study of a wide range of variables, such as the ratio of responses to food deliveries, the time interval between responses that would produce food, and variations in stimuli that signaled the previous and other contingencies. A second advantage of Skinner's apparatus was that it permitted the use of response rate as a measure of response strength or response probability. Response rate is a continuous variable that can fluctuate over time, and it is more sensitive to subtle variations in environmental conditions than latency until escape (i.e., from a puzzle box), or duration of maze-running, or other early measures of learning. A third advantage of the operant chamber and its measure of response rate was that it allowed the study of histories of reinforcement and other variables that affect learned behavior, such as those influencing extinction and maintenance (Skinner, 1966).

Skinner drew an important distinction between *operant* behavior, which operated on the environment to change it and which was affected by stimuli that followed it, and *respondent* behavior, an earlier discovered form of learning. Respondent behavior, elucidated by the Russian physiologist Ivan P. Pavlov, involved reflexive responses (e.g., salivation, eye

blinks) to certain potent stimuli that preceded the response (e.g., food, bright light, or loud noise). If neutral stimuli (e.g., sound of a bell) were repeatedly presented shortly before these potent stimuli, they could be *conditioned*, and they themselves would elicit a weaker form of the reflexive response. Thus, respondent conditioning was a different form of learning based on antecedent stimuli that triggered anticipatory responses to other antecedent stimuli. In contrast, operant behavior was controlled by both consequent stimuli (such as those producing "satisfaction," mentioned earlier) and antecedent stimuli that were consistently associated with those consequent stimuli (e.g., the sight of the latch, which prompts latch-scratching behavior). In addition, operant behavior was not limited to a relatively small number of phylogenetically determined, reflex-like responses, but instead was a virtually infinite number of behaviors that could be acquired during the individual's lifetime (e.g., speech, operating a computer, driving a car, break dancing).

Although B. F. Skinner conducted his early research almost exclusively with animals in laboratories, he quickly saw the implications of his work for understanding and improving human behavior. Some of his most influential (Skinner, 1953) and controversial (Skinner, 1948, 1971) writings utilized the laboratory-derived principles of operant learning to analyze complex human behavior in society. Skinner's students and other researchers provided support for these theoretical analyses with successful demonstrations that applied operant principles to ameliorate various psychological and clinical problems. Lindsley and Skinner (1954) and Lindsley (1960) first showed that the behavior of psychotic mental patients could be studied within an operant framework. This paved the way for investigators such as Ayllon and Michael (1959) and Ayllon and Azrin (1965, 1968) to prove that psychotic behavior could be reduced and functional behavior could be increased in chronic mental patients through the use of reinforcement contingencies and structured therapeutic environments, such as the token economy.

In the decades that followed, a sufficient number of psychologists joined to form behaviorally oriented psychology departments at institutions such as Western Michigan University, Drake University, and West Virginia University and a similarly inclined rehabilitation department at Southern Illinois University at Carbondale. An especially visionary and prolific band of psychologists, including Donald Baer, Montrose Wolf, and Todd Risley, established an academic stronghold in the Department of Human Development at the University of Kansas. At KU they recruited other colleagues with operant leanings to join their department; they devised a new methodology for intensive small-*n* research that they applied to problems in child development, developmental disabilities, family relations, and community organization; they founded the *Journal of Applied Behavior Analysis* in 1968, which became the flagship journal for the expanding field whose name they coined (Baer, Wolf, & Risley, 1968); and they taught generations of doctoral students, many of whom went on to distinguished research and teaching careers.

Behavioral approaches continued to spread to other disciplines, and Edwin J. Thomas and his doctoral students at the University of Michigan were among the first to apply these methods to social work practice in the United States (Reid, 2004). Many of Thomas's early students, including Eileen Gambrill, William Butterfield, Clayton Shorkey, and Martin Sundel, took teaching positions at major universities and further disseminated this approach through their students and their school's program curricula. Course textbooks provided another medium for the transmission of learning principles to newly trained social workers, and numerous books on this subject appeared in print (e.g., Fischer & Gochros, 1977;

Gambrill, 1977; Jehu, 1967; Pinkston, Levitt, Green, Linsk, & Rzepnicki, 1982; Rose, 1977; A. Schwartz & Goldiamond, 1975; M. Sundel & Sundel, 1975; Thomas, 1967, 1974; Wodarski & Bagarozzi, 1979; for a more complete list, see Thyer, 1985b).

BASIC THEORETICAL PRINCIPLES

Reinforcement

In the operant learning paradigm, reinforcement is a fundamental process closely related to Thorndike's law of effect. Reinforcement occurs when a stimulus follows a behavior that increases its future probability. Certain favorable consequences make responses more likely and strengthen that behavior under similar circumstances. Putting the proper number of coins in a vending machine and pressing a button is reinforced by the delivery of a chilled soft drink. The next time one is thirsty and in proximity of that vending machine, one is more likely to buy a soda from it. Waving at a neighbor across the street and seeing him smile and wave back reinforces the initial behavior of waving. Unfortunately, because reinforcement is merely a biological process, socially undesirable behavior as well as desirable behavior can be reinforced. An adolescent's cruel act of tripping and ridiculing a smaller youth can be reinforced by the laughter of nearby peers.

Reinforcement is often thought to mean the same as reward, but using these terms synonymously is misleading. Rewards, such as achievement awards (e.g., Employee of the Month), bonuses, or other prizes, are often given with the intent of promoting excellence. However, these rewards might not function as reinforcement in that the performance of workers might not improve after receiving the reward. These employees could already have been working at a high level because they were well trained and derived satisfaction from doing their job well or from receiving good annual evaluations. They might place little value on a piece of paper that they are supposed to frame and hang on their wall. Reinforcement is defined solely by the effect of the consequent stimulus in increasing the probability of the behavior that it follows.

Subjective pleasure or liking is another factor that can obscure the concept of reinforcement. Reinforcement is often experienced as pleasurable (e.g., eating an ice cream sundae, watching a beautiful sunset, sexual foreplay), but not always. A person might complain about dissatisfaction at wasted hours watching old TV reruns or talking with rude and self-centered friends, but if these activities occupy a large portion of the person's time they are probably functioning as reinforcers. Reinforcing events increase the likelihood of the behavior that they follow, but the person consuming the reinforcer may not report these events as rewarding or pleasurable.

Reinforcement through Stimulus Presentation or Removal

The preceding examples represent a certain type of reinforcement in which a stimulus is presented that increases the probability of a behavior. This type is referred to as *positive reinforcement*. Another type of reinforcement operates through the withdrawal or cessation of stimuli, typically aversive or noxious in nature, which increases the probability of a behavior. This second type of reinforcement is referred to as *negative reinforcement*. Asking a family member to turn down the volume on his stereo system is negatively

reinforced by the termination or reduction of the loud noise. In a parallel manner, rubbing hydrocortisone ointment on an itchy mosquito bite is negatively reinforced by the cessation of the skin irritation. As with positive reinforcement, negative reinforcement can follow socially inappropriate behavior and sustain it, as when a child fabricates reasons for not doing her chores and then is freed from having to do that work.

In real life the distinction between positive and negative reinforcement is not always clear (Baron & Galizio, 2005; Michael, 1975). For example, when a person in a hot, stuffy room opens the window, his response could be positively reinforced by the addition of the cool, fresh air or negatively reinforced by the removal of the overheated, stale air. In this situation, it may not be possible to separate out the two processes; the significant point is that reinforcing stimulus change has occurred. In clinical work, however, the distinction between positively and negatively reinforced behaviors may be useful because it suggests different intervention strategies (Carr, 1977; Iwata, 1987, 2006). Consider the case of a youth in a residential treatment center who refuses to comply with staff instructions or physically assaults other people. Is the youth's problem behavior being positively reinforced by attention from staff members who try to convince her to do the right thing, or is it being negatively reinforced by her being restricted to the living unit and being held back from school (where classmates tease her or she does poorly on her assignments)? The two suspected causes call for two different treatment approaches. If the youth is acting out to obtain attention from staff, interventions should be used that prompt some appropriate, alternative behavior (e.g., assisting staff with unit chores) and provide ample staff recognition for it. Conversely, if the youth is misbehaving to avoid school, interventions should be aimed at making school less aversive and more gratifying (e.g., separating the youth from peers that tease her, assigning more engaging or academically suited class work). Observing the youth's behavior over time and in other situations can reveal the potent reinforcers for this individual and can suggest underlying motives for her problem behavior.

Factors Affecting the Effectiveness of Reinforcement

Several factors modulate the effectiveness of reinforcers, making them potent or eliminating their potency when these factors reach certain levels. One of these factors is the probabilistic strength of the contingency, or the consistency with which the reinforcement is obtained after the desired response and *only* after the desired response. The stronger the relationship is between a response and reinforcement, the more effective the reinforcer will be, particularly when learning a new behavior. For example, token reinforcement can be an effective consequence for motivating study behavior in an elementary school child, but not if it is administered irregularly or if the child can obtain the same tokens by merely sitting in his chair, bartering with other children for tokens, or stealing tokens.

A second factor is the immediacy of reinforcement or the length of time between performance of the behavior and delivery of the reinforcer. Generally speaking, the closer the reinforcement follows the behavior, the more effective it will be. Given two machines that produce the same result (e.g., two computers, two video games, two microwave ovens), we usually choose the faster one. Quick feedback from teachers on homework assignments and tests promotes learning better than delayed feedback. Delayed consequences can be effective in sustaining behavior, however, if the response has been well established, the

delay has been gradually increased, or the delay has been explained to the person who must wait for reinforcement.

A third factor affecting reinforcer effectiveness is the amount of reinforcement. A larger quantity of reinforcement can be more effective than a lesser quantity (Cooper, Heron, & Heward, 2007; Miller, 1997). A teenager might be willing to mow the lawn for $10, but not for $2. A person might be agreeable to driving across town to see a friend for 4 hours, but not for only 40 minutes.

Extinction

Effects of reinforcement are not permanent. Extinction is the natural decline in behavior that is no longer reinforced. A person will stop using a computer that will not start or that always crashes. A caller gives up dialing a cell phone number that is never answered. A student who does all of his homework but who nevertheless fails all of his assignments and exams will no longer do his homework. Extinction demonstrates that behavior is functional or ordinarily has some payoff for the person performing the behavior. Organisms do not continue to respond in ways that do not benefit them, and when reinforcers cease, the behavior that fails to produce them eventually disappears too. The time required for extinction to occur depends partly on the schedule of reinforcement currently maintaining the behavior, a topic to be covered later.

Secondary or Conditioned Reinforcement

Our susceptibility to certain reinforcing or punishing stimuli is part of our genetic endowment and is often significant for survival. The biological functions of being reinforced by food, water, sleep, and sex and by avoiding bodily injury and extreme heat and cold are obvious. However, other reinforcers and punishers are themselves established through learning or are conditioned during the individual's lifetime. Some people's preference for spicy food is due not to spicy food being more nutritious than bland food, but to their history of repeated pairing of those spicy tastes with satisfying meals. Many sorts of garments will protect our bodies from the sun and wind, but our preference for stylish fashions of the day is guided by the reactions of friends and family members to our appearance. Likewise, many young people value good grades and other forms of academic achievement, but some youth groups ridicule high achievers as being "bookworms" or "nerds," turning good grades into a repulsive trait. It is important to recognize that certain reinforcers are conditioned or secondary reinforcers, because this conditioning varies greatly depending on individual history and cultural background. Some people will go through considerable effort to hear their favorite country music, which puts them in a good mood and relaxes them; yet, that same music might be extremely annoying to someone else. The same could be said for rap or classical music. Recognizing that childhood upbringing and personal history can infuse objects and activities with disparate or even opposite motivational value can heighten appreciation of human diversity.

Generalized reinforcers, such as money, tokens, and praise, are a particularly dependable form of secondary reinforcer that can be used to gain access to a variety of primary and secondary reinforcers. The broad purchasing power and consistent reinforcing capacity of money is well known to all. However, praise—or positive regard and the goodwill of

others—has similar worth in that it can be exchanged for favors, special consideration, material objects, and even money. Generalized reinforcers are more reliable reinforcers because they are associated with multiple primary and secondary reinforcers, and their reinforcing capacity is not linked to a specific state of deprivation or motivation. For example, although a cheeseburger and fries may be positively reinforcing when one is hungry, they lose much of that value once one has eaten and is full. However, money will have reinforcing value when one is hungry *and* when one is full because it can be used to acquire other desired goods unrelated to one's current state of hunger.

Schedules of Reinforcement

Under most conditions, behavior is reinforced intermittently rather than after each occurrence. Buying and dressing up in a new outfit will sometimes garner a compliment, but not always. If you hold a door open for another person entering a building after you, often the person will say "Thank you," but not every time. In sporting events, basketballs, footballs, and soccer balls are frequently thrown and kicked, but no one expects a goal to be scored with each attempt. The timing and regularity of reinforcement affects the temporal pattern and frequency of the behavior.

A *fixed-interval schedule of reinforcement* makes reinforcement available after a certain fixed period of time and affects the temporal distribution of behavior. An example of an ordinary situation involving a fixed-interval schedule would be a person whose mail is delivered every day at around 1:00 PM. If we were to observe this person throughout the day we might see that she shows little interest in her mailbox in the early hours of the morning. However, as the time approaches 1:00 PM she begins looking out the window at her mailbox, especially whenever she hears a vehicle pass by. After 1:00 PM, she begins leaving her house to check her mailbox and continues doing so until she finally picks up her mail. After picking up her mail, she stops looking for mail delivery until the next day, when the whole pattern of checking starts over again. Thus, we would see a gradual increase in response rate as the time for reinforcement approaches and a cessation of responding immediately after reinforcement (which signals a period of time in which reinforcement is unavailable).

Instead of being based on time, reinforcement schedules can be based on the ratio of reinforcements delivered to responses performed. These are referred to as *fixed-ratio schedules of reinforcement*. An example in everyday life is piecework wages, such as one dollar earned for every 50 apples picked or every 50 envelopes stuffed. In such schedules, the amount of reinforcement gained (or money earned) bears a direct relationship to the number of responses performed. If the ratio is not too high, this type of schedule can generate high work rates because the worker earns more by working faster. Piecework wages based on high fixed-ratio schedules of reinforcement may be profitable for owners, but are exhausting for workers. If the ratio is extremely high (e.g., 1: 500) "ratio strain" occurs and performance can break down, especially right after delivery of a reinforcer. Disruption usually occurs at this time because delivery of a reinforcer signals a lengthy period in which reinforcement is unavailable, and thus there is a lessened tendency to respond. The subjective experience of working under high-ratio schedules of reinforcement is unpleasant, and people working under these conditions are likely to become irritable or depressed. Conversely, working under low-ratio schedules of reinforcement, where the density of reinforcement is higher,

is associated with pleasant sensations and higher levels of satisfaction. So schedules of reinforcement not only influence work rate and other performance measures, but also overall mood and affect.

Reinforcement can be scheduled to occur after varying periods of time, known as a *variable-interval schedule,* or after a varying number of responses, known as a *variable-ratio schedule*. Variable-interval schedules of reinforcement produce a more steady response rate than fixed-interval schedules, without the postreinforcement pause seen in the latter. Variable-ratio schedules of reinforcement produce an even quicker and steadier response rate than fixed-ratio schedules (Miller, 1997). In addition, variable-ratio schedules are notoriously resistant to extinction, as witnessed by some people's addiction to gambling. Despite the loss of cash, life savings, possessions, and credit, gamblers are lured back by the variable-ratio schedule in their card game, slot machine, or lottery and the chance that their next bet will hit a big jackpot.

The previous paragraphs discussed simple schedules of reinforcement involving a single schedule and a single response. Operant research has also investigated complex schedules involving more than one reinforcement schedule and one response. A *multiple schedule of reinforcement* is one such complex schedule; it entails the successive presentation of two or more independent simple schedules, each accompanied by its own discriminative stimulus. Multiple schedules of reinforcement are common in everyday life and may take the form of different people or settings. Complaints about one's daily job irritations are likely to be received differently by close friends and family members, strangers on the street, and one's boss. A child throwing a tantrum may get concerned questions from his mother, verbal and physical comforting from his grandparents, ridicule from his siblings, and a spanking from his father. Choosing not to shave and wearing grubby clothes and sandals will generate dissimilar reactions depending on whether one stays at home, visits the corner store, attempts to get a table a fine restaurant, or goes to a business meeting.

As we know from experience, different consequences for the same behavior in different contexts changes the probability of that behavior; thus employees learn not to complain about their job to their boss and to dress properly for business engagements. In this way, people appear to develop separate facets or multiple personae, but a better understanding of this complexity comes from seeing that contingencies in particular situations gain control over differentiated performances.

Concurrent schedules of reinforcement are another complex schedule; they involve two or more schedules of reinforcement operating on two or more responses at the same time. Concurrent schedules of reinforcement also describe a wide variety of situations that humans encounter. Most of the time, a person chooses from an array of responses that are available simultaneously (e.g., work at home, read a newspaper, watch TV, call a friend), with varying types and schedules of reinforcement associated with each response. Matching theory (discussed later under "Advanced Theoretical Principles") can help to predict which of these alternatives will draw most of that person's behavior and occupy most of his or her time.

Recent Research on Schedules of Reinforcement with Humans

Schedules of reinforcement held a prominent position in early operant research with infrahuman organisms (Ferster & Skinner, 1957; Zeiler, 1977). The influence of schedules

of reinforcement on human behavior in laboratory studies, however, has been shown to be complicated by the presence of instructions and situational demand characteristics that can override schedule effects. The tendency of humans to respond to instructions rather than prevailing reinforcement schedules is strong in situations where the instructions produce behavior patterns that cause the person not to come into contact with the actual schedule contingencies. For example, if a person is instructed to respond at a high rate to avoid computerized fines, even though the programmed schedule permits him or her to avoid all fines by responding at a lower rate, the person will usually follow the inaccurate instructions and respond at the higher rate (Galizio, 1979). More significantly, instructions can also modulate or override the effects of reinforcement schedules when people have direct contact with the existing reinforcement contingencies, causing them to lose available reinforcement or to respond unnecessarily (Hayes, Brownstein, Haas, & Greenway, 1986; Hayes, Brownstein, Zettle, Rosenfarb, & Korn, 1986). The beneficial and detrimental effects of humans' propensity to follow instructions rather than to respond to prevailing reinforcement contingencies is discussed later in the section on rule-governed behavior.

Stimulus Control

The previous sections have focused primarily on stimuli that are consequences of behavior; however, stimuli present prior to the performance of behavior that are correlated with reinforcing and punishing stimuli also gain control over behavior. *Stimulus control* refers to the effect of these antecedent stimuli on the probability of a response.

Discrimination

Stimuli that are present when a behavior is reinforced gain control over that response, and the behavior becomes more likely when these stimuli are present. A child is likely to approach and talk to a group of children who have accepted him as a playmate. Conversely, this child is less likely to approach and talk with another group of children who have ignored him. A woman is likely to return to a restaurant that has served her delicious and inexpensive food. In contrast, that woman is unlikely to frequent restaurants that have served her unappealing and overpriced dishes. Seeing the front door to one's house brings on a search for one's house keys rather than office or car keys. Discrimination is a term that refers to differentiated response patterns that develop in the presence of antecedent stimuli tied to different consequences. Antecedent stimuli, or *discriminative stimuli,* allow us to anticipate consequences before they happen and as such control a large portion of human behavior. The words "Men" and "Women" or the international picture-symbols for male and female painted on a door allow a customer to enter the appropriate restroom of an unfamiliar restaurant and avoid an embarrassing incident. Complex discriminative stimuli obtained from reading maps and street signs, using personal digital assistants to keep appointments, and listening to advice from friends about romantic relationships govern more challenging responses in modern life.

Generalization

Whereas stimulus control involves bringing behavior under the control of specific stimuli, *generalization* refers to the opposite process: bringing the same behavior under the control of a broader range of stimuli. The success of clinical interventions often hinges on producing

some form of generalization. Therapy usually is provided in a particular location, such as a clinic or office, and initial therapeutic change may first appear in these circumscribed settings. However, therapy usually aims for the carryover of change to extratherapy settings, such as the client's home, school, workplace, or other settings where therapy was not directly applied. Responding in the presence of stimuli different from those in which the behavior change was previously reinforced is known as *stimulus generalization*. There are empirically validated techniques for promoting stimulus generalization in clinical work (Stokes & Baer, 1977; Stokes & Osnes, 1989), such as bringing elements of the extratherapy setting (e.g., family members) into the therapy setting and varying aspects of the therapy setting so that it more closely resembles extratherapy settings (e.g., training with noise and interruptions like those at home). Using procedures to promote generalization improves the chances that behavioral gains produced by therapy will transfer to relevant situations in the client's living environment.

Building Behavior by Shaping and Chaining

Shaping produces new behavior by differential reinforcement of successive approximations to the terminal response, or, in simpler terms, by reinforcing small steps in the direction of the ultimately desired behavior. In most teaching situations, shaping is combined with verbal instructions, modeling, physical guidance, and other prompts, and so its sole effects are rarely seen. Gradual shaping can be used to teach extraordinary physical performances that might even be considered "unnatural" for the human body. Gymnastics coaches are particularly adroit at this technique. For example, a back handspring is taught using progression, with reinforcement (i.e., praise) given for advancements along the way:

1. First, the student stretches and loosens up by bending back as far as she can (this step may take a considerable period of time).
2. Next, the student bends backward and tries to touch the floor behind her (with the coach manually "spotting" the student by holding her lower back to support her weight).
3. Then the student bends backward and touches the ground, supporting most of her weight (with the coach manually spotting the student by helping her to maintain her balance).
4. Next, the student bends backward and practices a partial push-off and kick that will propel her body through the handspring (with the coach manually spotting the student in case she loses her balance).
5. Then the student practices the entire back handspring at partial speed (with the coach manually spotting the student by helping her to maintain her balance, and perhaps giving her a boost to get her through the maneuver).
6. Next, the student practices the back handspring at full speed (with the coach visually spotting the student, catching her if she loses her balance).
7. Finally, the student practices the back handspring at full speed on her own.

A multitude of athletic movements and other skills can be taught through similar procedures involving reinforcement for incremental progress toward the terminal response.

Shaping and successive approximation also have numerous clinical applications, such as in the treatment of phobias by reinforcing a client's increasingly closer physical approach toward a feared object (e.g., Thyer, 1981; 1983).

Chaining

A chain is made up of two or more behaviors that each produce a stimulus change and that are performed in a particular sequence. Many complex human activities, such as getting dressed, cooking a meal, driving a car, and operating a computer, are behavioral chains. Learning a new behavioral chain (such as when learning to drive a car with a manual transmission) requires the person's close attention and can be quite difficult. However, after the skill is well practiced and mastered, it can be performed automatically with little thought or effort.

Conducting a *task analysis* (Cooper et al., 2007) lays the foundation for teaching a chain by identifying the individual responses composing the chain and the sequence in which they must be performed. Teaching a chain begins by verbally prompting, modeling, or manually guiding the first response in the sequence, and then providing reinforcement for its performance. After several trials in which the first response is performed consistently, the second response is prompted or guided, and its performance is reinforced. When the second response occurs consistently, it should be prompted immediately after performance of the first response, and then reinforcement should be given only after completion of the first *and* second response. After the first and second responses occur together reliably, with reinforcement delivered only after the second response, these two responses may be said to be *linked*. Next, the third response can be prompted or guided after the second response, and its performance reinforced. When the third response is performed consistently, it can be prompted immediately after the second response; then reinforcement should be delivered only after the first, second, *and* third response have been performed. This procedure, known as *forward chaining,* is continued until all responses in the chain are linked. Teaching a chain can also be done by starting from the end of the chain and proceeding to the front, known as *backward chaining*.

Modeling and Imitative Behavior

A child entering an activity room and seeing other children playing with a colorful new toy is presented with an opportunity to learn by example, a way in which one individual can rapidly acquire behavior from another. During such encounters, the behavior of the model serves as discriminative stimuli for the behavior of the observer. The observer watches the model displaying the desired behavior, and then responds to match the behavior of the model. Imitation is more or less likely, depending on what consequences the observer sees the model receiving. If the observer sees the model obtaining reinforcement for performing the behavior (e.g., a child watches a peer getting a toy to operate properly), then the observer is inclined to imitate that behavior. By contrast, if the observer sees the model failing to obtain reinforcement or being punished for performing a behavior (e.g., the child watches the peer using the toy in a way that does not work or getting hurt while using the toy), then the observer is disinclined to imitate that behavior. Much imitative behavior is probably *generalized imitation,* in that individuals copy the actions of others due to a history of previous reinforcement for imitative behavior (Baer & Sherman, 1964; Pierce & Cheney,

2004). Following the lead of others is an effective way to obtain desired outcomes and to avoid aversive stimulation, especially in novel situations wherein one does not know how to act.

Other factors that influence modeling effectiveness and the tendency to imitate are related to characteristics of the model. Models that are similar to the observer based on past experience, appearance, sex, age, and other variables are more likely to be imitated (Bandura, Ross, & Ross, 1963). For example, guidance from a domestic abuse counselor who herself has survived an abusive relationship is more likely to be followed than recommendations of a domestic abuse counselor without such personal experience. Models with high social status and prestige are more likely to be imitated than models of low social standing (Bandura et al., 1963). Hence, high school students are likely to adopt the manner of dress, speech, and even leisure activities of high-status individuals rather than the habits of social outcasts. Social workers should take these factors into account when selecting positive models for public education campaigns, primary prevention programs, and therapy groups.

The common expression "Do as I say, not as I do" refers to the fact that modeling effects occur even when unintended. Performance of socially inappropriate or maladaptive behavior (e.g., aggressive behavior, recreational drug use) can promote that same behavior in others who witness those acts. Perhaps the best example of this is Albert Bandura's (1965) classic Bobo doll experiment, in which modeling prompted physical aggression in children. In Bandura's study, children watched a film in which an adult hit, kicked, or otherwise exhibited physical aggression toward an inflated Bobo doll. In one version of the film, the adult was rewarded with praise, soda, and candy after being aggressive toward the doll; in a second version of the film, the adult was scolded and spanked for hitting or kicking the doll; and in yet a third version, no consequences were given for being aggressive toward the doll. Bandura found that children who observed the adult model being punished were less likely to imitate aggression than children who observed the model being rewarded. However, both the children observing the model being rewarded and those observing the model receiving no consequences were more likely to exhibit aggression than those observing the punished model, with no differences between the former two groups. This study suggested that problem behavior can be generated by models and be contagious, and it also has profound implications for the sorts of behavior that is frequently modeled in film, television, and video games.

ADVANCED THEORETICAL PRINCIPLES

Rule-Governed Behavior

Skinner (1969) posited that a sizable amount of human behavior is controlled by rules rather than by direct reinforcement contingencies. Rules are viewed as "contingency-specifying stimuli" that describe particular responses and the consequences that follow them. Usually, the rules are verbal, such as the oral instructions "Go down this street for three blocks, then take a right and go another block, and you will find a gas station," or the written instructions "Turn the handle counter-clockwise." However, rules also can be conveyed nonverbally (e.g., by demonstrating the proper twisting motions) or can take the form of pictures, diagrams, or even mathematical formulae. Rules can operate as complex discriminative stimuli (p. 143) that generate even more intricate response patterns, but without a personal

history of reinforcement, such as when a reader follows the directions given in a map to reach a destination he or she has never visited before.

Rule-governed behavior is useful for groups and societies because it allows people to benefit from the experience of others. The transmission of rules permits people to respond to dire consequences that have a low probability ("Buckle your seatbelt when you drive") or that may occur in the distant future ("Smoking causes lung cancer"). Many preventive programs currently being developed and evaluated by social worker researchers can be seen as forms of public education aimed at providing youth and adults with rules to protect them from dangers for which personal experience provides inadequate preparation.

While human reliance on rules allows us to more successfully navigate our social and physical environment and avoid harm without the tedious and haphazard process of individual learning, it also has disadvantages. Rules and verbal instructions can overpower the actual reinforcement contingencies currently in place (Hayes, Brownstein, Zettle, et al., 1986; Hayes, Zettle, & Rosenfarb, 1989). Unlike lower organisms that respond to subtle temporal features or response frequency requirements of the prevailing reinforcement schedule, humans will follow explicit or implicit instructions and forgo available reinforcement or make many unreinforced responses (behave inefficiently). In addition, rules are not merely information entered into a computer; these verbal stimuli possess their own motivational properties (Hayes et al., 1989). The words "We must be on alert for the next terrorist attack" may evoke emotional responses similar to those of being physically injured or having family members killed during guerrilla warfare (e.g., staying indoors, viewing people of certain ethnicities with fear and suspicion, voting for politicians who go to war against "terrorist states"). At a societal level, our susceptibility to verbal stimuli and insensitivity to the discrepancy between faulty rules and actual reinforcement contingencies is reflected in our vulnerability to mass media campaigns, commercial advertising, and political propaganda.

Self-Control

Operant learning is usually associated with external controls, such as those captured in the image of a behavioral psychologist working with an animal in a Skinner Box. However, B. F. Skinner was acutely aware of the self-regulatory capability of humans and wrote about it at length in *Science and Human Behavior* (Skinner, 1953). He observed that people can exert self-control by applying the same behavior control procedures to themselves that they use to alter the behavior of animals and other people. Skinner also listed and described self-control techniques in an account that is still timely and unsurpassed in its abundant, everyday-life examples. Skinner first observed that instances of self-control arise in situations in which people are affected by conflicting consequences, such as those that follow excessive eating. Excessive eating is associated with the reinforcing events of gustatory pleasure and relief from hunger as well as the punishing events of becoming overweight, being unhappy with one's appearance, and suffering from numerous health problems. In such conflictive situations, individuals can perform *controlling responses* to alter the probability of *controlled responses* (e.g., excessive eating), with the controlling responses taking as many forms as there are methods of behavioral control.

People can use physical restraint as a self-controlling response by refraining from purchasing high-caloric foods (e.g., ice cream) or by buying these foods only in small

quantities. (One is most likely to do this when one is satiated and capable of "self-control," which fits with contemporary advice not to shop for groceries while one is hungry.) They can also dispose of food items with high fat and high sugar content or lock them in a closet or cabinet and give the key to a strong family member. People can choose to patronize only restaurants that have appealing low-calorie entrées on their menu. If one is going to a party where fattening food will be served, one can change the stimulus properties of the available food by snacking freely on healthier food before the gathering. People trying to manage their food intake can surround themselves with other people with similar intentions, join official weight-loss groups, and read articles and books on the subject (exposing themselves to discriminative stimuli for eating the proper amounts of the right foods). Conversely, people should avoid cooking instruction and cuisine programs on TV, as well as food and restaurant commercials. People can substitute alternative responses to eating fattening foods, such as exercise (e.g., going for a walk), getting involved in a hobby, drinking water, or eating low-calorie snacks and meals. They can also self-monitor (Kanfer & Gaelick-Buys, 1991; Stuart & Davis, 1972) their food intake with daily logs and data sheets so that they become more aware of their eating patterns (and thereby facilitate positive reactivity) as well as devise better strategies to modify their behavior. The present list only scratches the surface in terms of available self-control strategies and is limited to eating behavior merely to make the examples more coherent.

RECENT THEORETICAL DEVELOPMENTS

Although operant learning is a mature scientific topic, it is far from calcified. Research in the experimental analysis of behavior and applied behavior analysis have both extended the reach of operant learning principles and made discoveries requiring substantial realignment of those principles. In this section I briefly review three of the latter developments that are particularly relevant to social work practice: functional analysis, matching law, and stimulus equivalence and relational frame theory.

Functional Analysis of Problem Behaviors

Functional analysis (Carr, 1977; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982) is an assessment procedure that seeks to identify the reinforcement contingencies that maintain a problem behavior, whether that behavior is self-injury, physical aggression, disruptive behavior, bizarre speech, or some other socially undesirable response. Before functional analyses, behavior therapists and behavior analysts selected interventions without investigating what consequences might have been currently reinforcing the problem behavior. For example, a middle-aged man diagnosed with Schizophrenia who exhibited delusional statements might be treated with social skills training, token reinforcement for accurate statements, and response cost (token fines) for delusional statements. The reinforcement and response-cost procedures would be applied to override whatever unknown sources of reinforcement were sustaining the inappropriate behavior (Mace, Lalli, Lalli, & Shea, 1993). Such a traditional behavior modification approach might be effective in reducing delusional speech, but its therapeutic effects would be based solely on the superior potency of extrinsic reinforcers introduced by the therapists. Because preexisting reinforcement

contingencies that supported the bizarre speech in this setting were neither identified nor systematically altered, these contingencies would remain to threaten the client's improvements whenever the behavioral program was faded or removed. In contrast, a functional analysis attempts to isolate the specific reinforcers currently maintaining the problem behavior, and this information is then used to design procedures that remove or block those reinforcers for problem behavior and instead make them contingent on appropriate behavior. Theoretically, this approach should produce better outcomes and a higher probability of generalization and long-term maintenance.

The hallmark of a functional analysis is an empirical test utilizing a series of brief (5- to 15-minute) sessions during which various contingencies that are hypothesized to maintain the problem behavior are simulated and the client's behavior is recorded. These conditions are alternated in random order (forming a multiple schedule of reinforcement), and the amount of problem behavior occurring in each of these conditions is then compared. For example, Wilder, Masuda, O'Connor, and Baham (2001) assessed the contingencies that were maintaining delusional speech in a middle-aged man with Schizophrenia by presenting alternating conditions of the following four types: (1) *escape from demand* (the therapist asked the client to work on a task, e.g., a simple household chore, until the client made a bizarre statement, after which the therapist allowed the client to take a 30-second break from the task); (2) *attention* (the therapist pretended to be preoccupied and ignored the client until the client made a bizarre statement, after which the therapist made eye contact and told the client that he "shouldn't talk" like that); (3) *alone* (the client was left alone in the room and observed to see if the bizarre statements would occur without any social consequences, and thus were self-stimulatory or self-reinforcing); (4) *control* (the therapist interacted with the client until he made a bizarre statement, after which the therapist broke eye contact and terminated all conversation for 10 seconds). Because these four conditions were presented in random order and the only difference between them was the social contingency, differences in the amount of delusional behavior observed in the four conditions logically should have been due to the type of reinforcement obtained for delusional speech in the various conditions.

In the study by Wilder et al. (2001), bizarre speech occurred in a substantially greater percentage of the scored intervals with attention (mean = 26%) as compared to escape from demand (mean = 2%), alone (mean = 0%), and control (mean = 5%) conditions. Utilizing this data, an intervention consisting of differential reinforcement of alternative vocalizations (attention for appropriate speech) plus extinction for bizarre vocalizations was designed. When this invention was applied and evaluated in a reversal design, it was shown to nearly eliminate the client's psychotic speech. Results of this study were later replicated with a second client also diagnosed with Schizophrenia who displayed bizarre vocalizations in the form of tangential remarks (Wilder, White, & Yu, 2003).

This clinical assessment methodology has been used successfully with expanding numbers of clients, predominantly children with developmental disabilities residing in hospitals or institutions (Hanley, Iwata, & McCord, 2003; Iwata et al., 1994). However, functional analyses have also been utilized effectively with developmentally disabled youth in an outpatient clinic (Derby et al., 1992) and with clients of normal intelligence (14% of the clients) who underwent brief stays (average = 10 days) in an inpatient setting (Asmus et al., 2004). Thus, functional analysis is a clinical assessment tool whose validity has been repeatedly established with numerous clients in various settings, and which yields interventions that harness motives underlying problem behavior.

Matching Law

Herrnstein (1961, 1970) formulated the matching law based on his research with pigeons in a two-response apparatus where responses were reinforced with food on concurrent variable interval/variable interval (VI VI) schedules. Herrnstein noted that his subjects "matched" or allocated their responses to the two alternative schedules in proportion to the reinforcements obtained from them. For example, if one third of the reinforcements were obtained from the first alternative and two thirds from the second, then approximately one third of the animal's responses would be directed toward the first alternative and two thirds to the second. This discovery was important because it showed that responding is affected by its overall context and the *relative amount of reinforcement* for each response alternative. This also meant that the frequency and duration of one response would change when reinforcement for a concurrent response was varied. For example, if the frequency or density of reinforcement for the second alternative response were increased from two thirds to four fifths of all available reinforcement, then four fifths of all responses would be directed toward that alternative. Consequently, the proportion of responses that would be directed toward the first alternative would drop from one third to one fifth, even though there was no change in the absolute number of reinforcements available for that choice. Thus, responding cannot be predicted solely on the basis of the amount of reinforcement provided for a response, but rather on the basis of the *relative payoff* for that response as compared to its alternatives. While this law was first demonstrated with pigeons in the laboratory under specific concurrent VI VI schedules, its generality has since been established with a wide variety of species, including humans, in naturalistic and clinical situations, and with different combinations of reinforcement schedules (McDowell, 1982, 1988; Pierce & Epling, 1983; Plaud, 1992).

McDowell (1982, 1988) elucidated how this law could be applied to ameliorate various clinical disorders. Problem behaviors are usually treated with extinction or mild punishment, but the matching law suggests that they can also be reduced by either increasing the rate of reinforcement for concurrent alternative responses or by increasing the rate of "free" or noncontingent reinforcement. Ayllon and Roberts (1974) implemented the former strategy in a fifth-grade class with students who frequently exhibited disruptive behavior. These investigators erected a token economy that reinforced reading in the classroom, and they recorded large increases in reading behavior and simultaneously large decreases in disruptive behavior. Improvements in both desired and undesired behavior were reversed during a withdrawal phase and then restored during the final treatment phase in an ABAB design. This study demonstrated how problem behavior can be effectively treated in an indirect manner by reinforcing alternative, appropriate behavior occurring in the same context. Although matching law has been applied in only a handful of clinical studies, it provides an empirical and theoretical foundation for positive interventions with a wide array of social problems, such as aggressive behavior, crime, addictive behavior, and psychotic disorders, just to name a few.

Stimulus Equivalence and Relational Frame Theory

These two areas of research examine the development of stimulus-stimulus associations and investigate how symbols and words acquire their meanings. Stimulus equivalence was originally discovered while teaching developmentally disabled students how to read

(Sidman, 1971, 1994). In a study demonstrating one form of stimulus equivalence known as *transitivity,* students were first prompted to match spoken words, such as the word "car" (A), with the corresponding picture of a car (B) by reinforcing subjects for pointing to the appropriate picture after hearing the spoken word. Next, students were taught to match spoken words, for example, the word "car" (A) with the corresponding written text, for example, "CAR" printed on a card (C), by reinforcing subjects for pointing to the correct set of letters after hearing the spoken word. After the students were taught to consistently match these two pairs of stimuli (A = B, and A = C), the instructor performed a test presenting B and C together along with a number of other stimuli. Subjects who received the training matched B with C and C with B, even though they had *never received direct training* associating these two stimuli. The emergence of stimulus equivalence B = C and C = B indirectly from training A = B and A = C is an anomaly for operant learning and has required the proposal of new theoretical schema (Sidman, 2000b). Aside from its theoretical significance, being able to match pictures of objects with their corresponding written and spoken names has practical significance because it constitutes a form of reading comprehension and demonstrates partial understanding of the *meaning* of words. Stimulus equivalence is usually connected with a history of verbal learning, and this capacity for abstraction is rarely observed in nonhumans (Hayes, 1989; Schusterman & Kastak, 1993).

Relational frame theory (Hayes & Hayes, 1992; Hayes & Wilson, 1993) extends this paradigm by noting that stimulus equivalence is only one of a seemingly endless variety of stimulus relations that can be taught with formats like the one just described. For example, if subjects are taught that "A is greater than B" and "B is greater than C," subjects are likely to respond that "A is greater than C" without any direct training involving A and C. In this case, the *relational frame* controlling behavior is *greater than* rather than the equivalence of paired stimuli. Such relations are arbitrarily defined (the subject could have taught that "X is greater than Y" and "Y is greater than Z," leaving the subject to infer that "X is greater than Z"), and they may or may not accurately reflect relationships between objects and events in the real world. With verbal symbols and their relational frames, humans are able to evoke past, future, distant, and nonexistent events (e.g., childhood memories, anticipation of one's own death, the Tooth Fairy), as well as to manipulate and transform these stimuli by placing them in different relational frames. This enables people to conduct complex analyses and engage in long-term planning, but it can also make them susceptible to faulty rationalizations and debilitating thoughts.

Acceptance and commitment therapy (Hayes & Wilson, 1994) is a new psychotherapy that has sprung from relational frame theory. This approach proposes that certain problematic behaviors and emotional reactions persist due to clients' verbal behavior (overt and covert) that supports patterns of avoidance. For example, a person may rationalize his missing an appointment with the statement, "I was too anxious to go to the job interview." This verbal statement adds to the problem in two ways: (1) The client reifies "anxiety" as an emotional condition that he cannot tolerate or overcome, and (2) the client presents an understandable, if not completely socially acceptable, explanation for his avoidance. Therapists attempt to undermine relational frames that support problematic avoidance patterns through the use of paradoxical parables (showing the futility of attempting to avoid all anxiety-provoking situations), experiential exercises, deconstruction of the meaning of words (e.g., "anxiety"), and other techniques. They also strive to heighten clients' awareness of the *present moment* and help them select the best course of action for that situation.

Acceptance and commitment therapy has been described as part of "the third wave of behavioral and cognitive therapy" and has produced positive preliminary outcomes with such diverse clinical problems as anxiety, depression, psychosis, substance disorders, chronic pain, eating disorders, and work-related stress (Hayes, 2004a, 2004b).

RELEVANCE TO SOCIAL WORK PRACTICE

Probably the greatest benefit that operant learning offers to social work practice is that it is a comprehensive framework for understanding and changing human behavior in the social environment (Thyer, 1987). It could be argued that there is no other biological, psychological, or social science theory that can provide such a broad, exacting, and data-based account of human behavior as the principles of operant learning. This approach also can be utilized to analyze and treat a wide spectrum of human problems, ranging from relatively narrow disorders such as phobias and anxieties to pervasive disturbances such as antisocial behavior, psychoses, and mental retardation. It can also be used to study and ameliorate seemingly macrolevel problems, such as differences in intellectual and academic ability correlated with socioeconomic status, by changing patterns of daily parent-child interactions in the home (Hart & Risley, 1995; see Pelaez, Gerwirtz, & Wong, this volume, for a more detailed discussion of this application).

The following sections review some of the direct applications of operant learning methodology to social work practice, including assessment, intervention, and prevention.

Uses in Assessment

The data of operant learning are observable behaviors qualified with clear descriptions of the target behaviors and quantified along parameters such as frequency, duration, intensity, and latency. Many forms of socially significant behavior can be precisely measured along these dimensions, such as frequency of initiating conversations or pursuing job leads, duration of engaging in school homework or household chores, force applied when kicking a soccer ball, or latency before making an assertive reply. Socially problematic or clinical behaviors also can be quantified by these dimensions, such as frequency of heavy drinking or self-deprecating remarks, duration of arguments or obsessive rituals, voice volume while screaming at others, or latency before complying with parental requests. Certain complex performances might exist as behavioral chains, and measuring these performances requires checking for completion of component responses in the correct order. Assessing the complete and proper sequencing of such performances is facilitated by a task analysis and a structured data sheet (e.g., a task analysis checklist). The precision and objectivity of these multifarious behavioral measures can help to clarify social work concerns and goals, which otherwise might remain vague and nebulous.

Quantification and precision of behavioral measures do not, however, guarantee their *social validity, clinical validity,* or practical utility. Increases in the frequency of positive comments or in the duration of eye contact during casual conversations are measurable, but they may not have substantial impact on listeners' evaluations of the speaker's social competence or attractiveness. The social validity of behavioral measures should be established by showing their relationship to primary concerns of clients, clients' family members,

referral and funding sources, and significant persons in the clients' community (e.g., teachers, prospective employers, police officers; I. S. Schwartz & Baer, 1991; Wolf, 1978). The clinical validity of behavioral measures should be established by showing their relationship to clients' subjective distress, level of functioning, ability to fulfill role demands, capacity to engage in desired activities, and overall quality of life (Kazdin, 1999).

Uses in Intervention

Evidence-based applications of operant learning principles are very extensive and have been the subject of enough textbooks to fill a small library. So this chapter merely offers a sample of empirically validated applications of operant learning approaches with particular relevance to social work practice. This section briefly covers evidence-based foundations in four areas: parent and staff training, social skills training, safety and prevention, and interventions with clinical disorders.

Parent and Staff Training

Because parents and staff members control many aspects of clients' environment and they are authority figures, training parents and staff in behavioral techniques has been a prime strategy for structuring contingencies to foster desired behavior. Parents and staff have been taught to set reasonable performance expectations, to prompt adaptive behavior with verbal instructions or modeling, and to reinforce performance of this behavior with attention, praise, and tangible reinforcers. They also have been trained in the sometimes difficult technique of ignoring minor misbehavior as a means of extinguishing it. Using this approach, parents have been taught how to deal with children's problematic behavior, such as noncompliance (Briggs, Leary, Briggs, Cox, & Shibano, 2005; O'Reilly & Dillenburger, 2000; Stein & Gambrill, 1976), temper tantrums (Pinkston, Polster, Friedman, & Lynch, 1982), bizarre verbalizations (Pinkston & Herbert-Jackson, 1975), failure to thrive (Koepke & Thyer, 1985), and sleep disturbances (Brophy, 2000). Court-mandated parents in the child welfare system (Smagner & Sullivan, 2005) and parents with a developmentally disabled child (Gammon & Rose, 1991) have been taught a variety of skills to cope with the special needs of their families.

In an analogous fashion, staff members in institutions have been trained to use reinforcement contingencies to manage urinary incontinence in elderly residents (Pinkston, Howe, & Blackman, 1987) and to reduce delusional verbalizations and disruptive behavior (Wong, Woolsey, & Gallegos, 1987), to restore appropriate conversational speech (Wong & Woolsey, 1989), and to improve grooming skills and personal hygiene (Wong, Flanagan, et al., 1988) in chronic mental patients. Behavioral procedures have also been utilized to teach technical skills to professional staff or interns such as facilitative and supportive utterances during family therapy (Galant, Thyer, & Bailey, 1991), clinical interviewing skills (Iwata, Wong, Riordan, Dorsey, & Lau, 1982; Schinke, Gilchrist, Smith, & Wong, 1978), management of visits between parents and children in foster care (Kessler & Greene, 1999), behavior management skills to staff in group homes for persons with mental retardation (Schinke & Wong, 1977) and adult day care centers (DeRoos & Pinkston, 1997), and behavior analysis skills to graduate social work students (Dillenburger, Godina, & Burton, 1997).

Social Skills Training

Social skills training (SST) can improve clients' competence in a variety of important interpersonal encounters, such as initiating conversations, dealing with conflict, and conducting successful job interviews. Coming from social learning theory rather than an operant learning perspective, Richard M. McFall (1976) developed a versatile technique for teaching interpersonal skills as well as noninteractive behavior. Although inspired by social learning theory (Bandura, 1969, 1976), this format embodies operant learning principles in its main procedures of (a) giving instructions that describe and explain the skill to be taught; (b) demonstrating or modeling the skill for the student; (c) having the student practice or rehearse the desired response, usually in role-play situations; and (d) giving the student positive or negative feedback on his or her performance. A major difference between SST and other operant learning procedures is that prompts and reinforcement are delivered in *simulated encounters* and not in the actual interactions in which the behavior typically occurs. It was generally assumed that cognitive mediation would lead to the transfer or generalization of skills learned in the role-play simulations to extratherapy settings. However, this assumption was often not empirically confirmed.

Utilizing the SST protocol, social workers have taught interpersonal skills for initiating and maintaining positive interactions with peers to fifth-grade students (Hepler, 1994), for maintaining social support to women at risk of child maltreatment (Richey, Lovell, & Reid, 1991), for facilitating vocational and community adjustment to mentally retarded clients (Hall, Schlesinger, & Dineen, 1997; S. S. Sundel, 1994), for carrying out appropriate conversations to persons with severe mental disorders (Wong et al., 1993), for increasing assertiveness and drug avoidance to drug users in residential treatment (Hawkins, Catalano, & Wells, 1986), and for problem solving and avoiding future acts of delinquency to youths in detention (Hawkins, Jensen, Catalano, & Wells, 1991). The range of client populations and concerns to which SST procedures have been effectively applied gives some indication of their flexibility and robustness.

Safety and Prevention

Operant learning and SST procedures have been successfully used to instill safe practices that avert accidents or reduce dangers that arise in familiar places, such as the home and family car. Besides preventing possible injury or death, these interventions can also head off the emotional harm that is a frequent aftermath of these traumatic events. Some self-protective skills that have been taught are automobile safety belt usage to youth (Sowers-Hoag, Thyer, & Bailey, 1987; M. Williams, Thyer, Bailey, & Harrison, 1989), safe responses when finding a gun in a house (M. B. Himle, Miltenberger, Flessner, & Gatheridge, 2004; Miltenberger et al., 2005), skills for young children to avoid abduction (Johnson et al., 2005, 2006; Miltenberger & Thiesse-Duffy, 1988), steps for identifying and treating children's illnesses for parents at risk of child abuse and neglect (Bigelow & Lutzker, 2000), ways to reduce home safety hazards for parents reported for child neglect (Metchikian, Mink, Bigelow, Lutzker, & Doctor, 1999), and self-preservation and emergency responses for battered families (Lund & Greene, 2003).

One of the most promising applications of social and operant learning procedures has been in the area of prevention. Prevention programs seek to reduce high-risk behavior and the development of clinical disorders by building adaptive strengths and coping skills

(Gilchrist, Schinke, & Maxwell, 1987; Task Panel on Prevention, 1988). Social work researchers have employed an expanded form of the SST procedure to transmit information and teach skills to prevent unplanned pregnancy in high school students (Schinke, Blythe, & Gilchrist, 1981), cigarette smoking in middle school students (Schinke & Gilchrist, 1985), drinking and driving in adolescents (Wodarski, 1987; Wodarski & Bordnick, 1994), drinking and substance abuse in minority adolescents (Botvin, Schinke, Epstein, Diaz, & Botvin, 1995; Schinke et al., 1988), and to improve self-image and social competence in adolescent girls (Lecroy, 2004, 2005).

Combining strategies of prevention and early intervention, Fraser and his colleagues evaluated multicomponent training programs aimed at preventing the development of aggressive behavior in third-grade children. One component of their program, Making Choices, consisted of teaching children social problem solving, social information processing, and social skills during 25 to 30 45-minute group sessions (Fraser, Day, Galinsky, Hodges, & Smokowski, 2004; Smokowski, Fraser, Day, Galinsky, & Bacallao, 2004). A second component was Strong Families, a parent training curriculum covering topics of limit setting, problem solving, and rewarding of prosocial behavior, delivered during 15 1- to 2-hour sessions conducted in the parents' home (Fraser et al., 2004). In a series of controlled studies with hundreds of subjects, these interventions were shown to produce statistically significant improvements for trained groups over comparison groups on teacher ratings of social aggression (i.e., verbal aggression, teasing, hostility) and overt aggression (i.e., threats, physical attack), with effect sizes for the different studies ranging from small to large (Fraser et al., 2004, 2005; Smokowski et al., 2004).

All of the previous studies reported success in accomplishing at least some of their goals; however, effect sizes associated with these interventions were not always large, measurement of generalization varied considerably across studies, and improvements were often assessed by self-report data. The impact of these preventive interventions might be amplified in future research by taking greater pains to objectively measure generalization of desired behavior to extratherapy settings, considering strategies for promoting generalization across stimuli and responses extrapolated from operant learning principles (Rzepnicki, 1991; Stokes & Baer, 1977; Stokes & Osnes, 1989), and modifying antecedent and consequent environmental stimuli more proximal to the target behaviors.

Another area of prevention research with potentially far-reaching ramifications is the reduction of television viewing and exposure to its words and images encouraging "violence, rampant consumerism, sedentary lifestyles and early sexual activity" and its dulling of "intellectual and social development" (Jason & Fries, 2004, p. 129). Jason and his colleagues have developed devices and techniques (e.g., television locks, televisions operated by token meters, and contingency contracts between parents and their children) for regulating exposure to this ubiquitous mass media that promotes sensationalism, materialism, and immediate gratification. By utilizing such devices and techniques, millions of parents can regain control over the unwanted messages that are broadcast directly into their homes and viewed by their families.

Clinical Disorders

Evidence-based foundations of operant learning principles come from the fields of behavior therapy, applied behavior analysis, and behavioral social work in effectively treating mental disorders delineated in the *Diagnostic and Statistical Manual of Mental Disorders*, fourth

edition, text revision (American Psychiatric Association, 2000). These myriad disorders are associated with personal suffering, functional impairments, and risks to health and life; therefore, the success of operant and behavioral interventions in ameliorating these problems is strong evidence of their utility. Because the literature on applying operant learning procedures with clinical disorders is vast, the present section focuses on the research of social workers addressing these problems.

Phobic Disorders Excessive, crippling fears and avoidance responses have been a major target of behavior therapy, and a few social work researchers have been active in this area. Treatments based on learning theory often entail *prolonged exposure* to the feared stimuli, thereby habituating clients to conditioned aversive properties of the stimulus and extinguishing their avoidance behavior. In an archetypal study of this approach, Thyer (1981) used graduated and prolonged in vivo exposure to dogs of various sizes and breeds to eliminate extreme fear of dogs in a 70-year-old woman. Thyer (1983) also successfully treated morbid fear of frogs in a 26-year-old woman by having the client gradually approach and eventually touch a live frog. Working with a situation causing distress in a nonclinical population, Thyer et al. (1981) reduced test anxiety in a group of 19 college students by teaching a combination of cognitive restructuring and muscle relaxation techniques (responses incompatible with fear). Finally, Vonk and Thyer (1995) utilized sex education and graduated exposure therapy to successfully treat fear of vaginal penetration in a 25-year-old heterosexual woman who was unable to have sexual intercourse.

Obsessive-Compulsive Disorder Persistent and distressing thoughts, images, or impulses that are often accompanied by repetitive rituals that clients enact to reduce anxiety have also been the target of behavioral interventions. Behavioral treatment often involves prolonged exposure to the objects or situations that provoke the obsessional fears and *response prevention* or persuading clients not to engage in the rituals that they usually perform to reduce their anxiety (e.g., washing or checking; Steketee, 1987). Thyer (1985a) treated a 36-year-old woman with homicidal obsessions of stabbing family members with sharp objects that were unaccompanied by compulsive rituals with repeated exposure to tape recordings of herself reading detailed accounts of her disturbing thoughts. J. Himle and Thyer (1989) later reported the successful use of exposure in eliminating obsessive thoughts in a 50-year-old man. This client's obsessions were blasphemous thoughts about religious figures and sex ("The Virgin Mary is a whore"), which were treated by having the client listen to tape recordings of himself repeating these repugnant phrases and having him repeatedly write out these phrases on paper. K. E. Williams, Chambless, and Steketee (1998) described the treatment of two African American women, one obsessed with fears of contamination and the second obsessed with hoarding beer. Both clients showed dramatic improvements after exposure exercises; the former client was able to touch grimy trash and the latter was able to give away beer or pour perfectly good beer down the drain. Exposure and response prevention have also been applied with larger groups of clients with obsessive-compulsive behavior, showing that outcomes are generally better when these procedures are applied in combination (Foa, Steketee, Grayson, Turner, & Latimer, 1984).

Schizophrenic Disorders Operant learning principles have been applied with some of the most severe behavior disorders in adults involving the emergence of bizarre or grossly

disorganized behavior and the associated deterioration in social functioning, vocational performance, and self-care. Wong and his colleagues (Wong, 1996; Wong, Wilder, Schock, & Clay, 2004) have recommended that the treatment of these disorders be multipronged and address the specific behavioral excesses and deficits exhibited by the individual client. In an early study, Patterson and Teigen (1973) used token reinforcement and verbal feedback to reestablish factual statements about personal background in a 60-year-old woman with a long history of delusional speech. Wong, Woolsey, et al. (1987) later applied positive reinforcement to increase accurate verbalizations and response cost (removal of positive reinforcement for inappropriate behavior) to reduce delusional speech in a 24-year-old woman with the diagnosis of Paranoid Schizophrenia. In a series of studies that examined the relationship between psychotic behavior and appropriate alternative behavior, Wong and his colleagues (Corrigan, Liberman, & Wong, 1993; Wong, Terranova, et al., 1987; Wong, Wright, Terranova, Bowen, & Zarate, 1988) demonstrated that a broad array of bizarre and repetitive responses could be displaced by both sedentary and strenuous recreational activities in 14 persons with severe mental disorders bearing varied diagnoses.

Beginning the lengthy process of restoring functional repertoires in clients with long histories of severe mental disturbances, Wong and Woolsey (1989) used a highly structured, discrete trials format to teach rudimentary conversational skills (e.g., saying "Hi" or "Hello") to four actively psychotic patients with Schizophrenia. Working with three higher functioning patients with Schizophrenia, Wong et al. (1993) applied traditional social skills training procedures to teach more sophisticated conversational skills (e.g., conversational questions such as "How is the weather outside?"). Addressing the common problem of clients' poor self-care and appearance, Wong, Flanagan, et al. (1988) utilized verbal prompts, modeling, praise, and consumable reinforcement to improve grooming and personal hygiene skills in a group of 50 regressed mental patients residing in a state hospital. Finally, focusing on clients' fitness and productive use of leisure time, Thyer, Irvine, and Santa (1984) used consumable reinforcement to motivate two former mental patients in a group home to exercise on a stationary bicycle.

More recently, Bradshaw (1997) applied a combination of cognitive and behavioral techniques over an 18-month period to reduce symptoms and to improve functioning in four outpatients with Schizophrenia. After spending a month to establish empathetic and supportive relationships with clients, the investigator taught them stress-reduction techniques (e.g., progressive relaxation, exercise) and social skills. Clients were also instructed in three cognitive techniques: negative thought stopping, empirical testing and invalidation of negative thoughts, and generating positive self-statements. Outcome data analyzed in four AB, single-subject designs showed that treatment was associated with substantial reductions in ratings of symptoms and gains in ratings of role functioning. Using a larger participant sample, Bradshaw and Roseborough (2004) applied a similar combination of cognitive and behavioral treatment procedures during 18 months of treatment with 22 outpatients diagnosed with Schizophrenia. Outcome measures consisted of clinical ratings of symptoms and adaptive functioning, and aggregated group data were evaluated within a multiple-baseline design. This study also documented significant improvements in symptoms and adaptive functioning that resulted from treatment.

Aggressive Behavior Although not linked to any specific diagnosis, aggression is a serious problem behavior and one that is frequently treated with techniques derived from

operant learning principles. Persons with developmental disabilities are a population that exhibits a variety of challenging behaviors, including physical aggression. Wong, Slama, and Liberman (1985) outlined skill acquisition and response reduction procedures available for persons with developmental disabilities or mental disorders, and they also presented case illustrations with positive outcome data. Wong, Floyd, Innocent, and Woolsey (1991) applied brief compliance training and differential reinforcement of other behavior (DRO) schedule to reduce physically aggressive behavior in an autistic man. The DRO schedule stipulated that if the client did not display aggressive behavior for a certain interval (e.g., 15 minutes), positive reinforcement (i.e., praise and a small piece of candy) would be delivered. As the duration of appropriate behavior increased and the frequency of aggressive behavior lessened, the DRO interval was gradually lengthened (e.g., to 30 minutes, to 45 minutes). Figueroa, Thyer, and Thyer (1992) employed extinction and a DRO schedule to reduce physical aggression in a 7-year-old boy with severe mental retardation. Extinction in this case involved a burly therapist who wore heavy, protective clothing and gloves and who ignored, blocked, or otherwise neutralized the boy's physical attacks until they gradually subsided.

Youth in residential or psychiatric treatment are another population with difficult-to-manage behavior, including verbal and physical aggression. Dangel, Deschner, and Rasp (1989) described a cognitive-behavioral anger control program used to decrease the verbal aggression of adolescents in residential treatment. The training program included cognitive retraining in identifying triggers for anger, considering alternatives to aggressive behavior, and increasing self-awareness of feelings and self-statements associated with anger buildup. Subjects were also taught alternative behaviors to aggression, including thought-stopping, muscle relaxation, and walking away from the situation. Rates of daily verbal aggression were recorded, and results evaluated within a multiple-baseline across-groups design showed modest declines in verbal aggression in the treatment phase and substantial declines in the follow-up phase. Finally, Wong (1999) showed that long-term treatment with a modified Achievement Place program (Phillips, Phillips, Fixsen, & Wolf, 1974) with response-cost procedures was associated with substantial decreases in aggression and other severe antisocial behavior in a group of 29 adolescent inpatients with histories of treatment failure. In addition to being linked to behavioral improvements, program components received generally high consumer satisfaction ratings by the youth in its care.

CRITIQUES OF THE OPERANT LEARNING APPROACH

The operant learning model is frequently misrepresented and misunderstood (Thyer, 2004). In earlier times, a common criticism of this approach was that the model was too simplistic and mechanistic. Human behavior was characterized as being inherently too complex to be analyzed in terms of mere stimulus-response units. This criticism has fallen silent in the present era of biomedical and pharmacological treatments, wherein synaptic-neurotransmitter activity is boldly asserted to cause specific human behavior, while psychotropic drugs are simultaneously advanced as solutions for a host of psychological and interpersonal problems (see, e.g., Wong, 2006). Another factor that has tended to quell this criticism is the growing body of research that has produced more advanced and elegant operant theory and techniques, some of which were discussed in this chapter.

It has also been suggested that operant learning overemphasizes the external control of behavior, and its principles may eventually result in mind/behavior control technologies that will be used by authoritarian or punitive agents, such as those artistically portrayed in the film *A Clockwork Orange*. However, with rare exception, behavioral researchers and practitioners are keenly aware of their position as human service professionals and their ethical responsibilities as behavior change agents. Furthermore, because behavioral practitioners' attempts to control behavior are open and recognizable, they are probably less prone to use this influence in authoritarian and self-serving ways than other groups, such as religious or business organizations, whose behavioral control activities are less obvious and less subject to public censure. Thyer's (2004) comment regarding the misreading or failure to read behavioral literature is also pertinent here. Leading behavioral researchers have written extensively about the shortcomings of punishment and reasons not to apply it as a behavioral control procedure, including its long-term ineffectiveness, its lack of teaching desired behavior, its negative emotional side effects, its tendency to produce escape or countercontrol behavior, and its modeling of aversive control that the student is later predisposed to use against the teacher (Sidman, 2000a; Skinner, 1953).

Another criticism of the operant learning approach is that because it changes behavior by engineering environmental stimuli, it is suited only for tightly controlled environments such as laboratories or closed institutions (e.g., hospitals, prisons, schools). This impression might have arisen due to the many early applications of operant principles in these types of settings. However, recent research reviewed in this chapter should help to correct this misconception, demonstrating that these principles can be utilized as educational techniques in prevention and early intervention programs applied in open organizations and communities.

Contrary to these criticisms, operant learning's focus on the malleability of behavior within the environment speaks for a progressive view of human nature and society. Because this approach sees behavior as largely the product of environmental stimuli and individual experience, it predicts that human potential will be optimized by making the most of these factors. Thus, operant theorists strive to expand people's opportunities and to provide them with nurturant and supportive environments, positive learning experiences, and skills for self-sufficiency and responsible citizenship. These are essentially humanitarian goals that are mirrored in the primary values of social work.

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Chapter 4

COGNITIVE-BEHAVIORAL THEORY

Paula S. Nurius and Rebecca J. Macy

RELEVANCE TO CONTEMPORARY PRACTITIONERS

Social workers and practitioners from allied disciplines are presently using interventions based on cognitive-behavioral theory to address a wide range of psychosocial problems, including depression, anxiety, chronic pain, substance abuse, violent trauma, and difficult family relationships (Berlin, 2002; Deblinger, Steer, & Lippman, 1999; Nurius, 2007; Ronen & Freeman, 2007; Spillane-Grieco, 2000). Cognitive-behavioral therapy (CBT) has been applied and found effective with an array of clients of various developmental ages and from a range of socioeconomic and sociocultural backgrounds (Carter, Sbrocco, Gore, Marin, & Lewis, 2003; Koh, Oden, Munoz, Robinson, & Leavitt, 2002; Organista, 1995). Additionally, CBT can be used in a variety of settings, from private practice offices to inpatient hospitals to community outreach services (e.g., Evans & Jaureguy, 1981; Mitchell, 1999).

Over the course of its development, the underlying cognitive-behavioral theory has been subjected to extensive basic research. The results from this research, a highly favorable body of findings, show the therapeutic effectiveness of CBT methods that operationalize the theoretical foundations. Another strength of the theory base is its considerable versatility and adaptability. As counseling professionals are increasingly asked to use evidence-based practices and to show that their interventions make a difference in the lives of the people with whom they work, many practitioners turn to cognitive-behavioral therapy because of the combination of its utility, adaptability, and strong record of effectiveness (Macy, 2006).

Additionally, cognitive-behavioral therapy has at its foundation a set of well-documented and detailed intervention techniques (see, e.g., J. S. Beck, 1995; Leahy, 2002) that are widely available and straightforwardly applied (Padesky, 1996). Application is particularly salient to practitioners as this emphasis on articulating implementation methods provides a basic template for how to translate theory into therapeutic practice. However, the effectiveness of any therapeutic method can be diluted by adherence to technique that is insufficiently attentive to the characteristics, complexities, and context of any given case. Grounding in the underlying theory, awareness of emerging developments, and balanced attention to limitations as well as strengths of this model of practice are essential to making decisions about the appropriateness of CBT for a given client as well as adaptation to foster good fit.

In short, as with any intervention, the effectiveness of cognitive-behavioral therapy is dependent on the practitioner's ability to use the theory and related techniques in clearly

formulated, deliberate, and thoughtful ways. Practitioners will be most effective in their use of cognitive-behavioral interventions if they have a nuanced understanding of the theoretical premises and are skilled in a range of CBT intervention techniques and tools (Macy, 2006; Padesky, 1996). This level of mastery requires study, practice, and supervision from others well versed in this intervention theory. Additionally, effective application of cognitive-behavioral interventions is incumbent on the counselor's ability to appropriately adapt and modify cognitive-behavioral theory and therapy techniques to clients' sociocultural and socioeconomic backgrounds, as well as clients' development in the life course (Cormier, Nurius, & Osborn, 2008; Organista, 1995). As Alford and Beck (1997, p. 13) state, "Cognitive [behavioral] therapy is the application of cognitive [behavioral] theory . . . to the individual case." In an effort to provide readers with a theoretical foundation for using this therapy effectively in assessment and intervention, we provide an overview of the theory and its developmental history, basic and advanced theoretical principles, and recent developments and critiques.

OVERVIEW OF COGNITIVE-BEHAVIORAL THEORY

The cognitive-behavioral theoretical framework of human functioning is based on the premises that thoughts, emotions, and behaviors are inextricably linked and that each of these aspects of human functioning continuously impacts and influences the others. Specifically, cognitive-behavioral theory posits that thoughts about the self, relationships, the world, and the future shape emotions and behaviors (A. T. Beck, 2002; Dobson & Dozois, 2001). In turn, feelings and behaviors shape thoughts and thought processes in a kind of ongoing reciprocal feedback loop. Moreover, cognitive-behavioral theory posits that cognitive-affective-behavioral *processes* are similar and analogous across human beings and human experience. However, the *content* within the cognitive-affective-behavioral processes is specific, unique, and personal to the individual (Alford & Beck, 1997; DeRubis, Tang, & Beck, 2001).

This distinction is very important. There is a lot yet to learn about processes—*how* exactly thoughts and feelings interact with each other as well as with genetics, physiology, and prior lived experience, and how these systematically relate to and with behavior. Yet to date, it appears that, as with other aspects of the human body and functioning, there is a high degree of comparability in how processes operate. The defining *content* of memories, beliefs, understandings, expectations, and values can be highly variable, reflective of many differences across people. And these differences flow into the operating system of cognition-affect-body-behavior processes in a continuous reciprocal interchange to generate an intricate, highly contextualized set of outcomes.

In other words, how human beings construct the reality of their life and the meaning human beings give to their life, their self, their relationships, their environments, and their future is distinct. This distinctiveness comes from uniquely individual experience, knowledge, and memory. When this cognitive-affective-behavioral system works well, human beings are able to take in information from their experiences and their environment, process and manage that information, and then use the information to direct emotions and behaviors toward meeting their needs and goals in ways that are adaptive, efficient, and functional (Alford & Beck, 1997; Berlin, 2002).

However, serious difficulties in human thinking, feeling, behaving, and functioning can occur when there are problems in thoughts and thought processes (J. S. Beck, 1995). Central to cognitive-behavioral theory is the notion of cognitive mediation—that the meaning people bring to and take from their experiences shapes how they feel and respond. Our cognitive activity is an active and crucial part of both positive and negative functioning. When our emotions and behaviors are guided by thoughts and beliefs that are seriously unhelpful in some manner, it is likely that we will have difficulty meeting our needs, pursuing our goals, and experiencing life in a satisfied, comfortable manner. When our needs are unmet and goals are not achieved, we are then likely to experience distress and anguish, which in turn may reinforce or create new problems in thoughts and beliefs, as well as our emotional and social experience and views of ourselves and what the future holds.

As a counterpoint to this, cognitive-behavioral theory also posits that we human beings have the capacities to monitor, examine, and change our thoughts, beliefs, and thought processes. We have the ability to think about thinking, and thus we have the capacity to alter and replace problematic, inaccurate, or in some other way unhelpful thoughts. By directing attention to and modifying thoughts and beliefs, we can also change and direct emotions and behaviors to better meet our needs and goals toward more beneficial outcomes (Berlin, 2002; Dobson & Dozois, 2001). This premise that people can think about their thinking, which A. T. Beck (1996) terms metacognition, is foundational to the change processes in cognitive-behavioral therapy.

However, cognitive-behavioral theory also posits that we do not tend to regularly reflect on our thoughts and thought processes, leaving us largely unaware of problems in our own thinking that may be at least partially contributing to our unease (Mischel, 1999). For brevity's sake, we are using such terms as thoughts and beliefs. However, the notion of cognition and cognitive activity is quite broad. As Dobson and Dozois (2001) note, a wide range of cognitive constructs and processes have been implicated, including but not limited to thoughts, beliefs, attitudes, assumptions, perceptions, interpretations, attributions, self-statements, scripts, rules for living, values, expectancies, narratives, cognitive distortions, schemas, narratives, and private meanings. In sum, cognitive-behavioral theory proposes that professionals can play an important role in assisting clients with understanding the impact that their thoughts have on their emotions and behaviors, the ways that self and social factors can shape their cognitive activity, and ways that people can learn how to reflect on and make choices about modifying their thoughts and thought processes to better meet their needs and goals.

HISTORICAL AND CONCEPTUAL ORIGINS

> There was a time, not too long ago, when the term cognitive-behavioral therapy was considered an oxymoron. . . . Only a quarter century ago, it was inconceivable to many that there could be anything legitimately called "mind sciences." Now it is difficult to imagine an adequate approach to psychotherapy that does not appreciate basic contributions from the cognitive sciences. (Mahoney, 2004a, p. 5)

This quotation captures the rapid development and dramatic impact of cognitive-behavioral theory and the therapeutic methods it informs. In many respects, cognitive-behavioral theory reflects an ongoing evolution in theorizing, clinical application, and empirical evidence.

Definitional boundaries can also be unclear. Some refer to cognitive theory and therapy and others to cognitive-behavioral theory and therapy. Some therapists see themselves predominantly as behaviorists who incorporate findings related to ways that thought, feeling, and action are interrelated. Others see themselves more rooted in the cognitive realm of understanding key processes through which cognitions—particularly errors, distortions, and maladaptive patterns of cognition—give rise to serious problems in living. Still others see themselves as working at an interface that integrates CBT premises with premises or findings from other arenas, such as cognitive science, constructivism, human biology, ecology, and psychopharmacology, and substantive factors anchored in respective arenas of practice (e.g., addictions, child and youth development, stress-related problems, problems associated with medical conditions).

A strict rendering of the historical origins of cognitive-behavioral theory is made difficult by differing perspectives and a general sense of merging between cognitive and behavioral lines of theorizing relative to therapeutic techniques (although not without dissent or controversy). Behavior therapy, for example, can be seen as developing in a context that stood in contrast to a medical model of psychopathology and to psychoanalysis as the prevailing therapeutic approach, instead emphasizing pragmatism, symptom relief, use of well-specified methods, and adherence to empirical evidence of underlying theorized principles and therapeutic outcomes. As behavior theories are addressed elsewhere in this volume, we do not review these here. In brief, there was considerable variability in the foci and specific theory-guiding methods framed under the rubric of behaviorism. Conditioning and learning theories were certainly central to a core ideological foundation. O'Leary and Wilson (1987) identify the following as characteristics typifying behavior therapy (as cited in Prochaska & Norcross, 2003, p. 281):

- Most abnormal behavior is acquired and maintained according to the same principles as normal behavior.
- Assessment is ongoing and focuses on currently functioning determinants of behavior.
- People are best described by what they think, feel, and do in specific life situations.
- Treatment is based on theory and empirical findings.
- Practice methods are detailed and replicable.
- Treatment is tailored to different problems and people.
- Intervention goals and methods are mutually developed and agreed upon with the client.
- Specific therapeutic techniques are evaluated as to their effects on specific problems.
- Outcomes are evaluated on the basis of observed behavior change, its generalization to real-life settings, and its maintenance over time.

We list these background dimensions of behavior therapy as they have carried forward to a considerable extent in the development of cognitive-behavioral theory and therapy. Although effective for a wide range of specific problems, particularly those associated with anxiety, both clinical and empirical experience with behavior therapy began to reflect limitations. Behavior theory underwent dramatic change as a function of the cognitive therapy movement that began in the 1960s and blossomed in subsequent decades. Major contributors to the cognitive therapy movement include Albert Ellis, Aaron Beck, Michael Mahoney, Joseph Cautela, Donald Meichenbaum, Albert Bandura, and others who

introduced cognitively oriented therapies such as rational-emotive therapy, cognitive therapy, self-control and self-regulatory methods, covert sensitization, self-instructional and stress inoculation techniques, coping skills training, problem-solving training, and structural and constructivist perspectives (Foreyt & Goodrick, 2001, and Dobson & Dozois, 2001, provide useful overviews of early major contributors).

Models that emphasized conditioning of human behavior by environmental forces began to share space and integrate with models that argued for cognitive *mediational processes*—that is, on ways that particular thoughts and cognitive styles shape how stimuli (external events as well as one's own thoughts and feelings) are experienced and interpreted, which in turn shapes behavioral responding. Albert Bandura's (1969) book, *Principles of Behavior Modification*, was an early forerunner of this evolution, framing in behavioral therapy terms the importance of cognitive mediational processes in understanding, shaping, and maintaining behavior. The shift from behavioral to cognitive-behavioral theory entailed a shift from environmental determinism (that one's functioning is primarily shaped by the external environment) to reciprocal determinism (that one is an active participant in shaping one's development as well as being affected by the nature of that environment, in a continual transaction between person and environment).

A number of factors have been identified as contributing to the initial theoretical specification of cognitive-behavioral therapy and its rapid ascendance as a preeminent therapeutic approach. Dobson and Dozois (2001) note the following factors:

- The behavioral perspective was increasingly being seen as insufficient to account for important dimensions of human behavior, yet cognitive extensions were generally not embraced as consistent with behavioral theory.
- The strongest alternative at the time, the psychodynamic model, had not amassed a persuasive body of evidence documenting its effectiveness.
- The addition of mediating processes offered by cognitive-behavioral theory articulated targets and guidelines for intervention that were viewed by many clinicians as meaningful and needed for client problems that were more cognitive in their characteristics or were not cleanly delineated by overt behavioral markers.
- Basic and applied research on cognitive processes was flourishing, providing empirical support for new and clinically relevant cognitive models that weathered criticism.
- Cognitive-behavioral therapy took hold as an organizing construct and body of work, manifested by forums such as new journals and major contributors that served to establish a focus and platform for exchange about provocative ideas and evolving findings.
- A growing mass of findings supported positive CBT outcomes, which gained weight and momentum in a context of cost containment and workplace pressures to document use of empirically supported interventions.

Although an oversimplification, one can consider the following three propositions as central to cognitive behavioral theory: (1) Cognitive activity affects behavior, (2) cognitive activity can be monitored and altered, and (3) desired behavior change can be

affected through cognitive change (Dobson & Dozois, 2001). Mahoney (1995, 2004b) indicates the major conceptual developments in the cognitive psychotherapies over the past 3 decades:

- The differentiation of rationalist and constructivist approaches to cognition. Although not inherently unrelated, this distinguishes a relative emphasis on the content of cognition as to its logic, errors, distortions, and (ir)rationality contrasted with a more proactive (constructive) view of the nature of cognition and more complex system of interchanges among thought, feeling, and action contextualized within a developmental perspective of the self and social systems.
- The recognition of social, biological, and embodiment issues. Increasingly, factors such as genetics and biological functioning, bodily experiences, physiology, and powerful social forces as important to shaping, understanding, and intervening were incorporated into theory.
- The reappraisal of unconscious processes. There was growing recognition that not all cognition is available to consciousness and that some processes, such as automatic thoughts, typically operate without awareness. Although contemporary notions of the unconscious are not the same as those deriving from Freudian theory, there is active effort to illuminate tacit experience and learn its function in psychological health.
- An increasing focus on self and social systems. Whereas early cognitive approaches tended to be internally focused and relatively inattentive to historical events or to the social and emotional relationship between client and counselor, more recent approaches contrast significantly, emphasizing complexity of the self and social embeddedness.
- The reappraisal of emotional and experiential processes. Shifting from an early emphasis on conscious reason as the key vehicle for correcting problems of perception, there is now much more emphasis on the power of emotion and the utility of experiential techniques that help to evoke emotional and physiological responding to incorporate with cognitive strategies toward therapeutic change.
- The contribution of the cognitive psychotherapies to the psychotherapy integration movement. Recent decades have witnessed a lessening of sibling rivalries among different psychotherapy theoretical adherents and greater dialogue and conceptual integration among behavioral, cognitive, humanistic, and psychodynamic theorists and practitioners.

Research and theorizing have continued with vigor since CBT's early foundations, to the point that CBT now ranks among the most dominant therapies identified by practitioners, supported by empirical findings, and listed as recommended methods (Chambless et al., 1996; Cormier et al., 2008; Dobson & Dozois, 2001; Hayes, Follette, Dawes, & Grady, 1995). The combination of theoretical evolution (openness to revisiting and revising theoretical propositions based on new findings), relatively precise documentation of intervention strategies, and a sturdy base of positive outcomes evidence has positioned cognitive-behavioral theory and practice to gain support among practitioners and administrators alike. We now turn to an outline of cognitive-behavioral therapy principles as well as recent theoretical development.

BASIC THEORETICAL PRINCIPLES

As discussed earlier, cognitive-behavioral *therapy* is essentially the application of cognitive-behavioral *theory* to the individual client's situation or problem. The specific therapeutic strategies a practitioner may use with coping skills applications, problem-solving skills development, or cognitive restructuring across different clients will vary to fit the change goals. However, there is a common theoretical base that undergirds these different types of cognitive-behavioral therapy. In this section we briefly review several basic theoretical principles of cognitive-behavioral therapy that are critical to understanding the organizing premises used to develop, apply, and adapt cognitive-behavioral interventions. Specifically, we discuss the theoretical principles of the (a) mediational model—how thoughts and beliefs determine emotions and behaviors; (b) information processing—how we human beings manage all the stimuli from our environments and ourselves to meet our needs and goals and how cognition is fundamental to this process; (c) self-regulation—how human beings are active agents with the capacity to alter their thoughts, feelings, behaviors, and environments, and how self-regulation can be used as the basis for change in cognitive-behavioral therapy; and (d) the importance of the environment—how a person's environment, including socioeconomic and sociocultural context, plays a critical role in shaping and activating cognitive content.

Mediational Model

The premise of the mediational model is that stimuli, such as experiences we encounter in life, do not directly determine feelings or lead to behavior but rather go through a filtering process of meaning making, led by the cognitive system that has to attend to and undertake interpretation of the experience and its implications for the person. This interpretative process draws from several levels of thinking, including automatic thoughts, underlying assumptions and rules, and core beliefs. Neenan and Dryden (2004, p. 7) describe negative automatic thoughts as those that involuntarily pop into a person's mind when experiencing emotional distress; these thoughts are often outside immediate awareness and difficult to turn off. Underlying assumptions ("*If* I impress others, *then* I should get ahead in life") and rules ("I *should* not let people down") are typically not explicitly articulated and yet tend to be reflective of and to reinforce core beliefs (e.g., "I am incompetent"). Core beliefs, which we further address later, take form as schemas that are stored in memory and drawn by relevant life events into information processing, shaping meaning making and thus emotional and physiological states and behavioral responding.

The mediational model does not propose a strictly linear process whereby thoughts or beliefs lead to emotions and physiological states, which then dictate behaviors. Rather, there is a dynamic interplay and presumed reciprocal relationships among these elements, such that changing any one should affect change in the other elements, or at least the overall dynamic. In cognitive-behavioral theory, however, it is postulated that entry through the cognitive system is essential for fundamental and sustained change (Clark & Steer, 1996). That is, assuming an individual has developed negative automatic thoughts, assumptions and rules, and core beliefs that have become deeply established in patterned, habitual responding (e.g., depression, anxiety, poor self-esteem), change in the cognitive architecture

that is operating in problematic situations is pivotal. In short, acknowledging dynamic interplay, the mediational model generally posits that emotions and behaviors in a situation flow from the cognitive activity that gets engaged in relating to the experience (e.g., the content of thoughts and beliefs salient in the moment and cognitive processes that carry these in anticipating, interpreting, and reacting; Dobson & Dozois, 2001), inclusive of thoughts and beliefs about the self, relationships, the world, and the future (Alford & Beck, 1997).

To illustrate, two students receive disappointing grades on an assignment in one of their first courses in graduate school. The first graduate student's cognitive content about the disappointing grade reflects the following beliefs: "I'm not good at this school stuff and now it's showing. If I continue to try to get through this, then my incompetence will become more and more apparent. I'm a second-rate student and I'm going to be humiliated in front of my classmates." The second student's cognitive content about the grade reflects these beliefs: "Wow! I was not expecting graduate school to be this tough. If I work a lot harder and study more, then I'm going to do better or at least have a better picture of what help I need. I am disappointed about this grade, but I have to keep my focus on my goals, and I know I can do better next time." The cognitive content exhibited by the first graduate student will result in emotions such as embarrassment and anxiety and behaviors of ruminatively worrying about future performance and starting to avoid studying, as that prompts episodes of anxiety, negative self-talk, and a sense that the material is over his head. Alternatively, the cognitive content from the second graduate student will more likely result in emotions of resolve and determination and behaviors such as going to the library to study after class. With both students in this example, it is evident that their cognitive content shapes and influences their emotions and behaviors, as well as that the cognitive content mediated the relationship between the life experience of getting a disappointing grade and the subsequent emotions and behaviors. These examples also illustrate ways that behavior contributes to a vicious cycle of emotional distress. People typically act as they think (e.g., if I don't think I can be successful with something, I'll likely behave in a manner consistent with this, which serves to sustain my unhappiness with my perceived incompetence).

In short, the mediational model posits that problems in one's behaviors and emotions are indicative of problems in one's underlying thoughts and thought processes, most likely negative, unhelpful beliefs, assumptions, and automatic response patterns (Alford & Beck, 1997; Cormier et al., 2008; Organista, 1995). Moreover, there tend to be themes that relate different kinds of emotional distress with cognitive content. Neenan and Dryden (2004) illustrate A. T. Beck's theorizing that the nature of emotional disturbance reflects what the individual perceives as being added to or subtracted from endangering or otherwise affecting aspects of life she or he cares about. For example, feelings of devaluation or loss are linked to depression, a sense of danger or threat to anxiety, situationally specific danger to phobia, transgression to anger, and expansion to happiness.

In first thinking about the idea of the mediational model, it may not be initially clear why emotions play an important role. However, theory and findings show complex relationships; thoughts and beliefs trigger and amplify emotions, emotional content associated with cognition stimulates and alters behavior, and powerful emotions can reinforce thoughts and thought processes, as well as make thoughts seem all the more urgent (Cormier et al., 2008; Dobson & Dozois, 2001; Macy, 2006). Although cognitions are targeted as key inroads to lasting change and behaviors are monitored as indicators of cognitive change

and improvement, therapeutic change is predicated on eliciting and managing relevant emotional patterns. Emotions need to be activated in therapeutic work to gain access to hot or emotionally charged cognitions. It is this activated state that allows the counselor to go beyond an abstract, cerebral exchange to actively work with the feeling-thinking linkages and to begin to foster different patterns not only of thinking and behaving, but of feelings (Neenan & Dryden, 2004).

Information Processing

At any given moment of our lives, we human beings are receiving large amounts of information. Often this information is complex, and it frequently originates from multiple sources. To manage this constant exposure to massive amounts of information that comes from within us as well as from our environment, we have developed elaborate thinking, feeling, and behavioral processes that enable us to screen out and ignore information that may not be useful or important at a given moment or in a particular situation (A. Beck, 2002). These filtering processes enable us not only to avoid being overwhelmed but also to focus—selectively attending to, interpreting, and responding to information that is relevant and that makes it possible for us to progress toward meeting our needs and goals (Berlin, 2002; Fiske & Taylor, 1991; Macy, 2006). How exactly is it possible that human beings can manage all the complex information we experience day in and day out and across the development of our life course? Cognitive-behavioral theory maintains that human beings have complex cognitive and affective structures (schemas) that allow us to manage the multiplicity and complexity of internal and external information in efficient and consistent ways. Although these structures generally function with impressive sophistication and utility (Alford & Beck, 1997; Nurius, 1993), this information-processing system has its vulnerabilities. It is, for example, highly conservative and what some have characterized as "miserly"—inclined to search in a self-confirmatory manner for what is familiar, self-relevant, and anticipated, to overlook or resist information that is contradictory, to not see information that is beyond one's base of experience or imagination, and to extend minimal processing resources unless compelled to do so.

Here is an example of how information processing works. Think about the last time you went to a party. You probably had a conversation with a good friend while you were at the party. During your conversation, many other things were probably happening at the party too. Other people were talking, and there may have been music playing. Let us say that your friend was telling you some important information about promotions at the place you both work and that being promoted is a long-standing career goal of yours. Additionally, let us also say that you came to the party hungry and had not made it to the buffet table before you ran into your friend. In addition to all the activity in the environment, you are also feeling ravenous. For you to attend to your friend's words (which may give you information to meet a life goal), it was also necessary to screen out all the information and activity going on around you at the party and within you internally. This screening process allowed you to focus on the conversation in such a way that you probably were not even aware that you were filtering out all this other information and activity. In fact, you were probably able to manage all this external and internal information smoothly and fairly easily and were also able to engage in this important conversation. Though shortly after this conversation ended, you probably began searching for the buffet table!

The task of attending to a conversation at a party is a fairly simple example of information processing. In fact, information processing occurs in an intricate, interconnected, and interdependent system of cognitive-affective-behavioral structures (A. T. Beck, 1996). These structures take in information, assign meaning, and evoke corresponding emotions, which all lead to behavioral responses in reaction to the information (Mischel & Shoda, 1995). Keep in mind that information processing occurs during every activity and behavior, from driving a car to playing basketball with friends to giving a presentation at work. Consider, too, ongoing activities and behaviors that occur over time, such as planning and taking a vacation, developing and completing a project at work, and parenting a child, just to name a few examples. Information processing is an operative part of every waking moment, sometimes functioning in a fairly automatic way (walking down the street, doing the laundry), sometimes in a more deliberate way that involves more explicit attention (hearing a child scream as one is walking down the street, coming across contraband material in your son's pants pocket as you do the wash).

Human beings have patterned and stable cognitive-affective information processes for all aspects of our lives and our personalities (Alford & Beck, 1997; Nurius, 2007; Shoda, 1999). On the one hand, the stability and consistency of these information-processing structures is adaptive, even essential, and facilitates human functioning in an efficient manner, conserving energy for needed times (Berlin, 2002; Fiske & Taylor, 1991; Macy 2006). Consider the example of driving a car. Imagine if every time you drove your car you had to consciously think through *every* step and decision—all the mechanics of driving, from getting into the car to turning the steering wheel, as well as the vast attentional energy required to purposely examine every bit of visual, auditory, and tactile information one encounters along the way. It would take a long time to get to your destination, would be exhausting and stressful (given that one has to sustain a continuous level of high alert and highly active processing of even trivial environmental information), and might even increase your risk of an accident given that attentional focus is so diffuse and taxing, reaction time to truly significant information is impaired.

Yet, as we've noted, the stability and consistency of cognitive-affective structures can also cause problems. To the extent that an individual has, for example, schematic structures underlying core beliefs about the self and the world containing information or ideas that are dominantly negative, that person's expectancies, interpretations, feelings, and responses are going to be infused and directed by this dominantly negative content in a system that will resist challenge or change, as do all well-developed cognitive-affective structures (Alford & Beck, 1997; J. S. Beck, 1995; Cormier et al., 2008; DeRubis et al., 2001). In turn, these difficulties in thinking, feeling, and behaving will pose problems for the person in terms of getting needs met and pursuing life goals. Although the person may be fully aware that needs and goals are not being successfully met, the person may not understand why the problems exist because the underlying cognitive-affective-behavioral processes, which contain unhelpful information, are so efficient and automatic that the person is not aware of the problematic information (Mischel, 1999). Additionally, erroneous cognitive-affective structures tend to be self-perpetuating, as the very act of processing information through a specific structure serves to reinforce the underlying content and the relative ease or accessibility of that structure for future processing (Shoda, 1999). Thus, on the one hand, information processing that draws on predominantly healthy and adaptive cognitive-affective structures is key to human beings' capacity to survive and thrive in a complex world; on the

other hand, information processing that draws on predominantly unhealthy and maladaptive cognitive-affective structures can cause serious problems that impair a person's capacity to survive and thrive.

Self-Regulation

Fortunately, as discussed earlier, our ability to think about our thinking gives us the capacity to become aware of our cognitive content and processes. With increased awareness of these generally automatic processes, we can then alter and replace problematic, inaccurate, and unhelpful beliefs and thoughts that underlie our problems in feeling and functioning. Although cognitive structures must be resistant to change in order to provide coherence and stability, they can be altered, modified, and replaced (J. S. Beck, 1995). By directing attention to and modifying problematic thoughts and underlying schemas that thwart our efforts to meet our needs and pursue our goals, we can also change and direct emotions and behaviors to better meet our needs and goals (Dobson & Dozois, 2001). As Berlin (2002) emphasizes, we humans are active agents in our own lives in the way we seek out, select, and manage information and experiences. Although we are constantly and consistently showered with information, we are not sponges simply soaking up information. We can also use our metacognitive capacity to think about our thinking to better direct our thoughts, feelings, and behaviors in ways that help us meet our needs and goals (A. T. Beck, 1996; Nurius & Berlin, 1995). This capacity to observe and reflect on our thinking, as well as our ability to direct our thoughts, feelings, and behaviors in ways that help us best meet our needs and goals, is termed self-regulation (Dobson & Dozois, 2001) and is another basic principle of cognitive-behavioral theory.

Cognitive-behavioral theory views the person as an active agent in the construction of perceived reality and the social and psychological interchanges both among and within individuals. Beyond reacting to the world, we also dynamically search for, choose, and use information to construct our realities and make meaning in our lives, including our understandings of our self, our relationships, the world, and our future (A. T. Beck, 2002; Blankstein & Segal, 2001). Although much of the way that people are exercising their agency or influence in this regard resides beyond common awareness, cognitive-behavioral theory views our cognitive-affective-behavioral patterns as knowable, accessible, and modifiable. This theoretical premise is the cornerstone of cognitive-behavioral interventions, be they cognitive restructuring, coping skills training, emotional regulation, or other specific strategies (Berlin, 2002; Dobson & Dozois, 2001; Macy, 2006).

Recall the example of the graduate student who received the unsatisfactory grade and thought to herself, "I am disappointed about this grade, but I can do better next time," and then headed off to the library; this is an illustration of self-regulation. Let's assume that both students had the abstract knowledge that academic performance can generally be improved through study, perseverance, and tutoring. One student had a core belief consistent with herself as being able to accomplish this connection, whereas the other did not. Clearly, the self-regulatory task for the student with a negative core belief is considerably more difficult than for the other student. Self-regulation for the former student would involve observing and reflecting on cognitive patterns (negative automatic thoughts, assumptions and rules, and core beliefs about her academic competence), feeling states (embarrassment, anxiety, disappointment), and behaviors (avoidance strategies) that are contributing to her

problems and then undertaking activities to interrupt these patterns and work to invoke and reinforce new patterns. A number of specific strategies could be used to assist with this effort. However, central to the effort will be the incremental progress toward challenging the negative core belief and reinforcing a new positive belief structure and information-processing habits regarding her academic competence, the possibility of achieving success, and the how to's and what if's for self-regulating through challenges and backslides along the way. Self-regulation often involves not only deliberate, explicit focus on changing beliefs and thought patterns, but also explicitly working to manage one's physiology (e.g., bodily reactions associated with anxiety, embarrassment), coping patterns, and mood.

What is noteworthy about the example of the positive belief student is how she automatically engaged in positive, helpful thinking patterns that supported behaviors that are adaptive for success in her academic goals. Part of what makes self-regulation difficult is this automaticity; both adaptive and problematic patterns are typically implicit and unscrutinized (A. T. Beck, 1996; Blankstein & Segal, 2001). Experientially, it feels like "what is," a kind of truth or reality ("I'm just not good at this—never have been, never will be"). The theoretical premises underlying self-regulation essentially frame the client as a personal scientist. Embedded within an overarching social learning and psychoeducational framework, self-regulation entails an assumed ability, with assistance, for clients to (a) gain awareness of their heretofore unobserved and automatic patterns, (b) test the validity of their problematic beliefs and thoughts, and (c) collaborate with the counselor to modify these patterns (Neenan & Dryden, 2004). Although the process of self-regulation requires energy and overcoming an inherently conservative cognitive-affective-behavioral system, humans are also inherently motivated to understand, gain meaning, and be agentic in their own functioning—assets to the process of self-regulatory change. How this capacity can be used for therapeutic purposes is discussed in greater detail later in the chapter.

The Importance of Environment

Social work professionals frequently work from a biopsychosocial perspective and often use frameworks that emphasize the importance of the environment, such as person-in-environment perspective, the metatheory of systems, and the ecological framework. The emphasis on the individual client's interactions with various aspects of his or her environment (e.g., family, neighborhood, community, state) is critical for social work professionals because we conceptualize problems in human functioning in terms of disruptions and problems in our clients' environment as much as we conceptualize problems in human functioning as stemming from within the person. Because of this emphasis, social workers may wonder to what extent cognitive-behavioral theory is useful for social work practice. We have noted that cognitive-behavioral theory sees the individual as deeply and continuously embedded within complex social environments, with functioning a product of reciprocal relationships between persons and their environments.

Nonetheless, we have emphasized (as does much of the literature) the cognitive, affective, and behavioral processes that happen within the individual. It would be a mistake, however, to assume that cognitive-behavioral theory conceptualizes problems in human functioning as lying entirely within the individual. In fact, person-in-environment interactions are essential in how cognitive-behavioral theory understands problems in human functioning, as well as in how social workers use cognitive-behavioral interventions to

address a client's problems (Berlin, 2002; Brower & Nurius, 1993; Dowd, 2002; Macy 2006). Neenan and Dryden (2004) emphasize a focus on correcting the *combination* of psychological and situational factors that are contributing to an individual's distress and working collaboratively with the client to understand how objectively unpleasant situations are experienced as well as how these may be exacerbated by how the client appraises or makes meaning of these situations in ways that impair his or her ability to cope with them.

Let us consider two ways in which a client's environmental milieu, which includes the client's socioeconomic and sociocultural context, come into play in a cognitive-behavioral theory perspective (Berlin, 2002; Macy 2006; Nurius, 2007). First, people's environment will inevitably play a considerable role in forming and presenting the opportunities, experiences, and information to which they have access (Dowd, 2002). As a result, the characteristics of their environment will likely shape the thoughts, beliefs, and ideas that form the basis of people's information processing and capacity to self-regulate their thinking, feeling, and behaving. Patterned ways of responding typically derive from formative experiences with the social environment.

For example, a person who lives in the desert may never have the experience of downhill skiing because the geographic environment limits the person's opportunities to have this experience. Without mountains and considerable snow, a person may never learn to ski and thus will never develop cognitive-affective-behavioral processes for the activity of skiing. However, if this person has economic resources and can travel, then he or she may go to a snowy, mountainous geographical area on vacation, take skiing lessons, and subsequently become proficient at this activity. Again, the person's environmental realities—in this case, the fact that the person has economic resources—have provided the opportunity for the development of cognitive-affective-behavioral processes for the activity of skiing.

This is a fairly benign example of how a person's environmental context can shape cognitive-affective-behavioral processes. However, given the social work profession's emphasis on social change and social justice, the reader may wish to consider how deleterious aspects of a person's environment, for example, poverty, racism, and neighborhood crime, also impact a person's cognitive, affective, and behavioral functioning. As Berlin (2002) emphasizes, the opportunities to which human beings have access may limit their capacity to create alternative ways of seeing themselves, relationships, the future, and the world.

Second, established cognitive-affective-behavioral patterns are often activated by the environmental context (Persons & Davidson, 2001). A person's internal experience (thoughts, feelings, bodily sensations) also activate relevant cognitive-affective-behavioral systems. Think of your own thinking, feeling, and behaving processes when you find yourself hungry or sleepy. In the flow of everyday life, we are constantly experiencing thoughts and beliefs being activated and made momentarily salient and influential by the experiences, events, or situations we are encountering.

As an example, think back to our two graduate students who both received disappointing grades on their assignments. Let's consider the student who began to anxiously ruminate, leading to avoidance coping behaviors. Let's further imagine that this student found out right before class that his partner of 1 year decided to break up with him. As a result of receiving these two pieces of bad news so close together, which are examples of external events, our student is feeling particularly discouraged, sad, and hopeless. But let's also imagine that on the way to a student bar with the intent to drown his sorrows a bit, the student runs into a good friend. This friend joins him for a beer but also provides a listening

ear and a clear-eyed shoulder to cry on. As a result of this friend's help and support, our graduate student feels more hopeful and heartened. The next day, he joins the other graduate student for an all-day study session in the library. This example provides multiple examples—the assignment grade, the problem relationship, the supportive friend—of how the current environmental context can activate relevant cognitive content in a way that shapes a person's thinking, feeling, and behaving.

Clearly, the kinds of problems and contexts with which many social work clients are struggling carry many levels of stress, hurt, inequity, and impoverishment. No one change or support approach will be a panacea, and cognitive-behavioral theory lays no claim to being a vehicle to correct environmental oppression and ills. What the theory does do is illuminate ways that individuals can gain awareness of both the stresses and resources of their environments as well as the ways they are engaging with that environment to exert influence in the best interest of their own needs, goals, and well-being. To accomplish this, practitioners who use cognitive-behavioral therapy, guided by an understanding of their client's environmental context, including developmental and cultural history, family and friend relationships, economic realities, and environmental factors, may well pair CBT with interventions targeted at external resources or problem contributors.

ADVANCED THEORETICAL PRINCIPLES

Although the theoretical principles we selected as basic apply across the range of cognitive-behavioral intervention strategies, other theoretical constructs will be pertinent when more in-depth cognitive challenges and restructuring are involved. These may pertain, for example, to work with individuals who are suffering from serious depression or chronic maladaptive behaviors and deeply patterned interpersonal functioning problems. It is beyond the scope of this chapter to detail applications of CBT methods or to elaborate in depth. We select core beliefs and cognitive errors as two features of cognitive-behavioral theory that build on and go beyond underlying basic principles. Resources for more in-depth descriptions of advanced cognitive-behavioral theory and therapeutic techniques include A. T. Beck, Freeman, Davis, and Associates (2004), Leahy (2003b), and Young (2002; Young, Klosko, & Weisharr, 2003).

Core Beliefs

Earlier we introduced the construct of core beliefs as the deeper cognitive structures (typically assumed to be stored in memory as schemas and situationally activated) that carry the content—positive or negative—of what individuals believe to be fundamentally true about themselves and their world. In applying cognitive-behavioral therapy to human problems at a foundational level, the distinctions among different types of cognitions are not always critical. However, at an advanced level of understanding, knowing the distinctions among cognitions will help to refine and advance a clinician's assessment and intervention.

Core beliefs, also called schemas, are the underpinnings of information processing because they are the memory structures that store descriptive information, beliefs, judgments, and ideas about the self, relationships, the world, and the future (DeRubis et al., 2001; Dobson & Dozois, 2001). Core beliefs take time and repeated use to become well elaborated

and overgeneralized. Once well developed, they tend to be experienced as tacit truths and are stable, complex, and resistant to change. Core beliefs are storage repositories, but they are by no means static. These cognitive schemas are theorized to be the main drivers directing what we attend to, how we make interpretations, what feeling states are evoked, and what behaviors we are then predisposed to. In relation to information processing, the resilience of core beliefs is often adaptive and helpful because they allow us to process and make sense of new information in efficient and consistent ways (Dowd, 2002; Guidano, 1987). However, when core beliefs contain unhelpful, inaccurate, or maladaptive information, they can cause considerable problems in thinking, feeling, and behaving.

Core beliefs generally comprise foundational information about the self, relationships, the world, and the future and are theorized to have had their initial formation in childhood and early adolescence (A. T. Beck, 2002). Cognitive-behavioral theory hypothesizes that formative life experiences develop and reinforce these central cognition structures because they were functional and useful during these key developmental periods (Berlin, 2002; Macy, 2006). With repeated application colored by the conservative, self-confirmatory bias of the cognitive system, these schemas were maintained and strengthened, being used to interpret and assign meaning to new experiences that further elaborate them. To identify a client's fundamental core beliefs, which may hold problematic information for the client's current life, a comprehensive developmental assessment can provide information and insight to the contexts from which a client's core beliefs emerged and what functions they served at the time.

Because core beliefs so powerfully shape a person's thoughts, emotions, and behaviors, they are essential and critical targets for deep-level change from a cognitive-behavioral theory perspective (J. S. Beck, 1995; DeRubis et al., 2001). In fact, many who do research on and write about cognitive-behavioral theory hypothesize that lasting cognitive, affective, and behavioral change requires an alteration in problematic core beliefs (A. T. Beck, 1996; Dobson & Dozois, 2001; Dowd, 2002). There are several challenges to altering core beliefs. One is the process of helping clients become aware of these underlying cognitive processes that contain negative, maladaptive information. Because these cognitive structures have become so embedded in a person's sense of identity, life philosophy, understanding of reality, and patterned way of being in the world, the intervention tasks of identifying, challenging, and disrupting habitual thought processes and then developing and reinforcing competing, more adaptive core beliefs require considerable skill and sustained commitment by client and counselor alike. However, core beliefs can be altered in a way that helps clients to better address their needs and goals (Dowd, 2002; Leahy, 2003a).

Cognitive Errors

In our discussion of the mediational model we described how unhelpful thoughts and beliefs contribute to problems in feeling, behaving, and functioning. Some of this stems from maladaptive cognitive content, such as negative core beliefs. Some stems from maladaptive patterns of thinking or cognitive processes. Cognitive errors are one such set of problematic patterns of thinking stipulated in cognitive-behavioral theory. Cognitive errors can occur at various levels of thought, including core beliefs as well as surface thoughts. Thus, cognitive errors are found both within a person's fundamental beliefs about the self, relationships, the world, and the future, as well as in spontaneous, transitory thoughts. In some respects,

the term "cognitive error" is a misnomer to the extent that it conveys a notion of some absolute reality or truth against which an individual's perceptions are gauged for accuracy. Consistent with the educational, learning approach of cognitive-behavioral therapy, the term "error" conveys a pattern of cognitive responding that can be reflected on as to its helpfulness to the person and modified to bring patterns of responding more in alignment with the individual's comfort and goals.

Within the general concept of cognitive errors there are several types of cognitive errors that have been broadly observed in clinical and empirical work, particularly those associated with emotional states (Alford & Beck, 1997; J. S. Beck, 1995). DeRubis et al. (2001) review common examples of cognitive error. *Magnifying problems* reflects the tendency to make one small event or problem bigger than it actually is or might fair-mindedly be viewed to be. For example, a person who is planning a once-in-a-lifetime, dream vacation and who runs into some problems as she tries to reserve a hotel room may think to herself, "The hotel I really wanted to stay at on my vacation is overbooked. This is awful! I might as well not go on the trip at all then, because it will ruin my whole vacation if I cannot stay at that hotel!" It is unlikely that this is the only suitable hotel in which our vacation planner can stay (although, of course, this would need to be explored). She may begin thinking about the entire vacation, not just the overbooked hotel, in a negative way, which in turn may lead to negative feelings, including disappointment, about her vacation plans. The fact that her thinking is focused on this one apparently minor factor is likely magnifying the problem in a way that colors her entire view of what was once her dream vacation. We all magnify (or minimize) at times. It becomes a problem, though, when there are repeated patterns—particularly when the individual is unaware of the polar extremes that are coloring her or his interpretations and feelings, patterns that lead to ongoing unhappiness and imbalance.

Another cognitive error, *jumping to conclusions*, reflects the tendency to come to a conclusion before gathering all the information, particularly conclusions that reinforce a negative existing belief. For example, a recent high school graduate who is looking for a job may think to himself, "It's been a day, and I have not heard back from my job interviewer, so I must not have gotten the job." Likely this thought will lead to other negative thoughts (e.g., "Why do I bother looking? No one will want to hire me") and negative feelings, such as frustration and despondency. These negative thoughts and feelings may in turn lead to unhelpful actions and behaviors (e.g., deciding to watch TV all day instead of sending follow-up emails to places where he sent his resume), which may also cause difficulty in his search for a job.

Discounting positives refers to the propensity to concentrate on negative experiences or aspects of a situation rather than the positive experiences or aspects. For example, a college instructor received many positive reviews from students about his teaching, but he can only focus on the few negative comments, possibly dismissing the positives as naive perspectives whereas the negatives show "the real truth" about his teaching. *Overgeneralizations* reflect the inclination to view one negative experience as the rule (e.g., "I asked a guy out once, but he said no. So I will never ask another guy out because they all will say no to me"); this is likely accompanied by affective states like embarrassment and a sense of hopelessness about this changing. *Mind reading* takes form through believing we know what other people are thinking, believing, and feeling irrespective of whether we have any information in this regard. A person who is engaging in this cognitive error may think to herself, "My

supervisor did not speak to me in the hall when she passed me! That's not like her. I bet she is thinking of including me in the next round of layoffs and does not want to speak to me." Of course, there could be many reasons why this person's supervisor did not stop to say hello. She may have been busy or distracted. However, a person who is engaged in one cognitive error may also tend to disregard any information that disconfirms the unhelpful thought and instead focus only on thoughts and feelings that support his or her unhelpful belief. Unfortunately, as the mediational model posits, cognitive errors generally lead to difficult, negative emotions, as well as unhelpful and maladaptive actions and behaviors.

Dobson and Dozois (2001) list other forms of cognitive error: *All-or-nothing thinking* segments experiences into two, often extreme or reductionistic, categories (e.g., flawless or defective). In *fortune-telling*, one's beliefs and/or feelings about the future are how things will be, discounting or ignoring other possibilities. *Emotional reasoning* is perceiving things to be true on the basis of one's feelings; if something "feels true" (e.g., is consistent with how one is feeling about oneself or others), this is evidence of its truth. Clients who make *"should" statements* blur duty and desire; they frame events in evaluative "should" terms (should have done; not done) when "would like to have done/not done" is more accurate. *Labeling* is applying a label to describe a behavior, then ascribing other meanings that the label carries (e.g., "I'm a 'bad mother' for losing my patience with my child. Bad mothers are negligent, unkind, and undeserving of their children"). *Inappropriate blaming* is a restrictive view of events that funnels into an overly narrow blaming stance (e.g., using hindsight to judge what should have been done even if that could not have been known at the time; discounting others' contributions to a problem or mitigating factors).

As you are reading about these different types of cognitive errors, it may occur to you that we human beings frequently engage in many of these types of problematic thinking and unhelpful beliefs on a regular basis. In fact, from a cognitive-behavioral theory perspective, all human beings are prone to thinking in ways that do not always help us to meet our needs and to reach our goals and to think in ways that can cause problems for us (Alford & Beck, 1997; DeRubis et al., 2001). Fortunately, as we emphasized in our discussion of the basic theoretical principles of cognitive-behavioral theory, human beings can also think about their thinking and change their thoughts, beliefs, and ways of thinking. As a result of this capacity, we are not necessarily stuck with our unhelpful, problematic, and maladaptive thoughts and beliefs. As human beings use their capacity to reflect on problems in their thinking, they can also change their thoughts and beliefs to be helpful and adaptive. In our discussion of the relevance of cognitive-behavioral theory for social work practice, we will discuss how practitioners can use specific cognitive-behavioral therapy techniques to help clients change their thinking to support adaptive ways of thinking, feeling, and behaving.

RECENT THEORETICAL DEVELOPMENTS

As limitations have been encountered with CBT approaches and findings, the traditional CBT focus on the nature of particular schemas, beliefs, or expectancies has shifted to an augmented focus on cognitive processes. Illustrative of this have been efforts to reshape attentional processes, that is, patterns of what individuals look for, notice, overly attend to, or psychologically engage with. Wells (2000) and colleagues, for example, have developed two cognitive attentional interventions. The attention training technique targets perseverative

self-relevant processing associated with emotional, particularly, panic disorders (Wells, 2000). The situational attention refocusing technique is intended to override biases in attentional habits and to help develop new processing patterns aimed at disconfirming maladaptive expectancies and/or selective attention, particularly in stressful circumstances (Wells & Papageorgiou, 1998). This line of emerging developments and others extends CBT's theoretical recognition of cognitive processes to more directly intervening at the process level: how individuals' attention is allocated, how specific meanings are attributed to internal and external stimuli, how emotions and cognitions relate to one another under different conditions, how people can gain metacognitive awareness—the ability to view their own thoughts and feelings in a relatively impartial manner—and how this relates to their therapeutic goals and gains (Nurius, 2007).

Over the past decade there have been several substantial developments. Some have characterized these as third-generation or third-order developments, following first-generation traditional behavioral therapy and second-generation behavioral therapies that integrated cognitive science (i.e., cognitive-behavioral therapy). These new directions embrace concepts such as dialectics, spirituality, relationship, and mindfulness (Hayes, Follette, & Linehan, 2004). This third generation of therapy has been defined in the following way (Hayes, 2004b, cited in Hayes, 2004a, p. 6):

> Grounded in an empirical, principle-focused approach, the third wave of behavioral and cognitive therapy is particularly sensitive to context and functions of the psychological phenomena, not just their form, and, thus tends to emphasize contextual and experiential change strategies in addition to more direct and didactic ones. These treatments tend to see the construction of broad, flexible, and effective repertoires over an elimination approach to narrowly defined problems, and to emphasize the relevance of the issues they examine for clinicians as well as clients. The third wave reformulates and resynthesizes previous generations of behavioral and cognitive therapy and carries them forward into questions, issues, and domains previously addressed primarily by other traditions, in hopes of improving both understanding and outcomes.

Orsillo, Roemer, Lerner, and Tull (2004) provide an overview of developments in and beyond traditional CBT, particularly related to anxiety disorders. They acknowledge the important evidence base supporting CBT (albeit, with limitations) as well as concerns that most individuals receiving community-based psychotherapy do not receive empirically supported forms of intervention. Modern learning theory has pointed to the importance of personal meaning both in how problematic symptoms (such as anxiety) arise as well as methods to interrupt dysfunctional patterns of cognitive and emotional responding, such as panic. Personal meaning points to the variability in how similar events can hold very different connotations and significance for different people. This strain of theorizing points to ways to build on techniques such as exposure therapy—for example, through assessing meaning and context in designing treatment—to better incorporate different emotionally charged meanings and life conditions that may otherwise impede therapeutic efforts. This growing attention to variation in personal meaning may provide important inroads for appreciating cultural diversity in underlying beliefs, values, expectations, and spiritual or existential philosophy as well as variation in how predictable or controllable any given event may be and the perceived implications of disturbing events for one's fundamental identity and worth.

Acceptance-based methods are a new wave of CBT-derived clinical approaches that explicitly address treatment impediments, such as clients' fear and avoidance of internal experiences. These emerging methods address a critical clinical dilemma. Avoidance of deeply distressing thoughts and feelings (such as those associated with trauma) is associated with later increased distress and symptom severity (Gilboa-Schechtman & Foa, 2001) and may incline some clients to avoid or refuse traditional CBT interventions and/or increase their risk of dropping out of treatment. Acceptance and commitment therapy, one such third-wave outgrowth, targets experiential avoidance and increasing acceptance. Experiential acceptance is defined as "willingness to experience internal events, such as thoughts, feelings, memories, and physiological reactions, in order to participate in experiences that are deemed important and meaningful" (Orsillo et al., 2004, p. 76). Similar emphasis on experiential acceptance is also evident in dialectical behavior therapy (Linehan, 1993), integrative behavioral couple therapy (Christensen et al., 2004), and mindfulness-based cognitive therapy (Segal, Williams, & Teasdale, 2002). Acceptance-based approaches work to assist individuals to be able to tolerate exposure to thoughts and feelings that are highly aversive and uncomfortable to them, moving to the capacity to observe both external and internal stimuli with an openness to acceptance rather than attempts to judge, flee, avoid, or change them (Segal et al., 2002).

Although acceptance-based methods are similar in several ways to CBT methods, the former emphasizes core values and quality of life, commitment to actions likely to help actualize these values and goals, metacognitive awareness that helps one observe distressing internal events more neutrally, a shift from changing thought content to changing one's relationship to one's own internal responding, and concern that attempts to directly control internal responses will more likely foster problem maintenance than resolution (Orsillo et al., 2004). Mindfulness practice is gaining supportive evidence (Baer, 2002; Breslin, Zack, & McMain, 2002; Teasdale et al., 2002) as an acceptance technique for augmenting tolerance of one's negative affect and cognition, fostering changes in attitude about one's internal events, ability to self-monitor and manage thoughts and feelings that are highly aversive, and facilitating relaxation (Orsillo et al., 2004). However, evidence is as yet preliminary. How these techniques function is not yet clearly established, nor has there been sufficient comparative analysis (e.g., to discern whether acceptance-based approaches significantly extend the effectiveness of CBT theories and interventions). Nonetheless, theoretical and clinical work is under way (e.g., Roemer & Orsillo, 2003) to better specify how this spiritual tradition fits into current theory and clinical methods.

RELEVANCE TO SOCIAL WORK PRACTICE

Consistent with the mediational model, a core emphasis in cognitive-behavioral interventions is on changing cognitions in order to produce and sustain change in emotional distress and maladaptive behavior patterns. Frequently these therapies are applied in a fairly specific problem-focused manner within relatively limited time frames (although more in-depth schema-based change involves more extensive therapeutic effort). Additionally, these therapies aim for well-delineated goals as outcomes, typically including behavioral evidence; for example, a person is behaviorally functioning in a manner more in line with change goals such as less depressed, more adaptive coping, more effective problem solving (Dobson &

Dozois, 2001). As a result of these emphases, cognitive-behavioral therapies are particularly relevant for today's practice in many areas of human service and across a variety of problems. In addition to being required to use evidence-based practices, many human service providers are also struggling with diminished resources and frequently being asked to serve more people in efficient ways. In this section we illustrate specific ways in which cognitive-behavioral theories and therapies can be used in social work practice.

Uses in Assessment

Because problematic thoughts sustain a client's intrapersonal and interpersonal problems, practitioners applying CBT work to identify relevant unhelpful and maladaptive cognitions, both surface thoughts and core beliefs (DeRubis et al., 2001). However, as discussed earlier, cognitive content and processes are often not realized or easily recognized by the client. This is particularly the case for thoughts that are part of clients' core beliefs. That is, clients may be more aware of their negative automatic thoughts, but they are less likely aware of the core beliefs that underlie these automatic thoughts and thought processes. For example, few clients will say to a practitioner something like, "I have a view of myself, my relationships, and the world that is fundamentally negative, and it is causing me serious problems." Rather, in a first meeting with a practitioner, clients are more likely to describe a presenting problem in terms of their difficult and negative feelings or in terms of the interpersonal problems they are experiencing (Macy, 2006). As a result, practitioners using cognitive-behavioral therapy need to use strategies to identify the cognitive activity that is most related to the client's presenting problem. Building from Blankstein and Segal's (2001) work, we present several of these strategies.

Strategies for Identifying Cognitive Content

Cognitive-behavioral therapy is predicated on the educational premise that the more clients understand the basic logic behind the model, and thus why a practitioner is undertaking any particular strategy, the better positioned they will be to incorporate these strategies into their own repertoire. This will give them the ability to step outside patterns that are troubling to them to assess the "how comes," consider their options, and gain skills that they can apply to this and future problems in functioning. Thus, many cognitive-behavioral assessment strategies can be used both in meetings between practitioner and client as well as outside formal sessions. Additionally, most assessment strategies can be used in a variety of settings: in a practitioner's office, during a home visit, or in a situation or setting that is part of the client's presenting problem (e.g., in a work setting if the client is having difficulty there). Of course, these strategies may need to be appropriately adapted to different settings and clients.

One cognitive assessment strategy entails asking a client to *think aloud* during a task, situation, or role-play (Blankstein & Segal, 2001). In this strategy, the client is encouraged to report and describe any thought, idea, or belief in order to identify cognitive content that is related to the presenting problem or difficulty. To facilitate activation of relevant cognitive structures, the client is coached to enact this exercise in a task, situation, or context that is related to the presenting problem or is causing the client distress. For example, if a client presents with problems in his or her role as a parent, a practitioner can have the client role-play an activity that is related to this problem (e.g., helping the child with homework).

During the role-play, the client will report thoughts, beliefs, and ideas that generally happen when engaged in this activity. The practitioner may need to prompt the client to report and describe these ideas and thoughts, and the practitioner may want to record the think-aloud ideas in writing to obtain all the information elicited by the client. This kind of technique generally begins with negative automatic thoughts, progressing to underlying assumptions and rules, and, if needed, identifying negative core beliefs (see Leahy, 2003a; Neenan & Dryden, 2004, for elaboration).

Another broadly applied cognitive assessment strategy is *self-monitoring* (DeRubis et al., 2001; Dobson & Dozois, 2001). One type of self-monitoring is the *thought record log,* in which the client is asked to record ideas, thoughts, and beliefs that occur during a specific activity, in a certain situation, or over a certain period of time. Or the practitioner can have the client record thoughts in relation to a specific activity or time. For example, a client who has a presenting problem of distressing anxiety during public speaking and who also must frequently speak publicly might be asked to record his thoughts while preparing to speak and then immediately after speaking. Information from this client's thought record log will provide helpful information to the practitioner who is conceptualizing the client's case.

Another example of self-monitoring is *thought listing* (Blankstein & Segal, 2001). In this exercise the client is asked to list any thoughts he or she may have had during an experience related to the presenting problem or during a distressing situation, either through enactment methods in a formal helping session or in the context of relevant experiences outside of formal sessions. For example, a practitioner may ask a client who is having difficulty at work to take a few minutes to record all her thoughts about work the next time she is feeling particularly anxious or distressed there, bringing these notes in for examination with the counselor.

Information about relevant cognitive content gathered outside of client-worker meetings can be particularly informative because cognition patterns of responding are typically activated by particular situations, experiences, contexts, activities, and mood states (Blankstein & Segal, 2001). Visualization, guided imagery, role-play, and other invoking strategies can often be significantly supplemented by monitoring in relevant situations as these emerge. This reflects another dimension of cognitive-behavioral theory highly relevant to social work: careful attention to patterned interchanges between environmental factors and cognitive-affective-behavioral configurations related to the client's presenting problem. As discussed earlier, cognitions do not occur without a context or stimulus; both are formative in a client's history and operative in clients' present-day habits and conditions. Cognitive-behavioral theory is influenced by social psychological findings regarding the ongoing self-social interface (Nurius, 1991); thus the practitioner will pay attention to clients' life development, including their current stage of life development as well as their life developmental history (Dobson & Dozois, 2001). However, the focus of change efforts is more likely to be anchored in the present, examining and working to reconstruct ways that current cognitive activity embedded in current environmental conditions are serving to sustain problematic patterns.

Working Hypothesis

Cognitive-behavioral theory is generally undertaken within an experimental frame of reasoning. That is, as the practitioner is identifying the cognitive content relating to the client's

present problem, the practitioner will also begin to develop and eventually refine a theory of the client's presenting problem (Persons & Davidson, 2001). This theory serves as a tentative working hypothesis of the problem and is the basis for the treatment plan and interventions with the client. In a working hypothesis the practitioner will specify the relevant events, situations, or activities that activate the problematic core beliefs, which give rise to the unhelpful automatic thoughts and assumptions, which are followed by consonant emotional responding and maladaptive behaviors (Persons & Davidson, 2001). In short, this working hypothesis strives to operationalize on a case-by-case basis the mediational model components and how these appear to be functioning in producing outcomes distressing to the client. Thus, identifying the underlying core beliefs that may be causing the presenting problem, as well as what internal or external stimuli appear salient and activate the unhelpful beliefs, is critical and forms the basis of the working hypothesis (DeRubis et al., 2001; Persons & Davidson, 2001). The working hypothesis is typically developed in an educational, collaborative manner with the client—assessing how the counselor's picture fits with the client's reported experiences and patterns—and is then used to target intervention efforts.

Uses in Intervention

Guided by this working theory, the practitioner, together with the client, use cognitive-behavioral theory to articulate interventions designed to modify a client's unhelpful and problematic cognitions and to develop and reinforce adaptive and beneficial cognitive-affective-behavioral patterns. As discussed throughout this chapter, all human beings have this capacity to reflect on and alter their thinking. However, not all of us realize that we can develop these skills or know how to effectively apply these cognitive change skills. In this section, we review selected specific cognitive-behavioral intervention strategies that practitioners can use to help clients with their presenting problem. We begin by discussing two principles of cognitive-behavioral interventions.

Cognitive-Behavioral Intervention Principles

Cognitive-behavioral therapeutic interventions rely on two important principles. The first principle emphasizes the importance for clients, as well as practitioners, to understand the fundamentals of the mediational model and how thoughts are seen to interact with and influence feelings and behaviors (Dobson & Dozois, 2001). This reflects a transparent, educational orientation intended to assist clients to apply self-monitoring to gain awareness of their unique patterns, to reflectively assess dimensions of (mal)adaptiveness, to articulate and undertake change goals, and to marshal supports to reinforce and sustain desired changes in content and process. Toward these ends, a cognitive-behavioral practitioner will frequently use psychoeducational tools and strategies to teach clients about the fundamentals of the mediational model.

The second fundamental principle of cognitive-behavioral interventions is the importance of collaboration between practitioner and client (Alford & Beck, 1997; DeRubis et al., 2001; Dobson & Dozois, 2001). Cognitive-behavioral interventions maintain that both the practitioner and the client bring expertise to the working, therapeutic relationship. Practitioners understand cognitive-behavioral theory and know how to create change in the lives of their clients. However, just as important to the success of cognitive therapy, clients

bring their expertise about their thought content, ways of thinking, and meaning making. Without clients' information about their internal thought processes, the practitioner cannot successfully apply the cognitive-behavioral theory to the presenting problem. Because of this, the success of cognitive-behavioral therapy relies on both the positive nature of the working relationship and the client's level of participation during the change process. Thus, it is critical that clients are active in the cognitive-behavioral interventions and the change process (Alford & Beck, 1997; DeRubis et al., 2001).

Homework outside of meetings between the client and practitioner are frequently part of cognitive-behavioral interventions as one means to gather contextual information relevant to activating the problematic patterns and to practice the cognitive-behavioral change skills that clients are learning in formal sessions (Cormier et al., 2008; DeRubis et al., 2001). One way the practitioner can help foster success with these application activities is to break the homework activities down into small, achievable parts (DeRubis et al., 2001). The practitioner may also want to practice homework activities with clients or to coach clients through the activities during meetings to make certain the clients fully understand and are able to carry out the assignments (Cormier et al., 2008). Last, it is important for practitioners to help clients think through barriers to carrying out the homework activities, as well as ways to work around these barriers (DeRubis et al., 2001). Although it is critical for clients to be active participants in the cognitive-behavioral change process both inside and outside of therapeutic meetings, it is also critical for the practitioner to fully prepare clients to be successful in their efforts.

These principles combine to support empowerment outcomes. At the end of a successful collaborative working relationship between the client and practitioner and with the resolution of the presenting problem, the client will have developed a new set of cognitive-behavioral change skills that will enable him or her to adaptively and effectively manage new problems. That is, once clients learn how to apply cognitive and behavioral change skills to one set of life problems, they are better positioned to generalize these skills to other problems in their life and to future problems.

Strategies for Cognitive Change

Dobson and Dozois (2001) distinguish three primary types of cognitive-behavioral therapies: coping skills therapies, problem-solving therapies, and cognitive restructuring therapies. Briefly, coping skills therapies aim to help clients more effectively manage biopsychosocial stressors and problems through the development and enhancement of coping skills. Problem-solving therapies aim to help clients find and create new strategies, skills, and resources to address their presenting problems. Cognitive restructuring therapies aim to create cognitive change to ameliorate clients' presenting problem (Cormier et al., 2008). Although these three cognitive-behavioral therapies entail specific strategies that distinguish them from one another, each involves some degree of cognitive restructuring. As a result, we focus our discussion of intervention strategies on cognitive restructuring.

A key intervention strategy in cognitive restructuring involves asking clients to test the validity of their thoughts and beliefs, including both automatic thoughts and core beliefs (DeRubis et al., 2001; Dobson & Dozois, 2001). In considering the validity of a thought or belief, the client is asked to carefully assess if the thought or belief is accurate, a fact, the truth, and meaningful. Frequently, problematic thoughts and beliefs rest on incomplete or distorted perceptions of relevant contributors and situational dynamics, may not be

meaningful, or are not wholly accurate. Helping clients see how their unhelpful beliefs reflect biases or inaccuracies (such as confirming negative expectancies and discounting contradictory evidence) or are not meaningful is the beginning to cognitive change and is an important step in cognitive restructuring. One example of a specific intervention strategy is the downward arrow technique (DeRubis et al., 2001; Neenan & Dryden, 2004). In this technique the practitioner uses a series of questions following the client's answers. For example, consider a client who has come to a practitioner because of difficulty with public speaking. The practitioner asks the client, "What is the worst thing possible that could happen to you while you are giving a talk in front of people?" The client tells the practitioner, "I get so anxious up there in front of everyone because I am so afraid that I'll misspeak and make a complete fool out of myself." The practitioner responds to the client with another question, such as, "Well, let's say your worst fears came true. What would that mean to you?" This question may help the client begin to see that the consequences of misspeaking may not be quite as bad as she thinks, with subsequent questions helping to illuminate underlying beliefs about negative outcomes and their implications.

Dobson and Dozois (2001) recommend that practitioners help clients distance themselves from unhelpful and problematic thoughts so they can identify, tolerate, and begin the process of challenging these seeming truths. This process of distancing can help the client examine the thoughts or beliefs in a more objective light. For example, in cognitive restructuring clients can be encouraged to take on the role of scientist or private detective with their thoughts and ways of thinking. In this role, the client will be looking for evidence to support or disconfirm the thought or belief. If in this process the client finds that there is little support for the thought or belief, the client may also begin to see the fallibility of the belief and the possibility of constructing alternatives.

Cognitive restructuring interventions also help create helpful, positive, and adaptive cognitions to replace the unhelpful cognitions (Cormier et al., 2008). Cognitive change is more likely to be successful and clients are less likely to slip back into unhelpful ways of thinking when armed with constructive, well-elaborated, and sustainable alternative response patterns. Again, let us consider the client who has difficulty with public speaking who has made progress in challenging her catastrophizing core beliefs and automatic thoughts. Toward developing positive, helpful thoughts about her public speaking, the practitioner may ask the client about a time in her past when she experienced success in a public presentation or, that failing, identify the kinds of thoughts she imagines a comfortable speaker would have in that context. Once the success is identified (e.g., "I was very anxious and nervous, but I kept thinking that if I kept taking a deep breath and focused on how well I really knew this material, I could get through it okay"), the practitioner may build on this to coach and encourage the client to engage in positive self-talk during role-plays, exercises, and her next speaking engagement (Cormier et al., 2008), guiding development of positive thoughts and core self-messages meaningful to the client.

Likewise, the practitioner might couple this positive self-talk intervention with a behavioral intervention that emphasizes teaching the client relaxation breathing skills, which is an example of a coping skills strategy. In combination, the mitigation of the client's negative beliefs ("I make a complete fool of myself every time I speak in public"), with the development of positive thoughts ("I have given other talks and made it through them just fine. I can make it through this one"), and the use of self-monitored self-talk, the client

and practitioner have worked together to create a comprehensive cognitive restructuring intervention to address the client's presenting problem.

Changing Core Beliefs

Although the cognitive change intervention strategies just described apply to automatic core beliefs as well as surface thoughts, research suggests that practitioners may find it more challenging to restructure clients' core beliefs relative to their automatic thoughts. Dowd (2002) posits that core beliefs are more stable and less alterable because they are long-standing and were once functional and adaptive (and they may continue to be adaptive and functional in other aspects of the client's life). As a result, clients may be unwilling to consider and alter these beliefs (Dowd, 2002). Berlin (2002) gives this apparent unwillingness a slightly different slant. She states that this unwillingness may be "an effort to preserve the integrity of continuous identity and a coherent life story" (p. 15). Thus, practitioners should carefully assess and consider problematic core beliefs in their efforts to change them because unhelpful and problematic core beliefs may continue to give the client a sense of self and identity.

Still, CBT literature often emphasizes the importance of changing problematic core beliefs (Cormier et al., 2008; DeRubis et al., 2001) if these appear to be causing problems in multiple areas of a client's life or if other forms of skill development (such as coping or problem solving) will be insufficient. Additionally, the practitioner may work with a client to change automatic thoughts at one time point, only to find a few months later that the client continues to struggle with the same presenting problem. A reoccurrence of a presenting problem suggests that an underlying core belief requires modification and restructuring. In a related vein, when clients and practitioners are successful in changing core beliefs to be more adaptive and helpful, clients will be provided with a kind of inoculation against future problems and difficulties because they have at their disposal a set of helpful, adaptive core beliefs that will aid them in facing future problems and challenges (Cormier et al., 2008). Consistent with the cognitive restructuring interventions presented earlier, A. T. Beck (1996) maintains that there are three ways to change core beliefs: neutralize them, modify them, or create more adaptive core beliefs that inhibit and mitigate the maladaptive core beliefs. Thus, the same cognitive restructuring interventions that work effectively with automatic thoughts will also work on core beliefs. However, practitioners must realize and account for the fact that the foundational nature of core beliefs requires careful thought and active work on the part of both the client and the practitioner.

Adapting Intervention Strategies

Research shows that cognitive-behavioral therapy and cognitive restructuring interventions can be successfully applied to diverse groups of clients from various backgrounds and across various developmental life stages (Cormier et al., 2008). Although the fundamental elements of cognitive-behavioral interventions can be successfully used to address a range of biopsychosocial problems across different groups of people, it is critical that these interventions be appropriately adapted to clients' sociocultural, socioeconomic context and gender identity, cognitive development, and physical capacities and abilities. As discussed earlier in this chapter, cognitive-behavioral theory maintains that cognitive-affective-behavioral processes are similar across human beings. However, the content within the

cognitive-affective-behavioral processes is specific, unique, and personal to the individual (Alford & Beck, 1997; DeRubis et al., 2001). An individual's cognitive content is, in part, derived from the individual's cultural heritage and background, socioeconomic status, the political realities of his or her existence, as well as his or her life history and life experiences. As a result, by adapting cognitive-behavioral interventions to the individual client's background, life history, and experiences, the practitioner is helping to ensure the meaningfulness and ultimately the effectiveness of the interventions for that individual client.

Fortunately, research provides some guidance on how to adapt cognitive-behavioral intervention strategies to be appropriate for various people. For example, in their assessment of a client's presenting problem, it is important for practitioners to consider cognitions related to the presenting problem; in their formulation of a working hypothesis, they should consider how social and cultural factors may make a problem worse (Organista, 1995). As Berlin (2002, p. 149) states, "In the midst of all the other difficulties (i.e., social problems), the overwhelmed individual is less able to think his or her way through problems." Thus practitioners should assess and recognize the client's capacity to think through his or her problem in the face of the social problem with which the client may be struggling. Practitioners should also consider how social and environmental factors may limit a client's ability to participate in the interventions and the change processes (Organista, 1995), as well as ways to assist clients to surmount barriers to their participation. Although for the most part, cognitive-behavioral change interventions emphasize intrapersonal change, some therapists also emphasize the importance of environment change (Alford & Beck, 1997; Berlin, 2002; Persons & Davidson, 2001). Practitioners who are able to help clients with changes to their environment, context, and situations as well as cognitive-behavioral changes may be the most effective change agents relative to practitioners who focus solely on cognitive-behavioral change (Macy, 2006). Changes to an individual's environment, context, or situation will likely provide new experiences and new ways of seeing the self, the world, and the future. Moreover, a significant reduction in environmental and social stressors will also likely help clients think their way through and out of a problem.

Practitioners should carefully adapt their language when teaching clients cognitive-behavioral theory and the mediational model (Cormier et al., 2008). For example, practitioners should use terms that do not discount the client's life experiences or reinforce marginalization, such as using the terms *rational* and *irrational* when describing a client's thoughts and thought processing. (Consider the terms we have used throughout the chapter to describe maladaptive cognitions, such as *problematic* and *unhelpful*.) Practitioners should also avoid jargon in their work with clients. As much as possible, practitioners should adapt the language used in cognitive-behavioral change interventions to the client's primary language, age, educational level, and hearing, seeing, and reading abilities. Additionally, practitioners should strive to adapt cognitive-behavioral intervention strategies to the client's values and to address issues of discrimination and marginalization in the intervention work together, when appropriate (Carter et al., 2003; Cormier et al., 2008; Koh et al., 2002). Practitioners may need to consult and collaborate with others informed about a client group to better understand the situational and social problems with which their clients are struggling, as well as the internal meaning making in which their clients are engaged (Organista, 1995).

EVIDENCE-BASED FOUNDATIONS

One reason for the advancement and expansion of CBT has been the rapidly growing body of empirical findings indicative of effective outcomes. In an overview of psychotherapy outcome research to determine which treatments benefit from evidence of effectiveness, Chambless et al. (1996) found 22 treatments judged to be "well established" on the basis of rigorous research criteria and an additional 25 treatments to be "probably efficacious." The great majority of these were cognitive-behavioral treatments for a variety of problems, including anxiety disorders, depression, substance abuse, relationship problems, eating disorders, and physical health problems.

The base of original research testing CBT outcomes is far too extensive to report here. However, a number of sources have summarized research outcomes across a range of clinical problems (Chambless et al., 1996; Cormier et al., 2008; Dobson, 2001; Foreyt & Goodrick, 2001; Orsillo et al., 2004; Prochaska & Norcross, 2003): affective disorders (depression, anger, anxiety, panic, trauma, and phobia), addictions (substance abuse, gambling, smoking), obsessive-compulsive disorders, relationship problems (couples treatment, parenting, social ineffectiveness, assertion), self-esteem issues, problem-solving skill needs, stress management and coping skills, and medical conditions (pain, epilepsy, cancer, asthma). Application of CBT to depression is perhaps one of the most vigorously tested uses. Persons, Davidson, and Tompkins's (2001) review of the research indicates some (but not unequivocal) supportive evidence for each of the components of A. T. Beck's model. Relatedly, cognitive therapy has been found to provide effective treatment for depression in substantial proportions of clients.

As previously noted, various forms of CBT have been applied with diverse client populations, across a wide age range, for both sexes, for gender-related issues, and with cultural and racial minorities. Cormier et al. (2008) and Hays (1995) review some of these findings, indicating a generally positive record among published studies. However, these reviews and others also highlight the importance of explicit attention to cultural factors, at times indicating adaptations of CBT techniques (see Hays, 1995, for recommendations for cultural adaptation of cognitive-behavioral methods). Advances both in clinical research with diverse populations and in theorizing that better articulates cognitive-cultural and transactional models (e.g., DiMaggio, 2002; Whaley, 2003) are critical sources of input to guide cognitive-behavioral theory and method refinement for effectiveness.

The growing pressures to use interventions established as empirically supported have combined with calls to distill key targets of change for particular problems and pressures to maximize cost and time efficiency to encourage research examining brief CBT. Although there are as yet no formal norms for what constitutes brief CBT, the generally recognized standard is treatment consisting of fewer than 10 sessions (in contrast to the more typical 10- to 20-session range for standard CBT treatment; Key & Craske, 2002). Brief CBT is generally targeted to a specified presenting problem and may be offered in a typical time sequence or in massed delivery, such as condensed over a 7- to 10-day period. Brief CBT may either reduce the amount of materials generally offered in standard CBT or may rely to a greater extent on the client taking a highly active role beyond time with the therapist, using materials such as workbooks, books, audiotapes, or computer programs (Key & Craske, 2002).

Similar to standard CBT, brief CBT has been effective for anxiety and phobia-related disorders, treatment of pain, eating disorders, and couples therapy. Work to date also is favorable with respect to depression and alcohol abuse (Hazlett-Stevens & Craske, 2002). Although the general body of research is favorable with respect to both CBT and brief CBT, as with many other therapies there remain gaps in our evidence base. For example, findings are incomplete as to which individual differences (e.g., attitudes toward treatment, chronicity and/or severity of problem, problem type) affect treatment outcome under what treatment conditions (Hazlett-Stevens & Craske, 2002). Thus far, evidence supporting effectiveness centers primarily on problems that are relatively circumscribed, with well-specified targets for change. However, to date there are few unconfounded comparisons between standard and brief CBT. Thus, further investigation is needed to ascertain the individuals and conditions under which brief CBT appears to be a well-suited choice over standard CBT.

CRITIQUES OF THIS APPROACH

Given the fuzzy definitional boundaries between behavior therapy, cognitive therapy, and cognitive-behavioral therapy, critiques are similarly indistinct. It is not always clear to what exactly critics are referring. Moreover, critiques of CBT, as with all clinical theories, vary somewhat as a function of the theoretical lens of the analyst. Some are uneasy with the highly systematic and perceived "mechanistic" characteristics inherited from behavior therapy, whereas others see that it is the behavioral techniques more than the focus on what are seen as ill-defined cognitions that carry the load of therapeutic change. Some find the focus on cognitions to be overly rationalistic and/or judgmental (e.g., regarding the irrationality of some cognitive patterns). Others argue that cognitive/behavioral therapy is too simplistic, basically reflects positive thinking, delivers little more than symptom relief, and is inattentive to client history or to dimensions of the therapeutic relationship. Not surprisingly, others rebuke such claims (see Neenan & Dryden, 2004; Prochaska & Norcross, 2003).

Some are concerned by what they see as insufficient attention to contextual factors in terms of socializing forces such as gender, sexual identity mores, and culture, as well as the more direct effects of external contingencies (e.g., poverty, oppression) that do not have to "go through the head" to be felt and do damage to people (Kantrowitz & Ballou, 1992). Hays (1995) notes, for example, that some of the underlying tenets of CBT may not be well suited for all clients; for example, emphasis on self-control, greater focus on an individual's thoughts relative to environmental factors that may be contributors to the root problems, challenging beliefs or thoughts seen as underlying client problems yet that also reflect cultural or other personal values. On the other hand, strengths of cognitive-behavioral theory relative to use with culturally diverse people include its focus on individual uniqueness, empowerment and collaborative practice, conscious processes and specific events and behaviors, and recognition of variability in individual meaning and histories that are shaping current experience (Hays, 1995). Recognition of need is incrementally being met with therapeutic adaptations and direct tests. Whereas Persons et al. (2001), for example, report weaker effects in treatment of depression with minority clients using standard CBT, Koh et al. (2002) report augmented outcomes

in treatment of depression of African American women using culturally adapted CBT methods.

Other critiques illuminate gaps and weaknesses in testing the theoretical base of CBT. The theorized cognitive process underpinnings have not yet been thoroughly empirically modeled or tested as to their causative functions in producing change. Cognitive units such as schemas, associative networks, belief and expectancy systems, and priming functions are difficult to directly tap and test. In reviewing empirical shortcomings, Orsillo et al. (2004) and Hayes (2004a) review research highlighting the following: (a) insufficient demonstration of how irrational cognitions are acquired, who acquires them, and how they can be measured independent of the associated emotions, such as fear or anger; (b) lack of direct evidence to support the theoretical premise that cognition not only predicts but causes behavior; (c) findings of bidirectionality between cognitions and emotions, which raises questions as to temporal, causal processes; (d) the fact that clinical improvement has been observed with CBT before the key theorized features have been fully implemented; (e) component analysis that has been equivocal as to the additive benefits of cognitive interventions; and (f) changes in cognitive mediators, which are the presumed agents of change, that do not always explain outcomes of CBT. There is increasing pressure to develop innovative theory and to secure outcomes evidence across groups or subpopulations that, in some cases, is leading to new models that diverge from standard CBT theory and methods.

There are also issues related to the match of CBT with client, problem, and therapist characteristics. This is particularly salient with short-form or abbreviated versions of CBT. Brief CBT is based on assumptions that a target for change is well defined and circumscribed and that the client is motivated, ready to undertake focused cognitive and behavioral changes, and capable of active engagement in activities in and between intervention sessions. However, in many cases, neither the problem nor the client is consistent with these assumptions, which raises serious questions about the appropriateness of brief CBT in these instances (Hazlett-Stevens & Craske, 2002). In a related vein, there needs to be good match with therapist characteristics. For example, therapists need a high level of skill in effecting change in a limited time (Scott, Tacchi, Jones, & Scott, 1997), positive expectancies, an ability to work in a highly targeted manner, and openness to outcomes being framed more in terms of teaching skills than in full symptom resolution (Key & Craske, 2002).

These issues are by no means unique to CBT. In many respects, they reflect the ongoing nature of advances in social science theory, clinical application, and changing consciousness and value perspectives that characterize society at large as well as clinical and research communities. Examples include assertions of the need for greater contextualism, the impact of postmodern and postcolonial theories, the need for inclusion of cultural diversity factors, and calls for multilevel theorizing that links individual with structural forces toward problem development and effective interventions—which bring challenging forces to bear on all practice-related theories. Part of what has characterized CBT theory is its elasticity. That is, the essential cognitive paradigm has been applied and adapted to a remarkably broad array of clinical problems.

There has also been openness within the community of CBT theorists to changing formulations that provide greater precision of complexity. For example, theorists such as Guidano and Liotti (Guidano, 1987, 1991; Guidano & Liotti, 1983) are credited with shifting from a traditional aim of correcting cognitive errors in reality processing to a more constructivist approach that incorporates emotion as a powerful form of knowledge, uses

active motor paradigms of the mind, uses parallel and analogue computational processes to represent complex processes, and aims to reorder perceptual experiences and appraisals of the self as central to therapeutic change. Developments in other allied as well as more distant disciplines, such as psychophysiology, neurophysiology, psychopharmacology, physics, ecology, and complex systems functioning, have also had an impact on recent theoretical developments, as have constructivist epistemologies (Neimeyer & Raskin, 2001).

As both Hayes et al. (2004) and Scrimali and Grimaldi (2004) illustrate, there is an ongoing flow to clinical and scientific clinical movements that illuminates limitations in conjunction with new possibilities. Cognitive-behavioral theory reflects an ebb and flow of research findings, theoretical challenges and innovations, and pragmatic, "on the ground" clinical implementation feedback. As more is being learned about the very complex systems that contribute to our functioning as humans—both internally and in self-social exchanges—we anticipate that cognitive-behavioral theory and its theoretical successors will evolve as well.

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Chapter 5

EGO PSYCHOLOGY THEORY

Eda Goldstein

Ego psychology is a theory of human behavior that has played a significant role as an underpinning to social work practice over the years. It is composed of a related set of concepts that focus on the executive arm of the personality—the ego—and its relationship to other aspects of the personality and to the external environment. Originating in Europe, ego psychology gained recognition in the United States in the late 1930s and 1940s. Some prominent social workers became associated with its assimilation into social work practice, particularly on the East Coast.

In contrast to Freud's pessimism about human nature, intrapsychic focus, and emphasis on the early childhood, unconscious, instinctual, and irrational determinants of behavior, ego psychology embodied a more optimistic view of human potential that showed respect for people's strengths and resilience. It drew attention to (a) the more adaptive, rational, autonomous ego functions and problem-solving capacities of the person; (b) the role of defenses in the process of adaptation; (c) the development of coping mechanisms that enable individuals to adapt to the environment and to gain mastery; (d) the lifelong nature of personality growth and development; and (e) the impact of interpersonal relationships, the environment, the society, and culture on human functioning (Goldstein, 1995). "Here at last was the happy synthesis between the social order and the psychological depths—the ego, which bridged these two worlds" (Briar & Miller, 1971, p. 19).

HISTORICAL AND CONCEPTUAL ORIGINS

Numerous theorists contributed to the evolution of ego psychological theory and its assimilation into social work practice.

Theoretical Developments

The concept of the ego and its role in defense was present in the early writings of Sigmund Freud and in the work of his daughter, Anna. In *The Ego and the Id*, S. Freud (1923/1961) proposed what became known as structural theory, which defined the ego by its functions: mediating between the drives (id) and external reality; moderating conflict between the drives (id) and the internalized prohibitions against their expression (superego); instituting mechanisms (defenses) to protect the ego from anxiety; and playing a crucial role in development through its capacity for identification with external objects. S. Freud saw the

ego as deriving its energy from, weak in relation to, and having no independence from the drives. In *The Ego and the Mechanisms of Defense*, Anna Freud (1936) put forth the first extension of structural theory by identifying the adaptiveness of defensive behavior, describing a greater repertoire of defenses, and linking the origin of defenses to specific developmental phases.

Despite these early writings, it is customary to view Heinz Hartmann as the father of ego psychology. In *Ego Psychology and the Problem of Adaptation*, Hartmann (1939) originated the concept of the autonomous ego, proposing that both the ego and the id have their own energy source and originate in an "undifferentiated matrix" at birth. The individual is born "preadapted" to an "average expectable environment" for the species. In contrast to the earlier Freudian view, many ego functions are "conflict-free" and have a "primary autonomy" from the drives.

Erik Erikson was a second seminal theorist in the development and expansion of ego psychology. In *Childhood and Society* and *Identity and the Life Cycle*, Erikson (1950, 1959) delineated ego development as occurring as a result of the progressive mastery of developmental tasks in eight successive stages of the human life cycle. He emphasized the contribution of biological, psychological, interpersonal, environmental, societal, and cultural influences in the developmental process. He was among the first theorists to view adulthood as a period for growth and change.

Unlike Erikson, Robert White (1959, 1963) was an ego psychologist who broke away from the Freudian psychoanalytic tradition. He postulated that the individual is born with not only innate and autonomous ego functions that give pleasure in their own right but also a drive toward mastery and competence. According to White, the ego actively seeks opportunities in the environment in which the individual can be "effective." In turn, the ego is strengthened by successful transactions with the environment.

Following on these major contributions, some writers began to study the constitutional and environmental factors that contribute to ego strength, coping capacity, and vulnerability (Escalona, 1968; Murphy & Moriarity, 1976), and others expanded ego psychological thinking by delineating the more specific impact of the caretaking environment to personality development. For example, attachment theorists such as M. D. S. Ainsworth (1973), John Bowlby (1958), and Rene Spitz (1945, 1965) generated crucial data and theory about the nature and influence of the child's earliest connections to others from their observational studies of children. Further, in close collaboration with one another, Margaret Mahler (1968; Mahler, Pine, & Bergman, 1975) and Edith Jacobson (1964) established the stages by which the child makes the transition from nonrelatedness to attachment to separation-individuation. They further described how children gradually acquire self- and object representations and other intrapsychic structures through their interactions with significant others.

Although relying on a different set of assumptions about personality development, human problems, and their treatment than does ego psychology, cognitive theory has links to ego psychology. For example, Jean Piaget's (1951, 1952) theory of intelligence and Lawrence Kohlberg's (1966) theory of moral development offered concepts that complemented those of ego psychology. Others have contributed to the development of cognitive theory and its application to the treatment of many types of dysfunction (Beck, Freeman, & Associates, 1990; Beck, Rush, Shaw, & Emery, 1979; Linehan, 1993).

The study of the impact of stress and crisis also drew on and enriched ego psychology. There are many studies of how the ego copes with various types of biological, psychological, and environmental stress (Grinker & Spiegel, 1945; Hill, 1958; Lazarus, 1966; Lindemann, 1944; Selye, 1956). Crisis theory describes the ego's capacity to restore equilibrium after a major disruption.

Assimilation into Social Work

Influenced by psychoanalysts who emigrated to the United States to escape Hitler's totalitarian regime and the Holocaust, ego psychology had a dramatic impact on social work practice beginning in the years of the Great Depression and then in the post–World War II period. As Gordon Hamilton (1958, p. 22) so aptly observed, ego psychology's more optimistic view of human potential at a time when the world was "crumbling to pieces . . . was part of the vision of man's strength and sturdiness under adversity." Social workers who became associated with this development were Lucille Austin (1948), Louise Bandler (1963), Eleanor Cockerill and Colleagues (1953), Annette Garrett (1958), Gordon Hamilton (1940, 1958), Florence Hollis (1949, 1964, 1972), Isabell Stamm (1959), and Charlotte Towle (1949).

The use of ego psychology led to a shortening and refocusing of the study and assessment process. It emphasized (a) the client's person-environment transactions in the here and now, particularly the degree to which he or she is coping effectively with major life roles and tasks; (b) the client's adaptive, autonomous, and conflict-free areas of ego functioning as well as his or her ego deficits and maladaptive defenses and patterns; (c) the key developmental issues affecting the client's current reactions; and (d) the ways in which the stresses of the external environment or a lack of resources and environmental supports are creating obstacles to successful coping.

Ego psychology provided the rationale for improving or sustaining adaptive ego functioning by means of work with both the individual and the environment and led to the expansion and systematization of treatment techniques for working with the ego. Ego psychologists recognized the importance of the reality of the client-worker relationship in contrast to an exclusive focus on its transference or distorted aspects and expanded our understanding of the nature of change, moving beyond an exclusive emphasis on insight.

Ego psychological concepts helped to transform the casework process from a never-ending, unfocused exploration of personality difficulties to a more deliberate and focused use of the phases of the casework process and underscored the importance of the client's responsibility for directing treatment and his or her own life. Ego-oriented treatment was intended to be either supportive or modifying in nature, as will be discussed later in the chapter.

Efforts to incorporate ego psychology also led to a distinctive problem-solving casework model developed by Helen Perlman (1957), who attempted to bridge the lingering dispute between diagnostic (psychoanalytic) and functional (Rankian) caseworkers as well as to offer correctives for practices that she viewed as dysfunctional for the client. It also contributed to the generation of crisis and more ecologically oriented models (Germain & Gitterman, 1980; Golan, 1978).

BASIC THEORETICAL PRINCIPLES

The following six propositions characterize ego psychology's view of human functioning (Goldstein, 1995):

1. Ego psychology views people as born with an innate capacity to function adaptively. Individuals engage in a lifelong biopsychosocial developmental process in which the ego is an active, dynamic force for coping with, adapting to, and shaping the external environment.
2. The ego is considered to be a mental structure of the personality that is responsible for negotiating between the internal needs of the individual and the outside world. Ego functions are innate and develop through maturation and the interaction among biopsychosocial factors.
3. Ego development occurs sequentially as a result of constitutional factors, the meeting of basic needs, identification with others, interpersonal relationships, learning, mastery of developmental tasks, effective problem solving, and successful coping.
4. The ego not only mediates between the individual and the environment but also mediates internal conflict among various aspects of the personality. It can elicit defenses that protect the individual from anxiety and conflict and that serve adaptive or maladaptive purposes.
5. The social environment shapes the personality and provides the conditions that foster or obstruct successful coping. Cultural factors; racial, ethnic, and religious diversity; gender; age; sexual orientation; and the presence or absence of physical challenges affect ego development.
6. Problems in social functioning must be viewed in relation both to possible ego deficits and to the fit between needs and capacities and environmental conditions and resources.

Ego psychology contains four main sets of concepts: ego functions; defenses; ego mastery, coping, and adaptation; and life cycle stages.

Ego Functions

Ego functions are the means by which the individual copes with and adapts to the world. Bellak and his colleagues (Bellak, Hurvich, & Gediman, 1973) identified 12 major ego functions:

1. *Reality testing:* This involves the accurate perception of the external environment, of one's internal world, and of the differences between them. The most severe manifestations of the failure of reality testing are seen in delusions and hallucinations (false beliefs and perceptions that cannot be objectively validated). All defenses, however, distort reality to some extent.
2. *Judgment:* This involves the capacity to identify certain possible courses of action and to anticipate and weigh the consequences of behavior in order to take action that achieves desired goals with minimal negative consequences.

3. *Sense of reality of the world and of the self:* It is possible to *perceive* inner and outer reality accurately but to *experience* the world and the self in distorted ways. A good sense of reality involves the ability to feel or to be aware of the world and one's connection to it as real, to experience one's own body as intact and belonging to oneself, to feel a sense of self, and to experience the separation or boundaries between oneself and others as distinct organisms. Individuals may experience themselves as estranged from the world around them (derealization), as if there is an invisible screen between them and others. In depersonalization, one feels estranged from one's own body as if one were apart from it and looking at it, as if it were a distinct object. Parts of one's body may seem disconnected. Certain distortions of body image also involve disturbances in the sense of reality. In a psychological sense, one may feel as if one has no identity of one's own, that parts of one's own inner experience are strange, or that one has an inner emptiness.
4. *Regulation and control of drives, affects, and impulses:* This involves the ability to modulate, delay, inhibit, or control the expression of impulses and affects (feelings) in accord with reality. It also entails the ability to tolerate anxiety, frustration, and unpleasant emotions such as anger and depression without becoming overwhelmed, impulsive, or symptomatic.
5. *Object (or interpersonal) relations:* This refers both to the quality of one's interpersonal relationships and to the level of development of one's internalized sense of self and others.
6. *Thought processes:* An important development in the mature thought processes is the individual's shift from primary process thinking to secondary process thinking. Primary process thinking follows the pleasure principle in that it is characterized by wish-fulfilling fantasies and the need for immediate instinctual discharge irrespective of its appropriateness. Wishes and thoughts are equated with action so that action upon the outside world is not necessary to obtain gratification in a psychological sense. In contrast, secondary process thinking follows the reality principle. It is characterized by the ability to postpone instinctual gratification or discharge until reality conditions are appropriate and available and replaces wish fulfillment with appropriate action upon the outside world. Wishes and thoughts alone are not sufficient to obtain gratification. Secondary process thinking is goal-directed, organized, and oriented to reality.
7. *Adaptive regression in the service of the ego:* Adaptive regression in the service of the ego connotes an ability to permit oneself to relax one's hold on and relationship to reality; to experience aspects of the self that are ordinarily inaccessible when one is engaged in concentrated attention to reality; and to emerge with increased adaptive capacity as a result of creative integrations.
8. *Stimulus barrier:* Individuals develop a mechanism by which they regulate the amount of stimulation received so that it is optimal: neither too little nor too great. Each individual appears to have a different threshold for stimulation. An important aspect of the stimulus barrier is the degree to which an individual is able to maintain his or her level of functioning or comfort amid increases or decreases in the level of stimulation to which he or she is exposed.

9. *Autonomous functions:* Certain ego functions, such as attention, concentration, memory, learning, perception, motor functions, and intention, have a primary autonomy from the drives and thus are conflict-free; that is, they do not arise in response to frustration and conflict. They can lose their autonomy by becoming associated with conflict in the course of early childhood development. Other capacities of the individual that originally develop in association with frustration and conflict later undergo a "change of function" and acquire autonomy from the conflict with which they were associated. Thus certain interests originally may develop as a way of coping with stress but later are pursued in their own right. The degree to which individuals are able to maintain and to retain areas of primary and secondary autonomy is a crucial factor in assessment.
10. *Mastery-competence:* The organism experiences pleasure not merely through the reduction of tension or need but also through exercising autonomous ego apparatuses in the service of adaptation. A mastery drive or instinct (White, 1959, 1963) has been postulated by authors who believe there is an inborn, active striving toward interaction with the environment, leading to the individual's experiencing a sense of competence or effectiveness. This important concept is discussed in more detail later.
11. *Synthetic/integrative function:* A primary feature of the ego is its capacity to bind or fit together all the disparate aspects of the personality into a unified structure that acts upon the external world. The synthetic function is responsible for personality integration, the resolution of splits, fragmentations, and conflicting tendencies within the personality. In this respect there are individuals who may show good ego functioning on selected characteristics but whose overall personality integration is deficient.
12. *Defensive functioning:* Defenses are the mechanisms by which the ego protects the individual from painful experience of anxiety or fear-inducing situations. Because of its significance in normal and dysfunctional coping, it will be discussed in greater detail later.

The assessment of these ego functions gives a measure of an individual's "ego strength," a composite picture of the internal psychological equipment or capacities that an individual brings to his or her interactions with others and with the social environment. Within the same individual certain ego functions may be better developed than others and may show more stability. That is, they tend to fluctuate less from situation to situation, or over time, and are less prone to regression or disorganization under stress. Even in individuals who manifest ego strength, regression in selected areas of ego functioning may be normal in certain types of situations, for example, illness, social upheavals, crises, and role transitions, and do not necessarily imply ego deficiencies. It is important to note that it is possible for the same individual to have highly variable ego functioning, although in cases of the most severe psychopathology ego functions may be impaired generally.

Defenses

All people use defenses, but their exact type and extent vary from individual to individual. Defenses are part of the ego's repertoire of mechanisms for protecting the individual from anxiety by keeping intolerable or unacceptable impulses or threats from conscious

awareness. Defenses also may be used to help individuals adapt to their environment. The following are common defenses (Laughlin, 1979):

- *Repression:* A crucial mechanism, repression involves keeping unwanted thoughts and feelings out of awareness, or unconscious. What is repressed once may have been conscious (secondary repression) or may never have reached awareness (primary repression). Repression may involve loss of memory for specific incidents, especially traumatic ones or those associated with painful emotions.
- *Reaction formation:* Like repression, reaction formation involves keeping certain impulses out of awareness. The way of ensuring this, however, is through replacing the impulse in consciousness with its opposite.
- *Projection:* When the individual attributes to others unacceptable thoughts and feelings that the person himself or herself has but that are not conscious, that individual is using projection.
- *Isolation:* Sometimes the mechanism of isolation is referred to as isolation of affect, for there is a repression of the feelings associated with particular content or of the ideas connected with certain affects. Often this is accompanied by experiencing the feelings in relationship to a different situation.
- *Undoing:* This involves nullifying or voiding symbolically an unacceptable or guilt-provoking act, thought, or feeling.
- *Regression:* Regression involves the return to an earlier developmental phase, level of functioning, or type of behavior in order to avoid the anxieties of the present. Behavior that has been given up recurs.
- *Introjection:* Introjection involves taking another person into the self, psychologically speaking, to avoid the direct expression of powerful emotions such as love and hate. When the object (person) of the intense feelings is introjected, the feelings are experienced toward the self, which has now become associated with or a substitute for the object. Introjection is closely connected to three other mechanisms that are mentioned frequently: identification, internalization, and incorporation.
- *Reversal:* Reversal involves the alteration of a feeling, attitude, trait, relation, or direction into its opposite.
- *Sublimation:* Sublimation is considered to be the highest level or most mature defense. It involves converting an impulse from a socially objectionable aim to a socially acceptable one while still retaining the original goal of the impulse.
- *Intellectualization:* The warding off of unacceptable affects and impulses by thinking about them rather than experiencing them directly is intellectualization. It is similar to isolation.
- *Rationalization:* The mechanism of rationalization is the use of convincing reasons to justify certain ideas, feelings, or actions so as to avoid recognizing their true underlying motive, which is unacceptable.
- *Displacement:* Shifting feelings or conflicts about one person or situation onto another is called displacement.
- *Denial:* The denial mechanism involves a negation or nonacceptance of important aspects of reality or of one's own experience that one may actually perceive.

- *Somatization:* In somatization intolerable impulses or conflicts are converted into physical symptoms.
- *Idealization:* The overvaluing of another person, place, family, or activity beyond what is realistic is idealization. To the degree that idealized figures inspire one or serve as possible models for identification, it can be an extremely useful mechanism in personality development and in the helping process. When used defensively, idealization protects the individual from anxiety associated with aggressive or competitive feelings toward a loved or feared person.
- *Compensation:* A person using compensation tries to make up for what he or she perceives as deficits or deficiencies.
- *Asceticism:* This defense involves the moral renunciation of certain pleasures in order to avoid the anxiety and conflict associated with impulse gratification.
- *Altruism:* In altruism one obtains satisfaction through self-sacrificing service to others or through participation in causes. It is defensive when it serves as a way of dealing with unacceptable feelings and conflicts.
- *Splitting:* This involves the keeping apart of two contradictory ego states, such as love and hate. Thus individuals who utilize splitting cannot integrate in consciousness contradictory aspects of their own feelings or identity or the contradictory characteristics of others. People are seen in black-and-white, unidimensional terms. This defense is said to be characteristic of borderline conditions.

Because defenses operate unconsciously, the person is not aware that he or she is using a particular defense. Defenses may be adaptive or maladaptive. All defenses falsify or distort reality to some extent, but when a person uses defenses in a flexible rather than rigid fashion with minimal distortion of reality and is able to function well without undue anxiety, the defenses are said to be adaptive. A defense, however, can severely limit a person's ability to perceive reality or to cope effectively and thus may be maladaptive. For example, a certain amount of denial of the possible outcomes of surgery may be helpful in enabling individuals to pursue a risky procedure, whereas the presence of massive denial of the seriousness of a health condition may result in a person's avoidance of necessary medical attention.

A person does not deliberately seek to maintain his or her defenses, but because defenses serve a protective function, efforts directed at modifying defenses usually are resisted by the individual. This resistance, however, creates obstacles to achieving the very changes that the person would like. Although it may seem desirable to try to lessen or modify certain maladaptive defenses in a given individual because they interfere with effective coping, any effort of this sort will arouse considerable anxiety. In many instances, however, when defenses are adaptive, they should be respected, approached with caution, and at times strengthened.

Under acute or unremitting stress, illness, or fatigue, the ego's defenses, along with the other ego functions, may fail. When there is a massive defensive failure the person becomes flooded with anxiety. This can result in a severe and rapid deterioration of ego functioning, and in some cases the personality becomes fragmented and chaotic, just as in a psychotic episode. When defenses are rigid, an individual may appear exceedingly brittle, taut, and driven; his or her behavior may seem increasingly mechanical, withdrawn, or peculiar.

Ego Mastery, Coping, and Adaptation

A mastery drive or instinct (Hendrick, 1942; White, 1959, 1963) has been postulated by authors who believe there is an inborn, active striving toward interaction with the environment, leading to the individual's experiencing a sense of competence or effectiveness. White described the ego as having independent energies that propel the individual to gain pleasure through manipulating, exploring, and acting upon the environment. He called these energies effectance and suggested that feelings of efficacy are the pleasure derived from each interaction with the environment. In White's view, ego identity results from the degree to which one's effectance and feelings of efficacy have been nurtured. It affects present and future behavior because it reflects basic attitudes, such as one's self-esteem, self-confidence, trust in one's own judgment, and belief in one's decision-making capacities, which shape the way one deals with the environment.

In the process of adaptation, human beings find ways of managing their internal states and negotiating the external environment. Some coping mechanisms go beyond what ego functions and defenses do. Such qualities as humor, perseverance, and conscious efforts to distract oneself from stressful circumstances can be thought of as aiding a person to deal with the vicissitudes of life.

Life Cycle Stages

Erik Erikson (1950, 1959) viewed optimal ego development as a result of the mastery of stage-specific developmental tasks and crises. He argued that the successful resolution of each crisis from birth to death leads to a sense of ego identity and may be said to constitute the core of one's sense of self. Erikson viewed later stages as dependent on earlier ones. The use of the term "crisis" reflects the idea that there is a state of tension or disequilibrium at the beginning of each new stage. The resolution of each stage is described in terms of the achievement of positive and negative solutions. In any individual, however, the resolution of the core developmental crisis posed by each stage may lie anywhere on a continuum from best to worst outcome. According to Erikson, resolution of each successive life cycle stage depends as much on those with whom the individual interacts as on his or her own innate capacities. Similarly, crisis resolution is dependent on the impact of culture and environment as it shapes child-rearing practices and provides opportunities or obstacles to optimal adaptation.

Erikson was among the first theorists to suggest that adulthood is a dynamic rather than static time and that ego development continues throughout adulthood. There is mounting interest in and evidence for the idea that personality change occurs in adult life. Adulthood is seen to contain elements of the past as well as its own dynamic processes, which lead to such changes. Benedek (1970), Butler (1963), Colarusso and Nemiroff (1981), Goldstein (2005), Gould (1978), Levinson (1978), Neugarten (1968), Neugarten et al. (1964), and Vaillant (1977) are among those authors who have made seminal contributions to understanding adult developmental processes.

ADVANCED THEORETICAL PRINCIPLES

Originally, ego psychology viewed object relations as one of many ego functions. As described previously, the term referred to the quality of interpersonal relationships. As some

theorists and researchers studied the impact of the caretaking environment on the child, they regarded the interpersonal world as providing the context in which all ego development occurs. They began to describe the complex processes by which the infant or small child attaches to and separates from the caretaker and takes the outside world inside (internalizes it). Numerous attachment and object relations theorists extended ego psychology, although some of these writers placed themselves outside of American ego psychological thinking. For example, John Bowlby's (1969, 1973, 1980) seminal work on attachment, separation, and loss challenged traditional views. Members of the British school of object relations, which comprises the work of Melanie Klein (1948), W. R. D. Fairbairn (1952), D. W. Winnicott (1965), Harry Guntrip (1969, 1973), and others, proposed distinctive theories. The work of Otto Kernberg (1975, 1976) reflected an attempt to integrate many concepts from the British school into American ego psychology and object relations theory.

Object relations theorists view the infant as innately object-seeking from birth. Although the interpersonal field exerts an influence all through life, children develop their unique or separate selves as a result of interpersonal experiences early in life. They also acquire basic attitudes toward the self and others that affect all subsequent interpersonal relationships, sometimes to the point of overriding the "objective" attributes of the self and others. For example, it may be difficult to modify a deeply entrenched negative self-concept despite evidence to the contrary.

Early Attachment Theorists

John Bowlby (1958, 1969, 1973, 1980) and Mary Ainsworth (1973) were among the first major theorists who actually studied infants and mothers. As discussed by Brandell and Ringel (2007), Bowlby believed that the earliest interaction between mother and child had a profound influence on children's ways of relating to others and on their internal representations of themselves and others. Building on Bowlby's work, Ainsworth delineated different early attachment patterns and their later consequences. These attachment styles are influenced by the caretaker's expectations, verbal and nonverbal behavior, sensitivity, and responsiveness to the infant. Once internalized, they become working affective, cognitive, and behavioral models that influence the way children and adults relate to others (Goldstein, 2001). Following are the major attachment styles:

- *Secure attachment:* This style reflects the child's confidence that the mother will be available and responsive.
- *Anxious, resistant attachment:* In this pattern, the infant is uncertain that the mother will be available and responsive and tends to be anxious and clinging.
- *Anxious, avoidant attachment:* Here, the infant has no confidence that the mother will be available and responsive and tends to withdraw from or avoid the love and support of others.
- *Disorganized-disoriented attachment:* In this pattern, the infant shows signs of stress and a breakdown of goal-directed attachment behavior.

Bowlby's work also contributed to our understanding of normal mourning or grief following profound losses. His observations of the sequence of protest, despair, and detachment in children who are separated from their mothers also can be applied to adults.

More recently, there has been a renaissance of interest in attachment theory, particularly as it sheds light on how early attachment styles influence interpersonal relationships and specific types of pathology in adulthood (Biringen, 1994; Fish, 1996; McMillen, 1992; Sable, 1995).

The Separation-Individuation Process

Edith Jacobson (1964) and Margaret Mahler et al. (1975) were major theorists who built an object relations perspective into ego psychology. Drawing on the studies of Rene Spitz (1945, 1965) and the writings of her colleague, Edith Jacobson, Mahler studied mothers and children. She described the separation-individuation process, which is a series of chronologically ordered phases, each of which leads to major achievements in the areas of separation, individuation, and internalized object relations.

The Autistic Phase

The newborn infant generally is unresponsive to external stimuli for a number of weeks and is dominated by physiological needs and processes. He or she sleeps most of the time and wakes when need states arouse tension. The infant's primary autonomous ego apparatuses are still somewhat undifferentiated and are not yet called into play to act upon the environment. The infant literally exists in his or her own world or in what has been termed an autistic state, although gradually he or she becomes responsive, if only fleetingly, to external stimuli. In terms of object relations the child is in a preattachment phase, which some have called a phase of primary narcissism.

The Symbiotic Phase

Gradually the protective shell around the child gives way, and he or she begins to perceive the "need-satisfying object," but this object is experienced within the infant's ego boundary and lacks a separate identity. In the symbiotic state the mother's ego functions for the infant, and it is the mother who mediates between the infant and the external world. The sensations the child experiences from the mother form the core of his or her sense of self, and this period marks the beginning of the capacity to invest in another person.

Separation-Individuation: The Differentiation Subphase

Differentiation begins at about 4 or 5 months. When the child is awake more often and for longer periods, his or her attention shifts from being inwardly directed or focused within the symbiosis to being more outwardly directed. The infant literally begins to separate his or her self-representation from the representation of his or her mother (the object).

Separation-Individuation: The Practicing Subphase

The practicing subphase continues the process of separation of self and object representations and accelerates the individuation process, as the infant's own autonomous ego functions assume more importance. The first part of the practicing period, when the infant is approximately 8 to 10 or 12 months old, is characterized by the infant's attempts to move away from the mother physically, through crawling, for example. The infant thus expands his or her world and his or her capacity to maneuver in it autonomously, optimally always in close proximity to the maternal figure, who is there to provide support and encouragement.

In the early practicing subphase the child experiences the simultaneous pull of the outside world and of the mother, and separation anxiety may increase until the child becomes reassured that the mother is still there despite the child's moving away from her. One can observe the repeated efforts initially on the part of the child to keep track of the mother even as he or she may crawl away from her, and then the child's attempt to find her if she has been lost momentarily. Gradually the child is more able to be on his or her own for longer periods of time.

During the second part of the practicing period, the child's ability to get around by himself or herself seems to lead to the child's "love affair with the world." At times the child appears oblivious to the mother's temporary absence. The pleasure in his or her own rapidly developing ego functions seems to enable the child to sustain the transient object losses inherent in individuation.

The child consolidates his or her separateness during this period and acquires a more stable internal self-representation that is distinct from the object representation. At the same time the child's "all good" self and object experiences are separated from "all bad" ones. Thus, when the mother is frustrating, she is experienced as all bad, although the child tries to rid himself or herself of this feeling; when she is experienced as loving, she is all good.

Separation-Individuation: The Rapprochement Subphase

While in the practicing subphase the child is content to be away from the mother for increasingly long periods of time; in the rapprochement subphase the child becomes more needful of her presence once again and appears to want the mother to share everything with him or her as well as to constantly reassure him or her of her love. This need for closeness while the child continues in his or her autonomous existence characterizes the rapprochement period.

During rapprochement, the child's belief in the mother's omnipotence is shed as the child realizes that he or she must stand on his or her own two feet. At the same time the child is frightened that now he or she will be completely alone and will lose the mother's love.

Separation-Individuation: On the Road to Object Constancy

During this phase the child again seems able to be on his or her own to a greater degree than previously without undue concern about the mother's whereabouts. The child's internalization of the mother, which remains fluid for some time, begins to permit the child to pursue the full expression of his or her individuality and to function independently without experiencing or fearing separation, abandonment, or loss of love. The final achievement of object constancy implies the capacity to maintain a positive mental representation of the object in the object's absence or in the face of frustration. This normal phase of splitting is overcome in later rapprochement, when the good and bad self and good and bad object each begin to become integrated. Prior to this integration and to the development of object constancy, the self and the world are experienced in polar and fluctuating terms.

Blos (1975) suggested a second separation-individuation phase occurring in adolescence. The healthy adolescent has an internalized sense of self and others but now must disengage from the more infantile aspects of his or her self- and object representations to acquire a more realistically based sense of self and of his or her parents. This disengagement also requires the discovery of new love objects outside the orbit of the family.

Even those adults who show optimal functioning may relive separation-individuation themes throughout the life cycle, particularly at life transitional points or during more acute stresses. Nevertheless, the adult who has achieved a relatively stable (psychological) identity and who has an integrated and realistic conception of self will have the capacity for mature and loving relations with others. Those who do not successfully complete this key developmental task will show serious interpersonal difficulties (Blanck & Blanck, 1974).

The British School of Object Relations

Members of the British school of object relations developed a set of distinctive ideas that were considered to be outside of the American ego psychological tradition.

Kleinian Theory

Melanie Klein (1948) did not actually emphasize the interpersonal world's role in shaping the personality, since she viewed early instinctual aggression and fantasy as determining the nature of the child's perceptions and experiences of the real world. She did think, however, that real objects could reinforce or challenge the infant's views. In Klein's view, envy, greed, and destructive fantasies about and impulses toward others make infants anxious; they fear the objects on whom they vent their anger. Rage is projected and results in persecutory fears, which are heightened during the paranoid-schizoid position present in the first 6 months of life. This stage also is characterized by the use of early defense mechanisms that help infants to rid themselves of this anxiety. In the last half of the first year of life, the infant enters the depressive position, in which his or her loving feelings temper the aggressive drive and hate. To preserve "good" objects, infants make reparation for their aggressive fantasies and impulses and are capable of experiencing gratitude and guilt. Klein believed that both the paranoid-schizoid and depressive positions shape later personality development and psychopathology and always are active to different degrees.

The Work of Fairbairn

Fairbairn (1952) also regarded infants as object-seeking rather than pleasure-seeking and, in contrast to Klein, argued that personality develops as a result of interactions with real rather than fantasized objects. Fairbairn believed that the frustration of not feeling loved or lovable or that one's love is welcome and valued results in aggressive impulses. The inability of external objects to provide for the infant's needs leads the infant to acquire a split ego and to build up a world of internal bad objects, which also are split into idealized, rejecting, and exciting parts. The internalization of bad objects and the split in the ego that result become closed systems that influence further personality development and psychopathology. They prevent the individual from progressing from infantile dependence to mature dependence and from establishing loving and satisfying bonds with others.

Winnicott's Writings

More concerned with healthy development than the origins of psychopathology, Winnicott (1965) placed considerable emphasis on "good enough mothering" and the provision of a "maternal holding environment" in children's development. He believed the child's internalization of personality attributes such as the capacity to be alone is based on attuned mothering as well as the ego defects that result from maternal failures. He also drew

attention to the significance of transitional objects as a bridge between child and mother. According to Winnicott, when good enough mothering is lacking because of either maternal deprivation or too much "impingement," the infant erects a "false" self, which is a façade that comes into being to please others. As the false self rigidifies, the child becomes alienated from his or her true self. Thus, the false self is a defensive organization that both "hides and protects" the true self at the expense of its full expression.

Guntrip's Views

Guntrip (1973) also stressed the importance of early mothering in shaping the personality. He argued that frustrations caused by external objects, primarily the mother, lead the infant or child to turn away from them and that this withdrawal, "the schizoid problem," is at the core of all psychopathology. It is characterized by ego splitting; a withdrawal from interpersonal relationships; attitudes of omnipotence, isolation, and detachment; hopelessness; and a preoccupation with inner reality. The most extreme schizoid mechanisms result in the person's becoming alienated from himself or herself and without any capacity to love or to experience understanding, warmth, and personal concern for others. Deeply hidden in such a person is his or her needy self that is cut off from the outside world.

Attempts at Integration

Otto Kernberg (1975, 1976) attempted to bridge the American ego psychological and object relations theorists with those of the British school, particularly the work of Klein. He shared Klein's views on instinctual aggression, unconscious fantasy, and primitive defenses and her view of how the child's inborn dispositions and instincts organize perceptions and internalization of the external world. Kernberg maintained a reliance on structural theory, however, and traced the development of an individual's internalized object relations and internal structure through a series of five sequential stages. These are similar to those described by Mahler, but Kernberg focused less on the separation-individuation process and tended to minimize the impact of the child's actual parenting experiences. Initially, his developmental timetable was earlier than Mahler's, but he later adjusted his thinking to correspond to her observations. Kernberg described the following stages:

Stage 1: *Normal "Autism" or the Primary Undifferentiated Stage*
In this first stage, the infant exists in a state of being objectless, unrelated, or undifferentiated with respect to the mother or main caretaker. Optimally the infant starts to build up a core of pleasurable experiences.

Stage 2: *Normal "Symbiosis" or the Stage of the Primary, Undifferentiated Self- and Object Representations*
Here, the infant begins to acquire a "good" internal self-object (infant-mother) image under the impact of gratification, which becomes the nucleus of the ego, and a "bad" inner self-object image under the impact of frustration.

Stage 3: *Differentiation of Self- from Object Representations*
In this stage, the child becomes able to differentiate between self-representations and object representations but is not yet able to experience either the self or objects in their totality because of a lack of integrative capacity and his or her cognitive

immaturity. The child continues to separate "good" or libidinally invested "good" self- and object images from "bad" or aggressively tinged self- and object images that now are differentiated from aggressively infiltrated, "bad" self- and object images. Because excessive frustration generates intense anxiety, the infant tries to expel or project rather than take in or introject the resultant "bad" self- and object images. The child fears that his or her "bad" self- and object representations will destroy the "good" self- and object images and begins to experience severe conflict. Splitting and other primitive defenses (denial, devaluation, idealization, projective identification, and omnipotent control) come into play to ward off conflict and anxiety by maintaining the separation between "good" and "bad" self- and object representations.

Stage 4: *Integration of Self-Representations and Object Representations and Development of Higher Level Intrapsychic Object Relations–Derived Structures*
Here, the child is able to integrate both "good" and "bad" self-images into a coherent self system and "good" and "bad" object images into a total and three-dimensional conception of others. The child can experience bad feelings toward the self or the object without losing all the good feelings. Splitting and other related defenses gradually give way to repression as the child's major defensive operation. Thus, anxiety- and guilt-arousing feelings or experiences become part of the unconscious rather than being split off or projected. The intrapsychic apparatus begins to consolidate during this stage, particularly as the superego becomes more structured. Superego development involves the transformation or "toning down" of both the extremely negative self- and object representations and the highly positive or primitively idealized self- and object representations. The resultant internalization of more realistic self-object images within the superego lessens its harsh control over the child, substituting more appropriate demands and prohibitions.

Stage 5: *Consolidation of Superego and Ego Integration*
Finally, in Stage 5, superego integration is completed and ego identity is consolidated under the impact of real experiences with others. A harmonious inner world, which has been shaped by interactions with external objects, stabilizes the personality and affects all later interpersonal relationships.

In relating the origins of severe psychopathology to his schema regarding the development of internalized object relations, Kernberg described the formation of three stable intrapsychic structures (psychotic, borderline, and neurotic) that influence later personality development and psychopathology.

RECENT THEORETICAL DEVELOPMENTS

Some writers drew attention to the gender bias in ego psychological views of women's development, for example, arguing that Erikson placed too much importance on biological sex differences in contrast to cultural factors and socialization and that he based his views on male experience. Likewise, feminists such as Chodorow (1978) and Gilligan (1982)

criticized Mahler's ideas, suggesting that females had a different individuation process than males because of their primary attachment to a same-sex rather than opposite-sex parent. They saw mothers and daughters as sharing a greater sense of identification and merger with one another, resulting in a more prolonged closeness and a more diffuse individuation process. Further, they viewed female self-development, when compared to male self-development, as involving more permeable rather than rigid boundaries, an emphasis on relationships rather than autonomy, and a greater capacity for empathy, caring, and intuition.

Newer perspectives on women's development complement ego psychology and object relations theory. They have major implications for understanding women's strengths and needs throughout the life cycle and for redefining in more normal terms behavior that had been viewed as pathological. They also illuminate the causes of certain symptoms and difficulties that women experience when they are deprived of necessary connection or when they experience conflict between a need for affiliation versus a push toward self-enhancement or more autonomous behavior. Further, these views of women's needs have significant ramifications for reshaping the treatment process to be more reciprocal and relational.

Early members of the Stone Center for Developmental Studies, which included Jean Baker Miller, Judith Jordan, Alexandra Kaplan, Irene Stiver, and Janet Surrey (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991) as well as another prominent woman theorist, Jessica Benjamin (1988), made similar arguments. For example, the Stone Center group regarded women's self-development as evolving in the context of relatedness, believing that enhanced connection rather than increased self-object differentiation and separateness is women's major goal. Further, they contended that women grow optimally and change when they experience an interactive process in which mutual engagement, empathy, and empowerment with significant others occur. Nonresponsive relationships and disconnection rather than problems in separation-individuation per se result in pathology. Benjamin stressed the balance between oneness and separateness, merging and differentiation. In Benjamin's view, true independence involves both self-assertion and mutuality, separateness and sharing, and that the individual's inability to reconcile dependence and independence leads to patterns of domination and submission.

Newer theories have put forth a more affirmative view of lesbian development. Recent research supports the view that lesbian object relations and self-development arise as a variant of positive developmental experiences, in contrast to the traditional belief that they reflect arrested, immature, narcissistic, and undifferentiated object relations (Goldstein & Horowitz, 2003; Weille, 1993). For example, in Spaulding's (1993, p. 17) study of 24 college-educated lesbians who had positive identities and achieved high scores on measures of psychological stability, the women showed "evidence of highly evolved, differentiated and integrated levels of object and reality relatedness." Further, their views of their parents did not correspond to common stereotypes, in that lesbians saw both their mother and father as strong, positive role models, who were nurturing, successful, and warm (p. 19).

Finally, greater attention to culturally diverse populations also has enriched ego psychology and object relations theory. Increasing knowledge of the unique coping capacities and needs of people of color and other ethnic minorities has reshaped the treatment process and led to more respectful and empowering intervention approaches (de la Cancela, 1986, pp. 291–296; Pinderhughes, 1983, pp. 331–338; Ryan, 1985, pp. 330–340; Wilson, 1989, pp. 380–385).

RELEVANCE TO SOCIAL WORK PRACTICE

When it was introduced, ego psychology offered a rationale for reshaping the diagnostic and psychosocial models of casework. It led to a shift in the assessment process, a modification of treatment goals, an expansion of what produces change, a greater emphasis on the role of the casework relationship, an enlargement of the intervention repertoire, and an appreciation of both the inner and outer resources that could be mobilized in helping efforts. In principle, ego-oriented intervention embodied a strengths perspective that allowed intervention to move away from an exclusive emphasis on a person's so-called pathology. Likewise, it focused on improving the way people function in their current lives, encompassed work with both people and environments, and was aimed at diverse client populations and problems. Concurrently, because of its insights into the origins and nature of emotional disorders, refinements and extensions of ego psychology shed new light on the treatment of those who present with severe psychopathology.

Ego psychological concepts have had a major impact on shaping social work practice. When the diagnostic and psychosocial models of casework integrated ego psychological thinking, they gave a major role to the assessment of ego functioning, ego strength, and deficits in ego functioning. It became customary to talk about ego-oriented intervention, which could be either supportive or modifying (Goldstein, 1995). Subsequently, ego psychological theory constituted one of the major theoretical underpinnings of different practice models and approaches.

Uses in Assessment

Assessment in ego-oriented treatment is biopsychosocial in nature and focuses on the client's current and past functioning and life circumstances. It considers the client's needs, problems, gender, ethnicity, race, life stage, social roles, characteristic ego functioning and coping patterns, relationships, environmental stressors, and social supports. The use of clinical or medical diagnoses may provide important information but should be augmented by a broader and individualized biopsychosocial assessment. Thus, concluding that a client has a learning disability, medical problem, emotional disorder, substance abuse, and the like has important implications but is not sufficient for the purposes of assessment and the planning of intervention.

In an ego psychological framework, the problems that people experience when they seek help voluntarily or are mandated to do so can stem from five areas: (1) the social environment; (2) life events and circumstances; (3) interpersonal relationships; (4) heredity, constitutional, and health factors; and (5) personality characteristics, patterns of relating, and vulnerabilities. A particular problem may stem from more than one source, or problems may exist in multiple areas.

For example, the social environment may lack essential resources and supports with respect to employment, financial remuneration and security, housing, medical care, education, physical safety, and recreation, and thus may contribute to enormous hardships, psychological stress, and unmet needs. Other sources of stress may stem from the existence of laws and social policies that are not equitable or sensitive to the needs of certain populations and the tolerance or stimulation of bias, discrimination, oppression, and violence

toward people of color, immigrants, members of certain ethnic and religious backgrounds, women, gays and lesbians, older persons, children, the mentally ill, and others.

Difficult life circumstances and events are major sources of problems that individuals face. These include developmental and role transitions throughout the life cycle, such as adolescence, midlife and aging, marriage, divorce, unemployment, homelessness, immigration, and relocation; traumatic crises, such as death, illness, rape, battering, incest, and other acts of violence; and actual disasters, such as floods, fires, hurricanes, plane crashes, and terrorist attacks. These occurrences challenge people's coping capacities, upset their equilibrium, and can result in severe deterioration in functioning.

Interpersonal problems such as parent-child relations, couple and family conflict, social isolation, and difficulties with friends, peers, coworkers, employees, employers, and teachers are frequent areas of difficulty for which individuals seek help. Individuals also may experience problems that stem from heredity and constitutional factors and physical and mental illness.

Finally, an individual's personality characteristics, internal conflicts, impaired ego functioning, dysfunctional patterns of relating to others, low self-esteem, and self and identity disturbances may result in symptoms; interpersonal conflict; problems in pursuing educational, occupational, relationship, and life goals; identity problems; destructive and self-defeating behaviors; and general feelings of anxiety and depression.

The following five questions are important guides to the practitioner in the assessment process (Goldstein, 1995):

1. To what extent is the client's problem a function of stresses imposed by current life roles or developmental tasks?
2. To what extent is the client's problem a function of situational stress or a traumatic event?
3. To what extent is the client's problem a function of impairments in ego capacities or developmental difficulties or dynamics?
4. To what extent is the client's problem a function of the lack of environmental resources or supports or lack of fit between inner capacities and external circumstances?
5. What inner capacities and environmental resources does the client have that can be mobilized to improve coping?

Uses in Intervention

The focus and nature of intervention follow from the assessment, and the client should be involved in establishing the goals and treatment plan. Although they often are overlapping and not clearly differentiated, ego-oriented approaches can be grouped according to whether their goals are ego-supportive or ego-modifying (Goldstein, 1995; Hollis, 1972).

Ego-Supportive Intervention

This approach aims at restoring, maintaining, and enhancing clients' ego functions and coping capacities. It centers on improving clients' here-and-now functioning, on the real aspects of the client-worker relationship as a positive force in the intervention process, and on the role of ego mastery, learning, problem solving, identification, positive

reinforcement, and corrective experiences in creating change. Ego psychology transformed the casework process from a never-ending, unfocused exploration of personality difficulties to a more deliberate and focused use of clients' strengths and underscored the importance of clients' self-determination and involvement in guiding intervention. In addition to the use of psychological techniques, it also recognized the importance of work with the environment.

Ego-Modifying Intervention

This approach aims at understanding and changing an individual's maladaptive behavior and patterns of relating to others, and in this respect is more focused on pathology. It employs more reflective and interpretive techniques, works with the person's past experiences as well as his or her present circumstances, and deals with the more transferential rather than real aspects of the client-worker relationship. In an ego-modifying approach, greater understanding of the nature of maladaptive defenses and behavior and basic attitudes toward the self and others and new relationship experiences that help to repair, strengthen, and expand clients' inner capacities are important to the change process.

Ego-oriented treatment approaches can be utilized with a broad range of clients whose ego functioning is disrupted by current stresses or who show severe and chronic problems in coping, including moderate to severe emotional disorders. Although ego psychology often has been associated with long-term psychotherapy, it also can be used in crisis and short-term intervention. The use of brief treatment requires somewhat different skills than does extended treatment since faster assessments and more active and focused interventions are necessary.

The Helping Relationship

In ego-oriented intervention, the worker conveys certain key attitudes and values irrespective of the client. These include acceptance of the client's worth, a nonjudgmental attitude toward the client, appreciation of the client's individuality or uniqueness, respect for the client's right to self-determination, and adherence to confidentiality. In contrast to earlier views that stressed the importance of worker neutrality and objectivity, there is greater emphasis currently on the worker's ability to show empathy for clients, to engage in controlled involvement, to convey genuineness, and to encourage mutuality.

Ego-supportive intervention emphasizes the more realistic as well as the transferential aspects of the helping relationship. Consequently, the worker in an ego-supportive approach may encourage the client's accurate perception of the worker as a helping agent rather than as a transference figure. The worker provides a human and genuine experience in the helping relationship. In many instances, however, the worker uses the positive transference and becomes a benign authority or parental figure who provides a therapeutic holding environment and fosters the client's phase-appropriate needs and development. In some instances the worker becomes a "corrective" figure to the client. A client may develop intense reactions to the worker of an unrealistic kind, even in an ego-supportive approach. Such reactions do need to be worked with, but the aim, in most cases, is to restore the positive relationship (Garrett, 1958; Hollis, 1972; Perlman, 1957).

Another important aspect of the use of relationship in an ego-supportive approach is the worker's willingness to function outside of the client-worker relationship in a variety of roles on behalf of the client. It may be important for the worker to be an advocate

or systems negotiator for the client or to meet with family members (Grinnell, Kyte, & Bostwick, 1981).

Specific Techniques

Among the psychological techniques used in ego-supportive intervention are those that are more sustaining, directive, educative, and structured, in contrast to those that are more nondirective, reflective, confronting, and interpretive. Hollis (1972) described six main groups of psychological techniques that are important to ego psychological intervention: sustaining and direct influence; exploration, description, and ventilation; person-situation reflection; pattern-dynamic reflection; and developmental reflection. Education and structuring also are important techniques.

Environmental intervention is critical to intervention efforts in an ego psychological perspective. For example, it may be important to mobilize resources and opportunities that will enable the individual to use his or her inner capacities or to restructure the environment so that it nurtures or fits better with the individual's needs and capacities.

The Nature of Change

In an ego-supportive approach, change results from (a) the exercise of autonomous ego functioning in the service of mastering new developmental, life transitional, crisis, or other stressful situations; (b) greater understanding of the impact of one's behavior on others; (c) learning and positive reinforcement of new behaviors, skills, attitudes, problem-solving capacities, and coping strategies; (d) the utilization of conflict-free areas of ego functioning to neutralize conflict-laden areas; (e) the use of relationship experiences to correct for previous difficulties and deprivations; and (f) the use of the environment to provide more opportunities and conditions for the use of one's capacities.

In addition to influencing the psychosocial model of casework, ego psychological concepts contributed to other social work practice models, for example, the problem-solving approach, crisis intervention, short-term treatment, and the life model. Moreover, some aspects of ego psychological theory are compatible with cognitive-behavioral techniques. Although ego psychology was applied mainly to work with individuals, ego psychological concepts were incorporated into work with couples, families, and groups; high-risk screening and prevention; and community-based intervention. They also had implications for the design of service delivery and large-scale social programs and social policies.

EVIDENCE-BASED FOUNDATIONS

Over the years ego psychology as a body of theory has been enriched by research. Greater sophistication in research methodology and design and more willingness on the part of theorists to subject their ideas to investigation have led to more systematic study of child and adult development and the ways people cope with stress, crisis, and various types of life demands and events. Tools for assessing normal and pathological ego functioning and adaptive functioning also have evolved. In contrast to these developments, intervention research has lagged considerably.

When social casework and its ego psychological base came under attack in the 1960s, studies of social work intervention that were based largely on the psychosocial model of

practice and its ego psychological underpinnings were disheartening (Mullen, Dumpson, & Associates, 1972). Upon closer analysis, however, the goals, processes, and outcomes studied were not well selected in the research design (Perlman, 1972). In the years since these studies, outcome studies of social work practice have yielded more positive results (Rubin, 1985; Thomlison, 1984). Moreover, "one of the achievements of psychotherapy research is the increased sophistication in method and methodology in both process and outcome research" (Lambert & Hill, 1994, p. 105).

An important thrust of process-oriented studies has addressed the common factors that are associated with positive outcomes across different therapeutic models. Lambert and Bergin (1994, p. 163) list 33 such features. Perhaps the two most important foci in these studies have been on the therapeutic alliance and therapist characteristics such as accurate empathy, positive regard, nonpossessive warmth, and congruence or genuineness.

A review of outcome studies based on psychodynamic psychotherapy has shown many positive results (Fonagy, Roth, & Higgitt, 2005). Isolating the specific factors that are associated with effectiveness has been more difficult; operationally defining psychosocial variables, interventions, and outcomes remains a difficult task; and there is a dearth of evidence for psychosocial interventions in comparison to cognitive-behavioral approaches.

In the decades since the 1970s, much of what is referred to as evidence-based practice has utilized cognitive-behavioral approaches that lend themselves to measurement and intervention manuals of techniques that are easy to describe behaviorally, has targeted specific disorders, and has tended to study more tightly controlled rather than real-life clinical conditions. There appears to be consensus that a gap continues between the evidence that has been generated and the impact that it has had on practitioners (Nathan, Stuart, & Dolan, 2000). Concurrently, there is a good deal of evidence for the use of ego-oriented interventions that are not often integrated into courses on evidence-based practice.

It is critical that the rich knowledge base for social work practice provided by ego psychology and the intervention models that flow from this body of thought receive more research attention from social work practitioners. Although experimental designs are important, there is a need to use more diverse research strategies that are suited to psychosocial intervention and to real-life clinical situations. To produce clinical research findings that are relevant in today's practice, it will be necessary to encourage more collaborative partnerships between clinicians and researchers and to train social work clinician researchers.

CRITIQUES OF EGO PSYCHOLOGY AND EGO-ORIENTED INTERVENTION

Despite its promise as a theory that bridges people and environments and its more positive view of people in comparison to traditional Freudian theory, ego psychology often was criticized for its focus on the inner life of the individual, its emphasis on psychopathology, and its utilization of psychotherapeutic techniques rather than environmental interventions, particularly as clients seemed harder to reach and had multiple problems. Additionally, the push toward equality, social justice, and freedom from oppression on the part of people of color, women, and gays and lesbians contributed to a challenge of psychodynamic theory and individual treatment, which were associated with the general distrust of the medical model and its view that people who were different were deviant. Followers of ego

psychology were criticized for blaming the victim rather than the effects of oppression, poverty, and trauma and for pathologizing the behavior of women, gays and lesbians, and those who are culturally diverse rather than respecting their unique characteristics and strengths. Moreover, because the concepts and associated practices stemming from ego psychology were not operationalized and studied, there was insufficient evidence supporting the efficacy of ego-oriented treatment.

As attention turned away from psychodynamic theory generally and embraced alternative theories and intervention models, its prominent position in social work's knowledge base waned for a time in the 1960s, when the social work profession emphasized social change or macrosystems intervention rather than direct practice or microsystems intervention. When direct practice reasserted its importance during the 1970s, however, ego psychology enjoyed a renaissance of interest. Almost 50 years after ego psychology's emergence, the results of a survey of the 1982 NASW Register of Clinical Social Workers showed that 51% "identified ego psychology as being the most instrumental to their approach" (Mackey, Urek, & Charkoudian, 1987, p. 368). This study was conducted over 10 years ago, and ego psychology's popularity has continued.

Many of the criticisms of ego psychology have not taken into account its integration of newer theoretical developments and research. Ego psychology has been open to change over the years. As a theory of personality, it has expanded to encompass new perspectives on attachment and interpersonal relationships, trauma, women's development and roles, and the unique characteristics of and issues faced by culturally and ethnically diverse groups, people of color, and other oppressed populations, such as gays, lesbians, and transgendered persons. Ego-oriented intervention has been applied to diverse problems and populations, and its proponents have attempted to integrate many of the ideas and principles that have been suggested by more culturally sensitive, affirmative, and empowering intervention approaches. Moreover, there is increasing evidence for the utility of ego psychological concepts and interventions. Changes in society and in the clients needing help have focused greater attention on the application of ego-oriented intervention to many client problems and populations, including AIDS (Dane & Miller, 1992; Lopez & Getzel, 1984); rape and other forms of violent assault (Abarbanel & Richman, 1990; Lee & Rosenthal, 1983); child abuse (Brekke, 1990); domestic violence (Bowker, 1983); substance abusers (Chernus, 1985; Straussner, 1993); borderline and other types of character pathology (Goldstein, 1990); homelessness and chronic mental illness (Belcher & Ephross, 1989; Harris & Bergman, 1984); and the effects of childhood sexual abuse on adults (Courtois, 1988; Faria & Belohlavek, 1984). Likewise, ego psychology addresses the special needs of culturally diverse and oppressed populations.

Despite its person-in-situation focus, its broad application, and its continuing evolution, however, the criticism has lingered that intervention based on ego psychological principles and techniques is too psychotherapeutic and intended for addressing the concerns of the "worried well" rather than clients presenting with difficult problems (Specht & Courtney, 1994). This position ignores the broadened application of ego-oriented intervention. Moreover, the view that the goals of psychotherapy itself are only self-understanding or self-actualization rather than helping clients cope more effectively with their life circumstances represents a gross misunderstanding of the treatment process. No doubt, this criticism has been fueled over the past 2 decades, in part, by the increasing numbers of social workers entering private practice and the number of students entering social work

educational programs who wanted to become therapists. It is worth noting that despite the increase in the percentage of social work practitioners in private practice, however, most who are so engaged do so on a part-time rather than full-time basis and continue to be identified with social work as a profession (Brown, 1991). Further, those in private practice are not uniform. There are those individuals who engage in advocacy and other forms of social and political action. One study clearly indicated that "combination workers"—those who work in both agency and private practice—occupy a middle position with respect to their values: "Combination practitioners value job security, having peer support, helping the poor and promoting social justice through social change significantly more than do private practitioners only. This may explain in part why they remain employed in an agency where these values can be met" (Seiz & Schwab, 1992, p. 332). Thus, the vast majority of clinical social workers are employed in social agencies where clinical knowledge and skills, broadly defined, as well as advocacy and linkage to necessary resources are necessary to help clients. Even working in private practice with middle-class clients exclusively does not, in itself, determine the focus of intervention. Such individuals are not immune from physical and mental illness and disability, unemployment, substance abuse, having to place parents in nursing homes, and other problems that necessitate involvement with organizational structures and environmental resources.

Nevertheless, there must be a continuing effort to apply ego psychological principles to the problems of diverse, oppressed, economically disadvantaged, and special populations in today's practice arena. Further, in the present climate of managed care and cutbacks in service delivery, and the resultant emphasis on very brief and often mechanistic interventions, ego-oriented short-term models need to be developed, utilized, disseminated, and studied to a greater degree than previously. To date, systematic research on the nature and effectiveness of practice based on ego psychological principles has been lacking, and research findings that do exist often are not integrated by practitioners. The range of complex problems that clients present requires that we draw on diverse conceptual frameworks and treatment strategies in the process of our work, whether we practice in private or facility-based settings. No theory or intervention model has proven useful in all or most circumstances. We cannot return to a reliance on those psychodynamic or other theories that conceptually isolate people from their interpersonal relationships or environment or psychotherapeutic models exclusively, but we also cannot disregard clients' difficulties in coping that stem from impairments or deficits in their inner capacities and their need for more supportive and intensive individual, family, and group treatment.

CONCLUSION

This chapter has described the nature of ego psychology, its major concepts and evolution, its assimilation into social work, and implications for social work practice. It also has commented on its empirical base and critics. It has shown that ego psychology had a dramatic impact on social work practice and provided the conceptual underpinnings to the diagnostic and psychosocial models of casework and to other practice approaches. Although ego psychology's most important contributions have been its views of human development, the causes of maladaptive behavior and more severe emotional disorders, and its implications for intervention with diverse problems and populations, ego psychology

also has had major implications for service delivery and social policy. For example, the emphasis on the importance of developmental stages, role and life transitions, and stress and crisis to human functioning alerts us to the times and conditions during the life cycle when such help is needed and can be particularly useful in establishing services aimed at primary prevention rather than remediation alone (Roskin, 1980). Concurrently, the awareness of the significance of acute or chronic impairments to the coping capacities that some individuals bring to their life transactions points to the need for a range of remedial, rehabilitative, and sustaining services. Further, because these theories stress the importance of the interpersonal, social, and environmental context in shaping development and in facilitating or obstructing successful coping, the goal of making social policies and institutions more responsive to human life and client needs becomes paramount. Thus, in keeping with the historical commitments of the profession, social workers must actively engage in work with both persons and environments at both micro- and macrosystems levels.

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Chapter 6

SELF PSYCHOLOGY THEORY

Joseph Palombo

During the early 1950s through the late 1970s, ego psychology was the dominant psychoanalytic paradigm that mental health practitioners applied in their work with patients and clients. The psychiatric *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-II;* American Psychiatric Association, 1968) drew heavily on its concepts to organize mental disorders. In schools of social work, ego-supportive casework was the only modality considered effective in the treatment of clients who sought help in social agencies. Most of those agencies relied on psychoanalysts to act as consultants for the most difficult cases seen by caseworkers. The group of patients identified as having narcissistic personality disorders, behavior disorders, or acting-out character disorders preoccupied the mental health community. They were difficult to engage in treatment and often were considered untreatable. If they did come to treatment, they soon fled because of the anxiety evoked when confronted with the consequences of their behaviors. The stubborn nature of their disturbance was thought to stem from the fact that they acted out their anxieties rather than experiencing them. These patients appeared to function well, and some had successful careers; they simply did not form the typical transferences expected of patients.

Heinz Kohut (1913–1981) was a psychoanalyst, who, like Freud, started out as a neurologist. He gained prominence in psychoanalytic circles as a consummate practitioner of classical Freudian psychoanalysis and was president of the American Psychoanalytic Association between 1964 and 1965. Self psychology emerged out of Kohut's efforts to psychoanalyze patients with narcissistic personality disorders. The traditional approaches used at the time to conduct an analysis with these patients failed to produce the expected results. The patients did not develop the transference neurosis anticipated to develop in those cases. By making an initial modification to the psychoanalytic technique, Kohut was able to bring unexpected results to his work. When the patients resisted his interpretations of the presence of unacknowledged unconscious oedipal fantasies, he decided to wait for further evidence of transference rather than persist with his interpretations. The outcome of that strategy was the emergence of what later came to be known as the "narcissistic transferences," that is, the idealizing and mirroring transferences. Kohut had stumbled upon an approach that permitted some of these disorders to be treated more successfully. For an authoritative biography of Kohut, see Strozier (2001).

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FORMS AND TRANSFORMATIONS OF NARCISSISM (1966)

Kohut's first public presentation of his formulations of self psychology came on the occasion of his delivery of the presidential address to the American Psychoanalytic Association in 1965. Later published as "Forms and Transformation of Narcissism" (Kohut, 1966/1978c), this paper, remarkable in its breadth and scope, summarized what was to be elaborated in much greater detail in the *Analysis of the Self* (Kohut, 1971). As befits a presidential address, its tenor is both scientific and encompassing. Its scientific focus provided the vehicle through which he first made public some of his hypotheses on the issue of narcissism. Kohut demonstrated that as a result of the application of empathy to his clinical practice, he broke new psychoanalytic ground. At that time, he modestly saw his work as simply filling a void in traditional metapsychology. His contributions were meant to amend some of the more obscure concepts of Freud's drive theory, particularly the aspect that dealt with narcissism.

Kohut began by stating that although in theory it is generally held that narcissism is neither pathological nor undesirable, once the domain of theory is left behind a more judgmental attitude tends to prevail. Attachment to objects is viewed as the appropriate transformation of narcissism. Yet the contribution of narcissism to health and adaptation had received little attention. He insisted that the definition of narcissism as the libidinal investment of the self not be understood to preclude object relationships. "The antithesis of narcissism is not object relation but object love" (1966/1978c, p. 429).

In this paper, he described two forms of narcissistic transferences he had discovered, those of the *narcissistic self* (later to be called the "grandiose self") and the *idealized parent imago* (the idealized representation of a parent). These two forms of narcissism represent developmental phases that the exhibitionistic component of the libidinal drive negotiates. During the phase of primary narcissism, a differentiation occurs through which these two components emerge. At first, the infant experiences the state of homeostatic balance as a blissful condition, a condition Freud had termed the "purified pleasure ego." Kohut conceptualized this condition as that of the "narcissistic self."

The narcissistic self is the state in which the child, wishing to be admired, engages in grandiose fantasies. These fantasies are the ideational content of the exhibitionistic drive. Objects at this point are important only insofar as they can participate in, and mirror, the infant's pleasure. The state in which the idealized parent imago becomes central is one in which the lost sense of perfection is projected onto the parent, and the parent becomes endowed with the qualities the infant requires in order to feel whole. The transformations of these narcissistic drive derivatives lead the narcissistic self to become the source of ambition and self-esteem, while the idealized parent imago is transmuted into drive-regulating structures in the ego and to the idealization of the contents of the superego.

The second section of this paper (Kohut, 1966/1978c, pp. 445–460) gives a remarkable reevaluation of the concept of narcissism in the broader context of its social meaning. Narcissism had been given a bad name; it had come to represent only those negative values that our culture attaches to the concept. There was another side to narcissism, which received far less acknowledgment, the side that spoke to the sense of pride and of healthy exhibitionism that is part of human experience. Even more significant, one could see transformations of narcissism in some of the most valued cultural activities: humor,

empathy, creativity, wisdom, and the ability to confront one's finitude. In this section, Kohut moved on to a consideration of narcissism as representing accretions to the ego and higher achievements of the personality. These are "man's creativity, his ability to be empathic, his capacity to contemplate his own impermanence, his sense of humor, his wisdom" (p. 446).

As a creative individual, the artist has a relationship to the environment that is much less well defined than it is for others. This relationship is one of intimacy and idealization. The artist draws inspiration from it and breathes life into it, making of the inanimate a work of beauty and acclaim. The artist transforms what is narcissistically invested into works of art.

Empathy is the unique capacity human beings have to gather data about another person's psychological states. It has its origins in the identification with a mother's responsive nurturing activities. To permit the free functioning of this capacity, a person must overcome several obstacles. Among these are the layers of cognitive thought that are acquired during maturation that blur the ability to be empathic. The person has to go beyond a self-centered position to one that recognizes oneself in others.

The acceptance of our transience and finitude comes not only through the acknowledgment of the reality of our impermanence and overcoming the narcissistic injury to our wish for omnipotence; it also comes through the acceptance of the inevitability of death with quiet dignity and strength. A transformation of narcissism occurs when we experience a feeling of timeless participation in the community of human beings. Humor may assist in the task of accepting one's finitude. Humor and the "cosmic narcissism" represent the abdication of one's archaic grandiosity. The transformation manifests as "a quiet inner triumph with an admixture of undenied melancholy" (Kohut, 1966/1978c, p. 458).

Finally, wisdom may be defined as an attitude toward life that encompassed a number of maturational and integrative steps. Tempered by age and experience, burnished by the transcendence over petty narcissistic injuries, and honed to the use of cognitive capacities and feeling states, the person achieves a pinnacle of development that approaches the sublime.

Had Kohut stopped at the end of the first section, his contribution might have been hailed as having made a major technical breakthrough in the treatment of narcissistic personality disorders. However, the breadth of his vision and the intensity of his humanistic concerns extended beyond the clinical setting in which he practiced. He saw the implications of what he proposed as penetrating the very fabric of our value system. The integration of narcissism into the healthy personality represented a radical departure from a worldview that saw narcissism in pejorative terms. He sought not only to redress the clinical wrong that had been committed by opposing attachment to others over attachment to one's self, but also pointed to the ways we as social beings value the transformed narcissism we carry with us from our childhood. Transformations are acquisitions of the ego that reflect our cultural heritage and lend richness and substance to our personalities.

Since he had not yet moved away from the mainstream of traditional psychoanalytic metapsychology formulations, at first his work appeared not to represent a major threat to the psychoanalytic establishment. The initial responses to his contributions were relatively neutral. However, following the publication of *The Analysis of the Self* (Kohut, 1971), his contributions were perceived as radical innovations and departures from traditional metapsychological formulations and analytic techniques (Loewald, 1973). Some analysts

were critical that he gave no credit to his predecessors, the object relations theorists such as Winnicott and Klein (James, 1973), as well as others (Stein, 1979). He was criticized as being too supportive, as not dealing sufficiently with patients' aggression and denial of dependency (Kernberg, 1974), and, most damaging of all, as displacing the centrality of the Oedipus complex from psychopathology (Kernberg, 1975; Schwartz, 1978). Later yet, he found it necessary to defend himself against the false accusation of reverting to a form of Franz Alexander's modification of psychoanalytic technique that advocated the manipulation of the transference by providing a "corrective emotional experience" (Kohut, 1984, p. 107).

Kohut did not intend to bring about a breach with his colleagues. He saw himself only as a scientist who, standing on Freud's shoulders, was able to glimpse things Freud could not see. He strove hard to explain his position and to defend his commitment to psychoanalysis. Ultimately, he saw that a greater commitment to progress meant departing from Freud, and he felt no hesitation in taking that step. Little did Kohut realize how revolutionary a step this was to be! A door was opened. The exploration of the territory to which the door led was to take a number of years. It led to a therapeutic treasury that was to enrich not only psychoanalysis as a therapeutic endeavor but other psychotherapeutic approaches as well.

BASIC THEORETICAL PRINCIPLES: EMPATHY AND THE NATURE OF PSYCHOLOGICAL DATA

Long before he came to his insights about narcissistic disorders, Kohut believed that empathy was an essential tool for the observation of psychological phenomena. Without empathy, in-depth psychological data could not be gathered. His intentions in "Empathy, Introspection and Psychoanalysis" (Kohut, 1959/1978d) were to reorient psychoanalysis away from the biological direction in which he felt it was going. He felt that the emphasis on drive theory detracted from the essential contribution that psychoanalysis had to make because it relied on biological rather than psychological principles. The redirection could occur only through a methodological shift in the tools of observation. A truly intrapsychic perspective could be maintained only by making empathy the central data-gathering instrument of psychoanalysis. He stated, "We designate phenomena as mental, psychic, or psychological if our mode of observation includes introspection and empathy *as an essential constituent*" (p. 209). He defined empathy as vicarious introspection. A consistent application of this instrument would provide a perspective that located the observer within the field of observation, that is, the patient's intrapsychic life, rather than outside it.

The tools for the observation of data within each of the sciences are different. The physical sciences utilize sensory observation to gather data, which Kohut designated an "extrospective" approach. Sensory observation of patients does not yield what is most essential to understand psychic states. Empathy enables therapists to obtain psychological data by bringing the therapist closer to the patient's experience. The therapist's reflective and introspective efforts and his or her capacity to resonate vicariously with the patient's experience provide the means to understand the patient's psychic reality. Another way this distinction could be made is to say that in extrospective observation the observer occupies an imaginary point outside the object, whereas in vicarious introspection the observer

occupies an imaginary point within the object. Referring to a man's experience of being unusually tall, he states:

> Only when we think ourselves into his place, only when we, by vicarious introspection, begin to feel his unusual size as if it were our own and thus revive inner experiences in which we had been unusual or conspicuous, only then do we begin to appreciate the meaning that the unusual size may have for this person and only then have we observed a psychological fact. (Kohut, 1959/1978d, p. 207–208)

Empathy, however, must be distinguished from sympathy. Sympathy may involve compassion for the observed. In sympathy, identification with the subject being observed occurs, whereas in empathy, the observer introspects upon what is experienced. Empathy is also to be distinguished from the more common connotations of the term, which indicate that a person may feel a degree of warmth, kindness, and respect for another person. Empathy, as an act of observation, need not exclude these qualitative aspects, although those aspects may be necessary accompaniments to the therapeutic task.

Empathy must also be differentiated from intuition. In the latter, a creative cognitive process occurs through which multiple inputs are apprehended simultaneously and inferences made to coalesce them into a gestalt. Intuition may serve the empathic process, but empathic observation does not require intuition.

Definition of Empathy

As we have seen, vicarious introspection is the act through which the contents of another person's experiences are apprehended. It is a process that leads to an understanding of how a person feels, thinks, and perceives reality. The method defines the psychological field of observation. In *The Analysis of the Self,* Kohut (1971, p. 300) wrote, "Empathy is a mode of cognition which is specifically attuned to the perception of complex psychological configuration." He later expanded this definition as follows:

> Let me summarize my opinions of the importance of empathy in human life in general by compressing my views into three propositions: (1) Empathy, the recognition of the self in the other, is an indispensable tool of observation, without which vast areas of human life, including man's behavior in the social field, remain unintelligible. (2) Empathy, the expansion of the self to include the other, constitutes a powerful psychological bond between individuals which—more perhaps even than love, the expression and sublimation of the sexual drive—counteracts man's destructiveness against his fellow men. And (3), empathy, the accepting, confirming, and understanding human echo evoked by the self, is a psychosocial nutriment without which human life as we know and cherish it could not be sustained. (Kohut, 1973/1978e, pp. 704–708)

The Recognition of the Self in the Other

We resonate with the internal state of the person observed, and through our associations and vicarious introspections we enter into the other person's psychological state and arrive at an understanding of his or her experience. This implies that the kinship that all human beings experience toward each other extends beyond the narrow confines of their biological similarities. Nothing that is human can be alien to us because as sentient beings we are capable of thinking and feeling as others think and feel. We are stirred by others' actions

and reactions. Even in the absence of direct verbal or observable cues, we are affected by others and are capable of grasping their experience. The psychic reality of others and the special meaning of their experiences can be deciphered by us as observers. Because of these capacities, we can recognize ourselves in others and recognize others in ourselves.

The Expansion of the Self to Include the Other

Empathic observations do not constitute an identification of the observer with the observed. Identification implies becoming like the other, a structural change occurring within the observer. What is significant is that the merger with the other produces a unique experience, a shared experience that is specific to that dyad. This may be interpreted to mean that the data derived from such observations have an element of subjectivity, as well as an element of objectivity. Variations in the data can and do occur when multiple observers sample the same events. However, in spite of the many idiosyncrasies to which we all are heir, a reasonable consensus can often be reached regarding the subject observed.

The Accepting, Confirming, and Understanding Human Echo Evoked by the Self

Kohut always insisted that empathy was neutral in its valence. As a tool it could be used for benign or destructive ends. He repeatedly pointed to the many examples of the abuse of empathy for destructive purposes, for example, con men who use their empathic skills to exploit their victim; the Nazis, who used sirens on their planes to terrorize their enemies; the captors who use their empathic understanding of a person's vulnerability to brainwash prisoners. All of these are instances of uses of empathy for antisocial or nonhumanitarian purposes. Yet, in spite of this, empathy also has a nonspecific benign effect on people. People have so great a wish to be affirmed and understood that they experience another person's empathy as benign.

In summary, empathy is a mode of understanding related to the domain of human experience and human motivation. This mode of understanding may also be exercised in many contexts: literary, dramatic, artistic, musical, and others. In the clinical setting, this mode of understanding is generically no different from other modes of understanding, except for the fact that the context determines the data to be collected.

Limitations of Empathy

The fundamental importance of empathy as a data-gathering tool in psychological matters leads to the consideration of some of the problems associated with some of its limitations, which Kohut (1959/1978d, p. 212) at first designated "resistances against introspection." The first set of limitations that he mentions are those due to the psychological resistances inherent in the use of this tool. "Foremost among the obstacles interfering with the use of empathy (especially for prolonged periods) are those that stem from conflicts about relating to another person in a narcissistic mode" (Kohut, 1966/1978c, p. 452). The ability to merge with another person's inner experiences requires the suspension of one's own need states and sense of autonomy in order to resonate temporarily with the other person. It also requires that the therapist not experience the other person's narcissistic demands as a personal affront and thus not respond with feelings of injury. This set of limitations stems from the observer's countertransference problems, that is, from particular blind spots

that impede the empathic process. Some people have strong resistances to the exercise of their introspective capacities because they denigrate them as sentimental or "unmasculine." Others fear the loss of boundaries; they are made anxious by the closeness involved or by the arousal of their own longings. Sometimes resistances can be activated because of the feeling of helplessness that is mobilized by remaining a passive observer. To be able to observe requires the inhibition of action and the restraint of the wish to respond in the immediacy of the situation. If a therapist has difficulties with this kind of stance and cannot tolerate the tension of remaining an active listener, then serious interferences in the process will be introduced (Kohut, 1959/1978d, pp. 212–213).

A second set of problems relates to the reliability of any knowledge acquired through empathic observation. It is common for clinicians to differ widely in their understanding and interpretation of any given patient's behavior or set of communications. These differences are not surprising when one considers that the manner in which data are collected varies widely. Each observer makes use of himself or herself as an instrument for the collection of data and brings to the situation varying experiences and introspective abilities. Limits are also set by one's own life experiences, cultural background, gender, and imaginative faculties (Kohut, 1959/1978d, pp. 229–232). For example, it is not unusual for a foreigner to be repelled by the cultural practices of an ethnic group. This often occurs around the consumption of foods or the practice of rituals. What may appear to be sadistic and odious to a person from an alien culture may represent the highest achievement to a person of that culture. Similarly, sexual differences may be seen as limiting the understanding one has of a person of the opposite sex. A man may have difficulty imagining what it is like to give birth to a child, and a woman may have difficulty conceiving of the experience of sexual penetration of another person. Furthermore, there are certain experiences that are so foreign to our humanity that it is at times impossible to expand the limits of our imagination to encompass them. Concentration camp victims and victims of torture often complain that no one could possibly understand what their experiences were like unless they had lived through those experiences. They may be correct. Such dehumanizing experiences may be beyond the reach of most people's worst fantasies and capacity for empathy.

Third, in clinical situations the observed (the patient) is inescapably affected by the observer (the therapist), who in turn is affected by the observed (the patient). Freud had suggested that the "evenly hovering attention" of the therapist can lead to a correct apprehension of the central issues with which the patient is dealing. The therapist was to remain an objective observer of the patient's communication. This stance was described in surgical terms, as an antiseptic environment in which the transference was not contaminated by the therapist's activity. Kohut believed such objectivity to be impossible. Patients often respond to the imperceptible nuances of the therapist's feelings. What is necessary, therefore, is not that we purify ourselves to see more clearly, but rather that we develop a perspective that helps us understand the process while taking into account this significant clinical fact.

There are times when closure about one's empathic observations may not be possible, since these may remain puzzling. Kohut recommended that at such times a prolonged immersion into a patient's experience is necessary before understanding can be achieved. This immersion involves collecting large amounts of data on which to base inferences. The immersion, furthermore, permits a process through which we can validate our inferences. Reasonable certainty may then be achieved that one's introspections approximate the patient's experience.

Last, empathy is not a perfect instrument that yields correct answers every time it is used. The subject matter with which empathy deals is the set of complex psychological configurations that constitute another person's experience. The very complexity of these configurations makes the operation of empathy a difficult and hazardous one. Like the lens in a microscope, it can be flawed or cracked or blemished, and to that extent the data obtained may be distorted, inaccurate, or incomplete. The observer should avoid making premature closures or interpretations, especially if the data the patient presents are bewildering.

ADVANCED THEORETICAL DEVELOPMENTS

On first reading *The Analysis of the Self* (1971) many found the book difficult to follow (James, 1973; Rothstein, 1980). As with any work that attempts to break new ground, its language included concepts from the very paradigm that Kohut was trying to modify. He incorporated the language of drive theory into his evolving self psychology. His use of a mixed metaphor bewildered many readers because it included the description of phenomena from two dissimilar frames of reference. In this section, I summarize Kohut's major contribution to the metapsychology of self psychology. In particular, I discuss his concept of the superordinate view of the self and of the disorders of the self. I leave the discussion of his contribution to clinical theory for the section on his work's relevance to clinical social work.

The Superordinate View of the Self

The empathic/introspective point of view gave Kohut a tool for observation, which permitted a consistent focus on patients' experiences. Although steeped in psychoanalytic theory, he found that traditional metapsychology was often too removed from the patients' descriptions of their feeling states. These were "experience distant," rather than "experience near" (Kohut, 1984). That is, metapsychological interpretations did not permit the therapist to immerse himself or herself into the patient's own experiences. They prevented an empathic merger that could further the therapeutic process. The use of the concept of the self was intended to facilitate that task.

The Concept of Self

In his early writings, Kohut used the concepts of self and self-representation interchangeably. In time, he came to feel that *self* was a more "experience near" concept that conveyed to the analyst the immediacy of the patient's experience, a concept that facilitated the process of empathic observation. As the concept became central to the new paradigm, Kohut was hesitant to give an exact definition of it. In particular, he felt that in the early phases of the development of a theory there was wisdom in retaining a level of vagueness that permitted flexibility in the use of new concepts. The meaning would emerge from the context in which the concept was used. He consequently postponed defining the concept until after the publication of *The Analysis of the Self* (Kohut, 1971, 1979/1991, pp. 450–454).

As the concept of self was modified Kohut made clear the distinction between the concept of the self and the concepts of ego, id, and superego. The latter were *agencies* of the mind that were at different levels of abstraction from the former. The self was a structure within the

mind, reflective of the content of one's experiences, but it was not coequal to the agencies of the mind. This use of the concept, as the content of one's experiences, permitted the retention of a description of these experiences as being conscious, preconscious, or unconscious. Had Kohut assigned to the self the status of an agency of the mind, there would have been serious difficulties in retaining these qualities for the self and in differentiating it from the agencies of the mind.

Kohut subsequently proposed that a distinction be made between the self in the narrower sense, or the *subordinate view of the self*, and the self in the broader sense, the *superordinate view of the self*. The first harks back to the period prior to the publication of *The Restoration of the Self* (Kohut, 1977); the second represents the more mature expression of his thinking. He posited a separate line of development for the self. At first he suggested that the subordinate view of the self has a developmental line that paralleled Mahler's (1975) separation-individuation line of object cathexis. That line describes the attachment to, or the cathexis of, the self. Later on he revised his position and considered that the superordinate view of the self encompassed the subordinate view.

Regarding the subordinate view of the self, Kohut wrote in *The Analysis of the Self* (1971, p. xv):

> The self emerges in the psychoanalytic situation and is conceptualized, in the mode of a comparatively low-level, i.e., comparatively experience-near, psychoanalytic abstraction, as a content of the mental apparatus—it is a structure within the mind . . . it has continuity in time, i.e., it is enduring. . . . The self has, furthermore, also a psychic location. . . . The self, then, quite analogous to representation of objects, is a content of the mental apparatus but is not one of its constituents, i.e., not one of the agencies of the mind.

Finally, Kohut moved to establish self psychology as a new paradigm. A more mature definition of the self emerged: the superordinate view of the self. The self as a depth psychological concept refers to the core of the personality. It is made up of various constituents that result from the interplay between the child and its earliest selfobjects. "It contains (1) the basic layers of the personality from which emanate the striving for power and success, (2) its central idealized goals, and (3) the basic talents and skill that mediate between ambitions and ideals—all attached to the sense of being a unit in time and space, a recipient of impressions, and an initiator of actions" (Kohut, 1979/1991, p. 451).

It should be noted that Kohut distinguishes between the self, identity, and personality. Personality is not a concept that had much currency in psychoanalytic theory; he therefore dismissed it as not having theoretical relevance for self psychology. Identity, which Erikson (1959) used extensively, is different from self. Identity refers to the self at a given point in time accompanied by the social roles acquired by the person. It is, therefore, not a depth psychological concept (Kohut, 1968/1978b, p. 471N–472N, 1979/1991, p. 451).

Selfobjects and Their Functions

The concept "selfobject," one of his most seminal concepts, was introduced by Kohut (1971) to describe an aspect of the relationship between self and others. In attempting to conceptualize the phenomena he observed in narcissistic personality disturbances, Kohut found that some patients needed psychological functions that they were missing but were

unaware of their absence. Initially, Kohut thought of these experiences, in the vocabulary of classical metapsychology, as patients needing another person to be an extension of their psyches, that is, performing "auxiliary ego functions." That person or the object was *experienced as part of the self* and was contained within the matrix of the self. The relationship was, therefore, not one in which a subject and an object came together, with the subject investing the object with libidinal energy; rather, it was one in which the subject came upon a missing part of himself or herself and immediately absorbed it.

In Kohut and Wolf (1978, p. 414) selfobjects are defined as

> objects which we experience as parts of our self; the expected control over them is, therefore, closer to the concept of the control which a grown-up expects to have over his own body and mind than to the concept of the control which he experiences over others. There are two kinds of selfobjects: those who respond to and confirm the child's innate sense of vigor and perfection; and those to whom the child can look up and with whom he can merge as an image of calmness, infallibility, and omnipotence. The first type is referred to as the mirroring selfobject, the second as the idealized parent imago.

Selfobject functions are psychological functions with which people are not born. Initially, they are mental states that have not acquired the stability, autonomy, and continuity to be considered structures within the self that are necessary to permit the person to function effectively. They are experienced as part of or within the self. Eventually these experiences are internalized as functions into the matrix of the self as structures, at which point they represent enduring functions that accrue to the self. The awareness of these functions is generally absent, much as one is not aware of one's heartbeat except when it skips or stops functioning, at which point the experience of the absence of the selfobject function is experienced as an injury to the self. Selfobjects may then be defined as the set of experiences that, when present, lead to an experience of cohesion and stability, but which, when absent, lead to disruption and fragmentation.

Kohut identified the specific selfobjects within the context of the transferences patients formed during analysis. Selfobjects include (a) the grandiose self or mirroring selfobject, (b) the idealized parent imago, and (c) the alter-ego selfobjects.

The Grandiose Self

The functions associated with the grandiose self include the experiences of being affirmed and acknowledged by another who mirrors one's internal state. The result is a sense of worth, positive self-regard, and experiences of being respected and feeling approved of by others who praise and compliment us in an authentic way. Some of these experiences lead the person to feel a sense of dignity and self-respect. Experiences of admiration and of feeling lovable result in poise, self-confidence, and self-assurance. Those of being cheered on in the pursuit of novel experiences and encouraged in the mastery of challenges that stretch one's reach lead to a sense of firmness in the sense of self and enhance the assertive pursuit of activities (Kohut, 1968/1978a, p. 489; 1971, pp. 26–28).

The Idealized Parent Imago

The functions associated with the idealized parent imago include the experiences of safety that results from the faith in the strength and omnipotence of someone who acts as a protector. Sharing in the strength of that person and feeling protected results in the function

of feeling empowered and effective as a human being. The experience of having one's excitement or overstimulating affects modulated by another results in the functions of self-control, self-discipline, and self-regulation. The experiences of being soothed, comforted, and calmed by another, who provides solace and support as well as joyous vitality, result in the capacity for enthusiasm and equanimity. Finally, the experience of learning rules of conduct that represent the content of the culture's values and ideals become consolidated into a value system and a set of ideals that serve as guides in the person's life. These give a sense of purpose in the pursuit of life's goals (Kohut, 1968/1978a, pp. 479–481; 1971, pp. 37–49).

The Alter-Ego

The alter-ego selfobject functions were initially associated with the mirror transferences, being considered an archaic form of those transferences, but were later given a separate status (Kohut, 1984, p. 193). The functions associated with the alter-ego include the experience of a common bond with others that unites human beings and that leads to the feeling of kinship with others so that nothing human feels alien. The experience of the intactness of oneself provides the sense of well-being and wholesomeness without which we feel dehumanized.

Transmuting Internalization

The process through which psychic growth occurs and structure develops is transmuting internalization. If a patient experiences an optimal frustration of his or her wishes, then a titrated disappointment in the therapist occurs. The patient abstracts and depersonalizes the function, transmuting it from the concretized representation in the therapist. The internalized function then becomes functionally autonomous from its concretized representation. The structuralized function within the self achieves a stable configuration (Kohut, 1971, pp. 49–50; P. H. Ornstein, 1978, p. 64).

An analogy will illustrate this process, although this is not an example of the process. Let us consider a child wishing to learn to ride a two-wheel bicycle who asks her father to teach her how to ride. The father will reassuringly place the child on the bike and instruct the child to begin pedaling. As the child struggles to maintain her balance, she experiences feelings of helplessness, of loss of body control, and becomes anxious fearing that she will be injured. The father reassures the child, and through his strength is able to propel the bike along, giving the child the illusion that she is beginning to control the process. The child draws strength from her father and feels confident in him. The father encourages the child to try pedaling faster, hoping that the momentum of the bicycle will permit the child to maintain her balance. As the child does so, she will momentarily outpace her father, who will let go and no longer be there as a support. The child, sensing the absence of her father, will turn around to reassure herself and will lose her balance and fall. If the injury is not too great, and if the child's determination is firm, she will ask to try again. The process will start over. At some point, the child will indeed find herself propelled sufficiently by her own power to have control over the bicycle; however, she will hesitate to look behind, knowing that this will surely result in her falling. She will maintain the illusion that her father is there performing that necessary function even though she is performing it herself. As the child develops her skill, the acquisition of the function becomes much more smooth

and complete. The child has internalized the capacity to maintain her balance and no longer needs her father's presence to ride her bicycle. While this example is illustrative of the acquisition of a skill, the parallels with transmuting internalization are significant.

Kohut made a clinical distinction between "gross identification" (Kohut, 1971, p. 166) or "gross incorporation" (Kohut, 1984, p. 101) and transmuting internalization. He found that there is a point in the treatment when some patients will either express the wish to become like the therapist or, in fact, begin to act in what seems to be an imitative fashion. Some patients express the desire to make career changes in order to become therapists; others take an interest in the type of art or decor that the therapist has in the office. These manifestations seem to have a defensive quality and do not appear to be the result of structuralization. It is as though the patient acquired a configuration of behavioral patterns that in fantasy are associated with the person of the therapist. The patient seems to feel and act in ways that indicate that the merger with the therapist has led to an accretion to the sense of self that resembles the external qualities of the therapist. What the patient is missing is the depth of feeling and the integration of the behaviors into the totality of his or her motivational system. The behavior is split off from the cohesive self and from its component parts. This phenomenon exemplifies incorporation rather than transmuting internalization of the specific functions.

The phenomenon of identification with the aggressor is similarly motivated (Kohut, 1971, p. 167). The hope is to please the aggressor by merging with his or her motives and thus avoid destruction. Here, the incorporation is not of the external behavior but of the intentions of the aggressor. The merger results in a union of purpose that will make the offender feel that the victim is a part of him or her and that to destroy the victim would become a self-destructive act. The victim's empathy for the aggressor's desires leads to the ultimate sacrifice of his or her self in the hope of survival.

In summary, the self is an enduring set of psychic structures. It results from the transmuting internalization of selfobject experiences. It includes the skills, talents, deficits, and temperament with which a person is endowed at birth. Ontogenetically the self progresses from the need for more concrete expressions of selfobject functions to less concrete and more abstract forms. As an enduring set of structures, the self is susceptible to regressions, disruptions, and temporary or permanent fragmentation under stress. The functional state of the structures of the self need not be constant. Rather, the stability and the tension gradient between the two poles of the self, the grandiose and idealizing poles, are the indicators for health.

The Development of the Bipolar Self

The development of the self results from the empathic interchanges between child and caregiver, which for Kohut provide "a matrix of empathy" (see Kohut, 1978, p. 752). From a developmental perspective, the self emerges from the "virtual self" (Kohut, 1977, pp. 100–101). The virtual self is the set of parental wishes, fantasies, preconceptions, and anticipatory desires that parents have for their unborn child. The hopes, fears, and wishes provide a milieu that will have a significant impact on the child's development.

The self unfolds ontogenetically from infancy to a mature cohesive self. It is composed of two poles, which, like a double helix, remain in a tension state with one another throughout one's lifetime (Kohut, 1977, pp. 171–191). The poles are composed of experiences related

to the idealized parent imago and those of the grandiose self. These poles utilize and interact with a person's inborn gifts, talents, limitations, and deficits. The combination of all three components represents the enduring structures that, in part, define the content of the self. The other part of the self is composed of the totality of the subjective experiences: past, present, conscious, and unconscious.

Through the first pole of the self, that of the grandiose self, the child experiences a sense of pride by virtue of the parents' admiration, which the child experiences as being special. Eventually, these experiences are transformed into a sense of self-assurance, self-confidence, and positive self-esteem that the child carries into adulthood. This line of development leads to the laying down of a structure eventually to be identified as a set of ambitions that act as powerful motives for admiration and recognition. Along the second pole, that of the idealized parent imago, are those experiences a young child has of feeling protected by powerful parents who are endowed with magical capacities. The wish to partake of and to share in this sense of power leads the child to become attached to what the child perceives as its source. Those experiences are eventually internalized by the child and become the source of tension-regulating functions. As enduring functions, these structures lead to the capacity for self-discipline and self-idealization. They form the core of a set of ideals that the person will endeavor to reach.

As the infant develops and the sense of self matures, these two poles come to a nodal point in development around the ages of 3 and 4. At that time, the nuclear self is consolidated. This is the core of the self that is shaped by the infant's experiences. It manifests through the stable and consistent use by the child of the first-person pronoun "I" to refer to himself or herself. Kohut postulated that these two poles form a tension arc that, in conjunction with a person's innate talents and skills, permit the unfolding of the person's inner designs and the fulfillment of a life's purpose. Positive self-esteem reflects the harmonious tension between ambitions and ideals in the context of the uses of one's talents. The capacities for joy, pride, and enthusiasm reflect the cohesiveness, firmness, and harmony of the sense of self.

The self is susceptible to regression, disruptions, and temporary or permanent fragmentation under stress. The functional state of the structures of the self need not be constant as an indication of health. Rather, the stability and the tension gradient between the poles of the self are the indicators for health. When ambitions and ideals are realized, the resultant experience is joy and triumph. For the same reason, the failure to achieve these goals produces despair.

Optimal Frustration

Optimal frustration is essential to the transmuting internalization of selfobject functions. Kohut (1984, p. 70) postulates two major components to optimal frustration. The first presumes the presence of an empathic caregiver capable of monitoring the child's capacity to live up to the caregiver's expectations. This presumes a caregiver's readiness to perform the selfobject functions the child requires when the child urgently needs these functions and when the limits of the child's capacity to tolerate the frustration is reached. The second is conceived as one in which caregivers delay intervening to allow the child to experiment and to practice without interference. The use of optimal frustration also entails that the caregiver endure the pain of watching the seeming ineptitude of an unskilled novice at the task of life. The child engages in a process in which the pain of trial and error, of success or failure

becomes tolerable and need not be avoided at all costs. To delay is to endure, and to endure makes it possible for creativity and inventiveness to come forth. The child's assertiveness is challenged as he or she attempts to solve the problem under the benign oversight of the caregiver. If the caregiver cannot endure the child's playful attempts at mastery and cannot permit the creativity that comes from such play, the child's efforts are thwarted. On the other hand, if the playfulness is accompanied by unresponsiveness, the urgent need for the function becomes dominant, and the child faces the threat of fragmentation in the absence of the function.

Through optimal frustration, the child has an opportunity to exercise the functions he or she already possesses and is not co-opted into having others perform functions for him or her. The child is also challenged to perform functions that he or she did not possess, while not being set up to fail at an impossible task. While the child is challenged to meet the demands of the task, the child is assured that he or she will not fail.

Structure formation is the residual of the process of delay and tolerable frustration that accompanies the loss of selfobject functions and the reintegration that occurs following the breach in the relation and the reinstitution of selfobjects' functions. Experiences of disruption or fragmentation that are caused by intolerable frustration will interfere with, undermine, or at times actually break down structural organization. No structure can result from a self state in which an infant is so overwhelmed by external or internal stimuli as to feel intense discomfort or pain. Optimal frustration is, therefore, critical to the process of structuralization.

Aggression and Sexuality

For Kohut (1984, p. 24), healthy assertiveness is not the expression of an instinctual drive, but the manifestation of a sense of cohesion. It denotes the child's prospective outlook on what confronts him or her as a welcome anticipation of the challenges before him or her. An observer may characterize the child's enjoyment of novel experiences as satisfying aggressive or assertive efforts and they may appear to have a "driven" quality, but for the child they are the natural accompaniment of an evolving sense of himself or herself. Raw aggression or sexual expression represents "disintegration products" of a fragmenting self (Kohut, 1978/1990, p. 389). The loss of self-cohesion, at times, may be accompanied by either vengeful rage at the frustrating object or sexualized responses. Rage responses may occur because the frustration is intolerable. Rage will also be the child's response to the caregiver's failure to recognize that he or she was injured. The caregiver's nonresponsiveness is experienced as a negation of the child's very existence, a negation that may be experienced as annihilative in its impact. To not have an injury acknowledged is to be dehumanized. If the child's plea and cry for comfort and for healthy merger are left unanswered, despair ensues. On the other hand, the empathic responsiveness of the caregiver can lead to an attenuation of the injury and may initiate the healing process. Aggression can then manifest itself in the form of protest or in the diffuse expression of anger. Rage may have no ideational content in the form of a target toward whom it is directed. (See also Kohut, 1972/1978a, pp. 111–131, 1977.)

The aggressive and sexual drives, therefore, are constituents of the self. They are components present from birth that are not separately identifiable except at times when disruptions of the self bring on fragmentation. They then emerge as disintegration products rather than as healthy expressions of the self. A child's solitary masturbation is not the reflection of

a healthy activity that is phase-appropriate; rather, it is indicative of the experience of loneliness in the absence of the needed selfobject function (Kohut, 1984, pp. 157–158). Psychosexual development, therefore, is not characterized by phase-specific preoccupation with individual body parts that are reflective of growth. To the contrary, the child uses the body parts, of which he or she slowly becomes aware as sources of comfort when the caregivers are unavailable to provide the necessary selfobject functions.

Oedipal Phase

The oedipal phase may now be understood as the phase in which the child, having achieved a stable sense of continuity and cohesion, attempts to further integrate the differential selfobject functions provided by the caregivers. These include the regulatory functions connected with the internalizations of social norms and expectations, the development of healthy assertiveness, and the clarification of gender roles associated with sexual role functions. Thus, the dual selfobject experiences associated with this phase continue to be those of the grandiose self and of the idealized caregiver's imago, although enlarged and modified by the child's emerging maturational needs (Kohut, 1977, pp. 230–239).

Kohut believed the myth of Oedipus might very well have been appropriate to understand some of the phenomena that Freud observed in the Viennese society of his day. It remains an open question whether the child-rearing patterns and the family structure of those days played a central role in normal development and in the development of neurotic disturbances. What remains to be explained are the phenomena observed in children between the ages of 3 and 6.

According to Kohut, the oedipal phase is the descriptive term for a developmental period rather than an explanation for what is expected to occur during that period. The healthy thrust of the oedipal child's development is the coalescing within himself or herself of the set of feelings and experiences that lead to self-assurance, self-confidence, and feelings of strength derived from the support the child receives from caregivers. The combinations of feelings of having been chosen for a mission in life and having a set of guardian angels who are watchfully keeping an eye over him or her give assurance to the child of the ambience necessary to progress through this phase. The feelings of specialness may derive from the child's experience of being mother's favorite or father's special child. The feelings of protective watchfulness may also come from either caregiver. The roles each caregiver plays are not necessarily linked to the selfobject functions. The child enters this phase with a heightened sense of grandiosity, feeling stimulated to greater exhibitionistic feats.

For the boy, exhibitionism may assume a "phallic" quality, not so much because he is endowed with a penis, but because as a boy, he has experienced a subtle responsiveness and approval to the expression of aggression, intrusiveness, and assertiveness. The caregivers may have joyfully resonated with the child's courageous forays into the world and may even have subtly suggested that there are worlds to be conquered and worlds from which he is excluded. The experience of exclusion from the caregiver's intimate closeness may stir the child's curiosity and perhaps abet his wish to enter into that world. His unmodified grandiosity may have led him to experience the exclusion as an injury to his feeling significant. He may respond with rage at the injury and regressively seek to merge once more with either caregiver as a way of healing the wound. This by-play, while appearing to have a configuration similar to that of a young Oedipus, is perhaps no more than the expression of a child's offended grandiosity. The child at some point may sexualize the

injury or the deficit that results from the unempathic responses given by the caregivers. However, this sexualization represents the child's attempt at healing the injury and at avoiding the fragmenting effect that it may have had. It does not represent the expression of the normal sexual drive that Freud thought it did.

While for the boy the issue is the intensification of his grandiosity, for the girl the grandiosity and wish for mirroring find a similar content but somewhat different expression; here the issues revolve around the qualities that the social context defines as feminine. That she might seek admiration from her father is socially determined; hence, the specialness of the little girl for the father is bound up with the selfobject function of total admiration, acceptance, and loving enjoyment of the little child. Here, too, the child may experience the mother's interference in this joyous union as an injury that also may lead the child to regress or to fragment. The motive behind the behavior, however, is not the drive that seeks expression, but the child's injury at not having an empathic response.

For the girl, the caregiver's omnipotence is experienced as a benign environment in which she can thrive. The magical qualities associated with fathers who disappear in the mornings to go to work and reemerge in the evenings are heightened by the exclusiveness of the joyous closeness that their reunion brings. A mother who wants to share in the husband's return may interfere with the child's wish to prolong this intimacy and to continue to benefit from it. If the girl is rebuffed and experiences the mother's intrusion as injurious to her, the untoward effects of the injury may result in a regressive merger with mother or in rage at her. Here again, the rage is not necessarily the expression of envy of mother and rivalry for her position and for what she possesses; rather, it is the rage of a wounded child whose caregiver was insufficiently responsive to her needs.

During this phase, for both the boy and the girl, sexual and aggressive issues do not come to the forefront until an imbalance occurs between the child and the caregiver. If children's vulnerabilities are touched, their sense of self is injured, and themes of sexualization and aggression emerge, representing the disintegration products of the self rather than its cohesive expression. The reasons for this disintegration may be not only the injuries suffered at the hands of the caregiver, but at times the overstimulating effect that an interaction with the caregiver may have had.

For the child, therefore, the issue is not the sexual possession of the mother or father, but the establishment or reestablishment of the lost merger with the caregiver. Competitiveness, rivalry, and the wish to excel are attributes of a child's wish to be exclusively the center of the caregivers' admiration. These are not the expressions of some innate aggression or hostility, but will become transformed into the healthy assertiveness of a self-confident growing child.

In different areas, both boys and girls are exposed to the increasing demands for socialization that caregivers make of them as they mature. The caregivers hand out prohibitions and approbations rather freely; the child is expected to conform to the social injunctions that are embodied in them. A moral code is transmitted to the child, less by precept and more by example. The child's self and the caregivers are united in their agreement of what constitutes right and wrong. Certain consequences follow from certain actions. This becomes understandable to the child, who now cognitively begins to move to a developmental phase in which causal relationships can be made around specific experiences. Internalization of these standards and rules of conduct comes about through the progressive de-idealization of the caregiver and the internalization of the regulatory function embodied in the

relationship. The functions become depersonalized from the caregiver's figure itself and are slowly integrated into the self of the child.

The injunctions and prohibitions constitute what may now be called the superego of the child. Superego is redefined as that component of the child's sense of self that embodies the prohibitions and the approbations formerly located within the caregiver but now smoothly internalized and constituting part of what becomes a code of conduct. Superego, therefore, is not a separate structure within the self but a component of the self, a component that embodies the self-critical and self-approving functions. What was the ego-ideal and was associated by Freud with the transformation of primitive grandiosity and sense of omnipotence is now attributable to the transformations related to the idealized parent imago. The result of the oedipal phase is that the child transmutingly internalizes further selfobject functions, specifically those associated with the transformation of grandiosity and those connected with the transformations of the idealization of caregivers. Through this process children acquire a value system to which they adhere with little protest. The internalized code represents the capacity for self-regulation, which is enacted through behaviors that are indicative of conformity to that code of conduct. Furthermore, the consolidation of gender differentiation occurs with the increased reality perception by the child of the demands and expectations that society comes to have.

Latency

From the perspective of self psychology, the oedipal period extends to approximately 8 years old. The shift in the development of the child's sense of self occurs more as a result of the growing capacity to comprehend the world around him or her and of the beginning attempts to correct the self-centered perceptions of experience. The attenuation of the feelings of grandiosity results in part from the child's perception of his or her peers as others who may have an equal claim for the attention of significant adults (Kohut, 1971, pp. 43–44).

Through the utilization of their potential and its expression in purposeful goal-directed activity, latency-age children experience a further consolidation of the cohesive self. Physical, social, and psychological manifestations of this growth are seen in each child's effort at mastering his or her environment. The caregivers' selfobject functions become a background for the child's creative development. The freedom to stretch himself or herself into new and unexplored areas is now available. The silence with which the child accepts the caregivers' limits and expectations reflects the smooth merger with those functions and the continuing exploration of his or her own capacities.

The capacity for self-regulation is perhaps most clearly exemplified in the latency-age child's acceptance of rules and regulations in the playing of games. However, the remnants of grandiosity are not totally eradicated. They may manifest in the form of competitiveness with adults and peers. Competitiveness in the latency-age child is perhaps better understood as the wish to ward off the blows to his or her grandiosity. In this respect one might best think of the child not so much as bent on winning but rather on not losing. To lose to another person is equivalent to being deflated and to experiencing a sense of worthlessness. Children may then redouble their efforts to win because of the threat that losing represents to them. Therefore, when a child is capable of accepting defeat, by being "a good sport" and not being "a sore loser," by not feeling personally injured, and not reacting with rage or feeling that the rules of fair play have been violated, these expressions may be considered

indications of the stability of the cohesive self and of the transformation of the grandiosity into the more modulated self-assurance that society expects (see Freedman, 1996).

Adolescence

The sense of self-cohesion that is relatively stable during latency may be temporarily disrupted by the upheavals brought on by puberty. Adolescents arrive at this phase with specific developmental needs for particular responses from their caregivers. The nature of the selfobject functions required at this stage is different from those of prior phases. The caregivers, who are the vehicles through whom these selfobject functions are performed, are required to play a different role from that played in former phases. Their ability to be responsive to the adolescent's needs is determined not only by the relationship that they have had to their child prior to that phase but also by the issues that are activated within them by the adolescent. The issues of their own adolescence may become entwined with their responses to the adolescent (Palombo, 1988, 1990).

Adolescents may bring with them unresolved issues or selfobject deficits from prior developmental phases; these serve to render more complex the task of the traversal of this phase. These deficits, or the regressions to prior modes of functioning, do not constitute the essence of the phase-appropriate struggle. Rather, a modification of the caregivers' responses in providing selfobject functions is central to the negotiation of this phase.

There is also no single path through which all adolescents must travel; that is, there is no model adolescent phase for all adolescents. Rather, different adolescents address issues differently and resolve them in accordance with their endowments and the availability of selfobjects to complement them or to compensate for possible deficits. There is no set script, narrative, or myth that guides the adolescent developmental process. Each adolescent must construct a narrative out of past and present experiences.

It is important to note that a phase-appropriate loosening of the sense of cohesion may result in experiences of temporary fragmentation. These adolescent processes may lead to a diffuseness in the cohesiveness of the self that challenges the adolescent's level of integration to reach a sense of equilibrium. The restoration of a balance would represent the reassessment of the meanings of prior experiences and their integration into a new set of meanings. The capacity for formal operational thought may facilitate the process. Thus, while temporary regressions to prior modes of behaving and relating may become manifest, these are in sharp contrast to the highly mature symbolic forms of thinking that may also be present.

From adolescents' perspective, the caregivers can no longer perform the selfobject functions that were once associated with them. Thoughts and reminders of their recent helplessness and childhood offend their grandiosity. They turn to a peer group for the performance of those functions and for the gratification of their exhibitionistic needs. Adolescents attempt to recapture center stage, making the broader world of the community their stage through athletic activities, academic achievement, or by challenging feats and dangerous actions. They thus leave behind the narrow world of their household. Realistic achievement enhances their self-confidence and provides an impetus for further feats of greatness. Here the reward is assessed by adolescents for what it is. It can be measured against what was formerly thought to be the biased opinions of their caregivers. To be reaffirmed is to accept the challenge. Success and recognition of one's success must come

not from the caregivers but from those who are now deemed truly capable of making an objective judgment.

It is difficult to overstate the extent to which adolescents' reassessment of their caregivers is due to their creative cognitive capacities and the broadened perspective this brings with it. As providers of selfobject functions, adolescents perceived the caregivers through the veil of their own needs; this perspective was once clouded by the narrowness of their cognitive capacities. Now the disparity between this perception of them and what they long for from caregivers jars them into reassessing their relationship to their caregivers. The massive de-idealization of the caregivers may have disastrous results for the adolescent. A less dramatic de-idealization may lay the groundwork for the internalization and consolidation of the functions they provided. Those functions may be found in others. Adolescents lodge their admiration in others, or may place their faith in value systems that seem totally opposed to the caregivers' values. The adolescent seems to wish to injure the caregivers and, by consciously rebelling against them, to avenge himself or herself on them. This may be the case because the injury to the adolescent of a traumatic de-idealization leads to such rage that only such vengeance wreaked upon the caregivers brings satisfaction. On the other hand, in their hostile rebelliousness against the caregivers, adolescents may be attempting to force caregivers to provide those selfobject functions that they were unable to provide for themselves and of which they now feel deficient (see Goldman & Gelso, 1997).

It would be incorrect to think that adolescents mourn their detachment from caregivers. If an adolescent can smoothly internalize the selfobject functions, he or she may walk away from the caregivers feeling a sense of wholesome independence or comfortable dependence on them, manifesting no sign of mourning. On the other hand, if the selfobject functions are not internalized, then one might indeed see the adolescent's depressiveness, moodiness, and mournfulness as indicative of the difficulties dealing with the longing to separate. These states are the manifestation of the emptiness that the adolescent feels and the painful experience of the absence of the functions, functions that were not internalized, which he or she now sorely needs.

Adolescence, then, is not a recapitulation of prior phases. It is a new phase in its own right in which further transformations of selfobject functions occur and become consolidated into a more cohesive sense of self. For the healthy adolescent the grandiosity takes the form of an ambition to achieve, feelings of self-confidence, of self-assurance accompanying this ambition, and the beginning exploration of life goals. The caregivers' values are reassessed and revised. The reinternalization of those values makes adolescents truly feel that the values are their own, that those values are there to please them rather than to please caregivers. Ideals may begin to take shape as they explore the direction that their life is to take, and with the simultaneous assessment of their capacities, a career goal may finally seem to loom on the horizon as a desirable goal to achieve.

During late adolescence, clinical observation reveals a number of shifts in the adolescent's sense of self. The painful self-consciousness that was previously noticeable begins to dissipate. The egocentrism and sense of uniqueness give way to more empathic attitudes toward others. Self-regulation becomes possible and is less dependent on others for reinforcement. Affect states are less labile, mood swings decrease, and a greater modulation of these states is evident. Greater self-confidence and self-assurance are manifested. The capacity to be assertive without having to be hostile is also observable. Regressions are less frequent and less severe when they do occur. There is less need to experiment with

fringe activities, such as substance abuse or delinquency, because of peer pressures. Fantasy appears more in the service of creativity or for trial action than for defensive purposes.

A number of factors appear to contribute to the processes underlying these changes. First, the past is reassessed through present experiences. In some measure, past events are reinterpreted and reintegrated with a different set of meanings than previously existed. As a result, the adolescent views his or her childhood in a different light and, depending on his or her introspective capacities, that places a distance between those events and the present, resulting in a new perspective. Second, the increased capacity for selfobject experiences at a symbolic rather than a concrete level leads to a shift in the meanings that others have, or have had, for the adolescent. The adolescent begins to look beyond the narrow circle of family and peers for selfobject experiences. While seeking avenues for self-actualization, the adolescent searches for values and ideals that are consonant with the rest of his or her experiences.

Third, the integration of gender role and sexuality into the rest of self-experience acquires an urgency that was not present before. The meanings of gender and of sexual expression or its inhibition become a focal preoccupation. Fourth, the advent of formal operational thought at the onset of adolescence plays an important role in the transformation in the adolescent's experience.

Because of these processes, a unification and consolidation in the sense of cohesion emerges that represents a different configuration of the self than previously existed. This new configuration may be described as the consolidation of the *nuclear self* (Kohut, 1971, p. 43, 1972/1978b; Palombo, 1990). The adolescent is then able to select an avenue through which to express values previously acquired, as well as ambitions and ideals. The adolescent's inner resources may be mobilized to move in the direction of the attainment of a life goal (Kohut, 1978). It is at this point that it may make sense to speak of an inner program that the person is propelled to actualize. Although this process may be thought to be akin to Erikson's (1959) notion of the consolidation of identity, it is different because of the perspective from which adolescent processes are being viewed. The nuclear self is not only formed in response to the need for adaptation; in part, it occurs irrespective of the adaptive consequences of the adolescent's behavior. Thus, the "unrealistic" aspirations of some youths, which to some adults appear foolish and impractical, represent the perennial generational struggles. These result from the tension between the older generation's exhortations to adolescents to adapt and the adolescents' rebelliousness. Adolescents may insist on the modification of reality to suit their internal needs—needs that are embodied within the nuclear self.

The consolidation of a nuclear self does not foreclose the possibility of continual growth in the course of the life cycle. Neither does it guarantee that destabilizations will not occur. The achievement of the consolidation of the nuclear self may also be culture-bound. In cultures in which the opportunities for the exercise of formal operational thought are neither valued nor made possible, a nuclear self may still evolve, although the timing of its emergence and the form it takes may be quite different from that of middle-class Western culture.

Entry into Adulthood

As the late adolescent enters into adulthood, that phase begins to represent the attainment of functioning as an independent center of initiative (Kohut, 1977, p. 94). It is the phase

in which a consonance between ambitions, ideals, and native endowments form a coherent whole. The tension arc between life goals, innate capacities, and the motivation to strive toward those goals is in sufficient balance to provide a sense of well-being and a secure sense of positive self-feelings. The hallmark of maturity is the positive self-esteem individuals expect to feel because they are secure in the knowledge of who they are, what they want from life, and what they feel capable achieving.

Such maturity does not use as its exclusive criterion for health either adaptation or adjustment to the environment. Adaptation represents the biological counterpart of attempts at survival, yet there are higher values in this hierarchy than survival. These are the values derived from ideals whose worth is deemed higher than life itself. In a sense we speak here of going "beyond adaptation," beyond the short-term or long-term perpetuation of existence, to the perpetuation of those values that transcend life itself and without which human existence has little meaning. The meaning that life has determines the person's sense of well-being, the connectedness with one's heritage and history, and the continuity with subsequent generations may matter more than life itself (Kohut, 1966/1978c).

Yet, life without selfobjects to provide the ongoing supports that are so necessary for any existence is meaningless. The quality of selfobject relation shifts in maturity, although their necessity is unquestioned. The reliance on others' selfobject functions runs like a thread throughout existence, and it cannot be negated. The sustaining effects of religion or an ideology as a source of comfort in a lonely existence represent the higher form of selfobject functions that are used. Relationships with spouses provide sources of admiration or strength and are further examples of such functions. Children may themselves become partial selfobjects representing the hope bequeathed to the world of some aspect of one's self that is valued and idealized and is internalized by the child.

The fulfillment of a life purpose is an integral part of the achievement of a sense of cohesion. Joy, pride, and enthusiasm for a purpose accompany such a happy outcome. When these are not present, disappointment and despair may overtake the person, a depressive anxiety may set in that denotes tragedy in that person's life. Tragic Man, as Kohut calls the unfulfilled life, is the life of a person for whom the tensions between ambitions and ideals cannot be reconciled, where disappointment in oneself overtakes one, leading to a sense of futility and meaninglessness. This results in self-contempt.

For those who can maintain a sense of self-cohesion and a consolidation of their nuclear sense of self, the avenues are open for the appreciation of humor, for the possibility of creativity, for the expression of wisdom, and for the capacity for empathy for others. For them also is the gift of the capacity to confront death with a degree of acceptance of its inevitability, unembittered by the thought that life did not give them what they sought from it.

We are led to the following definition of mental health and of normality: Mental health is the achievement of self-esteem that comes from a stable balance between one's goals and ambitions and that permits the actualization of one's potential, one's skills, and one's talents (Kohut, 1977, p. 284; see also Kohut, 1984, p. 7). The balanced tension between ideals and ambitions leads to feelings of joy, enthusiasm, and pride, whereas an imbalance between these leads to the symptoms characteristic of many of the disturbances of the self. In the course of maintaining this balance, a person may relate to others as selfobjects or as love objects. Health is equivalent to a sustained sense of self-cohesion that reflects the person's sense of well-being.

DISORDERS OF THE SELF

Kohut's emphasis on the significance of self deficits opened a different path to thinking about psychopathology. He felt that psychopathology is the result of empathy failures that led to deficits, distortions, or weaknesses in the sense of self (Kohut, 1984, p. 53). In disorders of the self, the self is fragmented, disharmonious, depleted, devitalized, or enfeebled (p. 60). Single traumatic events rarely play such a decisive role in pathology or produce the types of deficits encountered in narcissistic personality disturbances. It is instead the chronic multiple failures of the caregivers that lead to such deficits, a concept closer to Khan's (1963) concept of cumulative trauma. In addition, Kohut (1971, p. 79) maintained that it was less what the parents *did* than who they were—their personalities—that led to empathic failures, and hence to deficits in the child's sense of self. This "parent blaming" stance, which appears in many of Kohut's writings, requires discussion. In many case examples Kohut appears to be saying that the patient's parents *actually* failed to be empathic and consequently were responsible for the resulting deficits in the patient. However, in a footnote in *The Analysis of the Self* (Kohut, 1971, p. 42), he disavowed that he is speaking of the actual parents and insisted that he was referring to the manner in which the patient experienced the parents. The latter is obviously the more consistent position and the one I assume to be the case.

Self Deficits

In his formulations, Kohut felt the type of psychopathology he had focused on, which others conceptualize as pre-oedipal deficits, simply describe the state of the self in which the person experiences the absence of an important psychic function. A deficit, then, represents a developmental failure. It is not conceived as the *presence* of a flawed structure, but denotes the *absence of structure*. The absence of structure is evidenced in a variety of ways. It often appears as anxiety associated with the inability to sustain a level of cohesiveness, or as the desire, yearning, or longing for experiences associated with the missing selfobject functions. The truncation of those experiences during childhood leads to the experience of incompleteness. A deficit represents a state of affairs in which the child does not feel satiated by a particular set of satisfying experiences. The repeated frustrations associated with an expectation of their fulfillment followed by the disappointment of that expectation leads to a developmental failure. From then on situations evoking the expectation of satisfaction lead to the concomitant expectation of disappointment. The hope of satisfaction often continues to be present, while the fear of disillusionment is not easily dissipated. That dynamic remains active and provides motives for actions in most interactions with others, conduct that is characterized as symptomatic.

This concept of psychopathology excludes the possibility of the development of *pathological structures* in the sense of "persecutory objects" that object relations theorists suggest. An organism may either grow or fail to grow; it does not acquire evil or destructive structure. Kohut ruled out the possibility of the development of "bad objects" or of "introjects" as "persecutory objects." The assumption made by some object relations theorists that unpleasurable experiences with caregivers coalesce and lead to the formation of the representation of a "bad mother" is simply foreign to Kohut. This is not to say that deficits when combined with later defensive operations cannot lead to distortions in the self. However, this is different from postulating the possibility of the acquisition of structures that are pathological. It

is the absence of structure that leads to symptom formation. This position does not negate the possibility of defensive or compensatory structures that cover over deficits in the sense of self (Kohut, 1977, p. 3).

The concept of deficit is clearly associated with experiences of failures in empathy, which may occur even with caregivers who made every effort to be empathic with their child's needs. For example, a caregiver may find it difficult to modulate a child's excitement that is generated by an Attention Deficit Disorder. The child may continue to crave excitement in spite of caregivers' best efforts. Because excitement often feeds on itself, the child will have greater difficulty maintaining self-cohesion, and may soon fragment. The parent's inability to provide the selfobject function of modulation and containment is experienced by the child as a failure to provide caring and attuned responses.

Anxiety and Fragmentation

The concept of anxiety was central to Freud's theory of symptom formation as it resulted from the guilt a person felt for unacceptable oedipal wishes. For Kohut, on the other hand, shame was more central to the identification of narcissistic imbalances. In both cases, both shame and anxiety are seen as markers through which the presence of disturbances in the integration of experiences may be identified. As indicators of "psychic pain," these states would not delineate whether the person is responding to events that are external or internal to him or her. They may merely parallel physical pain as an indicator of a threat to one's integrity.

At times, Kohut used the concept of anxiety to mean the same things that Freud meant when he referred to the earliest forms of anxiety: the fear of annihilation or the fear of disintegration. Kohut (1979/1991, pp. 457–460) also uses the term "fragmentation" to refer to the end product of experiences that result from overwhelming anxiety. In Kohut and Wolf (1978, p. 414), we find the following statement: "The adult self may exist in states of varying degrees of coherence, from cohesion to fragmentation; in states of varying degrees of vitality, from vigor to enfeeblement; in states of varying degrees of functional harmony, from order to chaos." In *The Restoration of the Self,* Kohut (1977, p. 102) made a distinction between two classes of anxieties: (1) those that comprise "anxieties experienced by a person whose self is more or less cohesive" and (2) those that comprise "anxieties experienced by a person who is becoming aware that his self is beginning to disintegrate."

Kohut speaks of *primary anxiety* as disintegrative anxiety that results not from the fear of physical extinction, but from the loss of humanness. It is equivalent to psychological death. Primary anxiety threatens the self, which experiences it as the fear of the loss of the selfobject functions. The result of such a loss could range from a momentary reversible loss of cohesion, to feelings of inner disorganization and a loss of the sense of continuity in time and space, or to the experience of disintegration that may or may not be reversible. The experience of the loss of cohesion in a precariously established self would be experienced as *disintegration anxiety* (Kohut, 1984, p. 16).

> Disintegration anxiety is a broad term which refers to all the anxieties experienced by a precariously established self in anticipation of the further deterioration of its condition. Thus, the term refers not only to the fear of fragmentation of the self; it also encompasses the fear of impending loss of vitality and fear of psychological depletion. (Tolpin & Kohut, 1980, p. 436)

Secondary anxiety arises when the fragmented oedipal self, characterized by sexual and destructive fantasies and impulses, takes over. Fragmentation is the tension state within the self that is of such traumatic proportions that it is produced by overwhelming anxiety, loss of functions, or regression to archaic modes of functioning. Fragmentation is the last step in a series of experiences of anxiety that begins with feelings of embarrassment, then shame, humiliation, depletion, and enfeeblement, and ends in disintegration anxiety.

Defenses against Anxiety

His experience with narcissistic personality disorders led Kohut to find the defense of disavowal to be ubiquitous with these patients. In these patients the fantasies, which approached convictions of grandiose omnipotent capacities, are the hallmark of their pathology.

In time, Kohut (1984, p. 115) came to the following position:

> Defense motivation in analysis will be understood in terms of activities undertaken in the service of psychological survival, that is as the patient attempts to save at least that sector of his nuclear self, however small and precariously established it may be, that he has been able to construct and maintain despite serious insufficiencies in the development-enhancing matrix of the selfobjects of childhood.

The spatial designation of the vertical and horizontal splits is the result of the heuristic use of diagrams beginning with Freud. Freud's diagram divides the ego from the id by a *horizontal line* (see Kohut & Seitz, 1963/1978, p. 350). That line demarcates the repression barrier. In all references made by Kohut to the horizontal split, the allusion is to the repression barrier. He wanted, however, to distinguish between this defense and the other significant defense commonly used by narcissistic personality disorders, *disavowal,* which Kohut referred to as the vertical split in the self. Because disavowal is characterized by (a) a conscious awareness of what is disavowed and (b) a simultaneous disregard for the reality of what is disavowed, some means for the pictorial description of this mechanism was needed. Kohut was aware, of course, that Freud (1927/1961) had initially discussed this defense as a split within the ego—he called it a "rend within the ego"—in which part of the ego did not seem to know what the other part clearly knew. The term "vertical split" seemed to satisfy Kohut's (1971) requirements.

Disavowal, then, is the primary defense against the acceptance of reality by narcissistic personality disorders. It serves the purpose of safeguarding the patients' archaic narcissistic investments. The concept of defense, in this context, is indicative of an avoidance of the pain associated with confronting an unacceptable reality, not an avoidance of the libidinal or aggressive drive derivative. The reality is that patients' archaic grandiosity or idealizations do not conform to the state of affairs, as they wish them to be; they serve to avoid an injury to the vulnerable self.

Two different mechanisms operate in narcissistic disturbances. First is the area of repression that includes all the feelings related to the unsatisfied selfobject functions. The patient represses the unfulfilled selfobject longings that were necessary to feel complete and cohesive. These repressed feelings lead the person to seek continually selfobjects who might be available to fulfill such potential functions in order to restore a sense of completeness and cohesion. It is these feelings that become activated in the transferences and form the nucleus of the treatment process. There is often little awareness within the person of

these feelings. These defenses may constitute resistances to the process of treatment. The second area, that of disavowal, is quite different. Its peculiar characteristic is that it allows a person to feel low self-regard, depreciated, unsuccessful, or grandiose and omnipotent, in spite of all realistic evidence to the contrary. The contents of this area may be distinguished from archaic expressions of the narcissistic configurations and the various symptoms that emerge because of the deficit. The connection between these feelings and the repressed are seldom seen. This area does not lend itself to interpretation; its eventual integration into the self comes as a result of the work done in the area of repression.

Anxiety is created either by the loss of selfobject functions, by the perception of a sense of inadequacy, by effective overstimulation or understimulation, or by any threat to the stability of the sense of self. Defenses thus are triggered by some perceived or imagined danger to the self. These serve the function of maintaining or restoring the sense of cohesion. In this sense, they are self-righting efforts that are only partially successful since they do not require the deficits and do not enhance the person's growth potential.

The types and contents of symptoms that result from defenses cannot be catalogued since they are as varied and as unique as are people. When such defenses take on a pattern of repetitive modes of responding, they give rise to personality problems such as the mirror-hungry personality, the ideal-hungry personality, the alter-ego personality, the merger-hungry personality, and the contact-shunning personality (Kohut & Wolf, 1978). These personality types are recognizable for the particular use they make of defensive styles that hark back to their psychopathology. Defenses and defensive styles cannot be simply correlated with the type of deficit from which a patient suffers or the level of fixation or regression to which a patient has backtracked, or to the kind of compensations a patient uses. The dynamics can be determined only in the context of their reactivation in the transference.

Defenses may therefore be defined as those mechanisms used by the self for the purpose of survival, which help avoid the confrontation with intense psychic pain. They are related to the intensity of affect states and to the maintenance of cohesion. Repression is the failure to integrate the affect into the experience; disavowal is the failure to integrate the reality of the event into the affect.

Symptom Formation

Symptoms represent attempts by a vulnerable self to restore a sense of integration and cohesion. They emerge whenever anxiety around self-deficits is experienced or when fragmentation is about to occur. Thus, they represent either fixations at or regressions to earlier developmental levels, or they are indicative of severe disruptions in the sense of self.

> Apart from fragmentation, there are various regressions of the self in its [true natured] constituents. (The Grandiose Self in the Idealized Parent Imago) The more archaic yet still cohesive forms; and there is, above all, a simple enfeeblement of the still coherent self in the form of a drop in self esteem (experienced as empty depression). (Kohut, 1974/1978g, pp. 737–738)

From an empathic perspective, symptoms are unsuccessful attempts at defending against intolerable anxiety. The patient experiences such intense psychic pain that the only means that provide relief are those of turning to fantasies, or activities that serve as distractions.

These distractions are successful only for the moment; they soon fail and the anxiety returns. A relentless pursuit of strategies to fend off the torment of the psychic pain then is undertaken, but the distracting activities are the only means for survival.

At times defenses may cover over the fragmenting self and its deficits. The symptoms may not be as obvious as when fragmentation occurs, at which time a variety of self-disturbances may manifest. These include rage reactions or sexualization of relationships, hypochondriacal preoccupations, substance abuse and/or addictions, disorganized appearances, and other self-destructive behaviors.

Compensatory Structures

Kohut (1977, pp. 3–4) proposed the concept of compensatory structures to explain the dynamic that makes it possible for a person to make up for a deficit in one pole of the self by greater reliance on the functions the other pole provides. Thus, if one parent is unavailable to the developing child, the child may turn to the other parent to make up for deficits. The second parent would then become a source of selfobject functions and could be sufficiently self-enhancing to permit the child a reasonable degree of inner balance. The functional reliability of this structure is dependent, however, on the stability of the ties to the selfobject. Thus, if that parent also were to be susceptible to vulnerabilities, the internalizations of those functions would themselves be subject to de-stabilization. It is also possible that special endowments and skills could play a part in the development of those structures, if they happen to occur in the area that may strengthen the tie to the nurturing selfobject. However, even such endowments, without the selfobject functions' requisite for the sense of self to achieve balance, would not be effective. Compensatory structures, therefore, are those enduring functions of the self that are internalized to make up for prior failures in the internalization of selfobject functions that should have accrued to the self in the course of the developmental process.

RELEVANCE TO SOCIAL WORK

Many clinical social workers embraced self psychology from the time of its earliest formulations. Elson's (1986) book summarizing Kohut's work was highly influential in facilitating the integration of his concepts into social workers' clinical practice. The concepts of empathy, self-esteem, selfobject, and fragmentation found ready homes in the day-to-day work in which clinical social workers engaged. In what follows, I summarize some of self psychology's contributions to the diagnostic and treatment processes that have been incorporated into the practice of some clinical social workers (Bellow, 1986; Brandell, Kaufman, & VandeBunte, 1988; Eisenhuth, 1981; C. Goldberg, 1993; Palombo, 1976, 1982, 1985a, 1985b, 1985c, 1987a, 1987b, 1987c).

Diagnostic Considerations

For Kohut, as for most psychodynamic clinicians, the diagnostic process with patients was an ongoing one. The vicarious introspection of the patient's experience gave therapists a picture of the patient's internal states. Three sets of factors converge in making a diagnostic

assessment: (1) empathy as a tool for observation and data collection, (2) the transference-countertransference configuration, and (3) the inferences made from the data that are eventually condensed into a specific dynamic formulation.

As we have seen in the discussion on empathy, the therapist's limitations of experience, the capacity to be introspective, and the ability to be effectively in touch with his or her countertransference all play a part in the assessment of the patient's pathology. From the patients' side, their responses are influenced by their experiences of the interaction with the therapist. The creation of an empathic environment by the therapist has a nonspecific, benign, cohesion-producing effect on the patient. The patient may experience the absence of such an environment, that is, the therapist's distance, neutrality, or absence of involvement, as alienating and anxiety producing, an anxiety that, at times, may have a disintegrative impact on the patient.

The second set of factors is the subtle transference-countertransference interplay that colors the nature of the relationship. The diagnostic dilemma is as follows: If the therapist responds with neutrality, seeming to be distant, then patients will experience their therapist as uninvolved and uncaring. They will look more disorganized and less cohesive than they actually are in their day-to-day functioning. On the other hand, the empathic atmosphere engendered by a therapist may lead patients to look much healthier than in their day-to-day functioning. The therapist's diagnostic acumen is challenged by these responses. Therapeutic judgment must be tempered by what the therapist knows to be occurring in the clinical setting.

The third set of factors revolves around the inferences made to arrive at a formulation. It is not always possible for diagnosticians to separate completely the inferential process from the data collection process. The clinical environment is above all a human environment in which two people interact; it is not an antiseptic laboratory in which pure data are collected. However, this is not a limitation to the process; it constitutes its strength because the therapist's capacity to be naturally responsive to the patient creates an atmosphere of concern and safety that is a precondition for the patient to be capable of articulating his or her needs.

Ultimately, whether a patient is in need of treatment is determined by the diagnosis. The patient's subjective feelings of discomfort and the degree to which his or her functioning is affected will in part determine the recommendation. While the diagnosis generally determines the type of treatment instituted, at least initially, all good treatment emerges out of the therapeutic context itself; it is not dictated by the therapist's preconceptions.

Some comments regarding treatment recommendations based on a diagnosis are now in order. From a structural perspective, the first question is whether the patient has a chronically fragmented self or whether his or her sense of self is fundamentally cohesive. The former condition would imply psychosis, a borderline disorder, or a severe personality disorder. Genetic dynamic considerations will be secondary for the diagnostician in such cases, since the patient's history may not be helpful in obtaining an accurate assessment of what occurred. For such patients, Kohut (1971, pp. 1–34) felt that analysis is contraindicated; a supportive approach would be preferable.

If a patient does not have a chronically fragmented or fragmenting self, then the question revolves around the nature of the patient's primary selfobject deficit(s). While it is possible initially to see only the vague outlines of those deficits within the transference, the clues will surely be there. At times, some patients' resistances and defenses may mask the selfobject

transferences. Taking a history may help clarify these matters. However, such histories are constructions of the patient's past, and though they may be rich in content, they may be thin in substance. Letting the patient talk about himself or herself while focusing on the countertransference is a more productive approach. The dynamics of the interaction will constitute the important data, and the final genetic formulations will have to wait for another day. Kohut considered these patients to be good candidates for psychoanalysis. Clinical social workers have tended not to make such a sharp differentiation between patients who are analyzable and those who are not. They generally recommend treatment for both types of patients and determine which approach to take based on the patient's responses and the unfolding process.

Clinical Issues: Treatment

Treatment is conceptualized as directed to one of several goals: (a) to help the patient recover from a fragmenting experience (A. Goldberg, 1973); (b) to help the patient achieve a higher level of structuralization, either through the internalization of structures or the development of a compensatory structure in place of the absent one; or (3) to help the patient achieve a level of coherence, continuity, and cohesion not previously attained (A. Goldberg, 1978).

The capacity to attain any of these goals is, of course, contingent on the type of pathology and the patient's level of development and capacity to change. In self psychology, in cases where support is indicated, an amelioration of the patient's condition can occur by *providing the missing selfobject functions*. In analyzable cases, the curative factor is found through the process of *understanding and interpretation*, without providing the missing selfobject function. In the latter cases, the goal is the achievement of coherence, continuity, and cohesion through the transmuting internalization of the missing selfobject. A higher level of integration and functioning is reached when the deficit is corrected or adequately compensated. The latter may be attained through analysis or intensive psychotherapy. It is a given that the goal is not the achievement of autonomy and independence, as we are all interdependent on one another and can never survive without some selfobject functions that others provide.

Reconstructions in self psychology occur when patients find meaning and continuity in their histories. While the psychic reality of the patient is as important as the actuality of what occurred in childhood, the emphasis on the search for genetic factors is less on the recovery of traumatic events in the patient's past than on the patient's experience of these events and their meaning. The goal of the therapeutic process is to fit together the patient's recollections into a coherent whole, which leads to a greater sense of cohesiveness. Having made sense of the inner turmoil, the patient finds it has subsided, and a sense of inner peace is achieved.

Patients' excursions into themselves are not like the archaeological digs that Freud discussed, in which the therapist attempts to dig up the past to recover the truth or to discover what really occurred. Such efforts only lead to the recovery of remnants of the self. Instead, the task is like that of a historian seeking a plausible explanation for a historical event or like the writing of a memoir. The autobiographical aspects are recognized as a partial and subjective view of what occurred; no claim need be made of seeing the whole

or of arriving at an objective account of the events. The establishment of the sense of continuity with one's past leads to the establishment of a linkage with one's heritage. Cohesion produced by this sense of continuity leads to a consonance of ambitions and ideals in the context of one's capacities. The sense of fulfillment of one's self and one's life goals is the therapeutic culmination of the intervention. These explorations occur in the context of a transference during which the reliving of those experiences and their associated affects takes place. This reliving is accompanied by a new set of experiences during which the longings for the missing function are felt to be acknowledged and understood. The reawakening of those longings leads to a transference expectation that the therapist will in fact satisfy them. However, in most cases, the empathic recognition of the need for the function is sufficient for patients to transmutingly internalize what they had missed during their growing years. This does not mean that what occurred historically is not significant, as some would maintain. On the contrary, what in fact occurred does very much matter. The process of reconstructions is analogous to a jury weighing the evidence presented to it and deliberating about the coherence of the narrative the patient presents. Ultimately, a judgment is made as to what makes the most sense given the history the patient presents and the understanding the therapist provides and considers to be consistent with the body of knowledge he or she brings to the process.

The following case is an example.

Case Example

Jonathan was 16 years old when he came to treatment because of a serious problem with drug dependence. He was a very bright young man, the son of highly successful professional parents. Until about 2 years prior to his entry into treatment, he had made a reasonably good adjustment. He then became involved with marijuana, then with LSD, and then with speed, ending up with a relatively indiscriminate use of whatever substance was available. He searched for the elusive experience that would give him the specific euphoric high he valued. Music was a large part of that experience, and was felt to enhance it.

About 6 months into twice-a-week treatment, after the establishment of a positive transference and a therapeutic alliance, Jonathan decided to change his lifestyle and to give up drugs altogether. This was done without any urging on my part. In fact, I had to caution him about the effects of such a sudden withdrawal and the difficulties he would confront if he proceeded with his plan. He went ahead, however, and there followed a critical 6-month period during which he struggled mightily with his dependence. He experienced episodes of severe depression, depersonalization, some visual hallucinations, and a sense of total isolation from the world of his former friends. At times, we discussed possible hospitalization, but he opted against that and was able to weather the crises.

By the end of the first year of treatment, he had recovered some of his lost functioning and was able to manage a totally drug-free existence. By the second

(*continued*)

year, he was earning straight A's in his senior year in high school. The episode on which I wish to focus occurred during this period. A silent idealizing transference solidly undergirded our work together as he and I examined the reasons for his turning to drugs in the first place. We were able to see that part of his problem was related to a precipitous de-idealization of his powerful father early in adolescence, when his father unjustly accused him of a variety of minor misdemeanors.

He related the following conversation with his father. They had been discussing existentialism, and he had asked his father what he thought of all that is ugly and repulsive in the world. He could not understand the place of violence in human existence. His father responded by saying that he dismissed these things as not affecting him, and was not troubled by them. Jonathan reported that he was appalled at his father's intellectual shallowness, although he knew his father also to be capable of profound scholarly work. He could only assume that his father was belittling him, and it was another example of why he no longer admired the man.

Since we had worked through that particular piece of dynamic previously, I felt that another issue was at stake here. I responded by saying that I could understand his disappointment and rage but felt that at this point he was dealing with a different issue. I thought that the object of his anger and disillusionment was himself. The ugliness he spoke of represented that part of his history that he had failed to explain to himself and would like to forget. His problem now was integrating that fact, and that when he turned to his father for a solution, he was also disappointed that his father could not help him. The task he and I faced was one of helping him to find meaning within the continuity of his sense of self. He smiled and related that the morning before the discussion with his father he had driven to the place in the woods that was his favorite when he would get high. With the stereo in his car turned on full blast and the car doors opened, he sat in the spot where he had had his last trip on acid. As he sat there, he had experienced a feeling of amazement that he used to do such things. He felt that his prior search had been so meaningless and so mindless that he could not believe he had participated in it. He felt glad to be in full touch with his feelings and his being, but the puzzle remained.

Discussion

This young man's inner struggles did not reflect an inner conflict, but an attempt to acquire cohesion and continuity. While he may be seen as struggling with the issue of identification with his father, that was not the central issue in the transference at that moment. What was central was the division in his sense of self that barred him from feeling whole. The therapeutic task was to help heal that rift and to permit him to see himself as at peace with his past. To accomplish that, it was necessary for him to deal with the disillusionment with his father, the associated loss of the selfobject function he performed, and the disavowal of the rage at his father and himself. My interpretation was intended to help him understand that he had acquired the capacity for self-regulation that is a component of the idealizing selfobject function. His ability to deal with the contempt he felt for himself made it possible for him to recognize that, through our work, the capacity to exercise the function was now within him.

Transferences in Self Psychology

In the initial phases of treatment, the therapist faces the patient's resistances to the exposure to the pain-associated longings for responses. These defenses may have to be worked through before evidence of transference emerges. The nature of the mobilized transference depends on the patient's deficits. A patient with a well-structured personality will present with the major transferences described by Kohut: a mirror transference, an idealizing transference, or an alter-ego transference. A patient with a less structured personality may present with a more diffuse or chaotic transference that reflects the structure of the patient's sense of self.

Transferences in self psychology refer to wishes and longings for selfobject functions and to the displaced affects surrounding the deficits in the psychic structure that emerge in treatment. These may be unconscious, that is, dynamically repressed, or disavowed, that is, descriptively repressed. The dual aspects of a selfobject transference are (a) the patient's wishes that the therapist provide the longed-for function and empathic response the patient did not receive as a child, and (b) the patient's fears that the therapist will respond as the original object had responded in childhood, that is, unempathically failing to provide the needed function. For example, in an idealizing transference, the patient had failed to internalize the structures associated with phase-appropriate experiences of idealization of one or both parents. The trauma was due to what the patient experienced as an empathic failure that had thwarted his or her development. The failure may have led to the repression or disavowal of the longings for the missed experiences and of the associated pain. The pain and longings, however, remain active in the patient's unconscious, and renewed efforts are made to seek substitute selfobjects that promise to provide what was not internalized. This motive expresses itself in the form of transferences to the therapist.

Countertransference

Kohut (1968/1978a, pp. 499–507; 1971, pp. 280–281, 260–269) took the traditional view that countertransferences were related to therapists' unresolved issues. He described some of the common countertransference reactions associated with the disturbances of the self. In summary, they usually entail feelings of boredom and of not being appreciated as a separate person in cases of the mirror transferences and in the attribution of power to the therapist by patients associated with the idealizing transferences. In the less structured disturbances, where feelings of fragmentation and disconnectedness predominate in the patient, the therapist may respond with feelings of anxiety and bewilderment. The less benign forms of countertransference involve the therapist's taking the patient as a selfobject. The therapist acts out the patient's idealization by self-aggrandizing behaviors, or acts out the patient's need for mirroring by expecting to be praised or criticized. Alternatively, the therapist may reject and dismiss the patient's laudatory idealizing remarks by maintaining that they are unrealistic, or become self-congratulatory when mirrored by the patient because of remnants of his or her unresolved narcissism. Acting on any of these feelings leads a therapist to repeat with the patient the latter's traumatic past. Recognizing with the patient the nature of the experience, on the other hand, is the first step toward an eventual alleviation of the distress. Gratifying the longings by actually mirroring a patient through praise or

compliments, or gratifying the longings for an idealized selfobject by, in fact, playing the role of omnipotent therapist, are contraindicated with the more structuralized disorders.

In situations where a supportive approach is indicated it is appropriate that the therapist take some action, especially when it might be untherapeutic to withhold a response. For example, as therapists we have no quarrel with the position that in extreme cases, in which patients threaten harm to themselves or others, some direct intervention is indicated. In less extreme cases, as in the treatment of children, we acknowledge the therapeutic value of limiting a child's behavior, even if the child has to be physically restrained, if it is felt that the child is about to get out of control or become overstimulated. With adolescents, we find ourselves acquiescing to requests to call a parent or a teacher under special circumstances, even when there is no threat of physical harm. These examples are not always indicative of the therapist's countertransference; they may indicate that the therapist understands the underlying dynamics. A therapist may feel moved to act on such a request when it is absolutely clear that the gratification of the request is not motivated by the therapist's own need. In such situations, the meaning of the interaction need not reflect an acting-out, but indicates that the patient's regressive or archaic selfobject needs have reached such a level of intensity and urgency that a response is required. The patient may not have had the necessary structure to cope with the needs and requires that the therapist provide them.

A 24-year-old woman sought consultation for feelings of depletion and chronic depression. She felt her life to have little meaning; her isolation was oppressive; she felt disconnected from the world. During such periods of isolation, her anxiety would mount to the point where she experienced feelings of unreality, and she would become actively suicidal. Her therapy was a link to reality. My presence was experienced as an affirmation of her as a human being. At one point in the treatment, she managed to break out of the shell in which she lived sufficiently to get a job in a flower shop. She felt appreciated and began to experience a new sense of enjoyment. In her desire to have me be a part of that experience, she invited me to stop at the shop and visit her in the surroundings in which she now felt comfortable. My assenting to her request was a therapeutic gesture that provided her with a much needed acknowledgment of her self-worth. To refuse the request, or to delay fulfilling it until the dynamics were fully clarified, would have constituted a shattering rebuff. The visit was made and the treatment progressed.

The countertransference feelings were also related to my own wishes to rescue this patient from her desolation and isolation. This feeling was compounded by the fear that in her desperation she might attempt suicide. She had on several occasions talked of taking her life as a way out of her meaningless existence. The response evoked must be understood as diagnostically indicative of the level of other selfobject needs; the more intensely experienced, the more indicative of the extent of the deficit.

Nature of Therapeutic Interventions

Mutative interpretations, that is, interpretations that are curative, require a two-step process: *understanding* what the patient feels and *explaining* to the patient the genetic-dynamic factors that motivate his or her conduct. This process generally involves a "rupture-repair sequence." In this sequence, a rupture in the relationship between patient and therapist occurs because the patient, in the transference, experiences the therapist as he or she experienced the caregivers to have responded. The repair of the rupture comes after the therapist

is able to empathize with the patient's despair, following which the positive transference is reestablished. In the process, (a) patients feel understood when therapists empathize with their need for the longed-for function and the defenses to avoid the painful affects selfobject deficits have created; (b) subsequently, as the transference unfolds, interpretations are directed to explain the place of selfobject deficits in the patient's dynamics and at reconstructing the genetic roots of those specific deficits. These interventions give patients a sense of historical continuity that is a necessary part of self-cohesion and self-esteem (Kohut, 1984, pp. 102–107, 192–210).

It is clear that interpretation in self psychology functions differently than in traditional psychoanalytic psychology. The goal is not to uncover unconscious derivatives of instinctual impulses or to lift the repression with a view to arriving at a resolution of a conflict. Rather, the goal is to facilitate the transmuting internalization of the missing functions.

The Termination of Treatment

In *The Restoration of the Self,* Kohut (1977) deals at length with issues of the termination of analysis. For the purposes of this summary, two sets of interrelated issues converge when we contrast termination in the context of traditional theory with that of self-psychology: the experience of separation and loss as a catalyst for structure formation and the clinical theory and techniques applicable to the termination phase (Palombo, 1982).

The experience of separation and loss in psychoanalytic metapsychology was always held to be central to the development of psychic structure. In contrast, as we have seen, in self psychology the primary process through which structuralization occurs is transmuting internalization. Through the bit-by-bit de-idealization of the caregivers, and through the slow acquisition of the mirroring functions, patients are left with a residue of experiences that reflect the capacities for joy and pride, in ambitions and ideals, and in a harmonious tension between the longings for recognition and the strivings for achievement, which, in conjunction with their native skills and talents, leads to feelings of self-esteem. The capacities for self-regulation and for self-confidence become indicators for healthy progression through these stages. The loss of an object that is transmutingly internalized is neither grieved nor mourned. The patient may feel sad at the termination of the relationship with the therapist, but mourning either of the childhood objects or of the adaptive functions that symptoms may have had is not a necessary part of the process.

Once the agreed-upon goals of termination have been attained, the termination may be anticipated with relief and excitement. It becomes an event to be celebrated as one might a bar mitzvah or a graduation. The prospect of the completion of treatment represents the achievement of a goal. The patient, having finished an important piece of work, is ready to go on with the task of living. Patients feel that they have gotten what is needed from the treatment and are ready to go on to other life agendas. A sense of joy, triumph, and exaltation can prevail at termination, feelings that stem from the newly found integration and meaning to life. Patients have acquired a better understanding of themselves, and a further consolidation of the nuclear sense of self has occurred. The patient, together with the therapist, has reviewed his or her life, reworked old attitudes, and achieved a different perspective about his or her past. Childhood can now be left behind; life continues its flow, and the prospect of the fulfillment of the patient's potential lies ahead. The newfound strength becomes a source of comfort, of inspiration, and of creativity.

From a clinical perspective, the separation from the therapist need not be experienced as a loss but as the completion of a significant collaborative task, for which the patient is grateful. There may be some sadness at parting ways with someone who has had much meaning. This is just as true for the therapist as it is for the patient, but then the focus is on the fact that therapy is not life but a necessary intervention directed at the patient's specific needs.

EVIDENCE-BASED FOUNDATIONS OF SELF PSYCHOLOGY AND CRITIQUE OF THE POSITION

In his work, Freud embraced the view of science and its methodology as it prevailed at that time. Science is a systematic enterprise, controlled by logic and by empirical facts, whose purpose is to formulate hypotheses about phenomena (Hartmann, 1959; Rapaport, 1951, 1960, 1967; Rapaport & Gill, 1959). Critics of the position that psychoanalysis is a science point to Freud's clinical contributions and the method he developed to arrive at an understanding of his patients' psychodynamics. This method is an interpretive method that may be called a hermeneutic endeavor. Hermeneutics distinguishes sharply between the human sciences and the natural sciences. Psychology, as well as the social sciences, is part of the domain of the human sciences, whereas physics, chemistry, and biology are part of the natural sciences. For hermeneutics, what defines a human science as opposed to a natural science is that the focus is on understanding the *meaning* of a person's feelings, thoughts, or actions. These interpreters of Freud believe that psychoanalysis does not belong among the natural sciences (Blight, 1981; Clarke, 1997; Friedman, 1983; Gill, 1988; Holt, 1972, 1981; Palombo, 2000; Phillips, 1991; Sass, 1989; Steele, 1979; Wallerstein, 1988).

For hermeneutics, meanings can be apprehended only through understanding. To understand what someone says is to know what he or she meant. Human understanding is guided by criteria other than those of the correspondence between the events that are observable and their internal representation. Rather, the criteria that are applicable are those of the coherence, consistency, and completeness of the account being given of the meaning attached to the dream. In this interpretation, Freud's work was intended to create a theory through which the meaning of psychological events to patients could be understood.

The tension between the two views of psychoanalysis, that psychoanalysis is a science and that it is a hermeneutic endeavor, became fully articulated in Kohut's work. Kohut's early training was also in neurology. During the years he spent working as a neurologist, his colleagues anticipated that he would contribute significantly to that domain of science. When he gave up his practice as a neurologist to enter psychoanalytic training, he took with him the position that psychoanalysis was a science. However, as he came to appreciate the centrality of empathy as a tool for the collection of psychological data, a subtle shift began to occur in his clinical practice and his theory. He began to blur the distinction between the natural sciences and the human sciences, referring to the human sciences as no less exact than the natural sciences. The distinction between the methods of the natural sciences and those of the human sciences was rooted in the long tradition of hermeneutic philosophy, articulated in particular by Dilthey (1962), whom Kohut referenced. Kohut, however, never explicitly acknowledged an adherence to that perspective.

Kohut (1959/1978d, 1973/1978e, 1982) argued that the use of empathy for data collection does not make psychology any less of a science than the physical sciences. Because the essence of a science is the method through which reliable data are gathered, it is possible to see that in psychological matters, empathic observations yield a harvest of data that also can be ordered and that may lead to verifiable results. By focusing more strictly on the internal perspective, a "scientific psychology" may deal with the meaning of a person's experiences, rather than just the facts. Patients' experiences cannot be observed through the traditional instruments of the physical sciences; they can be apprehended only through a different mode of observation. He states, "We designate phenomena as mental, psychic or psychological if our mode of observation includes introspection and empathy *as an essential constituent*. The term essential in this context expresses the fact that introspection and empathy can never be absent from psychological observation and it may be present alone" (Kohut, 1959/1978, p. 209). In other words, the use of empathy need not exclude the use of data collected by extrospective means.

From that perspective we gain an appreciation of a different aspect of Kohut's creativity: his astuteness as an observer and his exquisite capacity for empathy for his patients. His nonjudgmental, dispassionate approach to clinical phenomena led him to the exercise of empathy. He was touched by the suffering of his patients, by their turmoil, and by their inability to break out of the symptoms in which they felt entrapped. He saw in his patients' suffering the universality of the human condition, not the embodiment of the myths from ages past, and with a compassion that transcended his ideal of himself as a scientist he made quantum leaps in his understanding of human nature. Out of this understanding evolved his clinical approach. As a clinician, he functioned as a humane physician, concerned for his patients, seeking an insight into their suffering. His empathy went beyond the data collected through mere sensory observation.

As we will see in the section that follows, this ambiguity in his position left his followers to interpret his contributions much as Freud's followers had. Some would maintain that self psychology was a science among the natural sciences, as Basch (1973) insisted and as I (2000) articulate in my work; others found its place among the human sciences, that is, as a hermeneutic endeavor, as Goldberg (1990) and the intersubjectivists maintain. Kohut's tilt toward hermeneutics represented a paradigm shift that was to have momentous consequences for psychoanalysis.

DEVELOPMENTS IN SELF PSYCHOLOGY SINCE 1981

Any attempt to trace the history of a movement such as that of self psychology from the perspective of this point in time is bound to be impressionistic and subjective. This account of developments is therefore clouded by my vision of the events since Kohut's death in 1981 and by the limitations of my familiarity with the bourgeoning literature that has appeared in the past 25 years. Even during Kohut's life, divergent views began to emerge that laid the groundwork for different interpretations of his work. These different interpretations led to schools of thought, some claiming independence from the movement and assuming their own names, others retaining their affiliation, claiming to be legitimate heirs to his legacy (see Coburn, 2006; A. Goldberg, 1998; Shane & Shane, 1993).

Most psychodynamic theories have absorbed a generic form of Kohut's precept that no depth psychological understanding of human motivation can exist without the use of empathy for the observation and acquisition of psychological data. Aside from that contribution, it is possible to distinguish in the literature four different trends that reflect his influence to one degree or another: (1) traditional self psychological theories, (2) intersubjective theories, (3) object relational theories, and (4) neurodevelopmental theories. A comprehensive discussion of each of these theories would have to include a description of the positions each took on the following major constructs: (a) the philosophical underpinnings of the theory, (b) the place of empathy in the clinical process, (c) the number and types of selfobjects and selfobject functions, (d) the significance of development on mature functioning and on the diagnosis of the patient's dynamics, (e) the causes of psychopathology, (f) the primary forms of transferences, and (g) the mutative element in the therapeutic process.

Aside from the fact that in this brief summary it is far from possible to cover all of these facets to the different theories, there are two impediments to the accomplishment of this task. First, the four trends do not have clear boundaries, and at times the positions taken by some contributors to one trend blend with aspects of the positions taken by those in other trends. Second, within each trend no single contributor represents the theoretical position of the entire trend; often there are broad divergences of opinion within a given trend.

Traditional Theories of Self Psychology

Among those who may be said to belong to traditional self psychology are Paul and Anna Ornstein (A. Ornstein, 1983, 1986; A. Ornstein & Ornstein, 1995, 2005; P. H. Ornstein, 1974, 1979, 1980, 1991, 1999, 2004), Tolpin (1996, 1997, 2002), E. S. Wolf (1983a, 1983b, 1988, 1998), D. Wolf and Hicks (1989), and A. Goldberg (1988, 1990, 1995, 2004). In large part, subscribers to this view adhere to a hermeneutic perspective. While adhering to the position that empathy defines the field of psychological phenomena, they find a place for information derived from other sources in the clinical setting. For the most part, they do not privilege the information gathered by researchers in development as having any greater weight than that gathered from the patient. Some, such as E. S. Wolf (1988), enlarge on the number of selfobject functions by adding the adversarial and efficacy functions. They are agreed that psychopathology results from the disavowal of missing selfobject functions. They maintain that, while the three selfobject transferences described by Kohut are most commonly found in disorders of the self, this need not preclude the presence of other types of transferences, such as the familiar ones that emanate from conflict. Finally, they agree that the "curative factor" in psychoanalytic treatment is the effect of interpretations of genetic-dynamics factors that produce the disturbance.

The Intersubjective Theories

A major criticism that intersubjectivists direct to traditional theories of self psychology is that the latter theory is that of a "one-person psychology" rather than a "two-person psychology." They insist that one-person psychologies subscribe to the "myth of the isolated mind." They claim that because we are always in interaction with others, this myth precludes a full understanding of psychological functioning. Over time, the position of intersubjectivists such as Stolorow and Atwood (Atwood & Stolorow, 1984; Stolorow,

Atwood, & Brandchaft, 1994; Stolorow, Brandchaft, & Atwood, 1987; Stolorow & Lachmann, 1980) has shifted from a more classical hermeneutic one to that of "perspectival realism" (see Orange, 1995). This shift avoids the relativism to which the original articulations of theories of intersubjectivity were prone. These theorists maintain that their positions have developed independently of Kohut's and that self psychology has only helped enlarge their point of view. For them, empathy, although delineating the domain of psychological phenomena, is redefined as a mode of inquiry that provides an understanding of the meaning experiences have had to the patient. Central to the therapeutic process is the overlap of the patient's and therapist's subjectivities. Selfobject functions represent one dimension of the transference that may fluctuate from being in the foreground or the background of interactions. In part, for methodological reasons, because their focus is on the here-and-now of interactions within the transference, little is said by these theories about development. The term "psychopathology" would not be appropriate to describe the patient's difficulties since it would objectify the organizing principles that motivate the patient. The preference is to view personal dysfunctions as resulting from the mutual interaction between patient and therapist. Finally, interpretations within the transference lead to the reorganization of the patient's organizing principles, which the patient experiences as no longer as oppressive as they once were.

The Object Relations Theories

The work of Bacal and Newman (1990) is most closely identified with the position of those who believe that self psychology is in direct continuity with object relations theories, a debt which they criticize Kohut for never acknowledging. The starting point for Bacal (1985) was an amendment to Kohut's position on optimal frustration. He and Newman took exception to that position, seeing it as a carryover from drive theory. Because they conflate the use of empathy as a tool for observation and its use as a therapeutic intervention, they propose that a more consistent position is that of "optimal responsiveness." Furthermore, they insist that self psychology does not place sufficient importance on the role of objects in interactions. Selfobject functions involve a *person* and an *object*. The role of the object is especially significant in the ontogeny of psychopathology, where splitting of the good and bad objects becomes the source of major difficulties for patients. In all other respects, these theorists merge aspects of self psychology and object relations theories.

The Neurodevelopmental Theories

Basch (1980, 1988, 1992) was in the forefront of psychoanalysts who appreciated the significance to psychoanalytic theory of the emerging research on infant development and the contribution of other disciplines, such as cognitive theory, cybernetics, information theory, and brain function. He believed that Freud failed in his effort in the *Project for a Scientific Psychology* (1966/1895) to ground psychoanalysis in neurobiology due to the state of knowledge at that time. With the growth of the neurosciences psychoanalysis may anchor itself in the matrix of these scientific disciplines. Basch nevertheless managed to integrate the concepts of empathy, selfobject function, and selfobject deficits into a broad scheme grounded in brain function. Tragically, he died before he could articulate his views into a coherent theory.

In my own work, based on my experiences working with patients with learning disabilities, I have found it necessary to pick up the thread in Kohut's work that takes into account a person's endowment, which he called talents and skills, in the formation of the sense of self (Palombo, 1976, 2001, 2006). With Basch, I emphasize the importance of development in the evolving configuration of the sense of self. I have suggested a framework that integrates self psychology with the emerging knowledge in the neurosciences. I retain Kohut's definitions of empathy and selfobject functions, but supplement the latter concept with the construct of complementarity to account for the functions that others provide. I view caregivers as providers not only of selfobject functions but, in patients with neuropsychological deficits, other psychological functions that I call adjunctive functions, such as those that complement a patient's memory, executive functions, regulatory functions, and other cognitive functions. More recently I have coined the term "mindsharing" to describe the broader domain of psychological functions that we share with others that include selfobject functions, adjunctive functions, transitional object functions, need for intimacy, and theory of mind. Psychopathology may therefore result not only from failures in empathy, but also from failures to provide adjunctive functions to patients with neuropsychological deficits, failures in attachment, and failures in the development of a coherent narrative. Classical therapeutic technique is only modified by the understanding gained of the impact of neuropsychological deficits and their contributions to patients' difficulties.

In closing, I quote the editor of the first issue of a new journal, the *International Journal of Self Psychology* (Coburn, 2006). Commenting on the embarrassment of riches in the diversity of theories of self psychology in the introduction to the first issue, he states:

> As to the question, One theory or too many? I would have to say, certainly not too many. Just a lot. Whereas this situation presents a challenge for readers who wish to stay attuned to contemporary self psychology and related areas, it also imbues our field with a level of complexity and dynamism that helps subvert any adherence to dogma and continued search for a grand narrative. (p. 3)

HEINZ KOHUT'S MAJOR WORKS

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Chapter 7

ATTACHMENT THEORY

Michelle Mohr Carney and Frederick P. Buttell

Social work is an applied helping profession that has roots in all of the other allied professions (e.g., psychology, sociology). Like these other helping professions, social work uses theory to both seek explanations for patterns in client problems and guide its search for solutions in collaboration with clients. Among the many theories, both explanatory and for intervention, that social work embraces, perhaps none is more important than attachment theory. Given the breadth and depth of attachment-related research (e.g., a literature search on PsycInfo yields over 10,000 hits), the purpose of the chapter is not to provide an exhaustive review of this substantial body of literature. Rather, because such critical reviews already exist, the purpose of this chapter is to briefly explain attachment theory and link it to professional social work practice. Specifically, this chapter provides an explanation of attachment theory and traces both its historical origins and recent theoretical advancements. Particular attention is given to empirical support for the theory as well as to its application to social work practice and to the profession of social work as a whole.

Attachment theory emerged from the seminal works of John Bowlby and Mary Ainsworth. Drawing on a range of theoretical frameworks from the fields of psychology, ethology, cybergenics, and psychoanalysis, among others (Bretherton, 1992), Bowlby developed a theory that transformed our thinking about the importance of the mother-child bond and the effects its disruption could have on the developing child. In his conceptualization of the attachment model, Bowlby sought to investigate the development of the mother-child relationship, beginning at birth, and explore the relationship between the quality of the mother-child connection and the emergence of different personality traits in children. In his model, he studied infant behavior toward the attachment figure, the adult, during times of separation and reunion. It was Bowlby's belief that the attachment behaviors formed in infancy would transcend childhood and shape the attachment relationships people have as adults (Ainsworth & Bowlby, 1991).

At the time of his writing, the field of psychology was preoccupied with psychoanalysis and the inner workings of the mind. With his attachment model, Bowlby challenged the widely accepted beliefs of his era in a lifelong effort to validate the effect of environmental factors on human development. Unlike many of his contemporaries, Bowlby believed existence to be multidimensional and dynamic, with interpersonal relationships playing a pivotal role in determining future patterns of perception and adaptation. His accomplishments were primarily theoretical, but through the groundbreaking studies of Mary Ainsworth, empirical support for his ideas was generated, which led to the acceptance of his model in the professional community. Since its inception, Bowlby's attachment theory has

established itself as an invaluable and respected psychological approach, currently considered to be "the leading perspective for understanding continuity and change in personality development" (Thompson & Raikes, 2003, pp. 691–692). In recent years, attempts have been made to extend its scope by applying its fundamental premises to areas outside of its original domain, further exemplifying its far-reaching and powerful influence.

HISTORICAL AND CONCEPTUAL ORIGINS

Edward John Mostyn Bowlby, born in England in 1907, began his studies in 1925 at Cambridge, with a focus in psychology and preclinical sciences. Continuing his education in clinical medicine, he attended University College Hospital, London, before acquiring his first practical experience teaching at a school for maladjusted children. Bowlby's volunteer work at the school proved to be an influential experience. Often noted are his interactions with two young boys who differed markedly in their reaction to Bowlby's presence. One was insular and reluctant to show affection; the other would not leave Bowlby's side. Bowlby was fascinated by their differences and desired to discover the factors contributing to their remarkably different reactions to him. Interestingly, his experiences with these two boys are largely believed to have heavily contributed to his decision to focus on children in his future studies (Ainsworth & Bowlby, 1991; Bretherton, 1992).

Bowlby's career in psychology officially began with his training at the Maudley Hospital in London in 1933. Over the course of the next several years he would qualify as a psychiatrist, begin working as a child analyst in the London Child Guidance Clinic, and train with the Institute of Psychoanalysis in London. At the London Child Guidance Clinic, Bowlby (1944) performed his first research experiment, the objective of which was to determine whether extended periods of mother-child separation were more common in his group of 44 juvenile delinquents relative to his control group of youth without felony charges. Results of this study suggested that the incident of separation between mother and child was less prevalent among those individuals in the control group (Bretherton, 1992).

Until this time, although his ideas regarding mother-child relationships had begun to emerge, he was still affiliated with the more Freudian and Kleinian schools of thought (Bretherton, 1992). Bowlby worked for many years with colleagues, including Joan Riviere and Melanie Klein, whose perspectives differed from his own. Consequently, because he was in the early stages of his clinical career, the degree to which his own beliefs diverged from theirs went unspoken for some time. A significant event in Bowlby's life was his recognition of just how far he had strayed from the beliefs he once embraced. Apparently, the turning point involved his work with a child whose mother was admitted to a psychiatric hospital in the midst of treatment. Whereas Bowlby, influenced by his postgraduate training with two psychoanalytically trained social workers, was more interested in the family experiences as a whole and the effects of the mother's illness on the child, Klein was concerned with the projections of the child onto the mother (Ainsworth & Bowlby, 1991; Bretherton, 1992). Comparing his own assessments to those of his colleagues helped him to better differentiate his beliefs from the model embraced by them, giving him the confidence to not only acknowledge his newfound beliefs, but to actively explore them. As a result of

this discomfort, in 1948 Bowlby developed a research unit to further explore his emerging interests in mother-child separation by engaging the social worker James Robertson to naturalistically observe institutionally hospitalized children who had been separated from their parents. This 2-year study would provide the first attachment-related data, which Ainsworth would later analyze at Tavistock Clinic and which would spark her lifelong interest in naturalistic observation methodology (Bretherton, 1992).

In addition to the development of these programs, a request made by the World Health Organization (WHO) was significant to the progress of Bowlby's life and work. In 1950, Bowlby was asked to provide advice to the WHO on the psychological well-being of homeless children. In preparation for this task, he sought to increase his knowledge of mother-child separation by delving even further into the existing research surrounding this issue. What emerged from this endeavor was Bowlby's report, *Maternal Care and Mental Health* (1952; Bretherton, 1992). Penguin Books published a second edition called *Child Care and the Growth of Love* in 1965 that included chapters written by Mary Ainsworth (Bowlby, 1965). This research laid the preliminary groundwork for Bowlby's attachment theory, elaborating on his beliefs relative to the quality of mother-child relationships and their effect on the child's developing mental health. Bowlby's major conclusion, as quoted in Bretherton (1992, p. 765), was that in order to grow up mentally healthy, "the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment."

In understanding the events that led to Bowlby's formation of attachment theory, it is necessary to include the contributions of Mary Ainsworth. Studying at the University of Toronto under William E. Blatz, Ainsworth became well versed in Blatz's security theory, an approach to personality development sharing some similarities to attachment theory (Ainsworth & Bowlby, 1991; Bretherton, 1992). After finishing her dissertation, she applied for a job at the Tavistock Clinic as a developmental researcher. Though her time spent at the clinic was brief, her experiences there marked the beginning of a career dedicated to the principles of attachment theory and led to the development of the now famous research experiment known as the Strange Situation (Ainsworth & Bell, 1970; Ainsworth, Bell, & Stayton, 1971; Ainsworth, Blehar, Waters, & Wall, 1978).

While Ainsworth's next step involved the study of attachment formation in East Africa, Bowlby continued in his quest to more clearly define and articulate the groundbreaking evidence of their attachment-based studies. Consequently, the development of the theory in its concrete form was a gradual process that stretched across many years and was the result of a variety of influences. In the mid-1950s, Bowlby's interactions with Robert Hinde brought to his awareness the potential importance of animal behavior in furthering his understanding of the origins of human attachment. Bowlby and his colleagues became particularly interested in observing the relationship between animal mothers and their young. For example, Bowlby and Hinde engaged in an extensive study of rhesus monkeys, which underscored the importance of external factors, such as the presence of social groups and family networks, in explaining animal behavior. Bowlby then applied information drawn from his ethological studies of animals to better understand his work with humans, paying careful attention to the interplay between individual and environment (Ainsworth & Bowlby, 1991; Bretherton, 1992).

BASIC THEORETICAL PRINCIPLES

Prior to the work of Bowlby and Ainsworth, theoretical work on mother-child interactions frequently concentrated on specific, often singular behaviors. For example, according to Sigmund Freud's psychoanalytic view, mother-child attachment occurred during the oral stage and was a function of the mother meeting the baby's basic needs through nursing (Ainsworth & Bowlby, 1991).

In the late 1950s, a classic study conducted by Harlow (1959) with rhesus monkeys began to question Freud's psychoanalytic view of attachment. Specifically, Harlow was interested in studying the relative importance of nourishment and comfort in determining whether attachment was simply a function of the mother providing for the child's basic needs. To investigate this question, he separated rhesus monkeys from their mothers at birth and placed them with surrogate mothers—one a wire cloth-covered "mother" with a face, the other simply made from wire. He found that the monkeys preferred the cloth-covered mother to the wire figure even when the wire mother was the source of nourishment (Harlow, 1959). Further, he found that when he introduced fear, the monkeys went to the mother they were using as a source of warmth and comfort, demonstrating that "physical contact, tactile stimulation, and the clinging response (which they labeled contact comfort) was more critical to the attachment bond between mother and baby monkey than was the feeding relationship" (Liebert & Wicks-Nelson, 1981, p. 374).

Extrapolating from animals to humans, Bowlby (1958, 1969) has argued persuasively that mother-child attachment has an evolutionary basis, encompassing a wide range of mother-child interaction behaviors that together demonstrate attachment. He believed that the predisposition to become attached was inherited and necessary for survival. Specifically, if a mother did not feel attached to her child, that child's ability to survive would subsequently be placed at risk, which would potentially prevent the child from passing on his or her inherited inability to attach (Dworetzky, 1984). Consequently, Bowlby (1958) believed that attachment between infant and adult was immediate, necessary, and a key element of human behavior, equivalent to eating and procreating. He further asserted that children's attachment relationship to their parents will in many ways predict the types of relationships they will enjoy throughout their entire life (Bowlby, 1969, 1982). More specifically, children construct expectations regarding how others will react to them based on the examples set by their experiences with their parents (Bowlby, 1973). Another important tenet of Bowlby's (1944) theory is that physical disconnection from one's parents is directly related to delinquent or even criminal behavior later in life. Protection by one's caregivers, which Bowlby (1969, 1982) states is a crucial element of secure attachments, is another important theme. Parents, government, police, and even friends and partners are expected to protect us from physical or emotional harm. We discuss these macro applications of attachment theory later in the chapter.

ADVANCED THEORETICAL PRINCIPLES

Bowlby identified four essential features related to forming attachment bonds: "(1) proximity maintenance (wanting to be physically close to the attachment figure), (2) separation distress, (3) safe haven (retreating to caregiver when sensing danger or feeling anxious),

and (4) secure base (exploration of the world knowing that the attachment figure will protect the infant from danger)" (Sonkin, 2005, p. 2). Additionally, he identified four stages of attachment: (1) preattachment, (2) attachment in the making, (3) clear-cut attachment, and (4) goal-corrected partnership. The preattachment stage, beginning at birth and lasting through the first few weeks of life, is characterized by a desire to maintain close proximity to the mother by engaging in behavior that promotes attachment (crying, smiling, sucking, closely watching mother). During the stage of attachment in the making, the infant's behavior becomes more personal and individualized. Specifically, whereas in the preattachment stage the infant would indiscriminately engage in attachment-promoting behaviors, in the second stage (i.e., attachment in the making), which lasts until the second half of the first year, the child focuses those behaviors on familiar figures (Bowlby, 1969; Dworetzky, 1984). By the third stage of attachment, clear-cut attachment, the infant is able to move around and physically seeks proximity to the identified attachment figure. The fourth stage, goal-corrected partnership, begins during the second year of life and is characterized by a more sophisticated child engaging in behavior designed to manipulate the attachment figure to meet the child's own needs (Dworetzky, 1984).

Mary Ainsworth provided strong empirical support for Bowlby's attachment theory by studying, first, the quality of the mother-child attachment and, second, investigating differences in attachment patterns. She began studying the strength and quality of the mother-child attachment in Uganda with mother-infant pairs. Her objective was to observe mothers and babies in their natural environment to document the presence and frequency of attachment-based behavior (Ainsworth & Bowlby, 1991; Bretherton, 1992). Ainsworth (1963, 1967) found that mothers varied in their responses to their infants' signals in what she considered to be three important ways. Through her observations she identified what she called securely attached infants (babies who cried little and were not afraid to explore when the mother was present); insecurely attached infants (babies who cried a great deal, even while being held by the mother and who tended to not explore); and not-yet-attached infants (babies who were indifferent to the mother; Bretherton, 1992).

Back in the United States, Ainsworth began a second project—similar to her study in Uganda—in Baltimore, Maryland. Again she observed the mothers in their own homes to identify differences in their responses to infant signals. Over the course of the yearlong study, she gathered over 72 hours of data on each of the 26 participating families to explore maternal sensitivity to their infants (Bretherton, 1992). She found that those mothers who attended quickly and tenderly to their baby's signals in the first quarter of the study had babies who cried less in the fourth quarter of the study. Similarly, those mothers who held and cuddled their infants often in the first quarter of the study had babies who needed to be held less in the fourth quarter of the study (Bretherton, 1992). Her home visits were followed by a laboratory experiment designed to provide the opportunity for more controlled observation (Ainsworth & Bowlby, 1991; Bretherton, 1992). In what is known as the Strange Situation, Ainsworth examined the relationship between the early attachment behaviors she observed in the infants in their home with their desire to explore a new environment in a controlled setting. She was interested in determining the extent to which the helpless infant relies on the mother, who serves as a "secure base" for the young child's exploration of the world (Ainsworth & Bowlby, 1991; Bretherton, 1992).

Ainsworth ultimately identified three classifications of attached children: the securely attached child, who protests or cries when the mother leaves the room but is easily consoled

when she returns; the ambivalent child, who tends to be very clingy and unwilling to explore his or her surroundings without the mother present; and the avoidant child, who shows signs of independence but in actuality is rather angry with the mother (Karen, 1990, p. 36).

Further revealing the importance of early attachment, Karen (1990, p. 36) states that "at age two, insecurely attached children tend to lack self-reliance and show little enthusiasm for problem solving," which strongly indicates that the child is conditioned by the level of responsiveness exhibited by his or her mother. Karen further explains that "Ainsworth's central premise was that the responsive mother provides a secure base" (p. 36) for the child, from which he or she can safely develop autonomy, comforted by the knowledge that he or she is supported by the mother. Karen does acknowledge, however, that

> being securely attached hardly ensures that babies will grow up free of neuroses or even of insecurities. It means only that they have been given confidence that someone will be there for them and that they are thus at least minimally capable of forming *satisfying relationships* [italics added] and of passing on that ability to their children. (p. 38)

It follows that these past relationships determine patterns for future relationships (Kobak & Hazan, 1991) and that these patterns can be accurately predicted based on an understanding of the quality of the initial attachment relationship (Bowlby, 1988). Given this, anxious attachment during early childhood would be a compelling determinant of the individual's likelihood of experiencing relationship difficulties later in life (Ainsworth, 1985).

RECENT THEORETICAL DEVELOPMENTS

The relationship between childhood attachment style and adult relationship patterns is widely studied (Campbell, Simpson, Boldry, & Kashy, 2005; Mikulincer & Shaver, 2005; Moore & Leung, 2002). Adult relationship attachment styles are believed to parallel childhood attachment styles, shaping the type of relationships in which individuals engage (Hazan & Shaver, 1987; Mikulincer & Florian, 1998; Moore & Leung, 2002; Waters, Kondo-Ikemura, Posada, & Richters, 1991; Yarrow, 1972). Paralleling the childhood attachment bonds identified by Ainsworth et al. (1978)—secure, anxious/resistant, avoidant, or disorganized/disoriented—similar patterns in adult relationships have been identified: secure, clingy, casual, and uninterested. Bartholomew (1990) created a four-category model of attachment (secure, dismissing, fearful, and preoccupied) to assess the quality of adult attachment relationship along two dimensions: positivity of representations of self and positivity of representations of others. The type of adult relationship formed has further been suggested to be an important determinant of quality of life generally, across the life span, in two distinct domains: "the internal psychological (emotional and affective) domain and the external sociocultural (behavioral) domain" (Moore & Leung, 2002, p. 245; Searle & Ward, 1990). The internal domain reflects "social and emotional well-being, mental health and/or levels of psychological distress or experienced stress," and the external domain reflects larger life stressors (Moore & Leung, 2002, p. 245). These life stressors, external to the individual, vary by culture and society and change with political and economic shifts. The individual's capacity to cope with these external stressors has been linked to adult

relationship style and thereby early attachment bond (Mikulincer & Florian, 1998; Moore & Leung, 2002).

In her manuscript describing the origins of attachment theory, Bretherton (1992, pp. 765–766) remarks that an often neglected aspect of Bowlby's attachment theory is his "emphasis on the role of social networks and on economic as well as health factors in the development of well-functioning mother-child relationships." A macro case example illustrating this larger system application of attachment theory is discussed later in the chapter.

RELEVANCE TO SOCIAL WORK PRACTICE

Uses in Assessment

Measuring Attachment in Children

Mary Ainsworth's naturalistic observational studies, discussed previously, were initially used to assess and measure attachment in infants and were followed by the Strange Situation laboratory experiments. More recently, researchers designed an alternative to the Strange Situation called the Attachment Q-set, also to determine children's use of the attachment figure as a secure base from which to explore their environments (Waters & Deane, 1985). This process uses an observer (sometimes expert, sometimes mother) to monitor a wide range of attachment-related behaviors in children and categorize them relative to their accurate description of the child (i.e., ranging from highly descriptive to not descriptive at all). In research evaluating the relationship between the results of the Q-set assessments and the Strange Situation attachment classification, it was discovered that the Q-set assessments performed by experts corresponded well to the Strange Situation assessments, although those done by mothers were less consistent (Van Dam & Van IJzendoorn, 1988; Vaughn & Waters, 1990).

Measuring Attachment in Adults

Measuring attachment in adults is typically done via interviews or self-report measures. Over the past 20 years multiple scales and interview formats have been created, all of which are designed to assess attachment (for a review of the most frequently used methods, see Sonkin, 2005; Sperling, Foelsch, & Grace, 1996). Although it is beyond the scope of this chapter to review all of them, we will briefly discuss a few of the most often used instruments that have been created to measure attachment in adults.

The Adult Attachment Interview uses open-ended questions to determine the influence of childhood attachment relations on adult attachment development (Main & Goldwyn, 1993). More structured is the attachment scale developed by Hazan and Shaver (1987) that is designed to gather similar broad information about attachment and links responses to attachment-related questions to one of three attachment styles that best describe subjects' feelings about romantic relationships. "Securely attached people indicate that they find it relatively easy to get close to others . . . avoidantly attached people indicate that they are uncomfortable being close to others, find it difficult to completely trust . . . and anxiously attached people indicate that they find others are reluctant to get as close as they would

like, frequently worry that their romantic partners don't really love them" (Simpson, 1990, p. 971).

The Adult Attachment Style Questionnaire (Bartholomew, 1990; Bartholomew & Horowitz, 1991) is a prototype measure using a Likert scale to determine how individual relationship characteristics approximate one of four identified categories: secure, dismissing, fearful, and preoccupied.

The Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998) is a 36-item self-report measure of adult romantic attachment created from most of the existing self-report measures. Revised by Fraley, Waller, and Brennan in 2000, the Experiences in Close Relationships Scales—Revised is again a 36-item self-report scale that yields the same two subscales: Avoidance (or Discomfort with Closeness and Discomfort with Depending on Others) and Anxiety (or Fear of Rejection and Abandonment).

The Adult Attachment Projective developed by George and West (2001) uses a series of drawings depicting scenes designed to trigger responses relative to the individual's level of attachment (Sonkin, 2005).

Uses in Intervention

Professional social workers rely, in part, on existing evaluation research to make informed clinical decisions regarding choosing an effective intervention model for clients. Determining which interventions may be helpful is made easier when they are viewed in a theoretical framework. Attachment theory suggests that the absence of secure attachment very early on in life can have lifelong negative implications. High-stress family settings, where there is child abuse and neglect, poverty, incarceration, divorce, or domestic violence, prove to be hazardous environments for children to form the secure attachments necessary for healthy psychological development (Aber & Allen, 1987).

From an attachment perspective, social workers can choose particular methods or services for clients that serve to address the early attachment problems. This is possible because attachment theory has been used as a framework for creating intervention programs that address almost every aspect of human behavior. Specifically, research on attachment theory has been used to influence child welfare (Andersson, 2005; Barth & Miller, 2000; Bennett, 2003; Daniel, Wassell, & Ennis, 1997; Dyer, 2004; Grigsby, 1994; Haight, Kagle, & Black, 2003; Houston, 2001; Howe, Brandon, & Hinings, 1999; McMillen, 1992; Mennen & O'Keefe, 2005; Penzerro & Lein, 1995; Riggs, 2005; R. Solomon, 2002) as well as to identify the negative impact of disrupted attachment patterns across the life span. Researchers have linked attachment theory to various social problems, including child abuse and neglect (Aber & Allen, 1987; Bacon & Richardson, 2001; Bolen, 2002; Crittenden, 1992; Crittenden & Ainsworth, 1989; George, 1996; Howe, Dooley, & Hinings, 2000; Hughes, 2004; Olafson, 2002; Page, 1999; Wasserman & Rosenfeld, 1986), poverty (Bakermans-Kranenburg, van IJzendoorn, & Kroonenberg, 2004; Erickson, Korfmacher, & Egeland, 1992; Gauthier, 2003), delinquency (Bowlby, 1944; Gauthier, 2003), divorce (Birnbaum, Orr, & Mikulincer, 1997; Brennan & Shaver, 1998; Cohen & Finzi, 2005; Cohen, Finzi, & Avi-Yonah, 1999; Corrie, 2002; Fausel, 1986; Rogers, 2004; J. Solomon, 2005; Thewatt, 1980; Todorski, 1995; Waters, Merrick, & Treboux, 2000), incarceration (Eloff & Moen, 2003; Fearn & Parjer, 2004; Mackenzie, 2003; Martin, 1997; Poehlmann, 2005; Pollock, 2002), the ability to form adult relationships (Bartholomew, 1990; Campbell et al., 2005;

Feeney & Noller, 1990; Fraley & Davis, 1997; Hazan & Shaver, 1987, 1990; S. Johnson, 2004; S. Johnson, Makinen, & Millikin, 2001; Mikulincer & Shaver, 2005; Moore & Leung, 2002; Waters et al., 1991), and domestic violence (Bond & Bond, 2004; Carney & Buttell, 2005, 2006; Dutton, 1995, 2000; Dutton, Saunders, Starzomski, & Bartholomew, 1994; Kesner, Julian, & McKenry, 1997; Kesner & McKenry, 1998; Murphy, Meyer, & O'Leary, 1994; Sonkin & Dutton, 2003), to name a few. Our research has been in the field of forensic social work, primarily concentrated in work with batterers in court-mandated domestic violence intervention programs. Therefore, we will use this research area as an example of attachment theory as it relates to professional social work intervention. Following that discussion is an application of attachment theory at the macro level.

Domestic Violence and Attachment

Bowlby believed that human beings react with anger when their attachment needs go unmet (Kesner & McKenry, 1998). This anger is meant to be a signal for the attachment figure to address the unmet need. A consistent state of unmet needs creates attachment patterns that Bowlby asserted were both lifelong and critical in forming the individual's internal working model of self. Consistent, warm, supportive responses to the proximity-promoting signals given from an infant create secure attachment and an "internal working model of self as valued and self-reliant" (Bretherton, 1992, p. 70). Conversely, rejected bids for closeness and security cause an "internal working model of self as unworthy or incompetent" (p. 70). Fonagy and his colleagues (Fonagy, Gergely, Jurist, & Target, 2002, p. 65) purport that, in adults, "a secure attachment relationship promotes the ability to mentalize, that is, to perceive and interpret behavior as based on intentional mental states."

What does it mean to mentalize? Using physical violence as an example, what causes some individuals to react to their own feelings of aggression with physical attacks rather than handling those feelings in a nonviolent manner? Fonagy (1999) would argue that those who engage in physical violence are unable to think about aggression in relation to attachment, or in other words, have inadequate mentalizing capacities. These individuals are often victims of child abuse who as children seek the comfort of their attachment figure while at the same time experiencing confusion about why they are being abused by that caregiver. This mental anguish causes children to create mental distance between their experienced acts of violence and their physical need for closeness. In doing this, they form inadequate patterns of thoughts relative to behaviors which continue throughout the life span and affect adult relationships as well (Fonagy, 1999). The securely attached adult is not encumbered by this need to create mental distance while seeking physical closeness, suggesting a synergistic relationship between having the capacity to mentalize, which demands secure attachment, and having a securely attached attachment figure. Thus, initial patterns of attachment shape interpersonal experiences and form the template from which future relationships are formed. This level of attachment in the adult, or the security of the attachment bond, is therefore a determining factor in the type of adult relationships individuals form and a factor in whether those relationships involve the use of physical violence (Bond & Bond, 2004).

Researchers have found the strength and type of attachment bond to be significantly associated with the use of violence in the home (Bond & Bond, 2004; Carney & Buttell, 2005; Carney & Buttell, 2006; Dutton, 1995, 2000; Dutton et al., 1994; Kesner et al., 1997; Kesner & McKenry, 1998; Murphy et al., 1994; Sonkin & Dutton, 2003). Interestingly, the

focus on attachment theory was the direct result of observations made in clinical practice that batterers were overly dependent on their intimate partner but incapable of initiating and maintaining an emotionally supportive relationship. As a result, these men desired closeness with their partner but, given their inability to achieve emotional closeness, engaged in violent and controlling behaviors to ensure physical closeness rather than emotional closeness (Murphy et al., 1994).

Conceptually, excessive interpersonal dependency among abusive men is viewed as a consequence of insecure attachment in childhood (Dutton, 1995; Holtzworth-Monroe, Bates, Smultzer, & Sandin, 1997). In brief, attachment theory proposes that the overall quality of the infant-caretaker relationship during infancy and early childhood is both the primary determinant of dependent traits in adulthood (Ainsworth, 1969) and a model for later interpersonal relationships (Bowlby, 1980). Regarding the development of excessive interpersonal dependency among batterers, Dutton has argued that battered mothers cannot adequately attend to the demands of the attachment process while simultaneously attempting to negotiate a hostile and dangerous home environment. Consequently, children in this situation become insecurely attached and, in adulthood, exhibit excessive dependency on their partners (Dutton, 1995; Holtzworth-Monroe et al., 1997; Murphy et al., 1994). Recently, Sonkin and Dutton (2003, p. 109) have reviewed the literature on attachment theory and domestically violent men and suggest that "men whose violence was predominantly or exclusively in intimate relationships probably have an attachment disorder." Therefore, they conclude, "incorporating attachment theory into batterer treatment is well founded" (p. 110). Despite this apparent connection, there are several factors not addressed in the available literature on attachment theory and domestically violent men that could militate against the inclusion of attachment theory into batterer intervention efforts.

First, a close evaluation of some of the studies supporting the connection between attachment theory and batterers reveals that some have serious measurement limitations. For example, in a study investigating the relationship between dominance needs and attachment style among maritally violent men, Mauricio and Gormley (2001) discovered that 58% of the 60 court-mandated batterers in their study reported an insecure attachment style. However, by the authors' own admission, the findings of the study were compromised by a significant association between social desirability and attachment style and the use of a single-item measure of attachment, the reliability of which was established on a college population. This highlights a common problem among studies attempting to investigate attachment issues in adults, namely, attempting to retrospectively assess the quality of the infant-caretaker bond in adult samples. Consequently, researchers often use indirect measures, most commonly interpersonal dependency, to judge the quality of childhood attachment in adults.

Second, among the studies investigating interpersonal dependency among abusive men (an indicator of insecure attachment in adulthood), there have been conflicting results from studies employing court-mandated and voluntary subjects. Specifically, those studies that employed voluntary subjects have suggested that domestically violent men exhibit excessive levels of dependency on their intimate partner relative to nonviolent men (Holtzworth-Munroe et al., 1997; Murphy et al., 1994).

Finally, it has been argued that all batterers have attachment issues (e.g., Dutton, 2000; Murphy et al., 1994; Sonkin & Dutton, 2003). Specifically, Dutton has argued persuasively that insecure attachment, when combined with parental shaming and observing violence in childhood, results in the development of an abusive personality in adult men. In his

developmental model for explaining male-initiated physical abuse, Dutton argues that childhood exposure to parental shaming, insecure attachment, and physical abuse form the core of an abusive personality, which, in adulthood, leads these individuals to abuse their partners. However, in a compelling review of Dutton's developmental model, Lawson (2001) notes that, among other things, Dutton fails to acknowledge that his argument pertains to only one type of batterer, namely, the borderline/dependent batterer, which accounts for only 25% of the batterers in Dutton's typology. Further, Lawson correctly indicates that Dutton's model completely ignores feminist theory and systems theory and minimizes social learning theory as workable explanations for the development of abusive behaviors among men. Taken as a whole, these three issues suggest that attachment theory may be an important component of theoretical explanations of battering and intervention efforts with some batterers, but it appears premature to suggest that attachment theory has relevance to all batterers.

In the field of domestic violence, rapid changes are occurring in forensic work with batterers. Importantly, two issues at the heart of batterer intervention programs (BIPs) are diverging and creating programmatic tension for social workers providing intervention services to domestically violent men and women. Specifically, increasingly rigorous evaluations of BIPS are suggesting that they are not as effective as initial research indicated they were, while, simultaneously, states are passing legislation that mandates a "one size fits all" BIP for all treatment providers statewide (currently more than 30 states have legislation governing BIP program standards; Maiuro, Hagar, & Lin, 2002). Consequently, through the enactment of state laws governing the treatment of batterers, treatment providers are becoming married to a BIP model that empirical research is suggesting may be ineffective (Davis & Taylor, 1999; Davis, Taylor, & Maxwell, 1998; Dunford, 2000; Feder & Forde, 2000). Despite the obvious problems associated with this initiative, the push for legislative standards moves forward. Among the many suggestions addressed by these standards is to formalize program structure and length. As a result, most treatment programs nationally, regardless of theoretical perspective, offer a feminist-informed, cognitive-behavioral, group treatment approach for batterers (Gelles, 2001; Holtzworth-Munroe, 2001). Perhaps the greatest problem associated with this legislative trend is that it poses a risk of institutionalizing a treatment approach that may not be working well.

In an interesting parallel, in a recent study investigating childhood attachment patterns via levels of interpersonal dependency among women in treatment for domestic violence offenses, we found the women to also be overly dependent on their partner, an adult indicator of insecure attachment style (Carney & Buttell, 2005). Perhaps more important, we found this excessive level of interpersonal dependency to be significantly associated with the women's use of psychological aggression tactics, physical assault, sexual coercion, and severe injury directed at their intimate partner. In this regard, these women appear to be much like male batterers in that there seems to be a positive linear relationship between interpersonal dependency and a multidimensional definition of violence.

Similarly, strength of attachment has been found to be a factor in determining whether an abused woman stays in her abusive situation or leaves (Dutton, 1988; Dutton & Painter, 1993; Henderson, Bartholomew, & Dutton, 1997). Based on the social-psychological theory of traumatic bonding, the abuse can strengthen the attachment bond. A battered woman's loyalty to her abuser is linked to the power imbalance and the intermittent nature of the violence in their relationship (Dutton, 1988; Dutton & Painter, 1993; Henderson et al.,

1997). The working model of self, embodied in the battered woman as worthless, intensifies as the abusive partner becomes more abusive. As her negative view of self escalates, she becomes more fearful, less confident, and more dependent on her abuser (Dutton, 1988; Henderson et al., 1997). This power imbalance, coupled with the intermittent nature of the violence, where periods of violence are followed by pleasant, affectionate, seemingly loving behavior on the part of the abuser, creates a cycle (Walker, 1979). This cyclical pattern of behavior serves to strengthen the bond between the battered woman and her abuser, thus interfering with her ability to leave (Dutton & Painter, 1993).

As the preceding discussion illustrates, attachment theory holds considerable potential for explaining the actions of both abusers and victims in domestic violence situations. Unfortunately, in the current climate of increasing state standards and legislative requirements for BIPs (Maiuro et al., 2002), wholesale programmatic change would, at best, be unlikely. Nevertheless, in terms of interpersonal dependency and attachment theory, the literature on male batterers is evolving in the direction of incorporating these constructs into existing treatment protocols (Sonkin & Dutton, 2003). Consequently, if future research confirms that all batterers, regardless of sex, have dependency issues that should be addressed in BIPs, then dependency and attachment issues may become vital in batterer intervention programming.

Case Example

An Application of Attachment Theory at the Macro Level to Explain Minority Disenfranchisement in the United States

As discussed previously, an often neglected aspect of Bowlby's attachment theory is the impact of macro influences on the attachment process. In fact, he argued that "just as children are absolutely dependent on their parents for sustenance, so in all but the most primitive communities, are parents, especially their mothers, dependent on a greater society for economic provision. If a community values its children it must cherish their parents" (Bowlby, 1951, p. 84, as cited in Bretherton, 1992). Consequently, while many studies focus on attachment principles in the context of the family, according to Bowlby, one can also expand the basic tenets of this theory to apply on a societal level. The remainder of this section considers the African American experience through the lens of attachment theory. Although no research is currently available that explores this avenue with a particular focus on African Americans, it seems evident that the disenfranchisement of African Americans in the United States can be at least partially accounted for by attachment theory.

In "The Political Context," Mowlam (1996) proposes that the inconsistent availability of the government to its citizens has led to a sense of insecurity on the part of American society as a whole. Of particular interest here, however, is the specific nature of the African American population's anxious or avoidant attachment to society and the government, within the framework of the typically microlevel dynamics of the mother-infant relationship that Bowlby (1982) and Ainsworth (1985) have explored. In short, while all human beings are affected by the early attachment dynamics of their parents or caregivers, the African American population as an entire culture has

also been profoundly affected by the inconsistent responsiveness of the American government as well as dominant society at large, in much the same way as an infant is affected by an insecure or anxious attachment to his or her parents. For example, a recent study on the history of youth delinquency (Cross, 2003) emphasizes that the coexistence of high African American crime rates and high levels of social capital can be explained by looking at the long-term negative emotional effects of slavery (which, more clearly than any other example in history, illustrates the absence of secure bonds with the government and society). The parallel between attachment theory at micro and macro levels is undeniable.

The main principle of Bowlby and Ainsworth's theory of attachment is that the securely attached child possesses the knowledge that his or her mother is dependable and consistently available (Karen, 1990). As attachment theory shows, a client who is currently experiencing relationship and intimacy difficulties may perhaps be better understood when examined in the framework of the relationships with his or her parents. To illustrate this point, consider the example of a young African American female client at a local community mental health facility. This client has expressed concern about a pattern of difficulty finding a romantic partner. She attributes this difficulty to the fact that she has a tendency to terminate her relationships at the first sign of a lack of trustworthiness. Her reluctance to trust (both in herself and others) has also been compounded by several painful and unsuccessful attempts to form friendships with Caucasian women. These relationships in particular have been thwarted by both racist concerns of the Caucasian parents and by an unwillingness on the part of her Caucasian friends to accompany her to African American clubs. As with her romantic partners, this client has a history of abandoning friendships as opposed to making efforts, through open communication, to arrive at some sort of mutual understanding. This client's pattern of avoidant attachments, through no fault of her own, can be traced all the way back to an avoidant attachment to her mother, whose boyfriend systematically and sexually abused the client for years. Her mother, in response, accused the client of seducing the man and therefore threatening her mother's relationship with him. The suspicious and destructive nature of this early relationship with authority figures seems to have set the stage for her current difficulties in achieving intimacy. As Colin (1996, p. 298) points out, "Adult avoidance of intimacy may have its roots in early experiences in which emotional vulnerability was associated with parental rejection." In this case, the client experienced both physical and emotional rejection by her mother, both of which have impacted her current relationship patterns on micro and mezzo levels.

However, related to the application of attachment theory at the macro level, one also could argue that her current relationship and attachment difficulties have also been largely affected by her culture's extensive history of social and political rejection. In this case, both the client's personal history of rejection and the specific history of the African American culture have affected her adult relationships. This connection gains further clarity when viewed in relation to the theme of trust that is

(*continued*)

evident throughout the principles of attachment theory. Specifically, an exploration of African Americans' attachment patterns as they relate to government and the dominant society uncovers many parallels to the dynamics of parent-child relationships. As discussed earlier, insecure or avoidant attachments result from a lack of protection and responsiveness from the parent. Enlarging this concept to a cultural level, though, reveals a similar pattern. Just as Mowlam (1996, p. 23) asserts that Americans in general are suffering from a "widespread, profound sense of insecurity" as a result of mistrusting the government, it follows that the very same (but greatly intensified) lack of trust would be present among African Americans when one considers that they, as a collective group, have never enjoyed the feeling of availability of and responsiveness from dominant society or the American government. In this respect, the theme of protection operates on micro, mezzo, and macro levels, with many of the same patterns emerging.

In the context of family and friend systems, protection provides comfort, safety, self-confidence, and security. In the sociopolitical (macro) realm, protection enhances the same qualities, but also affects the ability to successfully acculturate oneself into larger society. While African Americans are already faced with the need to assimilate into two cultures ("bicultural socialization"; Norton, 1993), the additional anxiety that arises from an overwhelming sense of being unwelcome or unimportant to their government (metaphorical parents, as it were) makes the effort to belong that much more difficult.

Continuing with our theme of linking attachment theory and domestic violence, another example of a macro application of attachment theory is the case of two clients, one female and one male, who came to a community mental health center seeking help with the female's depression and were referred for conjoint therapy sessions. At the time of the second session, the female showed up late and disheveled, stating that the male had physically attacked her in the parking lot. After talking for a few minutes while she calmed down, it was suggested that she call the police and report the incident. She had serious reservations about reporting the incident because she was afraid that the police would arrest her.

In the context of an avoidant attachment to authority figures, her reaction makes perfect sense. In her experience, she had no reason to trust that the police would protect or help her. It is precisely this awareness of the larger person-in-environment perspective that will enable clinicians to not only respond empathically, but also to begin to understand the effects of a lifelong experience that includes continuous rejection by authority figures on a sociopolitical level.

The reality of her fear is reflective of Bowlby's (1973) elucidation that children construct their expectations of others' reactions to them in terms of the history of their experiences with their parents, but on an enlarged scale. In this case, the police are a metaphorical replacement for the parents, and the concept then applies on a macro level.

In this aspect, the presence of increased social capital among African Americans is also reminiscent of sibling bonding patterns that may occur in the absence of consistent or nurturing parental care. In a study conducted by Van IJzendoorn, Van der

Veer, and Van Vliet-Visser (1987), five families were observed to examine the effects of the birth of a sibling. In this study, the anxiously attached firstborn responded very warmly to the newborn, differing from the patterns exhibited by other subjects (van Vliet-Visser & van IJzendoorn, 1987). An explanation of this phenomenon, provided by Dunn and Kendrick (as cited in van Vliet-Visser & van IJzendoorn, 1987), is that when the parents have failed to establish a secure bond with the firstborn, the child with anxious attachment will attempt to bond with the sibling in order to minimize the feeling of complete abandonment. This dynamic is also applicable to Hines, Preto, McGoldrick, Almeida, and Weltman's (1999) essay, "Culture and the Family Life Cycle." Hines et al. explain that a common practice of African Americans is to refer to each other as brothers and sisters as a reflection of the sense of attachment to each other that they possess. In the framework of sibling bonding patterns, this cultural attachment may be viewed as a direct reaction to members having suffered together through slavery and discrimination (an extreme lack of secure bonds with authority figures or metaphorical parents).

Additionally, Mowlam (1996, p. 26) asserts that this "lack of belonging" is one of the fundamental causes of the recent collapse between all young people today and their government. In an attachment theory framework, the concept of belonging is directly linked to avoidant attachment as well as the themes of trust and rejection.

The principles set forth by attachment theory therefore do not apply exclusively to individuals in the context of their family and upbringing. Attachment dynamics on a macro level also affect one's relationships as well as one's ability to function in society. African Americans and Caucasians still maintain some degree of separation from each other (although, admittedly, the relations have improved). It is also interesting to note that while African Americans as a culture enjoy high levels of social capital, the Caucasian culture by comparison is somewhat lacking in this resource.

In addition to increased awareness, acknowledgment, and validation of the African American culture's avoidant attachment history, the social worker must also help clients to identify and resolve these macrolevel avoidant attachment patterns—pretending not to care when actually they are probably quite angry—in order for clients to feel less resentful about a more integrated level of socialization into dominant society, which may in turn lead to increased opportunities. The emphasis here is on bicultural socialization, and not complete abandonment of the African American culture. The fact that there is a dominant society does logically, right or wrong, require some level of adjustment in order for other cultures to increase their opportunities for success. While the decision to embrace both cultures lies with each individual, the decision should be made free of any anger that has resulted from cultural rejection and an appalling lack of protection. The resolution of these avoidant attachments may also provide a therapeutic and productive channel in which to direct the intense feelings of anger that are likely to surface by using social capital to focus a collective effort on cultural advocacy.

(*continued*)

In this sense, a strengths perspective (Saleebey, 1992) emphasizes the value of existing social capital among African Americans as a creative and effective defense against a consistently hostile environment. Culturally specific social capital may also be utilized as a solid foundation from which one is better equipped to confront adversity. As Hewitt (1996, p. xv) notes, social capital is not only essential in terms of economics, but is also part of "the conditions for a good life." Existing attachment patterns used to establish social capital among African Americans may also provide opportunities to apply these same patterns to other populations. Because social capital is based on relationships and attachments (Putnam, 2000), the clinician's awareness and encouragement of this resource is vital.

As clinicians, we must be aware of and sensitive to the fact that attachment issues among African American clients may exist on several levels. Social workers must therefore make a special effort to explore these avenues when working with any client who has been oppressed. It is also essential to good practice that social workers acknowledge and validate African Americans' history of oppression so as not to add to the feelings of rejection, mistrust, and lack of responsiveness by authority figures. As mentioned earlier, the strengths perspective (Saleebey, 1992) guides us toward both encouraging and utilizing social capital as a resource, especially in light of the unlikelihood that the American sociopolitical system, in which African Americans live and function, is going to change anytime soon. Given the progress that has been achieved thus far, however, it would not be surprising for the macrolevel application of attachment theory with regard to oppressed populations to gain more understanding, recognition, and support in the near future.

CRITIQUES OF THIS APPROACH

Attachment theory has been widely tested and criticized (Bretherton, 1992). Scholars from virtually every discipline have questioned Bowlby's assertions regarding attachment theory's biological and physiological base, its universality, its intergenerational transmission, and its stability across time (Bolen, 2000). Additionally, research suggests that studies supporting Bowlby's attachment model have been plagued with methodological problems, calling into question the legitimacy of the interpretations and findings (Bolen, 2000; Hazen & Shaver, 1987; Lamb, 1987; Rheingold & Eckerman, 1973). Critics have suggested that the traditional view of the mother as the primary caregiver is sexist (Chodorow, 1978; M. Johnson, 1988), yet attachment theory does not specifically name the mother as the attachment figure, and evidence suggests that most important is a committed caregiver relationship (Marris, 1982). Opponents also advise that more research should be conducted relative to fathers as attachment figures and attachment within the family system (Bronfenbrenner, 1979).

The interrelations of early childhood attachment and later-in-life attachment relationships—across the spectrum—need to be further investigated. The impact of early disrupted attachment on later involvement in violence either as a perpetrator or as a victim needs to be further delineated. Finally, using the information gained about individual

attachment patterns to create programming to address social problems such as delinquency and domestic violence is particularly warranted.

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Chapter 8

PSYCHOSOCIAL THEORY

Roberta R. Greene

The purpose of this chapter is to discuss and critique Erik Erikson's eight-stage psychosocial theory. Erikson's theory, a departure from the classic psychoanalytic tradition of his day, made several contributions to the understanding of human development. First, he viewed development as occurring throughout the life cycle, starting with the infant at birth and ending with old age and death. As a result, the life cycle perspective drew new attention to middle and old age (Hogan, 1976). Second, Erikson contended that each stage of development is a new plateau, at which time the developing self can achieve a greater sense of mastery over the environment. This concept refocused research and treatment on a more positive understanding of personality development (Greene, 1999a). Finally, Erikson proposed that development takes place within a social context in which the individual has an expanding number of significant relationships throughout life. This broader developmental context foreshadowed developmental psychologists' interest in the ecological approach to person-environment.

DEVELOPMENTAL THEORY

A theory is a logical system of general concepts that provides a framework for organizing and understanding observations. Theories help identify the orderly relationships that exist among many diverse events. They guide us to those factors that will have explanatory power and suggest those that will not (Newman & Newman, 2005). Furthermore, theories should account for stability and change; describe the interactions among cognitive, emotional, and social functioning; and predict the impact of the social context on individual development (Greene, 1999b, 2005).

Developmental theory offers a means of comprehending the client's behavior within the broader context of the life span and within the composite of biopsychosocial events. The purpose of developmental theory is to account for both the stability and change of human behavior across the life cycle (Table 8.1). Before 1940, most social scientists thought that development did not occur after an individual became physically mature. Today, it has been generally established that development, particularly in the cognitive and affective areas, takes place across the life cycle (Kastenbaum, 1979). Social workers use various theories to assess clients' situations and develop interventions that resolve their difficulties. Theories also help social workers explain why people behave as they do, understand better how

Table 8.1 Developmental Theory: Its Applicability

Developmental theory can
- Provide a framework for ordering the life cycle
- Describe a process that is both continuous and changing from conception to death
- Address stability and change in the unfolding of life transitions
- Account for the factors that may shape development at each specific stage
- Discuss the multiple biopsychosocial factors shaping development
- Explore the tasks to be accomplished at each life stage
- Consider each life stage as emerging from earlier stages
- Explain successes and failures at each stage as shaped by the outcome of earlier stages
- Identify personal differences in development

Note: Based on "Eriksonian Theory" (pp. 107–136), by R. R. Greene, in *Human Behavior Theory and Social Work Practice,* second edition, R. R. Greene, 1999, Hawthorne, New York: Aldine de Gruyter.

the environment affects behavior, shape interventions, and predict the likely result of a particular social work intervention (Fischer, 1981).

Life span development, as envisaged by Erikson, draws on a number of theories and, due to the complexity of the subject matter, includes many scientific disciplines. In considering human development in an environmental context, this approach addresses an individual's genetic endowment, physiology, psychology, family, home, community, culture, education, religion, ethnicity/race, gender, sexual orientation, and economic status (Rogers, 1982). Developmental theory falls under the rubric of the person-in-situation construct, allowing social workers to view a client's functioning both longitudinally over time and cross-sectionally in the light of stage-specific factors.

HISTORICAL AND CONCEPTUAL ORIGINS

Freudian Origins

Erikson, who considered himself a Freudian (1968, p. 64) and was trained as an analyst by Freud's daughter Anna Freud, elaborated psychodynamic theory by adding a social dimension. In contrast to Freud, who believed that individuals are impelled by unconscious and antisocial sexual and aggressive urges that are basically biological in their origin, Erikson (1975) proposed that individuals are influenced positively by social forces about which they are highly aware (Greene, 1999a; Table 8.2). Although Erikson agreed with Freud that an individual must deal with unconscious conflicts, he viewed development as the outcome of the interaction of the individual with his or her environment.

Again, unlike Freud and other classical psychoanalysts who emphasized the *id* (the innate and primitive part of the personality) in their study of development, Erikson (1959, 1980) was concerned with the capacity of the *ego* (the executive arm of the personality) to act on the environment. The key to Erikson's formulation was its concentration on the interaction between people's striving ego and their mastery of the environment.

Despite his departures from Freud's psychodynamic point of view, Erikson (1975, p. 23) credited Freud with a "radical change in the concept of the role and the self-perception of

Table 8.2 Framework for Personality Development According to Freud and Erikson

Theorist	Personality Development Is
Freud	Based on a relatively closed energy system
	Impelled by strong sexual and aggressive drives
	Dominated by the id
	Threatened by anxiety and unconscious needs
	Dominated by behaviors that attempt to reduce anxiety and to master the environment
	Conflicted by contradictory urges and societal expectations
	Intended to place impulses under control
	Formed in early childhood stages, culminating in early adulthood
Erikson	Based on a relatively open energy system
	Shaped by weak sexual and social drives
	Governed by the ego
	Based on social interaction
	Bolstered by historical and ethnic group affiliation
	Formed through ego mastery and societal support
	Based on the historical and ethnic intertwining of generations
	Intended to prepare a healthy member of society who can make positive contributions to that society
	Shaped over the life cycle
	Intended to convey principles of social order to the next generation

Note: Based on "Eriksonian Theory" (pp. 107–136), by R. R. Greene, in *Human Behavior Theory and Social Work Practice,* second edition, R. R. Greene, 1999, Hawthorne, New York: Aldine de Gruyter.

the healer as well as the patient." Unlike some theorists (Weick, 1983) who perceive Freud and the medical model as an authoritative approach to treatment, Erikson (1975, p. 24) held that Freud's goals were to "free a person from inner bondage . . . and come to terms with his own unconscious . . . thus becoming collaborators in the job." Erikson's own view was that his training as a psychotherapist was both liberating and indoctrinating.

Erikson's Historical View

Erikson was born in Frankfurt, Germany, in 1902, and died in the United States in 1994. His perspective that developmental theory must be understood in the context of the historical times in which it is written is mirrored in his own life. The majority of Erikson's written works spanning the years 1936 to 1984 do not reveal much about his personal beliefs and sociohistorical times. However, Carol Hoare's (2002) *Erikson on Development in Adulthood* provides additional information from the Erikson collection at the Houghton Library at Harvard University and a transcript of the Conference on the Adult sponsored by the American Academy of Arts and Sciences. Her review of the unpublished papers used a process of grounded theory to examine Erikson's works and to cluster various ideas into content categories, enabling her to reveal "new images" of his developmental concepts (p. vi). Following the completion of her study, Hoare declared Erikson to be not only creative but "an originator" and a major author of twentieth-century thought (p. 9).

According to Hoare (2002), Erikson's interest in identity may have stemmed from the fact his biological father was Danish and his stepfather was Jewish. His sense of alienation was said to have grown because he was taunted as being a gentile by the Jewish community and being a Jew by other Germans. He lived throughout World War I in Germany, where his hometown was bombed on the day of his bar mitzvah.

In an attempt to clarify his own beliefs as a young adult, he read thinkers such as Kierkegaard, Freud, Lao-Tse, Schopenhauer, and St. Augustine. Trained as a psychoanalytic thinker at Freud's Vienna Psychoanalytic Institute by Anna Freud, he soon rejected the idea that development is primarily based on internal drives. His papers reveal that, although he was an admirer of Freud and incorporated some of Freud's thinking into his later works, he gradually came to find the atmosphere of the Institute too conservative. At that time, he earned a Montessori teacher's diploma, embarking on the path to his own philosophy of adult development "in which people strive beyond themselves to make human connections with others in their social world" (Hoare, 2002, p. 13).

After Erikson immigrated to the United States in 1933, his scholarship and clinical papers propelled him into a prestigious career at such institutions as Harvard, Yale, University of California at Berkeley, and Massachusetts General Hospital. He was the first child psychoanalyst in Boston and continued work as a clinician throughout his life. His views on public matters are sometimes revealed in his Harvard papers. For example, at the end of World War II, he commented on the first use of nuclear weapons, stating that the human race had "overreached itself" and that nuclear bombs were a "historical maladaptation" in species evolution (Erikson, 1984). Erikson's stance of nonviolence deeply informed his participation in the disarmament conference of the American Academy of Arts and Sciences, where he observed that the only antidote to the global arsenals of total destruction was Gandhi's nonviolent alternative to change. Later, in a lecture in 1972, he said that the "American Dream" had turned into a "nightmare" with the Vietnam War. His clinical work was extended to returning veterans. Erikson (1977a) also continued to struggle with the question of what it means to be an adult in a "busy, possession-oriented society" at a time when such a question appeared irrelevant.

Often commenting on and critiquing his own works, Erikson appeared well aware of the historical and conceptual origins of his writings. Erikson (1959, 1980) believed that the society into which one is born strongly influences how one solves the tasks posed by each stage of development. He also thought that people who share an "ethnic area, a historical era, or an economic pursuit were guided by a common image of good and evil" (1959, p. 17). He urged psychoanalysts to study the historical influences of the times in which they work. In his *Identity Youth and Crisis,* first published in 1968, he reflects on the "revolutionary minds of the middle class of the nineteenth century" (p. 25), including Marx, Darwin, and Freud.

Erikson (1958/1993, p. 16) believed he could use "psychoanalysis as a historical tool." At some level, as he writes in *Young Man Luther* in 1958/1993, he saw himself as a clinical worker and a scholar interested in the history of thought. He compares his subject, Martin Luther, to Freud. He attributes to both men the ability to engage in introspective analysis, which led to radical changes in society: "I have applied to Luther, the first Protestant at the end of the age of absolute faith, insights developed by Freud, the first psychoanalyst at the end of the era of absolute reason" (p. 252).

BASIC THEORETICAL PRINCIPLES

Psychosocial Theory

Erikson considered human development to be a biopsychosocial process, thereby agreeing with Freud that behaviors are propelled by sexual and aggressive drives. But, in contrast to Freud, Erikson suggested that there are three social drives: a need for attention, a need for competence, and a need for order in life's affairs. Erikson also concurred with Freud about the human unconscious having biological origins (Greene, 1999a). Nonetheless, he proposed a psychosocial theory—a theory that examines human behavior as the outcome of the interaction between a person's individual needs and abilities, and societal expectations and responsibilities (Newman & Newman, 2005; Table 8.3).

Psychosocial theory is "a theoretical approach that explores issues of growth and development across the life cycle as a product of the personality interacting with the social environment" (Greene, 1999a, p. 135). According to Erikson, to say that his concept of the identity crisis was both psychological and social meant:

- Identity is a subjective and observable quality related to an individual's sameness and continuity. Thus, a person's identity is a reflection of choices made, values carried out, and mentors met.
- Identity is a state of being and becoming and may be conscious or unconscious. Therefore, developing a sense of identity may produce mental conflicts.

Table 8.3 Eriksonian Theory: Basic Assumptions

Development is biopsychosocial and occurs across the life cycle.
Development is propelled by a biological plan; however, personal identity cannot exist independent of social organization.
The ego plays a major role in development as it strives for competence and mastery of the environment. Societal institutions and caretakers provide positive support for the development of personal effectiveness. Individual development enriches society.
Development is marked by eight major stages at which time a psychosocial crisis occurs. Personality is the outcome of the resolution—on a continuum from positive to negative—of each of these crises. Each life stage builds on the success of the former, presents new social demands, and creates new opportunities.
Psychosocial crises accompanying life stages are universal, occurring in all cultures. Each culture offers unique solutions to life stages.
The needs and capacities of the generations are intertwined.
Psychological health is a function of ego strength and social supports.
Confusions in self-identity arise from negative resolution of developmental crises and alienation from societal institutions.
Therapy involves the interpretation of developmental and historical distortions and the curative process of insight.

Note: Based on "Eriksonian Theory" (pp. 107–136), by R. R. Greene, in *Human Behavior Theory and Social Work Practice,* second edition, R. R. Greene, 1999, Hawthorne, New York: Aldine de Gruyter.

- Identity is most prevalent during the developmental period of adolescence and youth. It results from the interaction of somatic, cognitive, and social factors.
- Identity is dependent on the past and the roles offered an individual during childhood. It also depends on communal models.

In short, psychosocial identity is related to an individual's personal coherence and integration in his or her group, the guiding images and ideologies of his or her day, and the historical moment in which development occurs (Erikson, 1975, pp. 18–20).

Epigenetic Principle

The epigenetic principle, which follows a biological plan, suggests that individual growth occurs systematically, with each developmental stage building on another in an orderly pattern (Newman & Newman, 2005). The epigenetic principle suggests that "anything that grows has a ground plan, and that it is out of the ground plan that the *parts* arise, each part having its *time* of special ascendancy, until all parts have arisen to form a *functioning whole*" (Erikson, 1959/1980, p. 53).

Erikson (1950/1963) conceived of the developmental plan as unfolding over a lifetime, and retreating or regressing to an earlier stage was not possible. However, themes of earlier stages can emerge and a new resolution of an earlier conflict occur (Greene, 1999a). According to Erikson's wife, Joan Erikson (1988), who was actively involved in the conceptualization of these theoretical ideas, when a strength does not adequately develop during its scheduled period, support from the environment may bring about a further resolution of the development crisis at a later period in time.

Psychosocial Crisis

According to Erikson (1950/1963), a psychosocial crisis is not really a crisis, but a heightened sense of normal demands. These demands, which arise from the epigenetic principle, represent "a crucial period or turning point in a person's life when there is increased vulnerability and heightened potential. [It is] a time when particular efforts must be made to meet a new set of demands presented by society" (Greene, 1999a, p. 135; Table 8.4).

Erikson contended that an individual's personality is a function of the outcome of the crisis of each life stage. Each of the eight psychosocial crises listed in Table 8.4 may be thought of as a state of tension or stress precipitated by societal expectations for an individual's behavior. The resolution of a psychosocial crisis falls on a continuum from very successful to less successful. The two extremes or poles of the continuum from positive to negative are known as *polarities*. The psychological outcome of a crisis is a blend of ego qualities resting between the two contradictory polarities. For example, although an individual may be characterized as trusting, the outcome of the first psychosocial crisis is truly a mixture of trusting and mistrustful personality features. However, in some individuals the qualities associated with one pole will predominate or be more apparent.

Another important distinction made by Erikson was that a crisis may be considered a *normative event,* that is, one that is anticipated. Normative events have been defined as age-graded events, determined by universal biological and social norms, including birth and

Table 8.4 The Psychosocial Crisis

Life Stage	Psychosocial Crisis
Infancy	Trust versus mistrust
Early childhood	Autonomy versus shame and doubt
Play age	Initiative versus guilt
School age	Industry versus inferiority
Adolescence	Individual identity versus identity confusion
Young adult	Intimacy versus isolation
Adulthood	Generativity versus stagnation
Old age	Integrity versus despair

Note: Based on *Identity and the Life Cycle,* by E. H. Erikson, 1959/1980, New York: Norton; *The Life Cycle Completed*, by E. H. Erikson, 1982, New York: Norton; *Vital Involvement in Old Age*, by E. H. Erikson, J. M. Erikson, and H. Q. Kivnick, 1986, New York: Norton.

divorce. Sometimes normative events are historical events, experienced by an entire cohort (people born during the same era), such as the Great Depression. Nonnormative events are not expected and are limited to a relatively small number of people, such as violent death (Borden, 1992). Erikson also proposed that psychosocial crises accompanying each developmental stage are universal, occurring in every culture. However, each culture offers unique solutions at each life stage.

Ego Qualities versus Core Pathologies

Ego qualities are the positive features that become apparent following a psychosocial crisis; *core pathologies* are the negative qualities that emerge as a result of severely negative resolutions of the crisis. Ego qualities are the mental states that orient a person to life events. On the other hand, core pathologies are negative forces that develop following a crisis and also act as a guide to behavior. However, core pathologies usually are seen in resistance and avoidance of change (Newman & Newman, 2005; Table 8.5 and Table 8.6). For example, following the crisis of trust versus mistrust, is the person full of hope, or does he or she withdraw from life? Erikson, Erikson, and Kivnick (1986) suggest that those who are hopeful throughout life are better able to cope with adversity and attain their goals.

Radii of Significant Relationships

As an individual faces a psychosocial crisis, he or she has a significant other (or others) who acts as a communicator of and buttress to the societal demands of that period. For example, a mother or father often begins to put a child on a sleeping and eating schedule, but protects the child from hunger and malnutrition. This process begins to sensitize the child to social expectations and to stimulate the resolution of the crisis: trust versus mistrust. As the child develops, siblings, close relatives, teachers, and peers become part of the societal network that provides the social developmental context. In short, the radius of significant relationships refers to "the developing individual's expanding number of social relationships through life" that influence his or her multifaceted social life (Greene, 1999a, p. 135; Table 8.7).

Table 8.5 Prime Adaptive Ego Qualities

Life Stage	Ego Quality	Definition
Infancy	Hope	An enduring belief that one can attain one's deep and essential wishes
Early childhood	Will	A determination to exercise free choice and self-control
Play age	Purpose	The courage to imagine and pursue valued goals
School age	Competence	The free exercise of skill and intelligence in the completion of tasks
Adolescence	Fidelity to others	The ability freely to pledge and sustain loyalty to others
Young adulthood	Love	A capacity for mutuality that transcends childhood dependency
Adulthood	Care	A commitment to concern about what has been generated
Old age	Wisdom	A detached yet active concern with life itself in the face of death

Note: Based on "Reflections on Dr. Borg's Life Cycle" (pp. 1–31), by E. H. Erikson, in *Adulthood*, E. H. Erikson (Ed.), 1978, New York: Norton.

Table 8.6 Core Pathologies

Life Stage	Core Pathology	Definition
Infancy	Withdrawal	Social and emotional detachment
Early childhood	Compulsion	Repetitive behaviors motivated by impulse or by restrictions against the expression of impulse
Play age	Inhibition	A psychological restraint that prevents freedom of thought, expression, and activity
School age	Inertia	A paralysis of action and thought that prevents productive work
Adolescence	Repudiation	Rejection of roles and values that are viewed as alien to oneself
Young adult	Exclusivity	An elitist shutting out of others
Adulthood	Rejectivity	Unwillingness to include certain others or groups of others in one's generative concern
Old age	Disdain	A feeling of scorn for the weakness and frailty of oneself and others

Note: Based on "Reflections on Dr. Borg's Life Cycle" (pp. 1–31), by E. H. Erikson, in *Adulthood*, E. H. Erikson (Ed.), 1978, New York: Norton.

Table 8.7 Stage and Modalities

Stage	Approximate Age	Radius Relationships	Modalities	Freudian Stage
I	Infancy: Birth to 2 years	Maternal person	To get To give in return	Oral
II	Early childhood: 2–4 years	Parental person	To hold on To let go	Anal
III	Play age: 4–6 years	Basic family	To make things (going after something)	Latency
IV	School age: 6–12 years	Neighborhood and school	To make things To make things together	Puberty
V	Adolescence: 12–22 years	Peer group	To be oneself (or not to be oneself)	Genitality
VI	Young adult: 22–34 years	Partners in friendship	To lose and find oneself in another	
VII	Adulthood: 34–60 years	Divided labor and shared household	To make be To take care of others	
VIII	Old age: 60 years–death	"Mankind": "my kind"	To be through having been To face not being	

Note: Based on *Identity and the Life Cycle,* by E. H. Erikson, 1959/1980, New York: Norton; *The Life Cycle Completed*, by E. H. Erikson, 1982, New York: Norton; *Vital Involvement in Old Age*, by E. H. Erikson, J. M. Erikson, and H. Q. Kivnick, 1986, New York: Norton.

Psychosocial Stage Theory

Erikson emphasized that one stage of development builds on the successes of previous stages, a time when the individual must reestablish his or her ego functioning or equilibrium. Each stage of development is distinguished by particular characteristics that differentiates it from preceding and succeeding stages (Newman & Newman, 2005). The notion that development occurs in unique stages, each building on another and having its own emphasis or underlying structural organization, is called *stage theory* (Figure 8.1).

Erikson assigned only general ages to his stages. However, he did predict that there would be an age-related movement from one stage to the next at a time of natural ascendancy. Difficulties in resolving earlier psychosocial issues may predict difficulties for later stages. This concept is discussed again under "Assessment."

Stage 1: Trust versus Mistrust

The first of Erikson's (1959/1980) stages occurs during infancy and centers on the crisis of trust versus mistrust: the "cornerstone of the healthy personality" (p. 56). Erikson believed that "enduring patterns for the balance of basic trust over basic mistrust" were established (pp. 64–65) through positive interaction with a parental caretaking figure. Trust, which is learned from the parental figure, is the perception that people are predictable, dependable, and genuine. This learning takes place, for example, as the child experiences

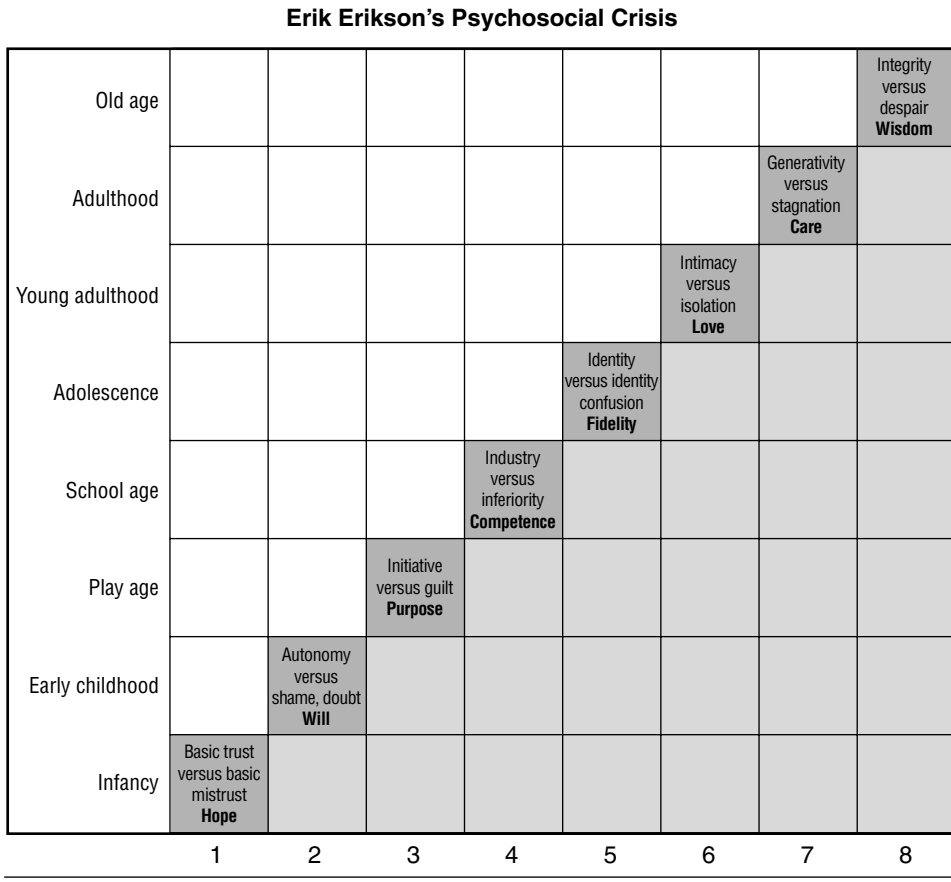


Figure 8.1 Erikson's psychosocial crisis

the warmth and joy of being cuddled or fed. "By 'basic trust' [Erikson] meant what is commonly implied in reasonable trustfulness as far as others are concerned and a simple sense of trustworthiness as far as oneself is concerned" (p. 57). On the other hand, *mistrust* may occur as a child senses that he or she is in danger and shies away from the caretaker.

Erikson (1958/1993) expressed his fascination with a child's capacity to form what he termed "object relationships," the ability to love in an individualized sense. Growing cognitive ability and maturing emotional response early converge on the face:

> An infant of two or three months will smile even at half a face; he will even smile at half a painted dummy face, if that half is the upper half of the face, is fully represented, and has at least two clearly defined points or circles for eyes; more the infant does not need, but will not smile for less. (p. 116)

The resolution of the first stage is a blend of trust and mistrust. When the resolution results in a more positive pattern, a child will be *hopeful,* exhibiting a sense of confidence. If the resolution is toward the more negative pole, there is a tendency for the child to *withdraw* or become socially detached. These important initial adaptive qualities may filter a person's perceptions over a lifetime unless other critical events affecting this general orientation occur.

Stage 2: Autonomy versus Shame

Erikson's (1959/1980) second stage, which takes place in toddlerhood, is autonomy versus shame. To develop autonomy, a firmly developed sense of trust is necessary. *Autonomy,* or a sense of self-control without a loss of self-esteem, is the positive aspect of this crisis and involves the psychosocial issues of "holding on" and "letting go" (Greene, 1999a). Autonomy may be seen when a child's asserts, "I can do it myself." On the other hand, *shame*, the feeling of being exposed or estranged from parental figures, involves a child feeling that he or she is a failure and is lacking in self-confidence. If a child is overly criticized, he or she may feel less than competent in his or her environment.

Erikson acknowledged Freud's view that this life stage is associated with the child's forcefulness during toilet training and is resolved through interaction with the parents. Erikson (1959/1980, p. 71) asserted that as a result, the matter of mutual regulation between parent and child "faces a severe test," A positive resolution of this crisis allows a child to experience a sense of *will*, seen in his or her resolve in meeting goals. In contrast, children who have a relatively negative outcome at this stage may develop *compulsions* or repetitive ritualized behaviors, contributing to the feeling that they are less able to be in control of their world.

Stage 3: Initiative versus Guilt

According to Erikson (1959/1980), having come to grips with the crisis of autonomy and convinced that he or she is a person, a child now must find out what kind of a person he or she is going to be. This crisis takes place in Erikson's third stage of life: initiative versus guilt. Erikson (1950/1963) maintained that, during this stage, the family remains the center of significant relations and that children become more concerned with play and with pursuing activities of their own choosing.

Initiative is expressed through such activities as playful exploration. Erikson (1959/1980, p. 78) stressed that, at this time, three basic developments contribute to the child's ability to engage in an active investigation of his or her environment: (1) The child learns to move around more; (2) the child's sense of language becomes perfected; and (3) both language and locomotion expand the child's imagination.

During the stage of initiative versus guilt, as a result of being "willing to go after things" and "to take on roles through play," the child develops a sense of *purpose* (Erikson (1959/1980, p. 78). A sense of purpose can be observed when a child appears to have a plan or sense of direction, such as building blocks. However, if he or she is overly thwarted or frustrated in carrying out his or her plans, a feeling of *inhibition*, or restraint that prevents freedom of thought and expression, will predominate. Therefore, when parents frequently inhibit planful behaviors, the child can fear parental disapproval. Long after the person has matured, the individual displays, as part of his or her "work ethos as well as in recreation and creativity, behaviors relevant to rebalancing of initiative and guilt" (Erikson et al., 1986, p. 169).

Stage 4: Industry versus Inferiority

One might say that personality at the first stage crystallizes around the conviction "I am what I am given," and at the second, "I am what I will." The third stage can be characterized by "I am what I can imagine I will be." We must now approach the fourth: "I am what I learn" (Erikson, 1959/1980, p. 87).

Erikson's fourth psychosocial crisis of *industry versus inferiority* occurs between ages 6 and 12. Classical psychoanalysts believed that this was a time when the sexual drive lay dormant and children enjoyed a period of relative rest (Corey, 1986). Erikson (1959/1980) broke with psychoanalytic thinking, suggesting that the central task of this time is to achieve a sense of industry. Industry is showing enthusiasm and self-motivation in relation to work. Developing *industry* is a task involving "an eagerness for building skills and performing meaningful work" (p. 90). On the other hand, *inferiority* is the sense that one is inadequate, or does not compare or compete well with others. It is at this stage that friends and peers present social comparisons.

The crisis of industry versus inferiority can result in the ego quality called *competence*. According to Erikson (1978, p. 30), competence "is the free exercise of dexterity and intelligence in the completion of tasks, unimpaired by infantile inferiority. It is the basis for cooperative participation in technologies, and it relies, in turn, on the logic of tools and skills." The opposite or counterpart of competence is *inertia,* defined as a paralysis of thought and action that prevents productive work. Success at making things and "making things together" with one's neighbors and schoolmates is a critical task in the child's expanding physical and social world at this time (Erikson, 1982).

Erikson (1977b) argued that childhood play is a central factor during this phase of development. He described play as a function of the ego and critical to the synchronization of bodily and social processes. Play may be mere fun or give a child the opportunity to figure out what works as he or she puts together a playful scenario. As the child gains mastery over play-like objects, the environment becomes more manageable. Erikson contended that modern play therapy follows the pattern of a naturally self-healing process in which the child is allowed to "play it out" (i.e., a problem) before a powerful adult (p. 225).

Stage 5: Identity versus Role Confusion

The fifth psychosocial crisis of adolescence occurs from ages 12 through 22. According to Erikson (1968), *identity* depends on social supports that allow the child to devise consecutive and tentative identifications, culminating in an overt identity crisis in adolescence: "Ego identity, then, develops out of a gradual integration of all identifications, but here, if anywhere, the whole has a different quality than the sum of its parts" (p. 95). Rather, identity is not reducible but can be ascribed to:

- *Soma:* The person's intrinsic nature, that is, his or her biological nature, specifically with reference to inclinations, aptitudes, and talents.
- *Ethos:* The cultural context, in terms of both time and place, by which the person receives greater or lesser exposure to acceptable and unacceptable potential identity elements, and by which particular identity elements may be ascribed.
- *Psyche:* The unique psychological contributions of the individual whereby the person may embrace or resist, in varying ways and to varying degrees, both biological givens and cultural ascriptions.

During adolescence, an individual struggles with the issues of how "to be oneself" and "to share oneself with another" (Erikson, 1959/1980, p. 179). The peer group becomes the critical focus of interaction. Erikson saw the formation of ideological views and choice of future vocations as crucial. The outcome of these challenges may be fidelity or repudiation.

Fidelity is "an ability to sustain loyalties despite contradictions in value systems"; *repudiation* is a rejection of alien roles and values (Greene, 1999a, p. 121). This is a time when adolescents struggle with their worldviews and may be drawn to others who share their ideas.

Stage 6: Intimacy versus Isolation

As can be seen in Erikson's (1959/1980, p. 101) words, the process of looking for others who share one's ideas continues into adulthood:

> Adolescent attachment is often devoted to an attempt at arriving at a definition of one's identity by talking things over endlessly, by confessing what one feels like and what the other seems like, and by discussing plans, wishes, and expectations . . . a real exchange of fellowship.

Intimacy versus isolation, Erikson's sixth stage involving a mature person's ability to form intimate, committed relationships, occurs between the ages of 22 and 34. The stage of intimacy versus isolation emphasizes "being able to lose and find oneself in another" (Erikson, 1959/1980, p. 179). The radius of significant relations expands to include partnerships in friendship and love. *Love,* or a mutual exchange and devotion that can overcome "the antagonisms inherent in a divided function," is the positive ego quality that emerges during this stage (Erikson, 1968, p. 289). *Exclusivity,* or shutting out others, is a negative sign that an individual has not been as successful in reaching intimacy.

Although Erikson (1959/1980, p. 101) did not go into detail when describing diverse family forms, he believed that

> after a person has formed a "reasonable" identity in adolescence, he or she will establish "real intimacy" with the other sex (or, for that matter, with another person or even with oneself). . . . Except where mores demand heterosexual behavior, such attachment is often devoted to an attempt at arriving at a definition of one's identity.

Stage 7: Generativity versus Stagnation

Erikson (1959/1980) did not believe that the terms "creativity" and "productivity" captured his ideas about the crisis of generativity versus stagnation. Referring to people's interest in establishing and guiding the next generation, he focused on parenthood. However, he went on to acknowledge that people may apply their generative gifts "to other forms of altruistic concern and of creativity" (p. 103). In short, Erikson's seventh psychosocial crisis, *generativity versus stagnation,* a stage that occurs in adulthood between ages 34 and 60, emphasizes "establishing and guiding the next generation" (1968, p. 290). The radius of significant relations extends to how people who share each others' lives divide labor and share households. Broadly framed, generativity encompasses creativity through producing a family, mentoring a student, colleague, or friend, and engaging in a career and leisure activity.

The ego quality that evolves from the crisis of generativity versus stagnation involves the ability to take care of others. *Care*, according to Erikson (1982), is an ever-widening commitment to take care of all that one has "stored" over a lifetime, including hope and will, purpose and skill, and fidelity and love, passing on these strengths to the next generation (p. 67). The inability to care for others sufficiently or to include them significantly in one's concerns results in the negative ego quality of *rejectivity.* Erikson extended the idea of

rejectivity to people who were overtly discriminatory to or who scapegoat people or ideas different from their own.

Stage 8: Integrity versus Despair

Integrity versus despair, the eighth psychosocial crisis, takes place during old age, which Erikson indicates begins at age 60 and lasts until death. The issue of this psychosocial crisis is "how to grow old with integrity in the face of death" (1959/1980, p. 104). *Integrity* is realized by individuals who have few regrets, have lived fruitful lives, and cope as well with their failures as with their successes. The person who has successfully achieved a sense of integrity appreciates the continuity of past, present, and future experiences. He or she also comes to have an acceptance of the life cycle, to cooperate with the inevitabilities of life, and to experience a sense of being complete (Greene, 1999a).

Erikson (1959/1980, p. 104) saw integrity as a state of mind—an emotional integration—in which an individual comes to an

> acceptance of one's own and only life cycle and of the people who have become significant to it as something that had to be and that, by necessity, permitted of no substitutions. It thus means a different love of one's parents, free of the wish that they could have been different, and an acceptance of the fact that one's life is one's own responsibility.

In contrast, *despair* is found in those who fear death and wish life would give them another chance. The older adult who has a strong sense of despair believes that life has been too short and finds little meaning in human existence, having lost faith in himself or herself and others. The person in whom a sense of despair dominates has little sense of world order or spiritual wholeness. People who have successfully resolved the crisis of integrity versus despair exhibit *wisdom,* or the active concern with life in the face of death. *Disdain*, on the other hand, is an individual's expression of contempt for others and the world (Newman & Newman, 2005).

ADVANCED THEORETICAL PRINCIPLES

In 1970, at 68 years of age, having completed a full career of writing and clinical work, Erikson retired from his professorship at Harvard. As he examined his own work and that of others in the field, he found that adult behaviors were usually stated in the negative and not in terms of what people might yet become. He felt that the linear depiction of development was also limiting and did not capture the complexity of people's lives. Furthermore, he argued that viewing life's milestones, such as marriage and retirement, as the essential elements of development did an injustice to describing the meaning of "adult."

Erikson decided to initiate a conference on adult development to address the difficulties he perceived in the field:

- Freud's idea that adulthood was not a time of growth and further development had been too influential.
- Because of this influence, adults were viewed as physically developed children.
- Theorists appeared to be unable to separate early childhood development from its origins in childhood.

- When adult development was studied, development was addressed as a chronological phenomenon composed of marker events rather than a time of qualitative difference.
- Concepts of adulthood and the views of adult normalcy were limited.
- Developmentalists tended to view behavior from a mainstream perspective limited by class and ethnocentric biases (Hoare, 2002, pp. 28–30).

In short, Erikson critiqued his own work as overly linear and concerned with normative events. He argued for a fresh inquiry into normal adult development, an inquiry that would make known the ideal and images of the generative caring person. His lifelong exploration of what it means to be an adult led him to question why so many adults lead "restricted versions of what they might yet become, whereas others always seem to create resilient, fresh renditions of themselves throughout the adult years" (Hoare, 2002, p. vii).

According to Hoare's (2002) analysis of Erikson's unpublished works, his later writings created six vague categories of overlapping, intriguing images of adults:

1. Prejudiced adult.
2. Moral-ethical, spiritual adult.
3. Playing, childlike adult.
4. Historically and culturally relative adult.
5. Insightful adult.
6. Wise adult.

Perhaps in an attempt to come to terms with the anti-Semitic culture of his youth, Erikson in many of his writings dealt with the nature of prejudice. For example, he wrote with great dismay about injustices to Indians and African Americans in the United States and of Hitler's anti-Semitic methods in Germany. He explained that the prejudiced adult develops as a result of holding membership in one group or another. As a child, a person has a certain degree of cohesiveness with that group and their worldview, often comprised of unconscious biases. Yet Erikson thought that the prejudiced adult who learned personal attitudes and behaviors as a child could overcome such unconscious biases as an adult, transcending prejudice to develop self-awareness and empathy.

Erikson made a distinction between a moral adult, one who is rule-driven and concerned with right versus wrong, and an ethical adult, who is principled. He thought of ethical adults as building on their own strengths and giving to others. The ethical adult assumes intimate, caring, and work roles; when taken together, these attributes are called maturity (Miscellaneous papers and notes, various dates, Item 95M-2, Erikson Harvard Papers).

Another image of the mature adult is the playing, childlike adult, who is able to adopt a mature form of play in planning, developing models, and appreciating drama. Adult childlikeness, which he considered a rare phenomenon, combines play with wonder and trust.

Erikson's fourth adult image is that of the historically and culturally relative adult, described as a highly abstract, cognitively developed person who lives in history and knows himself or herself. Such an adult is cognizant of cultural differences and rejects ethnic, class, religious, and other types of superiority. Going beyond Freudian concepts, Erikson described insight among insightful adults as both a process and a product. Attributes include the capacity to discern and the ability to understand and take control of oneself. Finally,

Erikson decided that it was grandiose to designate wisdom as the strength developed in old age. In *The Life Cycle Completed*, he modified or replaced wisdom with faith, which he defined as the final form of existential hope.

Erikson himself wrote two biographies about men he believed to embody a thoughtful and historically significant adulthood, *Gandhi's Truth* (1969) and *Young Man Luther* (1958/1993). *Gandhi's Truth* traces the historical developments of the militant nonviolence movement that established India's home rule. In his visit to India to outline historical and psychological events of the period, he became fascinated with how the Hindu life stages emerge in a sequence corresponding to his idea of the epigenetic principle. He also saw similarities in the way an adult is perceived to be an aggregate of the strengths developed throughout childhood. His ability to observe and acknowledge differences in the extended Indian family form allowed Erikson to hold a broader view of the Western family upon his return to the United States.

In addition, Erikson's biography of Gandhi contributes to the understanding of the relationship between an individual life cycle and societal movements. Erikson (1969, p. 408) observed that when followers join a leader, they do so because of the complementarity of:

- Their personal lives, that is:
  - The moment when they met the leader, their state of mind, and their stage of life.
  - The place of that moment in their life history, especially in lifelong themes transferred to the leader.
- Their communities, insofar as these are relevant to their search for an identity by participation, that is:
  - Their generation's search for leadership.
  - Traditional and evolving patterns of followership.

Throughout his life, Erikson displayed an interest in alleviating people's inner conflicts as well as in human rights. He was attracted to men such as Gandhi and Freud because he believed they both worked to expand a person's self-awareness.

RECENT THEORETICAL DEVELOPMENTS

Identity Formation

Several recent studies augment Erikson's concept of identity. For example, Waterman (2004) examines how better identity choices can be distinguished from less promising alternatives. Waterman builds on Erikson's conceptualizations and considers how the role of intrinsic motivation or feelings of personal expressiveness can influence the process of identity formation. Reviewing identity from another perspective, Lachmann (2004, p. 247) proposed that, although Erikson was originally criticized for his sociological or relational view of identity, developmental theory was returning to an "interactional matrix," whereas Ermann (2004) has argued that Erikson's developmental model, in which an individual has gone through the normative identity crisis in adolescence leading to a long-lasting identity, is no longer viable. He contends that because society is in such a state of flux, "today's individual is in a continuous developmental crisis" (p. 209). In an article on the changing

nature, if not the end, of the patriarchal family, Sjodin (2004, p. 264) concurs with the dynamic nature of social change, stating that "our entire social contract is being rewritten."

Postmodern theorists have also remarked on the diminishing currency of Erikson's theory (Schachter, 2005). Viewing his psychosocial theory from a postmodern perspective, Schachter made the case that although Erikson's theory was intended to be a universal theory that would transcend time-bound and local contexts, it is increasingly seen as less relevant to current social conditions.

Critical Life Events

Research on an older adult's remembered past is another extension of Erikson's theory. For example, the recall of past experiences has been established as a significant influence on an older adult's quality of life (Rennemark & Hagberg, 1997). In a study of social network patterns, the remembered past, and a sense of coherence, Rennemark and Hagberg found that positive self-evaluations were generally important for well-being, particularly when life events were understood within a context of significant others. Three research questions used to obtain life histories (which may also substitute for social work assessment questions) ask respondents to describe (1) what kind of person they think they are, (2) under what circumstances they have lived, and (3) their relationships with significant others (Table 8.8).

Narrative Gerontology

The idea that it is natural and possibly curative for older adults to talk about the past was first brought to light by Robert Butler, who coined the term "life review" in 1963. He espoused a form of reminiscence therapy based on an Eriksonian psychodynamic perspective in which recall of the past was said to allow for the resolution and integration of past conflicts. Although restructuring of past events has been found to foster adaptation among older adults, the life review approach has been criticized for limitations in terms of its universality (Merriam, 1993; Webster, 1999). Another limitation is that stories revealed during the life review process mainly focus on intrapsychic issues surrounding Erikson's eighth life stage, integrity versus despair.

As will be noted in a later section on assessment and intervention, social workers continue to believe in the efficacy of conducting life review. However, as early as 1988, Moody described life review as an "ersatz religion, stubbornly resisting empirical refutation" (p. 12). Critics have called for a fully articulated model or domain-specific model of reminiscence (Fry, 1995; Webster, 1999) and the need for a definition and typology of reminiscence (Haight, 1991).

Postmodern epistemologists have sought to understand reminiscence in a broader context. One such area of study that recognizes people's recall of memories as an important aspect of human development throughout the life course is known as narrative gerontology.

Narrative gerontology, a scientific approach to human development, highlights the study of aging by obtaining a story or an account of critical life events as told by an older adult (Kenyon & Randall, 2001). That is, as suggested by Erikson's theory, attention is given to the role of critical life events in their specific sociocultural context (Diehl, 1999). A narrative gerontology approach offers several benefits for studying such critical events. The narrative interview allows researchers and clinicians to understand the multiple dimensions embodied in life stories (Cohen & Greene, 2005). For example, according to Diehl, adverse critical events and the ability to overcome them can be better understood by focusing on

Table 8.8 Research Questions for Life Histories

Self-Evaluation (Good, Neutral, or Bad)	Topics	Questions
	Trust/autonomy	To what extent do you think you were well cared for and well guided through your first years? How easily do you interact with others without feeling shy or ashamed?
	Initiative	To what extent do you enjoy starting new activities? Were you easily kept back by feelings of guilt in your preschool years?
	Industry	Were you a hard-working pupil in the early school years? Did your teachers indicate that you were good enough?
	Identity	Did you belong to a group of friends in their teens? Did you feel like you knew yourself? Did you know how to behave toward other people?
	Intimacy	Do you remember your first love? Did you establish a close relationship with anyone? How do you remember that person?
	Early generativity	In the first half of your working life, did you do things that were meaningful for other individuals? For the next generation?
	Late generativity	In the second half of your working period, did you do things for other people? The next generation?

Note: Based on "Social Network Patterns Among the Elderly in Relation to Their Perceived Life History in an Eriksonian Perspective," by M. Rennemark and B. Hagberg, 1997, *Aging and Mental Health, 1*, p. 323.

the interrelatedness between the developing individual, his or her family, and the changing sociocultural context. An individual's story, told in his or her own words, can "uncover how life reflects cultural themes of the society, personal themes, institutional themes, and social histories" (Creswell, 1998, p. 49). That is, personal stories are recognized as being "nested within a set of larger stories or 'macro' narratives that reflect shared history, values, beliefs, expectations, myths" (Webster, 2002, p. 140).

The recall of past events can therefore be thought of as a community narrative—a tie to an individual's past and to collective historical events (Andersen, Reznik, & Chen, 1997). As noted by A. Cole and Knowles (2001, p. 1), narratives or personal stories provide "every in-depth exploration of an individual's life-in-context, [bringing] us that much closer to understanding the complexities of lives in communities."

RELEVANCE TO SOCIAL WORK PRACTICE

Uses in Assessment

Although Erikson did not set out to establish treatment protocols, his theory can be used to guide the practitioner's thinking about a client's relative success in meeting developmental transitions. Assessment is a procedure used to examine and evaluate the client's problem or situation. Through assessment, the social worker identifies and explains the nature of a problem or dysfunction, appraises it within a framework of specific elements, and uses that appraisal as a guide to action (Perlman, 1957). The purpose of an assessment, whether the problem originates with an individual, family, or group, is to bring together the various facets of a client's situation, and the interaction among them, in an orderly, economical manner and to then select salient and effective interventions (Greene, 2000).

Arriving at an assessment plan using Erikson's framework as a theoretical backdrop requires that the social worker explore a client's relative success in reaching the developmental challenges outlined by Erikson (Table 8.9). For example, the practitioner asks questions that could reveal the extent to which a client has achieved a hopeful and/or trusting personality. This challenge, originally presented in stage 1 and modified by subsequent life events, is evident in people's behavior. Thus, observation of clients' behaviors and how they interact with significant others results in such assessment information.

Uses in Intervention

Erikson's theory suggests that at each stage of development, a person strives to attain the psychosocial orientation associated with that critical time period. For example, the crisis in life orientation associated with the period of old age is integrity versus despair. As assessment discloses the conflicts a client is experiencing resolving this crisis, interventions are then attempted. Interventions are aimed at helping the client gain insight about the challenges and opportunities accompanying the crisis. Adjustments and realignments in roles and relationships may be necessary (Greene, 1982; Table 8.10).

Life Review

Life review is an example of how to use Eriksonian theory to better resolve a psychosocial crisis. In a hallmark 1963 article, Robert Butler, a major pioneer in the field of geriatric psychiatry, conceptualized the process of life review. As Butler examined his clinical data, he concluded that the "garrulousness" of older adults is not always an indication of psychological dysfunction. Rather, he suggested that the life review process has adaptive value for clients, and that practitioners should actively encourage the recall of the past. He defined life review as the naturally occurring progressive return to consciousness of past experiences in an attempt to resolve and integrate them. It involves a restructuring of past events and is conducive to the individual's adaptation to the aging process. Life review can be enhanced through the use of structured interviews, photographs, music, art, poetry, and dance therapy (Greene, 1977; Weisman & Shusterman, 1977).

Since it was first put forth, life review therapy has become a well-accepted and widely used clinical technique for working with the aged in a number of different treatment approaches and settings. For example, life review is used in social work with individuals and

Table 8.9 Assessment Questions

Stage	Questions to Explore
Trust versus mistrust	How hopeful is the client? How socially attached is the client? How well does the client appear to trust the social worker?
Autonomy versus shame	Does the client appear to move ahead with a sense of will or determination? Does the client seem to have a strong or relatively weak sense of self-control? Does he or she appear lacking in self-confidence?
Initiative versus guilt	To what degree does the client have a sense of purpose? Does he or she move into opportunities? Does he or she face new events with trepidation?
Industry versus inferiority	How competent does the client seem in handling his or her affairs? Does the client seem relatively productive?
Identity versus identity confusion	How comfortable is the client with bonding with others? Does the client have a relatively "good" sense of self?
Intimacy versus isolation	How comfortable is the client in loving and sharing with others?
Generativity versus stagnation	How willing is the client to care for others and be cared for himself or herself?
Integrity versus despair	Does the client pass along his or her ideas to the next generation? Has the client come to terms with his or her life and with others close to him or her? Does he or she have relative comfort with his or her mortality?

families (Greene, 1977, 1982) and has been effective with groups in nursing homes, senior citizen residences, and community centers (Pratt, 1981; Weisman & Shusterman, 1977).

EVIDENCE-BASED FOUNDATIONS: ERIKSON ON ERIKSON

Erikson (1968) made a distinction between scientific proof and progress and a field such as psychoanalysis that must account for its methods, practices, and ideology. He commented on his own writings and whether they could be considered "scientific." For example, in relation to the term "identity," he contrasted his conceptualization to those of social scientists:

> The dignity of the term seems to vary greatly. The quotation marks [used to set off the term] are as important as the term they bracket: everybody has heard of the "identity crisis" and it arouses a mixture of curiosity, mirth, and discomfort. . . . Social scientists, on the other hand, sometimes attempt to achieve greater specificity by making such terms as "identity crisis," "self-identity," or "sexual identity" fit whatever more measurable item they are investigating at a given time. (p. 16)

Table 8.10 Guidelines for the Eriksonian-Style Practitioner

Understand that your client is engaged in a lifelong process of personality development in which you as the practitioner can be instrumental in promoting growth.
Engage the client in a self-analysis that results in a developmental history.
Distinguish with the client his or her relative successes and difficulties in resolving psychosocial crises.
Determine areas of development that have led to a distortion of reality and a diminution in ego functioning.
Interpret the client's developmental and historical distortions. Ask for client confirmation of your interpretations.
Develop the client's insight and understanding about unresolved normative crises and their historical as well as present implications.
Identify ways in which the client can use his or her ego strengths to cope more effectively with his or her environment. Explore how these coping strategies can be put into action.
Clarify how and in what ways various social institutions support or fail to support the client's psychosocial well-being.
Seek means of enhancing the client's societal supports.
Promote the client's developing a new orientation to his or her place in the social environment.

Note: Based on "Eriksonian Theory" (pp. 107–136), by R. R. Greene, in *Human Behavior Theory and Social Work Practice,* second edition, R. R. Greene, 1999, Hawthorne, New York: Aldine de Gruyter.

Erikson went on to state that social scientists were motivated by the need to be logical or maintain experimental maneuverability and to keep in academic company. However, he was skeptical about whether the "changing images provided by modern psychology, scientific as they may be in the verification of some details, nevertheless harbor what Freud himself called a 'mythological' trend" (Erikson, 1969, p. 34).

Looking back to his earlier conceptualizations of "normality," Erikson (1959/1980) critiqued his own writings. He acknowledged his reliance on clinical insights in contrast to verifiable knowledge, pointing out that his writings are buttressed by clinical data. This suggested a short treatise on the healthy personality:

> An expert, it is said, can separate fact from theory, and knowledge from opinion. It is his job to know the available techniques by which statements in the field can be verified. If, in this paper, I were to restrict myself to what is, in this sense, known about the "healthy personality," I would lead the reader and myself into a very honorable but very uninspiring austerity. (p. 50)

Erikson (1959/1980) stated that psychoanalysis and the social sciences needed to work together to understand the life cycle within the historical period under consideration. He acknowledged the methodological divide between psychoanalytic thought and sociological observations. Putting his psychosocial theory into perspective, Erikson (1975, p. 18) acknowledged the difficulty of conceptualizing "something that is both *psycho* and *social*." He recognized that theory development in the social sciences was not as verifiable as in the natural sciences.

CRITIQUES OF THIS APPROACH

Gilligan on Erikson

Gilligan (1982), an early and vocal critic of Erikson, disagreed with the traditional approach to stage theory. She argued that human development needed to be reconceived, taking into account the differing socialization and life experiences of women and men. She contended that when women are measured with the same criteria used in the study of men, women come out wanting. In her seminal work, *In a Different Voice* (1987), she addressed the disparity between women's experiences and how these experiences are represented in human development theory. She referred to three studies that discuss the significance of language and how people act. Her interviews are intended to reveal conceptions of self and morality in the early adult years. In contrast to Freud and Erikson, Gilligan is concerned with the depiction of the differences between girls' and boys' development.

For example, her research suggests that there is a problem with Erikson's description of the identity crisis. Of particular concern is his assumption that development is a process leading to more and more autonomy and individuation. She contends that the "celebration of the autonomous, initiating, industrious self through the forging of an identity based on an ideology that can support and justify adult commitments" is a representation of male development (Gilligan, 1987, p. 3). She went on to state that although Erikson does note that for women identity has more to do with intimacy than with separation, he does not carry this theme out in writings. Gilligan (1990, p. 65) wrote, "Listening to girls poised at the edge of adolescence, I hear them speak of their confusion and their fight, their struggle for understanding and a great desire to be heard, to be in authentic relationships, and to know what they know with a sense of personal authority."

Gilligan (1982) and other theorists addressing women's development took issue with Erikson's description of girls' and boys' play as stemming from "biological initiatives" (Erikson, 1959/1980, p. 82).

Paradigm Shifts

As paradigms shift, Erikson's psychosocial theory also has been challenged philosophically. In this case, a critique of theory involves a process of "thinking paradigm" or a process of "continually asking questions about what the information . . . we send and receive reflects about our own and other's views of the world" (Schriver, 2001, p. 7). Similarly, Saleebey (1993) would argue that theories are perspectives, not truths. They are texts, narratives, and interpretive devices.

For example, in a 2005 issue of *Identity: An International Journal of Theory and Research*, Schachter asks how Erikson's classic identity theory meets postmodernism. While defending the concept's humanistic viewpoint, he goes on to say that the influence of Erikson's original concept of identity is slowly diminishing. He acknowledges that Erikson's attempt to write a universalistic theory "intended to transcend time-bounded and local contexts" (p. 139). He equally applauds Erikson's stance that all human development needs to be understood in interaction with context, making the perspective relevant to postmodern thinkers. The postmodern context of development emphasizes two points:

(1) Identity is formed within the context of continuous and rapid change, and (2) the developing individual is embedded in multiple contexts and affiliations that are sometimes contradictory. Thus, when a person is lacking in self-continuity and self-coherence, this may lead to what Erikson termed "identity confusion."

A Social Work Context on Development

According to Greene (1999b), "A theory has inherent usefulness to the degree that it gives direction to a [sound] social work plan of action" (p. xi). Therefore, Erikson's theory may be critiqued from the vantage point of those values and ideas considered important to social work practice, including whether the approach addresses the person-environment context, human diversity, and social and economic justice. The theory might also be critiqued for its relative consideration of a client's strengths and weaknesses.

Person-in-Environment

Based on the belief that the profession's basic mission requires a dual focus on individual and societal well-being, person-in-environment has been a continuing and unifying theme in the historical development of social work. The person-in-environment perspective has also structured the helping process (Gordon, 1962). By serving as a blueprint or an organizing guide for social work assessment and intervention at a multiple systems level, the person-environment focus has allowed for social workers to intervene effectively "no matter what their different theoretical orientations and specializations and regardless of where or with what client group they practice" (Meyer, 1987, p. 409).

There are two major Eriksonian concepts that might be said to be in the person-environment context: (1) The idea of development taking place in a radius of significant relationships—an ever-widening circle of significant others—mirrors the person-environment point of view; (2) societal institutions must positively reinforce and support the development of a healthy ego.

Life Cycle versus Life Course

A critique of stage theory itself involves a rejection of the premise that there is a fixed sequence to development. For example, Germain (1997) and others have argued for a life course approach to development that takes account of the personal timing of events, one's personal history in relation to the social structures, and the sociocultural period in which one lives. It thus takes into account the synchronization of individual life transitions with collective family configurations under changing social conditions (Hareven, 1982). In an article on the development of gays and lesbians, Boxer and Cohler (1989), maintain that a life cycle approach does not take into account between-group and intragroup variations. They contend that "it is precisely this social definition of the course of life which transforms the study of the life span or life cycle into the study of the life course" (p. 320).

Diversity and Social and Economic Justice

Stage models that present fixed uniform stages have also been criticized because they do not sufficiently account for culture, historical contexts, sexual orientation, family forms, or the presence of poverty and oppression (Greene, 1999c). For example, Chestang (1972, 1984)

pointed out that understanding the dynamics of establishing a sense of identity among African American youth requires awareness of the special factors involved in forming racial identity. He also contended that Erikson's psychosocial theory did not give sufficient attention to the implications of social injustice, inconsistency, and feelings of impotence on personality development in a hostile environment. Chestang went on to say that societal structures that embody institutional racism often impede development through "excessive shaming" and "repeated environmental assault" (pp. 46–48).

Ironically, while Erikson has been criticized for a lock-step approach to development (Boxer & Cohler, 1989), he also needs to be recognized for his cross-cultural studies (Erikson, 1937). For example, in his article "Observations of Sioux Education" (Erikson, 1937) written during his stay at the Pine Ridge Reservation in South Dakota, he worked on his report with the Indian commissioner's field representative in applied anthropology. The report reveals sensitivity to the plight of the Sioux as they must adapt to the trauma of historical change and oppression. He related how especially the older Indians can only try to escape as "the three horsemen of their history's apocalypse appear on the horizon: the migration of foreign people, the death of the buffalo, and soil erosion" (p. 103). He went on to say that it is possible to understand why Indian people do not want to adapt to "a conquering and feeding government" (p. 104). He also empathizes with the shock of young children who, in the government's effort to "Americanize" them, are forced from their homes and sent to big boarding schools.

Erikson (1975, p. 25) also expressed concern about inequities in the lives of African Americans:

> Since then [Nazi Germany] there have been national wars, political revolutions, and moral rebellion which have shaken the traditional foundation of human identity. If we wish to find witnesses to a radically different awareness of the relation of positive and negative identity, we only have to change our historical perspective and look to Negro writers in this country today. For what is there is nothing in the hopes of generations past nor in the accessible resources of the contemporary community which could help to overcome the negative image held up to a minority by the "compact majority"?

Strengths and Challenges

Client descriptions and social work helping strategies reflect a theorist's language and belief systems, and thereby may embody a strength or deficit perspective with respective implications for practice (Goldstein, 1990, 1998; Longres, 1997; Saleebey, 1996; Witkin & Nurius, 1997). Theories such as those derived from the psychodynamic school have been criticized for placing too great an emphasis on client weaknesses, such as a client's problems or abnormality. It is said that, in such approaches, practitioners take on the role of expert. However, Erikson's views on the matter are revealed when he credited Freud for his treatment of what was then termed the "hysterical personality." Erikson states that Freud's approach to psychoanalysis freed his patients from inner repressions. He also said that Freud (contrary to today's popular opinion) "called for a strict equality between patient and doctor, with the dictum that only as long as this nonviolent equality is maintained can the truth emerge" (1969, p. 246). Similarly, in Erikson's biography of Gandhi he applauded Gandhi's introduction of fasting and meditation into the politically charged societal conflicts of his day, saying that this approach to political battles was liberating.

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Chapter 9

COGNITIVE DEVELOPMENT THEORY

Tammie Ronen

One of the most fascinating phenomena in life is human growth and development. The study of human development has been a continuous focus of attention for theoreticians and researchers. Every decade, innovative directions for study present new outcomes, followed by fresh theories. Nevertheless, many issues remain that we do not yet understand and cannot yet explain.

There is no argument that a 1-year-old child is different from a 3-year-old. Everyone agrees that human beings develop and change over the course of time. But multiple arguments arise concerning the meaning of those changes. Does the change reflect growth that can be measured quantitatively, for instance, whereby children can comprehend simple concepts but adults can grasp complexities? Or is it a qualitative matter, whereby children think differently than do adults? What really changes as children grow? Cognitions? Emotions? Experiences? How do we explain the trajectory of these changes? Do human beings demonstrate a linear, computerlike process of development, or a complex set of unorganized systems?

Psychologists' view of human development has altered dramatically over the past 4 decades as an outcome of a shift in the direction taken by the sciences and humanities (Mahoney, 1991). For some researchers, such as Jean Piaget (1977), change is clearly a matter of biological development. Those who rely on Piaget's theory have focused on age as the most important component in determining a child's capabilities and functioning, with stages of development as the main window into children's ability to understand the world. Others, such as Lev Vygotsky (1962), agree that age is essential for change but underscore the influence of environment, especially as responsible for learning processes related to the development of language, which is crucial for human communication and interaction. Albert Bandura (1969) and his followers chiefly highlight the role of social learning and social influences in determining child's development. This view focuses on society's different expectations of children that elicit various demands and reinforce specific behaviors; thus, society's behavior influences how children develop.

Post-Piagetian theories have highlighted memory, thoughts, and information processing as the main components contributing to human development (Case, 1985, 1991, 1992; Demetriou, Shayer, & Efklides, 1993; Halford, 1993). These theorists emphasize that the way a child encodes events, interprets them, and processes information all influence that child's behaviors and emotions. The evolution of constructivism theory, including the conceptualizations of self-representation and self-organization, turned against the computerlike

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explanation of human development, primarily because of its linear view of change comprising a single simple mechanism. Human beings, according to the constructivist view, encompass complex systems characterized by concurrent multidirectional changes. Unlike computers, humans possess the capacity to create principles and attach meanings to their behaviors. The ability for self-organization is thus considered vital to understanding development (Karmiloff-Smith, 1993; Mahoney, 1991; Thelen, 1993).

An important consideration when discussing human cognitive development involves the relations between the cognitive domain and the other domains of human growth. Traditionally, physical development, cognitive development, emotional development, social development, and so forth have each been expounded as separate entities by professionals with different areas of specific interest, with no connections between the various domains. However, it is artificial to view cognitive development as uniquely separate from other developmental components, such as physical and motoric growth, emotional and social changes, and environmental and societal influences. Can we really differentiate the various components from one another? Often, these components are interlinked and integrated. For example, can a child with a major physical handicap grow up with no impairment in cognitive, emotional, or social development?

The main goal of the present chapter is to present the reader with the importance of relating to human development as a crucial component for understanding behavior. Let us take, for example, the case of a child who is exposed to a traumatic event, such as a near-fatal car accident with many casualties, but who avoids talking about it. How can we understand the child's reaction? Perhaps he is too young to understand the event's significance and was concerned only about his immediate environment (staying with his mother). If so, the traumatic event may cause no detrimental effect to the child's development because of his age. On the other hand, the boy's reaction could be associated with emotional maturity. It might be the case that although the accident itself was not traumatic for this young child, his mother's very obvious fear was extremely upsetting for him to witness. This exposure to complex emotions with which he cannot yet cope, such as stress, fear of the threat to life, and enormous anxiety, may cause his avoidance of talk about the event. Another possibility might be linked to linguistic development; the boy may not yet possess the emotional understanding and language to express the stress and anxiety he experienced. Or perhaps the child may be growing up with a familial or environmental taboo against talking aloud about traumatic events or against revealing emotions to strangers. So how can we really know what this child's behavior means and what significance the event holds for him? We need this developmental information in order to plan intervention, if necessary, to help the child cope, grow, and prevent future damage. Knowing the concepts, stages, and variations in growth will enable professionals to understand the importance of development, the skills and abilities children possess, and how these can and should be integrated into the assessment, intervention, and evaluation of clients and the design of effective intervention methods.

The central focus of this chapter is cognitive development. Therefore, I highlight the basic concepts of three major theories of cognitive development: Piaget's seminal theory, information processing theory, and self-organization/representation theory. I dedicate the major part of this chapter to Jean Piaget. Despite the changes to which postmodern society has been exposed, Piaget continues to be widely recognized as the greatest developmental psychologist of the past century. Up to this day, he is considered the father of cognitive-developmental theory. His ideas have been refined and elaborated by others but remain the

foundation of child psychology. To track the advances that have transpired in cognitive-developmental psychology since his theory was introduced, I also describe a neo-Piagetian modern theory of cognitive development, a series of evolving information-processing models, and, finally, the postmodern multimodel theoretical explanations for understanding human behavior: self-organization and self-representation.

HISTORICAL AND CONCEPTUAL ORIGINS

Looking at traditional theories of physical development facilitates our understanding of why early psychological theories related to development in terms of physical stages and characteristics. The reliance on stages stemmed, at least in part, from the early theorists' background in biology and medical science.

Classic Theories of Development: From Physical to Psychological Stages

Before Piaget, earlier developmental psychologists tried to present extensive, well-grounded theories that attempted to explain human behavior and development in relation to various stages and ages, relating to all areas of life. Many areas of commonality are depicted in these theories. Sigmund Freud, as a founder of the field of psychology, who was trained in biology and medicine, developed his psychoanalytic theory based on psychosexual development. He viewed children's development as following basic physical stages and attributed psychological changes to stage-related physical changes and growth (A. Freud, 1963; S. Freud, 1947). For example, infancy, when a child cannot yet control movement and primarily uses the mouth to become acquainted with objects and body parts and to gain oral stimuli, Freud termed the oral stage of development, a stage of instinct control when the id is apparent (see Table 9.1). Freud's psychosexual theory provided a conceptual framework for understanding the development of intrinsic personality structure based on three major systems: the id, the ego, and the superego, reflecting different influences in various stages of human development.

A major follower of Freud, Erik Erikson, devised a social development theory that maintained a structure founded on the basic physical stages of development and on early Freudian psychoanalysis theory. However, Erikson extended his theory to eight stages, expanding into adulthood, and he focused on social interests at each stage rather than on individuals' intrinsic development based on physical interests and capabilities. This theory outlines the psychosocial tasks with which the individual is occupied within his or her social environment, focusing on individuals as socially interactive beings who must encounter and resolve conflicts as they relate to their functions (Erikson, 1950). For example, in the oral-sensory stage the young infant, who is completely dependent on the caregiver, must develop trust, but an inconsistent caregiver might lead to mistrust in the infant (see Table 9.1). This theory emphasizes one's potential for change and development (Erikson, 1950).

The first application of social learning theory (behavioral theory) also followed these stages of development, with Sears (1951) attempting to translate Freudian psychology into stimuli-response terms. I will not describe this theory here because later applications of behavioral theory were based much more on social learning, stimuli response, and environmental conditioning, as distinct from basic developmental theory (Bandura, 1969).

Table 9.1 Early Theories of Development

Physical Stage	Motoric Development	Freud's Stages (Psychosexual Development)	Erikson's Stages (Social Development)	Piaget's Stages (Cognitive Development)
Infancy	Basic control over physical movement (mouth, hands)	*Oral* Emergence of ego	*Trust versus mistrust* Dependence Need to trust caregivers as a way to learn to trust others	*Sensorimotor* Mainly reflex activity Developing object consistency
Toddlerhood	Control of basic motor skills (crawls, walks)	*Anal* Development of self-control	*Autonomy versus shame and doubt* Forming sense of self-control	*Preoperational* Starting to use symbols and representation
Preschool	Control of fine motor skills (holds crayon, plays with puzzles)	*Phallic* Emergence of superego	*Initiative versus guilt* Acquiring more independence	Language
School age	Control of fine and gross motor skills, complex activities, balance (climbs, jumps)	*Latency*	*Industry versus inferiority* Confusion Learning to produce things	*Concrete operational* Problem solving Developing logical operations
Adolescence	Gradual correction of motor awkwardness	*Genital* Selection of heterosexual partner	*Identity versus role confusion* Developing ego identity	*Formal operations* Comprehension of symbols Advancement of logic skills

Many researchers were interested in human development and developed stage theories. However, Piaget's theory linked cognitive intellectual development to a physical basis and became the most well known. Jean Piaget is considered one of the greatest figures influencing this area, and his theory remains widely applied and studied (Vasta, Haith, & Miller, 1995). The work of Piaget described the development of cognition and the process of acquiring and using knowledge. His theory traced the organizational structure that enables children to think. Piaget's research focused on how children use language and how they reason about classes, relations, and physical causalities (Campbell, 1999).

Over the years, this theory has been criticized, but no one was able to develop a comprehensive theory to replace it; therefore, to this day, it continues to serve as the basis for understanding human cognitive development. Moreover, Piaget's work became the core of many other schools of thought. For example, Kohlberg (1968) applied Piaget's theory of cognitive intellectual thought to devise a stage theory of moral thinking, understanding,

and development. Even Sears's (1951) early application of social development and learning theory, based on psychoanalytical components that had been translated into the concepts of stimuli and responses, related to Piaget's cognitive developmental components.

Basic Concepts Relating to Cognitive Development

To understand cognitive development, the reader must first review some necessary concepts relating to growth, development, and cognition.

- *Cognitive development:* Changes in the complexity of mental functioning or degree of performance skills over the course of physical growth (Sahler & McAnarney, 1981).
- *Growth:* Actual physical or motoric changes in human beings from birth until biological maturity.
- *Heredity:* The inherent nature of the human being, the internal components; the overall genetic endowment, defined within broad limits; an individual's basic overall potential and predisposition.
- *Genotype* (related to heredity): The actual gene composition.
- *Phenotype* (related to heredity): The morphological and physiological characteristics of a given individual as determined by the expression or suppression of certain gene compositions or combinations.
- *Temperament:* The innate characteristic or habitual inclination or mode of emotional response to stimuli.
- *Environment:* The physical, social, and cultural external surroundings in which one grows.
- *Learning:* The process of being trained and acquiring new skills.

In this chapter, I do not describe physical development in detail. I only mention a few principles that are important for understanding physical growth but are also important for understanding cognitive development:

- No two individuals are exactly alike (Sahler & McAnarney, 1981). Therefore, any discussion of physical development (and the same is true for cognitive development) must relate to normal variation (illustrated by the bell-shaped curve) and must emphasize normal tendencies rather than exact characteristics.
- Throughout development, critical or sensitive periods emerge, implying times of particular receptivity or ease in acquiring or modifying a particular function. Such critical periods relate to an individual's special needs and capacities that will enable ideal growth for that person.
- Physical growth as well as cognitive development do not occur in one domain of functioning but rather in the entire organism; therefore, we expect reciprocal influences between the various areas.
- Young people grow at a faster rate during infancy and during adolescence than at any other time.
- Females at any age (infant, toddler, pubescent) develop earlier and faster than do males.
- On average, males are heavier and taller than females.

- In modern society, young people mature physically faster and earlier than in previous generations.
- Modern theory recognizes the importance of the child's psychological climate for physical growth, even pertaining to motor development. For example, we consider toddlers' ability to begin walking to be a matter of physical development; in other words, no child can walk before muscles, motor skills, and bone development are ready. However, if a toddler's mother is extremely anxious and fearful about her child falling down, or if she tensely waits to see if something is wrong with her child's development, those anxieties and fears may affect her toddler, who may show signs of hesitation and lack the confidence to start walking.

Jean Piaget

Piaget is considered the most influential experimenter and theorist in the field of developmental psychology and in the study of human intelligence (Evans, 1973). Born in 1896 in Switzerland (died 1980), Piaget was originally trained in the areas of biology and philosophy. He always considered himself to be a natural scientist, not only a psychologist. He considered himself a "genetic epistemologist" whose main interest was to discover how people come to know things.

He grew up in Switzerland and published his first paper there at the age of 10. He moved to France in 1919, spent 2 years at the Sorbonne, and received his PhD in science at the age of 22 from the University of Neufchatel. In 1929, he returned to Geneva, where he continued his research on child psychology on a large scale. When his children were born, he started observing their reactions and subjecting them to various experiments. Much of his theory was developed from what he discerned from observing his own children.

Piaget's work integrated three disciplines: biology, philosophy, and psychology. His biology background triggered his interest in growth and development, as seen in his notions about the principle of structure and the functions of intelligence, organization, and adaptation. As a good biologist, he was interested in discovering the underlying organization of human thought. His philosophical interest manifested itself in his manner of studying concepts, in the way he questioned children and involved them in philosophical tasks about nature and the origin of knowledge. His psychological work derived from the general concepts that were at the center of philosophers' attention at that time: space, time, causality, numbers, and quantity (Vasta et al., 1995).

BASIC THEORETICAL PRINCIPLES: PIAGET'S THEORY OF COGNITIVE DEVELOPMENT

For Piaget, development is what cognitive structures do; it is an active thing that interacts with the environment (Campbell, 1999; Campbell & Christopher, 1996). Human beings develop cognitive structures and the ability to perform. Development accrues as cognitive structures naturally change over the course of growth. The most fundamental aspect of Piaget's theory is the belief that intelligence is a process—not something that the child has but rather something the child does (Vasta et al., 1995).

Piaget was unique in that he did not settle merely for naturalistic observations of children; rather, he involved them directly and gave them tasks that required solutions using

experimental manipulations (Vasta et al., 1995). By observing children, Piaget (1977) found that an infant younger than 9 months forgets about a toy if it is covered up. Later on, starting around the age of 10 months, most babies understand that the hidden toy still exists. He was struck by the fact that all children seem to go through the same sequence of discoveries about their world, making the same mistakes and arriving at the same solutions (Carrigan, in press). Some children advance through a stage faster than other children, but they all undergo the same stages. His theory concerned identifying the commonalities in children's development rather than determining how children differ from one another.

Piaget was not interested in the precise knowledge children possess but rather in how they go about acquiring and using that knowledge and how they cope with assignments (Vasta et al., 1995). He asked children whether two equal rows of eggs continue to have the same number of eggs after one row was stretched out. He asked children such questions as how many ways there are to get from one end of a room to the other (Campbell, 1999; Campbell & Christopher, 1996). He looked at the genesis of intelligent conduct, ideas of objective consistency, and causality. He also noted symbolic behaviors such as imitation and play.

Piaget explained development in a way that avoided both "preformation," which is the doctrine of innate ideas, and environmental determinism (Campbell, 1999). He saw cognitive development as a function of neurological maturation, an adequate social environment, experiences, and constant internal cognitive reorganization (Sahler & McAnarney, 1981). He asserted that heredity sets broad limits on intellectual functioning; hence, experiences modify or reorganize these reflexes into purposeful mental and physical activities to the extent permitted by the individual's current level of physiological maturation. Piaget felt that interactions with peers were the most critical factor in child development because they elicit conflicts, which turn into arguments and debates. He found that children felt more free to confront ideas when working with peers than with adults; therefore, he observed them playing and talking.

Piaget viewed development as the continual struggle of a very complex organism trying to adapt to a very complex environment (Piaget & Inhelder, 1969). The concept of knowledge is essential for Piaget's theory. He viewed knowledge as a biological function that arises out of action. He emphasized that knowledge is basically operative in that it is subject to change and transformation. Knowledge comprises cognitive structures, in Piaget's view, and development proceeds by the environment's assimilation to the person's cognitive structures and by the accommodation of these structures to the environment. Movement to a higher level of development depends on "reflecting abstraction," which means coming to know properties of one's own actions, or coming to know the ways they are coordinated.

Piaget's theory focused on two major principles: the tendency for all species to organize their activities, and the tendency for all species to adapt to their surroundings (Sahler & McAnarney, 1981).

Key Piagetian Concepts

- *Development:* The continual organization of knowledge into new and more complex structures.
- *Egocentrism:* A fundamentally cognitive limitation whereby children fail to understand how someone else's point of view might differ from their own, or a failure to coordinate their point of view with that of another person's. Egocentrism appears clearly in young

children's play; they seem to play together but actually play alone, near each other. Egocentric children may appear to be conducting a conversation but actually are conducting monologues and not relating to one another.

- *Cognition:* Knowing. The central idea is that children's behavior reflects the structure or organization of their knowledge or intelligence. How we think and what we know are assumed to guide how we behave (Vasta et al., 1995). The main principles deriving from this theory are therefore organization and change.
- *Logical structure:* What children acquire once they can categorize objects into groups (e.g., put all animals into the same group), make inferences correctly (using hierarchies such as understanding that "animals" is a higher group than "dogs" or "cats"). Both action schemes and logical structures encompass the operative knowledge.
- *Operative knowledge:* Knowledge that concerns change and transformation. Knowledge is primarily operative, which is why we cannot understand what it is until we understand how it is acquired. However, we cannot understand how knowledge is acquired unless we conduct investigations (Campbell & Bickhard, 1986). Operative knowledge contrasts with "figurative knowledge," which is static.
- *Functions:* Relating to biological tendencies to organize knowledge into cognitive structures. These inborn biological processes are the same for everyone and remain unchanged throughout life. Their purpose is to construct internal cognitive structures.
- *Cognitive structures:* What make up knowledge. In contrast to functions, cognitive structures are flexible, vary, and change repeatedly over time as the child grows. All cognitive structures are interrelated. The simplest cognitive structure is a sensorimotor scheme.
- *Organization:* The tendency for all humans to organize their activities and integrate knowledge into interrelated cognitive structures. In this way, one can make sense and order and can fit new knowledge into existing cognitive structures.
- *Change:* Occurs as a result of the human tendency to adapt.
- *Adaptation:* The organism's tendency to fit with its environment in a way that promotes survival; a combination of assimilation and accommodation. Ideally, development is a balance or equilibrium between assimilation and accommodation.
- *Assimilation:* The tendency to understand new experiences in terms of existing knowledge, apply the knowledge one already holds to a new situation and deal with the environment by using available activities.
- *Accommodation:* Changing a scheme to make it work better or fit the environment better, developing new necessary activities.
- *Schemes:* The cognitive structures of infancy that involve the object in the environment and the child's reaction to it. A schema is a psychological structure that reflects the child's underlying knowledge and guides the child's interaction with the world. The nature and the organization of these schemes define the child's intelligence at any given moment. An action scheme is a way of accomplishing some goals in some situations. Vasta et al. (1995) describe how, according to Piaget, a child understands what a ball is through pushing, throwing, or mouthing it. All these actions that the child performs are examples of schemes.
- *Intelligence:* Not something that the child has, but rather something that the child does. The child understands the world by acting and operating on it.

The Four Cognitive Stages

According to Piaget, intellectual development proceeds in a stepwise ordered manner in response to experiences. Individual differences and the social and physical environment all influence the age at which the child achieves a certain level of cognitive activities, but not their order or content. Specific age is less important than the order and progress of learning (Vasta et al., 1995). For example, Piaget emphasized that it is impossible to arrive at a "concrete" operation before undergoing some sensorimotor preparation. Learning cannot change the order of acquiring new skills but can facilitate the acquisition of new skills. Piaget also described transitional periods between the stages, when children can already present some characteristics of the next stage.

In relation to stages, Piaget (1993, p. 33) said that each one in a series "is a necessary part of the whole and a necessary result of all the stages that precede it (except the first), as well as naturally leading on to the next stage (except the last)." In the same lecture, Piaget emphasized that, relating to intelligence, we can use the term "stage" under certain conditions: when the series of actions is constant, where each stage is determined not merely by a dominant property but by a whole structure that characterizes all further actions belonging to this stage; and where these structures offer a process of integration such that each one is prepared by the preceding one and integrated into the one that follows (p. 34).

Piaget defined four major stages of cognitive development: sensorimotor, preoperational, concrete operational, and formal operations (see Table 9.1). These cognitive stages enable classifications of children's thinking and permit charting of their progress. Each stage can be divided into substages.

The Sensorimotor Stage

The first stage of cognitive development lasts from birth to approximately 2 years of age. The infant's initial schemes are simple reflexes. During this early period, infants are limited to "thinking in action." They use their senses to gain information and increase their motor capabilities to seek new experiences. Thus, their knowledge of the world is limited to physical interactions with people and objects. During this stage, the child develops simple activities, applies them to an ever-widening range of situations, and coordinates them into longer and longer chains of behavior. Children start understanding that they have control over their actions. The main source of children's learning is from parents or caregivers and from their own experimentation with their world. At this stage children are also egocentric. The sensorimotor stage ends around the end of the second year, with the development of language, an understanding of object permanence, and the ability to imitate someone else's action on the basis of memory alone. This first stage of cognitive development provides the foundation for future development.

The sensorimotor stage comprises six substages, each of which demonstrates a gradual development of the child's cognitive capabilities:

Stage 1 (birth to 1 month old): This substage mainly constitutes reflex activity. For Piaget, development occurs as behaviors are applied to more and more objects and events. In other words, the infants assimilate more and more things, and their behavior starts to change in response to these new experiences (i.e., they start to accommodate).

Stage 2 (1 to 4 months): The second substage includes primitive anticipation, curiosity, imitation, and object concept (following an object briefly). Babies change from reflexes

to sensorimotor schemes. The infant develops organized schemes of behavior (e.g., sucking) that can be applied to innumerable different stimuli. Individual schemes become progressively refined, and later on, the separate schemes begin to become coordinated. For example, by turning toward a noise they hear, infants are exhibiting coordination of hearing and vision.

Stage 3 (4 to 8 months): This substage involves discovering procedures and attempts to imitate familiar behavior. Babies start showing interest in the outer world, and their schemes are directed toward exploration of the environment. Babies kick and push the crib and spend a few minutes responding happily when a doll is seen jumping, a noise starts, or the crib rocks.

Stage 4 (8 to 12 months): This is a substage of intentional behavior. The baby exhibits rudimentary though purposive action. Infants begin to have some desirable goals and to figure out how to achieve them. When we hide a toy the baby finds interesting, the baby will start looking for it for a few minutes before losing attention.

Stage 5 (12 to 18 months): This is a substage of novelty and exploration. The toddler shows interest in producing novel behavior, varying behaviors, and completely new solutions. For example, a child may intentionally and repeatedly drop a spoon from the highchair to see how parents respond each time.

Stage 6 (18 to 24 months): In this final substage of mental representation, the toddler begins to think about problems in terms of trial and error, trying out one behavior after another until a solution is reached. This substage of development starts when the child begins to use simple symbols such as single words and pretend play (Piaget, 1977).

Several main concepts are crucial for understanding the sensorimotor stage:

- *Object permanence:* Understanding that an object continues to exist even when it cannot be seen. This ability usually begins to develop around 2 months of age and is fully developed by 7 to 9 months. Before object permanence, the baby loses interest or stops looking for objects that are not visible. When the infant plays with a toy and the toy drops out of sight, the child immediately loses interest. However, once object permanence develops, the baby will continue to look for the lost object, following the direction where the object disappeared. At this point, the child can visually follow the caregiver leaving the room (Carrigan, in press).
- *Progressive decentering:* The gradual process of becoming less and less egocentric. This process is strongly connected to development. The infant begins life in a state of profound egocentrism (manifested most obviously in the absence of object permanence), when he or she cannot distinguish between the self and the outer world.
- *Invariant:* The stability of objects that remain the same within the changing world. The ability to understand object permanence relates to the child's ability to understand that although many things change in the world, the object that disappeared from sight remains the same.
- *Language:* The basic means of communication. The first stage of language acquisition begins at birth, when crying is a means of vocally communicating distress. The infant cries when hungry, dirty, or cold. Between 1 and 2 months of age, the infant begins to express contentment or joy through laughing and giggling.

With regard to memory at this stage, Bhatt and Rovee-Collier (1996) stated that babies at the age 3 months already have memory and can remember specific objects and their own actions with those objects, over a period of 7 days. They demonstrated this memory by measuring babies' kicking of a mobile at different frequencies and time frames throughout a weeklong period.

The Preoperational Stage

The second stage of cognitive development lasts from age 2 years to 6 years. In moving from the sensorimotor stage to the preoperational stage, the most important feature is the development of representational ability. This means that, in these preschool years, the child begins to use symbols to represent the world cognitively, thus using mental imagery. For example, a boy can pick a small toy, make it his "friend," and talk with and consult with that friend. Young children see the world as more orderly and predictable. The child is aware that superficial alterations do not change the nature of things. While understanding that the world is orderly, children also realize that they can cause events to happen. The child also acquires the ability to anticipate—to think about some possibilities before acting on them. The child also finds it possible to organize objects, people, and events into meaningful categories and at the same time to begin to count and deal with quantities. Their ability to develop relationships with others becomes possible because they are able to imagine how others might feel. They begin to develop the ability to explain and predict other people's actions by imagining their beliefs, feelings, and thoughts (Carrigan, in press). This ability is also related to progressive gradual decentering, as children start to understand that there are others in the world and that one should relate to them and consider their existence.

Several components characterize this stage:

- *The appearance of the semiotic function:* This is the ability to make something—a mental symbol, a word, or an object—stand for or represent something else that is not present (Ginsburg & Opper, 1979). Symbolic thought begins to emerge; this means that children acquire the ability to think of something without needing to see it right in front of them (Piaget, 1977).
- *The use of language:* At this stage, children incorporate information and make it known to others. They start understanding language. Use of language remains very basic, at a preconcept level, but can serve the child during pretend play. The child can now use words, numbers, and actions and perform them mentally through the use of internal symbols.
- *The appearance of initial but transductive reasoning:* In this stage, children start using reasoning in a simple concrete form; however, they cannot yet use a full range of reasoning. For example, if they see two sticks of the same length on a table, but one is placed farther away than the other, they will claim that the closer one is longer. The example that Piaget offered was of two rows, each containing the same number of eggs, but in one the eggs were adjacent, whereas in the other the eggs were more spread out. The child will say that the spread-out row is longer.

  The reasoning is a basic ability of the child to make guesses about future events. The child can solve problems through intuition and concrete thinking (as in: "There are more eggs in the second row because it is longer") but cannot explain the reasoning

behind those solutions. Rather than using deductive or inductive reasoning, children in this stage use transductive reasoning, moving from one particular to another and seeing cause where none exists. For example, on a cloudy day, a child may reason that it is not daytime because the sun is not out.

Children in this stage continue to exhibit other illogical thought patterns:

- *Egocentrism:* Children in the preoperational stage remain egocentric, assuming everyone else thinks as they do. Yet, gradually, this egocentrism starts to decrease.
- *Animism:* Attributing life to inanimate objects. Children at this stage typically think animistically; they confuse what is real with outward appearances (Piaget, 1977).
- *Irreversibility:* The lack of a cognitive process that enables transformation of objects or quantities from similar to dissimilar states and vice versa. Children at this stage fail to understand that an operation or action can go both ways, as when two halves of a broken cookie are put back together to make a whole (Carrigan, in press). They also fail to understand the significance of the transformation between states, such as a deflated balloon.

As part of cognitive development, memory skills also change and develop. Piaget (1969) claimed about the first stage of sensorimotor development that early events are not stored in memory at all. He recognized the appearance of memory in the preoperational stage, however in a very limited way. A. Freud (1963), in contrast, believed that early memories are repressed because they are emotionally troubling. Other theorists felt that early memories become inaccessible because they are not encoded for storage. More recent research has indicated that children at these ages can remember things that happened to them, just as adults do (Nelson, 1992).

The Concrete Operational Stage

The third stage of cognitive development lasts from 6 to 12 years of age. Children perform mental operations on the bits of knowledge they possess. Psychologists view children at this stage as being more logical. The child can start using calculations and numbers, adding, subtracting, and arranging numbers in logical sequences. Logical structures such as groupings become available for classification in sets and subsets, and children can seriate objects in order. Their thought is logical and systematic, and they can work out a verbal problem based on facts. Yet, children remain limited in their ability to systematically generate or test hypotheses, which requires keeping track of multiple possibilities. Children at this stage can already take other people's points of view, seeing things from more than one perspective. They can reason using concrete knowledge but cannot take the abstract side of things into consideration and cannot develop all possible outcomes.

School-age children develop concrete operational thinking or reasoning that focuses on real, tangible, concrete objects. In classifying objects, they can group things in more than one way at a time by about age 7. They know that a person can be both a parent and a teacher at the same time. They understand that some classifications are inclusive of others, such as that a particular animal can be both a dog and a pet. A father can also be a child of someone and a spouse of someone, as well as an uncle and a father.

Children at this stage also master conservation of numbers, liquids, lengths, masses, and weights. Piaget's well-known conservation experiment presented children with two glasses containing equal amounts of water. Then water from one glass was poured into three other glasses, and the child was asked whether the water in the original glass equals the water now contained in the three other glasses. Children who master conservation have begun understanding reversibility.

Central concepts in this stage include:

- *Transformation:* Changes in the cognitive skills that children develop. Concrete operations cause important transformations in children's skills from the preoperational period.
- *Seriation:* Seriating or arranging objects in sequence according to some dimension, such as length or size.
- *Conservation:* The realization that certain properties of an object necessarily remain constant despite changes in the object's appearance. For example, toys such as play clay can be shifted into different shapes but retain their amount and weight (Piaget, 1983). Conservation develops early in middle childhood.
- *Reversibility:* A cognitive process of transforming objects or quantities from similar to dissimilar states and back again while maintaining the concept of an invariant unit.

With regard to memory skills at this age, both short-term and long-term memory improves, partly as a result of other cognitive developments, such as learning strategies and the ability for reasoning. At this stage, children also improve language use. They can already understand metaphors and the use of symbolic language. Children understand metaphorical language such as "eat like a bird," "hungry as a dog," and "sick of hearing all that again" without taking it literally.

The Formal Operations Stage

Piaget's fourth and final stage of cognitive development lasts from 12 years of age to adolescence. It has a starting point but no end point. Achievements in this period include all of the higher level abstract operations that do not require concrete objects or materials. At this stage, the child can already use abstract, idealistic, and logical concepts. The child can raise hypotheses, use deductive reasoning, and guess how to solve problems (Piaget, 1983).

To present the child's progress in contrast to previous stages, the concrete operational child already has the ability for cognitive representation rather than the merely overt actions of the sensorimotor stage. However, the concrete operational child continues to be limited to dealing largely with what is in front of him or her: concrete, tangible, real objects (Vasta et al., 1995). The formal operational child has no such limitations. Now the child has the capacity for logical thinking and for hypothetical, deductive reasoning. Formal operational children already possess the ability to systematically generate and work with larger areas of possibility, including abstract possibilities. They use symbols that are related to abstract concepts to complete problems. They learn from reading and from trying new ideas as well as from friends and adults (Evans, 1973).

The development of formal operations allows individuals to comprehend moral, political, and philosophical ideas. As Weiner and Elkind (1972, p. 171) stated, "Adolescence is the era in which an individual becomes able to think abstractly and to deal with concepts like liberty and justice, to grasp metaphors and similes." Adolescents with formal operations can cope with contradictions and falsehood, understand thought processes, and evaluate their own and others' appearance and behavior.

Despite young people's advances during this period, they continue to demonstrate egocentrism, primarily two kinds, as described by Elkind (1974). Youngsters relate to an imaginary audience, whom they perceive as viewing them the same way they view themselves (e.g., if a young man is critical about himself, he is certain that all of his peers are similarly critical of him). Adolescents also believe in a personal fable, whereby they are unique (no one can possibly understand how they feel) and invincible (thinking about themselves differently than how others think of them, for example, the ability to understand that although I don't think I am a good enough football player, I know others think I am a wonderful player).

The main concepts related to this final stage are the following:

- *Operational thinking:* A rigorous logical system for evaluating hypotheses and deducing necessary outcomes; formal mental action.
- *Imaginary audience:* Early adolescents' egocentric belief that others are as interested in them as they are.
- *Personal fable:* The egocentric sense of uniqueness and invincibility; adolescents can think of themselves differently than how others think about them.

Formal operations are universal. That is, every normal person acquires them as their final stage of cognitive development. Most adolescents gradually grow up, mature, and develop the adolescent way of thinking successfully, which helps them shift from childhood to adulthood. However, situational causes (some adolescents do not receive adequate opportunities and support) will damage this process. Only in the 1970s was Piaget struck by the fact that many college students he met had not yet acquired formal operational ability; this fact facilitated his understanding that the highest level of formal operations is quite rare. It is now acceptable that there is no such thing as "finishing the developmental process" and that adolescents as well as other children encompass a heterogeneous group, with various capabilities, skills, and levels of cognitive development.

CRITIQUES OF PIAGET'S APPROACH

The General Contribution of Piaget

Consensus clearly holds that Piaget contributed a new understanding and significant concepts to the issue of human development. He looked at the biological functions and actions related to cognitive development. Until Piaget, little attention was given to the biological functions of knowing; this issue, which was not the focus of interest in his time, now became more acceptable (Campbell & Bickhard, 1986; Campbell & Christopher, 1996; Mahoney, 1991).

Piaget was also the first scholar to overcome the dichotomy between nature and nurture. This was an innovation during a period when genes were believed to influence development, environment was held responsible for learning, and no connections were drawn between these two entities. Piaget made it clear that development does not simply reflect the unfolding of a pattern dictated by genetic makeup, nor does it simply indicate the importation of structures from the physical and social environment. He focused on the nature-nurture connection and on the combination of biology and experience and action together to produce changes in the child's cognitive ability (Vasta et al., 1995). By combining biological and cognitive development, Piaget laid the foundation for what emerged much later: the postmodern tendency to see human life as a multitude of multivariate but interrelated components.

Piaget became recognized, and still is, because of his four stages of cognitive development. These stages continue to be employed, although they receive the most criticism. The criticism relates to several components: the fact that Piaget described the stages rigidly, the dichotomous starting and ending points of each stage, his disregard for environmental and personal differences and components that could affect the ability to achieve the skills needed in each stage, and his disregard for individual differences that could enable a child to achieve more advanced skills at an earlier stage and vice versa. More detailed criticisms are presented in the next section.

Campbell (2005) stated that Piaget's most important idea came from his work on egocentrism. For Piaget, egocentrism—or egocentralicy—is fundamentally a cognitive limitation. Children are egocentric because they cannot think maturely or logically and find it difficult to take other people's point of view. As an example of egocentrism, Campbell recalled Piaget's classic three-mountain problem in which a child is asked to inspect a papier-mâché model of three mountains, one large and two smaller ones. Then, while seated in one position at the table, the child is asked to select the photograph that shows what another child, who is seated across the table, would see. Children younger than age 6 years will select the photograph that shows what they see, not what the other sees. The importance of this experiment for Campbell was its crucial implication that human children are not primitive or antisocial; rather, child behavior is driven and limited by cognitive development. A child at a certain age or stage cannot act differently because of how the child thinks before cognitive maturation. Piaget's work dramatically affected scientists' perspective about human thinking. The concept of egocentrism continues to be acceptable today, although Piaget was criticized because of his rigidity in positing this concept as something that children should overcome and that never occurs during adulthood. In Piaget's later days, he was surprised to find adults who continued to exhibit egocentrism and that a high proportion of the adult population never reached what he described as the complete formal operation stage.

Piaget's Vertical Stage Theory and Biological Background

To appreciate Piaget, it is important, first of all, to understand the world he came from and lived in, and then to see how his ideas characterized his time, but also differed and went far beyond what other people were doing at that time. Like other professionals of his time (Freud, Bandura), he had a biological, scientific background. Having this scientific base, they all looked at development in the way that typified that time period: looking for

basic stages that could be placed in sequence, one after the other, and could explain each behavior; seeking a general large theory to explain behavior rather than focusing on specific skills or components; and creating a hierarchy where one element cannot begin before the prior one ends. Table 9.1 reflects this similarity in their views, although some variations are evident.

These stages are described in a mechanical way, with clear starting and ending points and with no relation to dynamic processes that might interfere with the stepwise progression through the stages. Mahoney (1991) emphasized that both Piaget and Freud proposed an in-depth and dynamic model in mechanical terms. He termed Freud's model a "horizontal stage theory" of "dynamic equilibration" and Piaget's stages "equilibration processes as the driving force beneath a vertical stage theory of development" (p. 155).

For all of these theorists, too, development was inexorably related to childhood. Although Erikson, unlike Freud and Piaget, extended his model to incorporate the years after adolescence and looked at eight rather than four or five stages, he conceptualized the main psychosocial tasks after becoming an adult as accepting and completing development, not as new assignments or views of the world. None of the theorists considered that there were significant developments after adolescence. This reflected the view of the times, and is found in theories of physical development as well. Stage thinking is no longer accepted in our postmodern society that seeks more complicated, unorganized, multivariant effects and upholds unorganization as a necessary part of organization (Mahoney, 1991, 1995). However, despite his era, Piaget was able to think creatively and differently and to develop ideas that stood the test of time.

Piaget as a Constructivist

Mahoney (1991) described Piaget as the major twentieth-century constructivist who influenced the "cognitive revolution." To explain this, I will describe in short some of constructivism's basic views about human beings.

Constructivist theory derives from a view of human beings as personal scientists who are continually creating conceptual templates from experiences (Kelly, 1955; Neimeyer & Mahoney, 1995). As scientists, people organize their experiences in a way that creates meaning in their lives. Knowledge comprises the main way human beings regulate their perceptions of environmental events (Guidano, 1995). Knowledge about both similarities and contrasts can be elicited by the individual's continuous comparisons and organizations of ongoing life experiences. This knowledge constitutes a chief component in the person's ability (as a scientist) to organize, make sense of, and give meaning to life experiences, the self, and the world. Knowledge is progressively shaped and changed in response to challenging environmental pressures (Guidano, 1995).

One's construction system varies and changes as one successively anticipates events and construes their replications. The concept of the meaning-making process is based on the understanding that psychological problems are, in large part, determined by the way people construe their experiences (Kelly, 1955). The emphasis of constructivism is on the tenet that each person is responsible for the individual way he or she organizes the way life is lived. Viewing each individual as a unique architect, the personal construct intervention advocates first attempting to understand the client and then creating an intervention appropriate for that one human being (Swell, 1995). Constructivist theory has become one of the leading

psychological theories for intervening with clients over the past 2 decades and is now widely applied in the treatment of individuals, groups, and families.

Looking at Piaget's theory, it is easy to understand why Mahoney (1991) considered him to be an important constructivist. Each of the key concepts of constructivism mentioned by Mahoney—active agency, order, organization, self, social symbols, and life span development—are central to Piaget's theory. Active agency epitomizes Piaget's conception of both knowledge and intelligence as something an individual does; the only way Piaget tested capabilities and development was via human actions. The concepts of activity and operation are central in Piaget's theory. Piaget viewed order as the way one organizes oneself (Mahoney, 2003). According to Piaget, humans constantly develop through stages, enabling them to organize their experiences, and this, for him, was constructivism. Organization, therefore, refers to the fact that all cognitive structures are interrelated and that new knowledge must be fit into this system. The way it fits into the system is through the processes of accommodation and assimilation. Piaget's view of constructivism relates to his emphasis on the tenet that every bit of knowledge is novel and that the way it is applied is novel. Children do not copy or reproduce knowledge they gain from the environment; rather, they take it, bend it, shape it, or distort it and thereby turn it into something new that they apply differently than the environment originally did. They process the knowledge they gain in a way that will fit comfortably into their existing knowledge (Vasta et al., 1995).

The role of the self in Piaget's theory was to develop schemes and functions and to apply them in various unique ways. Regarding social symbols, Piaget's constructivist notions related to the dynamic balance in human life that is rooted in biology but that is continually extended into new forms due to social influences and novel experiences. Thus, Piaget dealt with social symbols throughout the life span. The processes of assimilation, accommodation, and construction of new knowledge begin at birth and extend throughout life.

His constructivist ideas were manifested not only in the content of his work (his concepts) but also in how he approached his subject of study: learning how children think. As described earlier, Piaget did not merely observe children and then interpret their behavior; in line with a constructivist orientation, he assigned them tasks and worked with them to ascertain their own personal views and explanations of situations. As a participant-observer, he developed new concepts, derived from children's own explanations, to help the scientific world understand children. Perhaps this approach to conducting research helped him fashion his significant explanation of intelligence and knowledge—as something that one does rather than something one simply acquires as is, from the environment.

Piaget's approach to the study of children also characterizes assessments utilizing constructivist concepts. Rather than basing assessment research on outcomes and quantitative studies, constructivists employ qualitative research focusing on the process itself. Piaget, as well, was interested in identifying the possibilities and necessities inherent in thinking processes (Campbell, 2005). Instead of examining children's achievements or answers, he sought out children's personal and unique styles in coping with questions. He tried to understand them rather than assess them. Thus, once again, he actually laid the ground for future research trends, in this case, for the qualitative empirical studies that came into use much later in the social sciences.

Commonalities and Differences with Other Developmental Theories

The idea that children are not simply smaller than adults, that they are qualitatively different in their thinking, was an important contribution to knowledge in the past century. It is now common knowledge that differences exist between infants, toddlers, young children, adolescents, and adults, and that these differences are not only quantitative but also qualitative.

Piaget (1969, 1983) identified four general factors that contribute to cognitive change: biological maturation, learning and development, experience, and equilibrium. The first three are part of every theory of development that has been suggested since Piaget:

1. *Biological maturation:* Piaget's ideas about biological maturation were novel in his day but quickly became basic knowledge for developmental theorists. There is no argument today that biological factors contribute both to the nature of change and the timing of change. Nobody will try to train children to stand, walk, or write before they are biologically ready for those tasks. Modern theory extended Piaget's view of biological origin and took it far beyond what he dreamed. We are now experiencing a decade when biological factors are considered crucial for every psychological, emotional, and physical behavior.
2. *Learning and development:* Piaget viewed these two in combination. In line with his notions, today a consensus exists that learning and development always occur within the constraints set by the child's maturational level and that certain kinds or levels of learning are impossible until maturation has progressed sufficiently.
3. *Experience:* Piaget divided experience into physical and social experience, stressing the importance of assimilation and action. The role of experience in human development and learning is very important in modern theoretical models. As will be seen later in the chapter, although they gave it other explanations, modern theories of information processing and learning emphasize the effect of experience. Constructivist theories also assert the importance of exploration and experimentation as crucial for developing and changing (Mahoney, 1991, 1995, 2003). Experience in modern society is described in various terms but continues to be considered a vital component in the change process.
4. *Equilibrium:* For Piaget, adaptive responding means equilibrium—a balance within the cognitive system. Equilibrium exists when the child's cognitive structures can respond to any environmental challenge without distortion or misunderstanding. Piaget cited equilibrium as the ultimate explanation for several aspects of development, particularly as a way to explain motivation. In contradiction to his other notions, equilibrium was rejected by researchers, who were unable to validate its importance empirically (Vasta et al., 1995). Other cognitive-developmental psychologists claimed that equilibrium is too vague and general a term to be tested (Zimmerman & Bloom, 1983).

Overall, two main trends characterize the criticisms of Piaget and his work. The first trend accepted his theory but claimed that he was too rigid in describing the stages and that he either overemphasized or underemphasized children's abilities. The second trend rejected Piaget's basic ideas and model altogether.

Criticizing Piaget for His Tendency to Underemphasize or Overemphasize Children's Abilities

Many researchers fall into the category of the first kind of criticism, disagreeing with the rigidity of Piaget's model and his view of children's abilities. This trend describes scholars who actually accepted Piagetian theory but attempted to increase its flexibility and to bring research evidence that would support the need to change his age margins or the kinds of available schemes in certain stages. These researchers viewed Piaget's four stages as important for understanding children's development. However, they claimed that Piaget erred in defining some stages' age ranges or in determining criteria for moving to the next stages.

Over the past 3 decades, hundreds of studies have been conducted relating to Piagetian theory. Many of these supported his ideas but rejected his limited attribution of behaviors to specific times. For example, many tried to prove that children can understand object permanence earlier than Piaget thought they could (Leslie & Keeble, 1987; Poulson & Nunes, 1988; Vasta et al., 1995). Modern psychologists believe that the notion of object permanence is important for understanding children, but studies point to the fact that babies have some knowledge about object permanence several months earlier than Piaget suggested (Baillargeon, 1986, 1987a, 1987b; Fischer, 1980; Rutkowska, 1991).

The same criticism can be seen in relation to Piaget's notion of formal operations. Modern researchers found that this operation is difficult to achieve. High percentages of the adult population achieve formal operations at a much later time in development than Piaget proposed, and some fail to achieve formal operations at all (Shayer, Kucheman, & Wylam, 1976; Shayer & Wylam, 1978). On the other hand, the fact that many young adults did not fully achieve formal operations was suggested to be a problem of these young people's lacking experience rather than reflecting a mistake in the model itself. Studies showed that giving children a little hint improved their outcomes. Also, people seem to achieve better results when involved in tasks they find interesting (Danner & Day, 1977; Stone & Day, 1978; Vasta et al., 1995).

Nevertheless, despite these criticisms about age boundaries and the effect of experience on children's achievements, all of these researchers supported Piaget's basic model. Studies continued to present outcomes corroborating his major concepts of stages and developmental capabilities.

Criticizing Piaget for His Model

The second trend opposed Piaget's basic ideas and model, suggesting that his whole view consisted of a misinterpretation of children's behavior. For example, studies found that Piaget underestimated infants' behaviors and competencies in the sensorimotor stage. Piaget's view of the first stage of development as based mainly on reflexes especially encountered contention. Today, researchers not only link such early behaviors to reflexes but also view infants as already being capable of cognitive ability. This ability is referred to today as "cognitively organized behavior," reflecting the complexity and coordination that behaviors such as sucking and gazing may show (Vasta et al., 1995). In general, Piaget focused on motor behavior in assessing infants' knowledge, including reaching, manipulating, bringing objects together, and in general acting on the world (Vasta et al., 1995). However, modern

theories of development look at habituation procedures and depend less on overt behaviors; therefore, the depiction of infants is much more positive. Meltzoff and his colleagues (Meltzoff, 1988; Meltzoff & Borton, 1979; Meltzoff & Moore, 1983, 1989) presented many outcomes pointing to infants' ability for cognitive responses relating to imitation of adults and memory, contradicting Piaget's view of reflexes and motor behavior.

Most scholars today hold that Piaget overemphasized motor behavior, both methodologically and theoretically. He emphasized the infant's literal mode of experiencing to learn about the world. He underestimated the role that perceptual learning plays in the infant's development (Bebko, Burke, Craven, & Sarlo, 1992; Mandler, 1992; Mandler & Goodman, 1982).

Another dispute about Piaget's theory derived from research outcomes relating to memory. Piaget (1969) explained that early events were not stored in memory at all. His ideas differed from those of A. Freud (1963), who believed that early memories are repressed because they are emotionally troubling. Modern developmental psychologists contradicted Piaget by presenting outcomes proving that young children can and do remember in a way similar to adults (Nelson, 1992). There are many kinds of memory; therefore, the issue is not whether the child has the ability for memorizing but what the child can remember at what age (Carrigan, in press). Infants can remember simple objects such as faces and toys, which differs from adults' memorization of knowledge in terms of facts, names, and so forth. Bhatt and Rovee-Collier (1996) showed that 3-month-old babies can already remember specific objects for a few days.

Piaget claimed that perception cannot contribute to development, in line with the view of traditional empiricists who asserted that visual perception gives us only a string of static snapshots that must be interpreted by higher mental processes (Campbell, 2005). He rejected any signs of passive knowledge, maintaining that knowledge means acting and shaping—not just modeling, accepting, and using what others do. Nowadays, we accept the fact that human beings possess both tacit knowledge and obvious knowledge.

Piaget's methods have both strengths and weaknesses. Their strength is rooted in the combination of two distinct methods that were not common in developmental psychology: one, his way of observing a behavior in its natural environment and, two, the longitudinal study of children as they developed. The methods' weakness relates mainly to the small number of children he studied, although later his studies were replicated and found accurate (Harris, 1989).

Many controversial arguments continue to be debated regarding the adequacy of Piaget's model, and many of the studies that opposed Piaget have not been replicated later. Despite the limitations of his theory, many educators and psychologists turned to his writings to glean his notions about learning and experiences in school and in treatment.

EVIDENCE-BASED FOUNDATIONS FOR PIAGET'S MODEL

Very few professionals have had their work replicated and tested as much as Piaget has. Not only was he himself constantly involved in testing and retesting his own assumptions (Piaget, 1977, 1983, 1993; Piaget & Inhelder, 1969), but several hundreds of studies have attempted to replicate his model over the past 40 years (Flavell, Miller, & Miller, 1993; Miller, 1993) and continue to do so today.

Most of these studies examined the earliest and the latest stages in his model: the first stage of sensorimotor development and the last stage of formal operations. As mentioned earlier, many studies were able to replicate and justify Piaget's stage model, but they proposed some minor changes in his age classification, such as proposing that children develop skills faster and earlier than Piaget proposed. For example, with regard to the concept of object permanence, most studies justified the existence of the object permanence question in infancy but found that infants achieved this ability earlier than Piaget had proposed. Replication studies have amply confirmed Piaget's claims about the kinds of errors infants make when they search to find a hidden toy (Harris, 1989; Uzgiris & Hunt, 1975). On the other hand, many of the studies that contradicted Piaget have not been replicated (Meltzoff, 1988; Meltzoff & Borton, 1979; Meltzoff & Moore, 1983, 1989).

Likewise, with regard to formal operations, research accepted the stage's concepts but found that people achieve it later than Piaget had proposed (Baillargeon, 1986, 1987a, 1987b; Fischer, 1980; Leslie & Keeble, 1987; Poulson & Nunes, 1988; Rutkowska, 1991; Vasta et al., 1995). In sum, most research evidence validated Piaget's basic assumptions and stage model but added the idea of individual differences and environmental processes as affecting the child's experiences and experimentations and, therefore, as changing the child's ability to understand concepts, acquire new knowledge, and reason. Later on, studies showed that logical reasoning is a skill that is also affected by training and by degree of interest; thus, children who are trained specifically to reason logically or who have a high level of interest can achieve this skill much earlier than Piaget believed (Overton, 1990).

Overall, research evidence in this field enables several conclusions to be drawn:

- The four cognitive developmental stages can easily be substantiated, demonstrating the different capabilities children possess at each stage. However, progress from one stage to another does not seem to be as orderly and consistent as Piaget's model suggested. The time line for the beginning and end of each stage may differ from the original theory, and this is subject to individual differences, training, and experiences.
- Training can change the child's cognitive development. It is difficult but possible. The majority of training studies have reported positive outcomes, where training programs impacted children's skills.
- The success of training depends on the child's developmental level. Training will not help a 1-year-old child reason logically. However, if the child is already close to the appropriate stage, training can facilitate how that child applies his or her knowledge in a few months. Furthermore, an important finding that emerged indicated that the child's willingness to comply is also a crucial determinant of success.

ADVANCED THEORETICAL PRINCIPLES FOLLOWING PIAGET

The cognitive developmental approach encompasses a number of related theories. Until the 1980s, this approach was influenced mostly by the work of Piaget (1977) and later by the work of Vygotsky (1962, 1978, 1987). Each offered a "big theory" that explained human development through hierarchal stages and ages. Ever since the first publication of Vygotsky's *Thought and Language,* there have been ongoing debates about the relationship

between the ideas of these two theorists (Cole, 1996; Cole & Wertsch, 2005; Wertsch, 1991). Both Piaget and Vygotsky investigated cognitive development and attributed development to biological changes, ages, and stages. However, they differed in where they placed the locus of cognitive development. For Piaget, the individual child constructs knowledge through actions enacted upon the world, emphasizing the role of knowledge as a creative component influencing development. For Vygotsky, there is a constant interaction between the child and the environment (Cole & Wertsch, 2005). Vygotsky assumed the existence of an intimate connection between the special environment that human beings inhabit and the fundamental, distinguishing qualities of human psychological processes (Cole & Wertsch, 2005). In this view, Vygotsky conceived language to be the main mediator of this interaction. For many years, the development of language has been a main subject of research and study in child cognitive development (Casasola & Cohen, 2000; Fenson et al., 1994; Oller, Cobo-Lewis, & Eilers, 1998).

The most obvious advancements that occurred in theories of cognitive development were in the second half of the twentieth century. During the 1980s and the 1990s, the focus of interest within cognitive development shifted from cognitive stages, ages, and knowledge development, as Piaget suggested, or from the development of language and the interaction with the environment, as Vygotsky proposed, to the area of information-processing models and sociocultural trends.

From Piaget to Information-Processing Models

A. Freud (1963) was the first to present a psychoanalytical theory of development based on internal structures and conflicts that human beings must strive to resolve. Piaget (1969) proposed the notion of development based on cognitive development, emphasizing the role of knowledge as an underlying structure (see Table 9.2). His ideas about the mental rules underlying cognitive performance were further developed into various developmental theories, one of the most important being Vygotzky's (1962) sociocultural theory of the development of language. Vygotzky emphasized the role of the environment in acquiring language and the role of language in children's development.

Piaget's ideas and methods for studying children continue to be applied by many modern developmental psychologists, who are therefore called neo-Piagetians (Case, 1985, 1991, 1992; Demetriou et al., 1993; Fischer, 1980; Halford, 1993; Shayer et al., 1976). Proponents of this orientation actually form the link between Piaget's traditional cognitive-developmental theory and the more advanced postmodern information-processing model in how they apply Piaget's concepts of stages, tasks, knowledge, and abilities to the phenomenon of how people process information. We can therefore say that these neo-Piagetians are the mediators between Piaget's stage theory and the later information-processing theories.

The Nature of the General Information-Processing Models

Piaget focused on broad, general explanations for children's behavior at each stage, whereas information-processing theorists limit themselves more to specific domains and focus on particular skills, tasks, or aspects of children's development. Rather than investigating children's achievements and ways of thinking, information-processing theorists are

Table 9.2 Main Trends in Explaining Cognitive-Developmental Stages

Theory	Main Contributors	Basic Features	View of Development
Cognitive intellectual developmental theory	Piaget 1896–1980	Process of acquiring and using knowledge Basic underlying organizational structures	Four periods of cognitive development: sensorimotor, preoperational, concrete operational, formal operations
Sociocultural approach to development	Vygotzky 1896–1934	Development is a product of culture Mental development relates to thought, language, and reasoning	Intellectual abilities are specific and depend on the child's interaction with childrearing environment
Neo-Piagetian cognitive developmental approaches	Case (1985) Shayer et al. (1976) Halford (1993)	Applies information processing to Piaget's stages, tasks, and abilities	Complex systems of mental rules underlie cognitive performance, extending Piaget's basic stages
Information theory Early stage: linear model (see Figure 9.1)	Shannon & Weaver (1949)	Neural interaction Goal of simulating human behavior Flowchart and computer metaphors	Serial, linear models of input and output Neglect of emotions and human internal causes
Information processing model: Second stage (see Figure 9.2)	Kail (1992) Siegler (1991)	Sequential, more complex model Includes executive routines Relates to individual intentions	Information gathering Encoding information Storing it for short- and long-term memory before responding
Modern social information processing model	Crick & Dodge (1994) Dodge (1986) Dodge & Pettit (2003)	Mediational model based on cognitive science Goal of understanding the process before behavior accomplished and understanding human mind	Adds social and emotional elements to the basic output-input model Views social knowledge structures as evolving outcomes in life experiences during ongoing social exchanges
Connectionism, self-organization, and self-representation	Thelen (1993) Karmiloff-Smith (1993)	Neuroscience Networks of knowing The power of system as a cyclical phenomena and unorganized systems Shift in emphasis from computer to living nervous systems	Dynamic structure of activities Ongoing process of change Focus on the nature of memory

interested in the process underlying this thinking. Their aim is to develop methodological and theoretical models that are both more specific and more comprehensive than that of Piaget.

Traditional information-processing models were initiated starting in the late 1940s by Claude Shannon at the Bell Telephone Company, as he researched a mathematical theory of signal transmission in order to maximize line capacity with minimum distortion (Shannon & Weaver, 1949). Shannon and Weaver viewed the brain as an information source, the voice as a transmitter, and information as something that reduces uncertainty (Ritchie, 1986). Traditional information theory ignored the human factor in human communication. For several decades at that time, the terms "cognitive psychology" and "information processing" were often used synonymously (Mahoney, 1995).

The renewed attention to and evolution of information-processing models in the 1990s resulted from growing interest in cognitive science. The new interdisciplinary adaptations of information-processing models combined the fields of biology, mathematics, philosophy, neuroscience, and psychology. Such models enabled the representation of a nonobservable process in an observable fashion (Miller, 1993).

The information-processing model of Shannon and Weaver (1949) was a linear, basic, mediational model depicting miniature prototypes of stimuli-responses operating inside the organism (Mahoney, 1991). This model conceived human cognition as a system that involves three main parts: input, processing, and output. The first part, input, involves receiving signals from the external and internal world. These inputs can be signals related to sights, sounds, tastes, feelings, and so on. Traditional information-processing models offered a linear explanation for human development, where input from the environment ends with output toward it. The linear model linked stimuli to response:

$$\begin{array}{ll} \text{Stimuli} \rightarrow \text{Response} \\ \text{(input)} \quad \text{(output)} \end{array}$$

Key concepts in this model were short-term memory, which can store only a limited amount of information for several seconds; planning, as a fundamental cognitive process; and hierarchical organization, which turns the input into an output (Miller, 1993).

This basic, simple, linear model of information processing by Shannon and Weaver (1949) was extended by Kail (1992), Siegler (1991), and others into a more complicated model that is still linear but includes components of covert responses as well as covert stimuli, as can be seen in Figure 9.1. Research relating to the brain in general and to memory in particular brought the extension of this model to what Mahoney (1991) called the second generation of mediational models. Such models became more complex to include executive routines: concepts of gathering information, encoding information, and storing it in short- and long-term memory before responding.

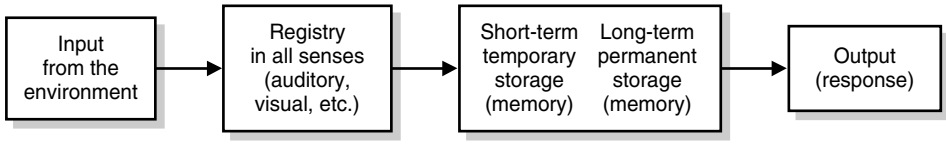


Figure 9.1 The basic linear information-processing model

The main goal in studying the processing of information in the human brain is directed toward understanding the process that occurs before the person acts, and to specify the underlying psychological processes and developments that human beings undergo. The focus is on thinking styles and processes (Kail, 1992; Kail & Park, 1992; Siegler, 1991; Siegler & Crowley, 1992). Thus, information-processing models strive to understand not how one behaves (the output) in terms of speech, social interactions, writing, or actions (Vasta et al., 1995), but rather how this process proceeds. The part that most intrigues psychologists is the receipt of information through the brain and its processing and transformation. Processing of information involves coding it into symbolic forms, comparing it with previously acquired information, storing it in memory, and retrieving it when necessary.

It is important to note that this model of information processing was static and did not consider changes or development over the life span. It did not describe human cognitive development but presented how humans act regardless of age and stage. However, this model served as the basis for acknowledging issues of development for later information-processing models.

For several decades, until the 1990s, information-processing models became the leading approach to the study of human cognition (Miller, 1993), trying to imitate the operation of computers and to construct programs that simulate human behavior. This approach proved very useful for studying issues such as problem solving, memory, reading, and other cognitive processes that involve critical thinking or decision making, where individuals must take a variety of perspectives, weigh the consequences of their decisions, and question their information sources.

Key Information-Processing Concepts

- *Cognition:* An act or mental process of knowing, such as reasoning or problem solving, by which a person tries to understand the world.
- *Computer simulation:* Programming a computer to perform cognitive tasks to resemble human functions; an information-processing method to test theory.
- *Encoding:* The internal representation of external or internal stimuli; a basic mechanism of change in the information-processing model.
- *Planning:* A cognitive process that helps turn input into output.
- *Reasoning:* The ability to understand cause-effect links and understand the rationale underlying specific behaviors.
- *Short-term storage and short-term memory:* The results of temporarily storing cognitive operations while carrying out new operations, before the process of storing it for the long term.
- *Social cognition:* Thoughts relating to other people, the world, and oneself in relation to the roles, norms, and expectations of society.
- *Stimulus-response:* The link between stimuli, usually elicited by the external environment, and the person's ensuing response; based on learning theory, suggesting a common organizing principle that views behavior as an outcome of external stimuli.
- *Strategy construction:* Strategies in information-processing models for processing and remembering information.

Metaphors for Linear Models of Information Processing

The early, linear model of information processing can be illustrated by two images: the flowchart and the computer. Both depict the order from a starting point (input) to an ending point (output).

Flowchart Metaphor From birth, the child is attuned to the surrounding environment and receives information, or input. For example, if a child tastes a novel food, its flavor enters the sensory register and remains there for a few seconds. Then it moves to short-term memory and sometimes to long-term memory. When, in the future, the child tries a similar food, the taste can be extracted from long-term memory, connected with the current food, identified, and stored in permanent memory. In such a case, other inputs, such as visual images, noises, or events that accompanied that first trial of the food, may also be extracted simultaneously, helping to give that food a special significance. Thus, the information the child received from his or her own experience and from the surroundings is stored in memory and will guide that child's future behavior. Using the flowchart metaphor, theorists try to capture the orderly flow of information through the cognitive system. The goal of the psychologist is to specify as precisely as possible the entire process transpiring between stimulus and response (Vasta et al., 1995).

Computer Metaphor The second metaphor that is used by the traditional linear information-processing model is that of a computer. It serves as a metaphor for understanding the sort of intelligent system that operates between input and output in an attempt to simulate brain processes. Information-processing theorists have often adopted preexisting computer languages for their theories. The computer can be seen as representing the brain in several ways: Both store representations or symbols and manipulate these symbols to solve problems; both perform a variety of such manipulations in an incredibly rapid and powerful fashion; both are limited in the amount of information they can store and manipulate; and both can learn from experience and modify their rule systems in progressively adaptive directions (Vasta et al., 1995).

Using the metaphor of the brain as a computer emphasizes the flow of information that humans receive from the environment, as well as the selective and sequential processing and storage of that information in organized forms or schemata (Lyddon, 1995). Interactions with the world become a function of the cognitive system's capacity to identify potentially useful information, transform the information into meaningful cognitive patterns, and use these patterns to choose appropriate responses (Lyddon, 1995). In a chapter analyzing the contribution and revolution of cognitive therapy, Mahoney (1995, p. 41) stated, "Metaphors of representation are under reappraisal." Mahoney also claimed that "the limits of solely computational programs are increasingly recognized and nowadays, culture, affect, history, and context are the most interesting topics in human knowing and experience" (p. 41). Although Mahoney proposed the study of the brain, he asserted that information processing and cognitive sciences are necessary points of reference to development. He recommended that research in this area should continue to respond creatively to the challenge of increasing complexities in models and theories of the human mind.

Kail (1992) and Siegler (1991) developed the second stage of the information-processing model into a more complex one. Rather than a linear explanation based on input and

output, they suggested a complex model that integrates human intentions and capabilities (see Figure 9.2). In understanding human behavior, they emphasized that input from the external environment is only the first stage, followed by how people encode, interpret, store, and assess information before acting.

Social Information Model

Based on the more complex model of information processing of Kail (1992) and Siegler (1991), a social information model was developed by Crick and Dodge (1994) and Dodge and Petit (2003), adding social and emotional elements to the basic input-output model. Researchers of this trend (see Table 9.2) view social knowledge structures as outcomes evolving from life experiences via ongoing social exchanges (Dodge & Pettit, 2003).

Models of social information processing provide a framework within which several discrete cognitive processes are thought to underlie human behavior. For example, children's social information processing is considered an important step in their decision to behave aggressively, specifically with regard to their ability to evaluate the consequences of aggression (Hall, Herzberger, & Skowronski, 1998). Bandura (1978) stated that people play an active role in creating information-generating experiences as well as in processing and transforming informative stimuli.

Social information-processing models are part of social learning theory (Bandura, 1978, 1986). This theory views behavior as a function of the expected probability that a particular

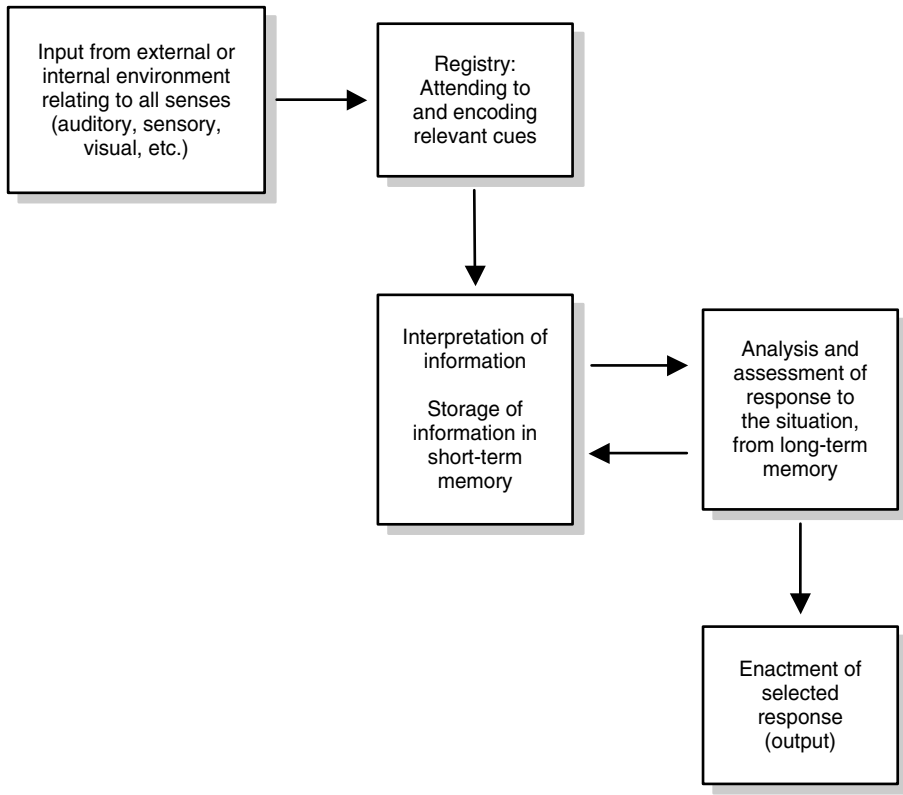


Figure 9.2 The extended information-processing model (second stage)

reinforcement will occur (outcome expectancy) and also as a function of the degree of preference attached to that reinforcement outcome (outcome value). Responses occur as a sequential set of emotional and mental processes building up to motor behavior. The model relies on evidence suggesting a link between social adjustment in childhood and later life difficulties; in addition, the model utilizes social cognitive approaches to social adjustment (Crick & Dodge, 1994).

The social learning theory of human knowing is fundamentally cognitive, constructivist, and deterministic in the sense that cognition and behavior are linked to the environment (Lyddon, 1995). The main contributions of this model are its examination of global cognitive constructs such as perspective taking, role taking, and referential communication (Crick & Dodge, 1994). These emphasize scientific understanding of children's social behavior and social adjustment.

The model of social information processing accepted all of the stages described by Kail (1992) and Siegler (1991), as illustrated in Figure 9.2. However, it added the social elements and the individual way a child is capable of encoding, interpreting, and assimilating information at various ages and subject to specific personal characteristics. The six stages of the social information processing model consist of:

1. Attending to and encoding relevant cues into working memory. This is the stage when children receive input while facing a social situation. This input is determined by their biologically limited capabilities. The encoding process includes both external and internal cues. This stage will differ by age and stage. Younger age correlates with a more limited ability to encode situational cues objectively.
2. Mentally representing and interpreting encoded cues in a meaningful way. Interpretation may consist of one or more independent processes, such as the filtered, personalized mental representations of situational cues, which are stored; the casual analysis of the event that occurred; inferences about the perspectives of others in the situation; assessments of goals; evaluations of the accuracy of the outcome expectations; self-efficacy predictions of the outcome expectations; and inferences relating to the meaning of the prior and present exchanges for the self. This stage, like the previous one, is subject to the child's age. Mental representation differs as the child grows older, as do memory storage and the ability for inference.
3. Selecting one or more goals or desired outcomes for the situation and acting to produce particular outcomes.
4. Accessing one or more potential responses to this situation from one's long-term memory's repertoire, or constructing a new response if the situation is novel.
5. Evaluating acceded responses by anticipating whether they lead to desired outcomes or not, according to some moral code. If the situation is novel, they may construct new behavior.
6. Enactment of a selected response through motor and verbal behavior (Dodge & Pettit, 2003).

According to this model, maladaptive responses to social stimuli are a result of deficits or distortions at each of the major stages of information processing described (Yoon, Hughes, Gaur, & Thompson, 1999). Although each stage can be assessed independently, the model

emphasizes processing of social stimuli together with sequential processing and with the reciprocal nature of information-processing stages. Consequently, children's processing at each step is not independent of other steps, and the processing across steps culminates ultimately in observed behavior (Yoon et al., 1999). Also, at various ages and developmental stages children can activate different social information processing stages.

RESEARCH EVIDENCE AND CRITIQUE OF INFORMATION-PROCESSING MODELS

Interest in information processing in general, and lately in social information processing in particular, has not focused only on children or developmental issues. The main focus of research has been directed toward studying the development of social cognition and its effect on thinking. Therefore, most empirical outcomes in this area refer to isolated, rejected, and aggressive children. The information-processing approach became very useful in guiding developmental and clinical psychologists' research on children's problem solving, memory, reading, and other cognitive processes. Nevertheless, this approach does not constitute a "big theory" but a domain-specific one; hence, the outcomes pinpoint specific distortions or deficiencies in cognitive processes rather than uncovering general conclusions about human development.

Findings from numerous studies support the relations between some aspect of processing cues and specific behaviors, such as aggression (Crick & Dodge, 1994; Dodge, 1986) or hostile cues (Dodge, Pettit, McClaskey, & Brown, 1986; Waldman, 1996). However, the model of social information processing posits that multiple processing operations are involved in any action, and studies have highlighted multiple steps of processing that can typically predict behavior (Dodge & Price, 1994).

In a meta-analytic review of these models, Yoon et al. (1999) suggested that aggressive children show a broad pattern of deficits and biases in social processing. Each of the main stages mentioned by Dodge (1986) produced an effect size, thus offering important implications for children's behavior and differentiating between aggressive and nonaggressive children.

In sum, the period of information-processing models at the end of the twentieth century has been described as a time of "science of the mind," which viewed the mind as a central station that transmits stimuli as well as energy output in the form of responses. This view served, and still serves, as an invaluable reference point and source of technological development, but now is in a stage of further development. Mazlish (1993) described this period as an ongoing process that is not yet history; this view continues to evolve and appears in the cognitive sciences.

RECENT THEORETICAL DEVELOPMENTS: CONNECTIONISM, SELF-REPRESENTATION, AND SELF-ORGANIZATION

The present way of relating to human behavior has stepped beyond the two-dimensional linear chain models characterizing information processing to an alternative explanation that is not linear but complex. This explanation is based on the idea that the mind is organized and

managed centrally through complex processes of self-organization and self-representation. The idea that underlies this approach is connectionism, which has become the main stream in cognitive science over recent decades. This novel approach represents a paradigm shift in human science, with the intent of changing our understanding of human behavior (see Table 9.2). As an explanation, it is more mature and offers a more sophisticated type of stimulus-response model. It emphasizes the system as a whole, rather than any specific part of the system. It emphasizes the need to connect rather than to differentiate.

Connectionism is revolutionary compared to traditional information-processing approaches to cognition. It relies on neuroscience as its source of assumptions about the distributed "networks" of knowing. It rejects the serial operational structure. Connectionists have appealed to "massively distributed" processing going on simultaneously, "rather than parallel (or sequentially)" structured processes (Mahoney, 1991, p. 82). It presumes that linear computerlike explanations are basic to learning and memory, and it emphasizes symbolic processes that are necessary for understanding human development.

Connectionism explanations were born in the postmodern period, depicted as a postrationalism revolution. Postmodernism and postrationalism are themselves reflections of developments in psychology and of complexities and apparent paradoxes that challenge imminent developments (Mahoney, 1995). In postmodern society, a clear tendency to view the world differently has emerged. In contrast with rationalism—the wish to look at order, stages, and organization, which are linear and hierarchical—new developmental psychologists as well as other scientists have lately been seeking out more complex models. Such models object to the basic traditional tendency to look for one general explanation for development, such as Freud's psychoanalytic developmental stages, Erikson's social developmental stages, or Piaget's cognitive developmental stages. Rather, connectionism models emphasize that human behavior is subject to many processes. Some of these are internal processes, such as the human tendency for self-organization, based on specific ways of thinking, feeling, or acting. Others are processes that derive from social, environmental, and cultural alterations that influence the way one behaves. Whether internal or external, this process creates changes that are nonlinear and do not have starting and ending points, but rather are characterized by multivariate changes and cyclical phenomena. The rule of connectionism is that no simple rules explain development.

Mahoney (1991) defined the basic features of connectionism: First, it relies on models and theories in neuroscience (rather than computer science) in model building. Second, connectionism rejects traditional serial (linear) models of information processing in favor of multiplex parallel processing models. Third, connectionism acknowledges complex "symbolic" processes that cannot be experienced in simple, concrete, explicit symbolic form (Mahoney, 1991).

In line with the acceptance of connectionism, explanations for the complex processes of memory, the mind, and mental representation became central topics of interest and study. Shanon (1987) asserted that knowledge is central and necessary for human behavior. However, its basic feature is mental representation, which is how symbols are organized to represent processes. At the same time, human behavior, especially cognitive activity, consists of manipulation of the symbols that were represented.

It is beyond the scope of this chapter to present the theory of constructivism that is now reflected in postmodern society. However, two concepts that derive from the explanation of

connectionism and are part of the theory of constructivism must be mentioned, inasmuch as both relate to the explanation of human function in cognitive realms. Both are directly linked to connectionism and both have roots in Piaget's theory of cognitive development. They are self-organization and self-representation.

The notions of self-organization and self-representation derive from the wish to look for systems' principles to explain development either via biological organization or by applying system theory and later on self-organization theory to explain development. In a way, these concepts reflect a development of computational models. In this view, schema and constructions become central. However, instead of looking at ages and stages when each component can be developed, the tendency is to find a general explanation for the process of representation and organization.

This new trend rejected the metaphor of the mind as a computer and the reliance on computer studies. Instead, it developed the idea of the basic human need to organize experiences and behaviors, which is therefore termed self-organization—an outcome of multiple processes that are connected within the human mind. Several components characterize the tendency for connectionism that is based on self-representation and self-organization. This tendency:

- Shifts emphasis from the computer to living nervous systems as the primary source of information about human development.
- Integrates knowledge from ongoing research of the mind, the memory, and behavior to contribute to our study of human development.
- Applies basic knowledge taken from computer science but extends it to relate to the emotional and internal processes unique to human beings.
- Recognizes that computational processes cannot adequately deal with the complexity of "symbolic processes," which operate pervasively in all human experiences. (Mahoney, 1995)

Thelen (1993) stated that the advantage of using the principle of self-organization lies in the fact that there is no need to explain every behavior in biology systems, and there is no need for clear, simple, linear explanations. The self-organization principle enables reference to complex processes and their interactions with the complex components that make up human behavior. Thelen suggested that development necessitates new empirical strategies in which one can identify developmental transitions where systems can fall into progression, but at the same time where they can also regress and elicit new forms of development. These new strategies should combine biological, physical, and psychological systems that can explain the ontogenetic change in the reorganization of components to meet adaptive tasks.

Karmiloff-Smith's (1993) work links previous and advanced models of cognitive development. She raised three assumptions about the human mind, contending that it (a) possesses some innately specified information that allows it to attend to persons, objects, space, and cause-effect relations and to establish domain-specific representations; (b) has a number of innately specified processes that enable self-organization and self-description; and (c) acts not only in the external environment but also in its own internal representation

system. Karmiloff-Smith stated that the process of forming representations includes encoding information, specifying sequences, and storing new representations within or between domains. She asserted that Piaget was wrong in attributing knowledge to the outcome of domain-neutral sensorimotor action. Modules result from a process of modularization as development proceeds. Knowledge (whether newly acquired or innately specified) is encoded and activated as a response to external stimuli. Children exploit the knowledge that they have already stored via a process of representation. The child has a "theory" that organizes the principles defined in internal representation.

The advantage of relating to complex explanations is also its weakness. If we try to find a unified, integrated explanation for human behavior, which permits us to relate to each specific act, we will not be able to rely on self-organization and self-representation explanations. These two features can supply an understanding of human beings' tendency to behave in a certain way. However, only through our knowledge of a developmental perspective can we identify the specific levels of representation in the human mind.

In line with the tendency for self-organization, we can look at development as involving two opposing processes: progressive access to stored information on the one hand, and regression to previous knowledge that was stored for a long time on the other hand. We can therefore explain development as the way humans change while desiring to organize acquired knowledge; new understanding arises and progress is made toward modularization and computation in a domain-specific fashion (Karmiloff-Smith, 1993). This can occur both in verbal and nonverbal modes.

Key Connectionism, Self-Representation, and Self-Organization Concepts

- *Postmodern:* The philosophical perspective that acknowledges the complexity, relativity, and intersubjectivity of human experiences.
- *Self-organization:* A process, shaped by social bonds and symbolic processes such as imagery and language, that helps people connect and organize their experiences.
- *Connectionism:* An explanation for human behavior based on massively distributed processing in the human mind, which also relates to our ability to connect various explanations from different theories to explain how human minds operate: simultaneously rather than sequentially, emphasizing that models are all connected to each other and influence each other; a tendency to integrate and connect rather than to separate.
- *Representation:* A term appropriate in formal symbols systems such as language and mathematics, as a "product" of the mental system.

Knowledge on self-representation and self-organization is still in its early stages of exploration and elaboration. It is difficult to present evidence-based data for this postmodern model because available research tools are lacking to study this model's fit with human functioning.

Two distinct research trends, however, do reflect postmodern society. First, scientists are continually seeking evidence-based knowledge, research outcomes, and data to lend support to this theory, supporting the notion that only empirical study can fully address human complexity. Second, at the same time, recent research has given increasing weight to the necessity for qualitative research methods to discover the authentic voices, experiences, and phenomena beyond the numbers and groups yielded by quantitative studies.

RELEVANCE TO SOCIAL WORK PRACTICE

During the past 2 decades, social workers have been facing a sorrowful reality depicted by the emergence of new generations of needy families on the one hand and significant cuts in resources on the other hand (Ronen, in press). Daily, social workers face the busy and complex world of human behavior in social contexts, a world in which relationships break down, emotions run high, and personal needs go unmet. Social workers are committed to the protection and empowerment of weak populations, of those people who are least powerful. Members of this profession struggle to help their clients improve their physical as well as mental well-being, within a society characterized by great economic inequality and a high potential for vulnerability (Bateman, 2002; Howe, 2004).

Knowledge about the client's cognitive development is useful and necessary for social workers. Only through knowledge of normal developmental processes can one begin to understand deviations in development and their importance for assessment and intervention (Forehand & Weirson, 1993). By relating to normal cognitive development, social workers can improve their assessment of their clients' problems, as they pinpoint whether a problem relates to a basic deficiency or distortion in development, or to environmental, situational influences. The ability to differentiate a problem's environmental, developmental, and situational sources should influence decision making in all phases of intervention, including the selection of optimal methods and techniques for change (Ronen, 1997, 2001, 2003).

An awareness of the client's cognitive level, strengths, and limitations enables the therapist to devise the communication level that will appropriately meet the client's developmental needs, thus influencing the design of intervention strategies. There is general agreement about the need for a good match between the developmental level of the client and the level of complexity of the selected assessment and intervention methods. In fact, this tendency to connect developmental levels with assessment and intervention methods is one of the areas that has received the most agreement and evidence-based research outcomes.

USES IN ASSESSMENT

Despite the broad range of therapeutic approaches and wide diversity of techniques for assessment and diagnosis utilized by social workers, consensus exists among practitioners about the importance of developmental considerations, normal growth patterns, and social influences. Thus, developmental knowledge can serve as a strong basis for interdisciplinary communication, mutual enrichment, and increased treatment efficacy among those approaches focusing on individual dysfunction.

The integration of developmental theory into theoretical models of assessment should lead to two major shifts in the field. First, the understanding of normal development should be considered critical for assessment: Placing symptoms into a developmental context can determine whether a specific behavior is age-normal or age-deviant. Second, knowledge of developmental tasks may help in explaining the etiology of the referred problem, as well as the need to adopt assessment considerations to the client's age (Forehand & Weirson, 1993).

USES IN INTERVENTION AND THERAPY

Age, gender, and cognitive stage influence treatment approaches. Our theoretical understanding and the basic research available on development indicate that, at different ages and stages of development and differentially for boys and girls, specific processes and opportunities may emerge in domains such as cognitive comprehension, exposure to new experiences, establishing relationships, and perceiving and expressing emotions (Ronen, 1997). Research on cognitive development, the influence of peers, and transition periods (e.g., transferring schools) suggests the need for different sorts of intervention to achieve change (Kazdin, 1993).

Myers and Thyer (1997) have offered clinicians several ways to facilitate effective treatment. Among them are stages to categorize empirical validation, basing treatments on outcome studies or learning from meta-analyses. For example, meta-analyses relating to child therapy have underscored that age and cognitive development are crucial for treatment outcomes.

Cognitive development is particularly vital for making decisions about treatment settings and techniques. Forehand and Weirson (1993) linked treatment to cognitive stages and the new roles and social tasks evident at each developmental age or stage, as follows: Infants' major developmental task involves a shift from total dependence on the caregiver to increased independence and self-regulation, producing a range of normal educational and developmental difficulties. This knowledge enables the social worker to make decisions about the kind of selected settings for intervention—mainly parent's supervision and the content of intervention—based on educational counseling about developmental process regarding infancy. In toddlerhood and then early childhood (ages 3–5), the major developmental task, beginning mastery of academic and social situations, generates behavioral and discipline problems. The main settings for intervention, therefore, will be parents and kindergartners regarding methods for helping the child accept authority, setting limits on the child's behavior, and reinforcing or punishing children. Middle childhood (ages 6–11) is focused on the task of cultivating personal identity and self-control, thereby leading to problems in self-control and interpersonal difficulties. At this stage, the child can be a candidate for individual or group intervention based on ways to express emotion, social skills, and behavior change. Finally, in adolescence (12–18), the major developmental tasks are separation and individuation from the family. This phase precipitates problems in establishing a personal identity, regulating one's sense of autonomy, and interacting within the family. This is a stage for individual intervention based on self-control, working toward developing appropriate expectations, self-image, and self-evaluation.

Children with a high level of cognitive development can enjoy abstract and general strategies, whereas children with a low cognitive level will need specific, concrete strategies. Diagnostic procedures should also include an assessment of the child's attribution style in order to formulate appropriate interventions, in view of the fact that children with an internal attribution style can manage independently, whereas children with an external attribution style may need external control (Copeland, 1982; Ronen, 1997).

Diverse interventions are necessary to achieve change, and this depends to a large extent on the client's cognitive development (Kazdin, 1994). For example, a higher cognitive stage enables verbal therapy, whereas lower cognitive development necessitates nonverbal, nondirect modes of intervention (Ronen, 2003).

Theoretical considerations have led to the hypothesis that children's cognitive developmental level may be the most important moderator in the efficacy of implementing cognitive therapy (Durlak, Fuhrman, & Lampman, 1991; Dush, Hirt, & Schroeder, 1989) as well as in the genesis and maintenance of maladaptive and adaptive behavior (Beidel & Turner, 1986). Dush et al. found a positive relationship between age and treatment outcome, where older children having more advanced cognitive skills benefited more from cognitive treatments. The best results were found for adolescents (ages 13 to 18 years), and good outcomes were also shown for preadolescents (ages 11 to 13), but only half the success rate was demonstrated with younger children (ages 5 to 11; Durlak et al., 1991).

CONCLUSION

Nowadays, there is a growing tendency to explain human development as a complex, nonlinear, dynamic process in which phases and forces of change alternate and intermingle with phases and forces of stabilization (Mahoney, 1991). The principles and processes of human development are universal, whereas the particulars of each individual life in process are truly unique. As Sroufe (1989) stated, it may be useful to consider the child's progress in each developmental line or domain; however, it is equally important to recognize that change comes in "packages," and development transforms multiple domains simultaneously: "Existing capacities and levels of organization are subordinated and integrated into new, more complex levels of organization" (p. 71). Likewise, consensus today has it that no single theory is all-inclusive in accounting for human behavior; instead, researchers tend to combine various explanations (Sahler & McAnarney, 1981).

Mahoney (1991) presented three domains that influence the theory of development. Behaviorists view behavior as the main force in human experience and argue that change in motoric activity produces change in attitude and affect. Cognitive scientists view thought as the primary force, and they attribute changes in thinking to the production of changes both in behavior and feeling. Humanists emphasize emotional processes as responsible for development and change.

Davies (1999) claimed that the interaction of different domains throughout development creates increasing complexity. Thus, a school-age child is not merely more advanced than a preschooler but fundamentally thinks, communicates, behaves, and sees the world differently from younger children. As children grow and mature, the brain makes new capacities available and is responsible for the time when changes occur. However, the way they occur depends on the environment that shapes the child's development. Davies asserted that thinking in terms of stages and ages tends to limit appreciation of the multiple changes that transpire across many areas of functioning. While one examines a particular domain of development, such as cognition, it becomes nearly impossible not to observe how cognitive development interacts with other domains, such as emotional and physical development. Karmiloff-Smith (1993) stated that development involves a dynamic process of interaction between mind and environment that is part of our biological potential in interaction. She emphasized that the human mind is not only a receptor or channel for processing information, and she underscored the creativity and flexibility that human minds can wield.

Traditionally, developmentalists attempted to explain behavior either by looking at the organism itself, or by looking at the environment. In the first case, new structures and functions were seen as arising in the organism as a result of instructions stored beforehand that were encoded in the genes or in the nervous system and read out during ontogeny, like a program on a computer tape. In the second case, developmentalists viewed the organism as gaining in form by absorbing the structure and patterning of its physical or social environment, through its interactions with that environment (Thelen, 1993). Unfortunately, no comprehensive developmental model exists to consolidate these separate views by conceptualizing interactional, transactional, or systems-level concepts to incorporate the wide range of available empirical data. There is a paucity of general principles of development that could be applied across species or across domains and could explain the regularities and irregularities, nonlinear patterns, and regressions that characterize the emergence of a new form (Thelen, 1993). Can we supply one grounded theory for understanding human development? This is a question often asked nowadays and often answered with the constructivist way of understanding human development.

Modern society has introduced many changes into our lives. With the technological capacity for prenatal ultrasound enabling us to follow pregnancy and view the infant's development in the mother's body, we can no longer talk about life that begins at birth. The beginning of life now starts when the baby is conceived, and suggestions abound claiming that specific prenatal environmental stimuli—music, lights, and the mother's voice—may even affect development before a baby is born. At the other end of the developmental scale, late adolescence and early adulthood have become more prolonged due to social changes in the Western world that have led to longer periods of dependence on parents, as young adults attend university and enter the competitive world of work. Moreover, modern medicine has extended human life to older ages, implying a longer period of adulthood. As a result, we can no longer talk about ending the conceptualization of cognitive development at the end of adolescence, and we now believe that learning continues to develop at older ages. These changes at the beginning and the end of life must modify our dichotomous view of cognitive development.

More studies, more organized theories, and new research tools are needed to fully answer the questions we face about human cognitive development in modern life. As can be seen, over the past 50 years we have learned a lot. But much remains to be learned. Probably, 30 years from now, new models and new theories will exist, proposing new explanations for how the human mind develops.

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Chapter 10

PERSON-CENTERED THEORY

Michael J. Holosko, Jeffrey Skinner, and Ra'Shanda S. Robinson

Client-centered theory is an ever-evolving approach to human development conceptualized by Carl Rogers in the 1940s, eventually known as "person-centered" theory (PCT) in the 1970s. The reasoning behind the change of nomenclature was that the words "person-centered" more closely articulated the values of the Rogerian therapeutic approach. For Rogers, what was formerly referred to as the *patient* was indeed a *person* with the same idiosyncrasies of human beings everywhere (i.e., hopes and fears, dreams and aspirations, triumphs and losses, and unrealized potential and struggles).

In Rogers's early years therapists maintained the accustomed practice of seeing a patient with their back turned to the client. For Rogers, truly *seeing and being with* the client in her or his physical, mental, emotional, spiritual, and experiential space was imperative. For social work professionals, the Rogerian approach to PCT will certainly resonate with core ethics from the social work praxis, particularly the principles of the person-in-environment, the biopsychosocial approach to assessment and intervention, the self-determination of the client, the recognition of the spirituality of the client, and the intrinsic dignity and worth of all human beings, to name a few.

This chapter discusses the historical and conceptual origins, basic theoretical principles, advanced theoretical principles, and recent theoretical developments of PCT and the relevance of PCT to social work practice. Additionally, evidence-based foundations and critiques of this conceptual approach are considered. This chapter presents the conceptual constructs (i.e., of the practice, the human personality, and the therapeutic process) of the person-centered approach to understanding human behavior in our social environment and provides conceptualizations that can assist the practitioner in her or his therapeutic enterprise.

HISTORICAL AND CONCEPTUAL ORIGINS

On January 8, 1902, Carl Ransom Rogers was born in the Chicago suburb of Oak Park, Illinois, to a civil engineer father and a devout Christian mother. Carl was the fourth of six children. Being raised in a strict moral, religious environment, Carl became secluded, autonomous, and a self-regulated person, cultivating knowledge and an appreciation for scientific methodology.

Vocationally, Carl Rogers initially wanted to work in the field of agriculture. Following a trip to an international Christian conference in Beijing in 1922, however, his heart was intent

on becoming a clergyman. After 2 years in the seminary, Rogers shifted vocational tracks again and began to focus his energies on helping human beings overcome the obstacles that impeded the realization of their intrinsic worth and value. While completing his PhD, he was involved with the Society for the Prevention of Cruelty to Children. In 1930, Rogers became the director of the program.

During this period, several psychotherapeutic elements were brewing in the cauldron of praxis and application. Freud's psychoanalytic understanding of the human being was a dominant theoretical model. The elite Psychoanalytic Society occupied a preeminent place in the mindscape of the praxis milieu. Kurt Goldstein was developing the idea of organismic self-actualization. Edward Thorndike was constructing an educational psychology theorem which tested and measured children's intelligence and their ability to learn. Otto Rank set out to test the previously uncharted territory of American psychoanalysis (deCarvalho, 1999) and introduced the therapeutic process of relationship and will. Abraham Maslow was at the nascent stage of his crusade for humanistic psychology. John Watson's (1913) book, *Psychology as the Behaviorist Sees It,* often referred to as the "Behaviorists' Manifesto," thrust him into the spotlight of popular media, and his articles on child development and child rearing became commonplace in advertising and magazines. B. F. Skinner's operant behaviorism, which focused on how behavior can be established, shaped, and maintained through reinforcement processes, loomed large on the horizon of possible practice modalities. And Fredrick Perls was developing Gestalt psychotherapeutic theory and methodology, which sought to synthesize the cognitive, emotional, physical, and spiritual aspects of the human being in her or his pursuit to actualize the full self. Amid the churning of these variegated elements Carl Rogers was transitioning from the clinician field to the academy.

In 1940, Ohio State University offered Rogers a full professorship. Within 2 years, he wrote his first book, *Counseling and Psychotherapy* (1941), in which he discussed the necessity of the therapist to establish a relationship with the client based on understanding, acceptance, and open communication. These ideas were revolutionary when Rogers first penned them. Three years later (in 1945), the University of Chicago invited Rogers to establish a counseling center on campus applying the elements of his practice modality. While working at the University of Chicago, he authored his œuvre d'une vie, *Client-Centered Therapy* (1951), wherein he outlined the tenets of his theory of psychotherapy.

Carl Rogers is hailed by many as one of the most influential American psychologists in history. As the cofounder of humanistic psychology (along with Abraham Maslow), Rogers wrote 16 books (two of which were published posthumously) and more than 200 articles that influenced the world and changed the whole of therapeutic understanding. He was renowned for nondirective psychotherapy, and the primary goal of his theoretical orientation was to release and empower the individual to achieve her or his full potential.

In Rogers's day, three primary forces informed therapeutic praxis: (1) psychoanalysis, (2) behaviorism, and (3) humanistic psychology. The emergence of PCT was a direct response to the other two modalities of practice. Whereas psychoanalysis sought to find the corollary between clients' past experiences and their present actions, in the Rogerian approach, the therapist is simply present to the client (person) in relationship, offering neither valuation regarding what the client shares, nor interpretation of the meaning of that which is shared. Psychoanalysis sought to offer an answer by imbuing the therapist with the ability to interpret insights, teach, and lead the patient through personal discovery of

her or his neurosis. In this theory, the psychoanalyst is the expert teacher and the patient is the recipient of the therapist's expertise. Rogerian therapy sought to transform the therapist from resident expert to transparently honest human sojourning with the client.

The behaviorist approach to therapy sought to modify the patient's behavior through controlling the consequences that follow behavior. By applying learning theory, the behaviorist focused not on the development of personal insights by the patient, but on the understanding and elimination of the presenting problem through an analysis of environmental contingencies possibly involved in maintaining it.

The Rogerian approach countered this therapeutic modality by focusing on the inner experiences of the client and how those inner experiences influenced behavior. The third prevailing force that was influential in therapeutic praxis in Rogers's day was humanistic psychology. Rogerian thought and practice truly resonated with this approach.

Humanistic psychology emphasized the inherent worth and dignity of the human individual and her or his quest and drive toward personal growth. The bedrock of PCT is the Renaissance-inspired esteem for human potentiality. Upon this humanocentric foundation, Rogers constructed a model of practice that was a reaction to the other prevailing therapeutic forces and a celebration of human potential. A comparison of these three modalities is presented in Table 10.1.

For Rogers, the client was not merely a client (customer, patient, or patron) per se, but a person with a face and feelings. Freud never saw the patient's face. It was his general practice to sit with his back to the patient. Freud sought to interpret for clients their neurosis; behaviorists sought to change the environment and behaviors of their clients; but Rogers endeavored to facilitate a transformation within clients by helping them achieve greater congruence between their real self, self-concept, and ideal self. This fundamental change was contingent upon the relationship between the therapist and the client. Through the conduits of unconditional positive regard, genuineness, and empathetic understanding, the transformation of the client could be engendered. Congruence and the realization of the latent potentiality of the client (her or his self-actualization) was the ultimate goal of Rogers's therapeutic enterprise.

It is relatively easy to discern the influence of Rogers's contemporaries on his psychotherapeutic practice theorem. Rank's theory of will therapy and therapist-client relationship is evident in Rogers's PCT (deCarvalho, 1999). Whereas Freud saw an inexorable link between patients' present neurosis and their past, Rank stressed the importance of the patient's immediate inward experience. Similarly, Rogers's emphasis on *the here and now* of the client and her or his inner knowing is more closely akin to Rank than it is to Freud.

Additionally, Rank (1924) stressed a biopsychosocial proviso of attachment and acceptance in the human being that originates at birth. For Rank, this essential need exists within the therapeutic relationship between the practitioner and the client. Although not entirely asseverating this Rankian presupposition, Rogers did recognize the biopsychosocial importance of nurture and acceptance from the therapist with the client. Rank's inference that "nurturing and intuitive emotional bonding can produce individual growth" is a clearly present tenet in PCT (deCarvalho, 1999, p. 132).

A third juncture of confluence between Rank and Rogers is the significance of and respect for both the individuality of the client and her or his inherent potential and the necessity of noninvasive, nondirective therapy. Although only meeting professionally in 1936, Rogers was clearly influenced by the ideas of Rank. Nevertheless, it could not be

Table 10.1 Comparing the Main Therapeutic Issues of Psychoanalysis, Behaviorism, and Client-Centered Therapies

Practice Modality	Main Authors	Main Assumptions	Main Treatment Issues	Therapist's Role
Psychoanalysis	Balint, Benjamin, Bion, Bollas, Bowlby, Erikson, Fairbairn, Ferenczi, Fonagy, A. Freud, S. Freud, Gabbard, Grotstein, Horney, Jung, Kernberg, Klein, Kohut, Lacan, Loewald, McDougall, Mitchell, Ogden, Renik, Sandler, Searles, Stoller, Stolorow, Sullivan, Tustin, Winnicott, Wolf	The therapist seeks to liberate the analysand from subconscious obstructions that impede her/his freedom. These obstructions are often unexamined and play out through transference, resistance, and defense mechanisms. Patient is oblivious to the power of self-deception and the influence her/his past has on the present mental health. The nature of the human being is tripartite, consisting of *id* [primitive desires], *superego* [internalized values, norms, and morality] and the *ego* [mediates the other two parts and gives rise to the self].	Pros: Effective treatment modality for issues of intimacy and relationships; good at identifying unconscious sources of problems; recognizes the struggle between values and desires. Cons: Therapist is expert textual interpreter of patient's disclosures and the therapeutic approach intellectualizes feeling process, thus strengthening client's defenses.	Therapist analyzes the free associations of the patients' transference with empathetic neutrality and offers insights. Therapist is the interpreter, teacher, and expert who leads the patient to personal discovery of her/his neurosis. Therapist treats the unconscious [the source of the neurosis] and patient gets well. **Therapist is passive.**
Behaviorism	Beecroft, Binder, Bloom, Boulding, Briggs, Cook, Gagné, Glaser, Kamin, Lindsley, Pavlov, Parrott, Rayner, Reese, Rescorla, Schoenfeld, Skinner, Solomon, Staats, Thorndike, Tolman, Trolfand, Watson, Wyrwicka, Zuriff	Behavior in the client can be investigated scientifically without delving into the unconscious. Human free will is an illusion, and genetics, environment, association, and reinforcement are the primary determinants of action. Observing behavior and treatment of presenting troublesome symptoms can assist the client.	Pros: Recognizes that improving the conditions of the client requires modifying the environment she/he lives in; stresses the objective study of behavior; and, established the difference between respondent and operant behavior.	Therapist helps client to modify her/his behavior through understanding their learning history and adding in modifying current contingencies of reinforcement and punishment.

		Modifying behavior is the goal of this therapeutic approach not exploring or improving feelings of the client.	Cons: Seen by some as reducing the client to an animalistic nature and minimizes inner knowing and feelings.	Therapist is not concerned with inner knowing of the client but instead with present problematic behavior. **Therapist is directive and active.**
Client-Centered [aka Person-Centered]	Bozarth, Buber, Corsini, Finke, Kirschenbaum, Levant, Maslow, Meador, Mearns, Rank, Shlien, Tomlinson, Zimring	Within the human being are three selves: the self-concept, real self, and ideal self. The real self is the person in actuality. The goal of therapy is to bring greater congruence to the person of these three selves through a person-to-person relationship between client and therapist. Increasing congruence in the client frees her/him to realize full potential [self-actualization]. The more congruence, the greater the whole health of the client.	Pros: This modality prizes the person and respects the inner knowing, feelings, and experiences of the individual; use of reflection and clarification proves clinically useful; stress on clients' self-determination. Cons: Non-directivity of therapist is often criticized. Person-centered therapy is often considered a theory but not a model.	Therapist establishes with the client a relationship of positive regard, genuineness, and empathetic understanding. The role of therapist is not to be teacher, guru, or problem solver but partner with the client to achieve congruence within her/himself. **Therapist is interactive.**

claimed, with any degree of scholarly certainty, that Rogers was well informed about Rank's theories.

Although beginning his psychotherapeutic journey with those in the Freudian camp, Rank departed from that discipline and went in a different direction. His encounters with social work clinicians (most of whom were women) in Pennsylvania were certainly of great consequence to the development of his psychotherapeutic understanding. Likewise, Rogers's clinical experiences with children in New York, where he worked as a child psychologist alongside social workers at the Rochester Society, had a developmental influence on his practice modality. For both Rank and Rogers, clinical experiences, encounters with social workers in the field of service, the inadequacy of the preeminent models of psychoanalysis, and the stirring of the cauldron of psychotherapeutic praxis and application helped to formulate new treatment modalities. Even though Rank was the first to articulate a person-centered psychotherapeutic modality, Rogers went on to become one of the "most influential psychologist[s] in American history" (Kirschenbaum & Henderson, 1989, p. xi).

Another significant influence on PCT was Abraham Maslow. A contemporary of Rogers, Maslow studied with the comparative psychologist Harry Harlow at the University of Wisconsin. Following graduation, Maslow returned to New York to study with the behaviorist Edward Thorndike. After a stint teaching at Brooklyn College, Maslow became chairman of the Psychology Department at Brandeis University in Massachusetts, where he began the work for which he is most known (Seeman, 1990).

The early years of Maslow's research revolved around attachment behavior (principally in the nurturing/nonnurturing rhesus monkeys studied by Harlow), the learning process and connectionalism, and human sexuality. While at Brandeis, he encountered Kurt Goldstein, a German neurologist, who was steeped in Gestalt theory (a holistic theory of the organism). The psychotherapeutic ramifications of Gestalt theory emphasized the importance of awareness in the patient. Through his relationships with contemporary theorists, Maslow learned about the organismic drive to self-actualize in all human beings and the necessity of clients to become aware of themselves as part of reality. The insights gained from his encounters with these contemporaries gave rise to the model for which Maslow is known, the hierarchy of needs (see Figure 10.1). This model had a contributive influence on the development of Rogers's person-centered paradigm.

The notion of self-actualization, that is, that the person has both the organismic drive as well as the essential resources to reach her or his fullest potential, became a driving force in Rogerian thought. One point of departure for these two psychologists was that Maslow contended that very few people become self-actualized, spending most of their energy on the lower levels of existence (the "D-needs"). Conversely, Rogers maintained that the principle driving force of the human is toward self-actualization. Maslow believed that the development toward actualization was contingent upon the stage-like progression of satisfying lower needs first, whereas Rogers conceived of the inner connectivity of all things and needs. Unlike Maslow, Rogers perceived the actualizing tendency in all organisms, not just human beings. Virtually every living thing inherently seeks to reach its latent potential. If certain favorable conditions are present, the minuscule acorn becomes the mighty oak, the speckled egg becomes the elegant swan, the banal granule of sand becomes the lustrous pearl in the oyster, and the human being becomes fully actualized, that is, reaching her or his growth potential and selfhood. Rather typical of Rogers was the tendency to take a basic idea and amplify it to multiapplicable proportions. Rogers applied the concept of

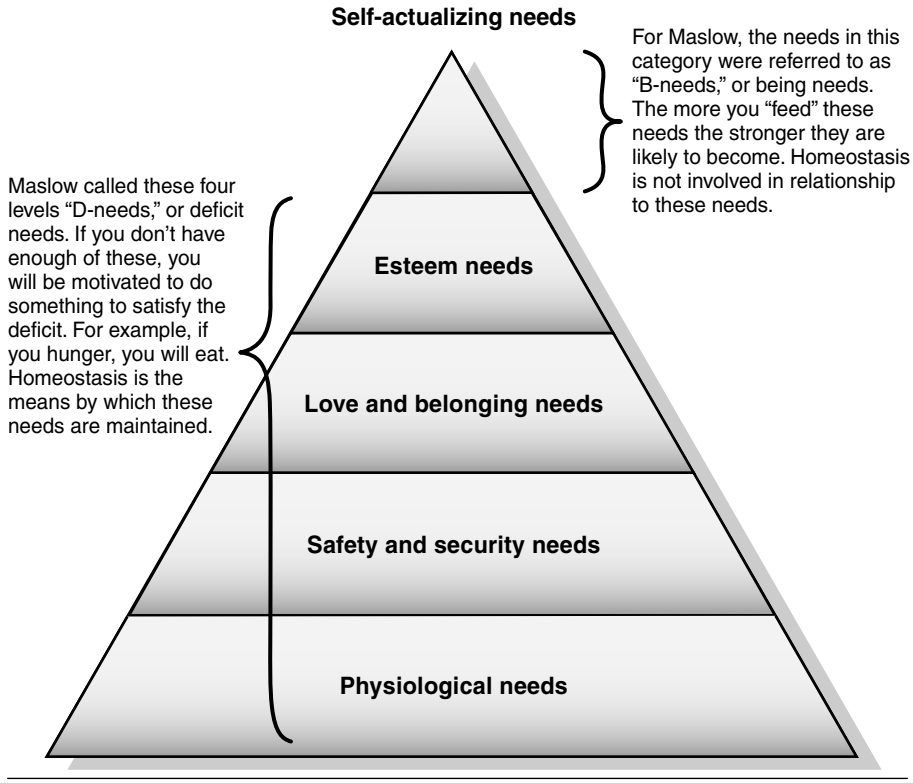


Figure 10.1 Maslow's hierarchy of needs

self-actualization to micro, mezzo, and macro levels—from seaweed to society, from farm animals to family systems, and from cats to clients.

Earlier, we suggested that PCT is an ever-evolving approach to human development. Among the very interesting characteristics of the Rogerian hypothesis is the dynamism of the model. Rogers's therapeutic postulations were not static and were not posited in a vacuum. Some scholars suggest that Rogerian therapy developed over the course of four periods, spanning several decades (Bozarth, Zimring, & Tausch, 2001; Zimring & Rasking, 1992; see Figure 10.2).

In the 1940s, Rogers developed nondirective counseling as a reaction to the predominant psychoanalytical practices of directive therapy, thus challenging the notion that the therapist knows what is best for the patient (Rogers, 1941). In the 1950s, he reframed and renamed his theory to reflect the prominence of the client, calling the approach client-centered therapy (Rogers, 1951). During this period, Rogers focused more on the self-actualizing tendency of the client and less on the role of the therapist. Between the 1950s and 1970s, he focused on the conditions essential to the therapeutic process by which the client becomes the self he or she truly is (Rogers, 1961, 1970b). During this period, Rogers expanded his theory to educational and encounter groups. Finally, in the 1980s and 1990s, the Rogerian approach was expanded "to education, industry, groups, conflict resolution, and the search for world peace" (Corey, 2005, p. 165). Amid the emergent, exponentially increasing application of Rogers's theory, a new name was ascribed to it: person-centered therapy.

According to Corey (2005), the educational, relational, professional, clinical, and theoretical experiences and encounters in Rogers's life all played a role in the formulation

Period One	Period Two	Period Three	Period Four
1940s	1950s	1950s–1970s	1980s–1990s
Non-Directive Counseling	Client-Centered Therapy	Conditions of Therapy	Common Factors Revisited
Rogers' Book: *Counseling and Psychotherapy* 1942 Essential Ideas: Rapport between client and therapist is essential to effective therapy; client needs to accept self; nondirective acceptance of client facilitates the client's self-acceptance.	Rogers' Book: *Client-Centered Therapy* 1951 Essential Ideas: The therapist's attitude, rather than technique, is essential to the therapeutic success; emphasis on the client's world and perceptions; and idea that the client knows what's best for her/him.	Rogers' Article: *The Necessary and Sufficient Conditions of Therapeutic Personality Change* 1957 Essential Ideas: Six necessary conditions must preexist for client-centered therapists to be successful; three therapeutic attitudes must be present in therapist for process of constructive personality change; and, research emphasis on attitude of therapists rather than particular therapies.	Bozarth's Paper: *Forty Years of Dialogue with the Rogerian Hypothesis of the Necessary and Sufficient Conditions* 1999 Essential Ideas: Investigations of Rogerian thought come full circle returning to earlier ideas; application of Rogers' basic premises applied to multiplicity of presenting problems from anxiety to substance abuse; Rogerian thought utilized in education, group work, diplomacy, social justice, health care, and policy.

Figure 10.2 Periodic development of Rogerian therapeutic approach

of his unique approach to psychotherapy. Ultimately, Rogers defined a psychotherapeutic approach in which the raison d'être was that the client is the essential agent for positive self-change. Rogers embraced salient ideas and theories of his day, rebuffed antiquated postulations, rejected demoralizing practices and principles, and constructed a theorem that has proven its relevance for over half a century.

BASIC THEORETICAL PRINCIPLES

Having considered the historical and conceptual origins of Rogerian therapy, we now turn our attention to the basic principles of the theory itself. In this section we consider (a) human nature, (b) the three values sustaining Rogerian theory and the role of the therapist, and (c) self-actualization. Explicating these principles will provide the clinician with a working knowledge of the essential tenets of person-centered therapy.

Human Nature

The therapist's anthropological perspective and presuppositions regarding human personality will inevitably adjudicate her or his psychotherapeutic practice modality. Ziegler (2002,

p. 76) explained that "clients are treated in a particular way consonant with the therapist's theory (explicit or implicit) regarding what client (human) personality is." As practitioners, our estimation of that which constitutes the human being will inform, guide, shape, and delimit our assessment, intervention, advocacy, and relational and interactional dynamics with clients.

Freud saw the human being through the lens of moderate constitutionalism, that is, the perspective that the biological and organismic instincts constitute the essential elements of what it means to be human. Strongly influenced by Darwinism, neuroanatomy, and neurophysiology, Freud nevertheless acquiesced to the causality of environmental factors, particularly in psychosexual development during childhood, although he favored biological determinism. The human being's personality emerged from her or his biological existence, while the environment had some role in development.

Behaviorists such as Watson, Skinner, and Thorndike believed that the human being is a combination of biologically determined behaviors contingent upon genetics as well as reactions to environmental influences, which, through association or reinforcement, shape behavior. The freedom to choose (i.e., free will) is an illusion, according to behaviorists. Additionally, until Skinner began crafting his *radical behaviorism model*, the feelings, emotional states, and contemplative introspection of clients were not generally regarded as real or worthy of treatment.

Rogers apparently concurred with Freud to some extent, often referring to the "nature" of the human being. Central to the hypotheses of PCT is the inherent, intrinsic, and fundamental organismic drive of the human being to live up to her or his fullest potential. Rogers (1961, p. 196) contended that the principal driving force of the human creature was "the inherent tendency of the organism to develop all its capacities in ways which serve to maintain or enhance the person." He believed that positive childhood experience was fundamental to the self-actualization of the human being in adulthood. The environment during the developmental years was, for Rogers, the principal determinant of later positive advancement. For all three of these perspectives, the patient/client's biopsychosocial interconnectedness is of principal import to the therapist.

Regarding the role of rationality, the three main therapeutic modalities differed considerably. Freud did not subscribe to the opinion that the human being was the architect of her or his life or the rational being he or she claimed to be. Rather, from his perspective, the human being was merely a puppet, and the irrational forces of the unconscious neuroses were the puppet master. The id (that part of the human personality that functions outside the realm of conscious, rational awareness) dominated the mindscape of the human being, causing her or him to behave in virtually unpredictable and unreasonable ways. Additionally, the incongruous exigencies of the superego exasperated the neuroses of the subject by placing absolutist claims on the human being that could not be satisfied. Because the human being is essentially a neurotic mess, irrationally controlled by the unconscious, the notion of a reasonable person is a myth (Stachey, 1989).

Behaviorists, being essentially materialists, did not opt for the rationality of human beings either. The intention of the behaviorist is not to deliberate on the person and her or his feelings, but on the person's exposure to past contingencies of reinforcement and punishment. The behavior of the individual, not the reasoning behind it, was of primary interest to the behavioral psychologist. The genetic predisposition of the person, her or his history of respondent and operant learning, and the contravention of punishment, reward,

and reinforcement on the person were more significant to the behaviorist than alleged human rationality.

Rogers perceived the human being as strongly rational and exceptionally adept at shaping her or his behavior through reasonableness. According to Rogers (1961, p. 195), the human is "exquisitely rational, moving with subtle and ordered complexity toward the goals the organism is endeavoring to achieve." The inner connectivity of the self-actualizing drive and human reason is strongly emphasized in Rogerian thought and practice. Irrationality occurs as a direct result of the psychosocial conditions of incongruity between the actual self and the ideal self or the actual self and experience. In other words, when people are at odds with their essential (fundamentally reasonable) selves, they behave unreasonably and destructively.

Further along the anthropological lines of personality is the subject of the changeability of the human being. Personality change is often the principal end toward which therapeutic intervention strives. Disagreement among the main theorists exists, however, regarding the possibility of and the extent to which the human subject can change. Freud believed that the adult personality is fashioned during the psychosexual stages of maturation in early childhood (e.g., oral-incorporative stage, anal-retentive stage, and phallic stage, in which the Oedipus complex [for males] or Electra complex [for females] occurs). The developed character structure of the patient is an importunate and impassive configuration that continues through the adult years. The benefit of the therapeutic enterprise is not then change of the neuroses of the patient, but rather, insight as to the source of the neuroses. Freud's contention was that such insight could assuage the annoyance caused by the patient's neuroses. The psychoanalytic approach to therapy did not subscribe to nor try to effect change in the personality of the patient.

Behaviorists asseverated that individual's reactions to stimuli could be modified through positive reinforcement, thus altering maladaptive behavior. Behaviorists did not usually focus on trying to effect personality change in the client based on clients' self-report of their inner feelings. Clients' introspective reports on feelings and inner mental states, though real, are simply descriptions of their private behavior, and are themselves *caused* by biological factors and clients' learning history, but are not *causes* of behavior themselves. The essential goal of the therapeutic enterprise is the modification of aberrant behavior, as defined by the client and/or society.

Rogers was strongly committed to and optimistic about the ability of the human being to change her or his life and personality. The transformative process of human development was, for Rogers, an ever-evolving dynamic fueled by the organismic tendency to achieve one's full potential. Informed by existentialist ideology (i.e., existence precedes essence), Rogers did not believe that the self existed at birth, but rather, developed over time as the human being experienced life and challenges. Along the journey to self-actualization, the human is involved in the organismic valuing process whereby she or he determines whether or not experiences develop or depreciate the sense of self. The essential goal of the therapeutic enterprise, for Rogers, is for the therapist to offer the person (client) unconditional positive regard so that she or he can cultivate a pattern of self-acceptance to bring about congruence and facilitate self-actualization.

Hjelle and Ziegler (1992) posited that a therapist's particular anthropological biases adjudicate the praxis modality. As is evident in the brief synopsis of three main therapeutic approaches, not all interventions perceive the patient/client/person in the same way.

Similarly, the anticipated outcomes for each methodology are different, as they correspond to the varying presuppositions of the human constitution. The anthropological biases determine the stratagems to effect change in the subject, whether that change is cognitive insight, behavioral modification, or achievement of psychodynamic congruence.

The essential frame of reference for whatever practice modality a clinician chooses to employ rests squarely on her or his anthropology. The essential assumptions regarding human nature, the constitutionality of the human subject, the development of personality, and the ability to change are all factors that inform practice. The differences evident in the three theories reviewed in this subsection highlight the critical issue of the possibility of fundamental transformation within the patient/client/person as a result of therapeutic intervention. A summary of this is presented in Figure 10.3.

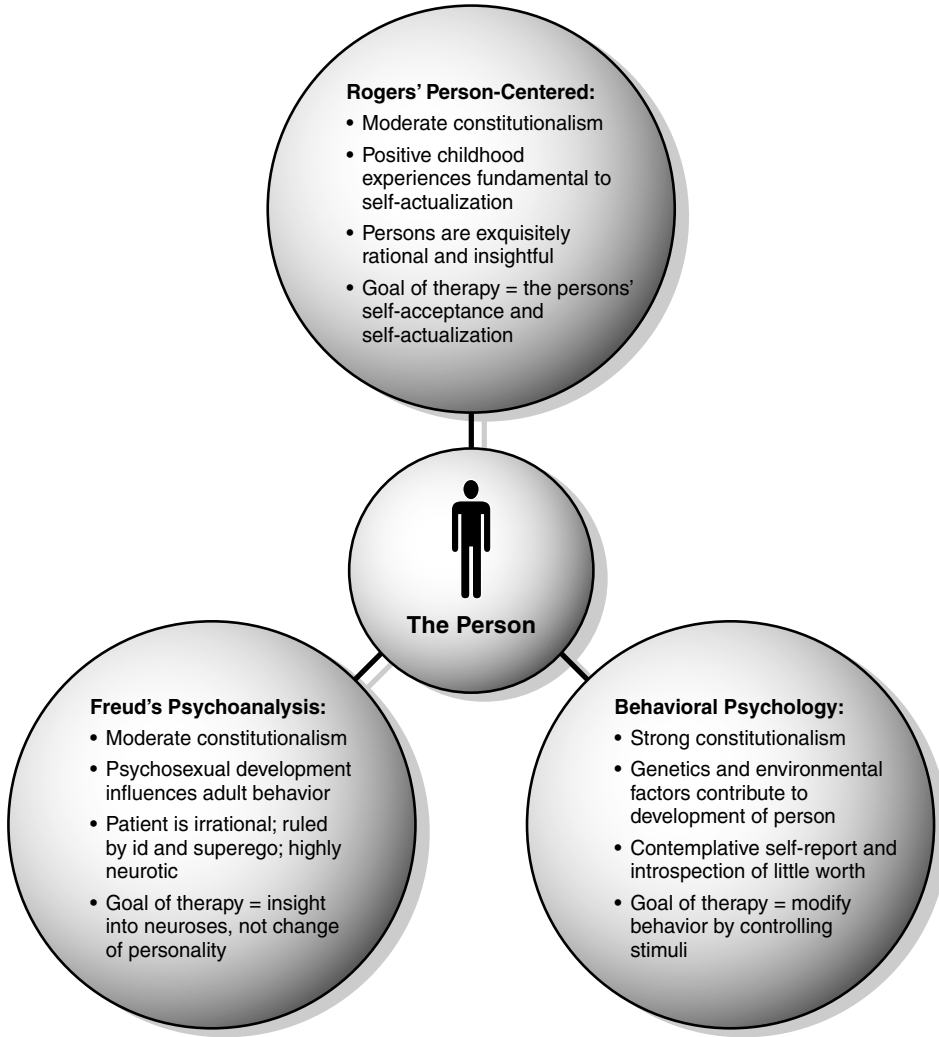


Figure 10.3 Summaries of the theories of human nature

The Three Core Conditions Sustaining Person-Centered Theory and the Role of the Therapist

According to Rogers, people are essentially trustworthy. They have the potential for understanding themselves and resolving their own problems without direct intervention from the therapist, and they are capable of self-directed growth if they are involved in a specific kind of therapeutic relationship. Achieving change in therapeutic scenarios can be difficult for both the therapist and the client, even in the most ideal settings (Corey, 2005).

The role of therapists is rooted in their ways of being and their attitudes, not techniques designed to get the client to do something. These attitudes and beliefs affect the change of the personality or inner resources of the client, thus creating the therapeutic climate for growth. Therapists use themselves as instruments of change, and when they encounter a client on a person-to-person level, their role is to be without roles (Corey, 2005). Rogers admitted that his theory was radical, but his three therapeutic core conditions of (1) *congruence,* (2) *unconditional positive regard,* and (3) *accurate empathic understanding,* embraced by many therapeutic schools, are helpful in facilitating therapeutic change. These conditions relate to the shared journey in which therapists and clients reveal their humanness and participate in a growth experience together.

Person-centered therapy reverences the intrinsic value of the living organism and the essential drive to reach its potential. The core conceptual value of PCT is that *life invariably finds a way.* When therapists offer these core values to a client, they are able to offer a social environment that serves to dissolve a client's conditions of worth. The purpose of a PCT therapist's actions is to bring about growth or empower clients. In doing so, therapists treat each client with respect and are mindful of individual differences and cultural and ethnic diversity.

Congruence and genuineness implies that therapists are really and truly authentic during therapy sessions. Their inner experiences and outer expressions of those experiences match, and they can openly express feelings, thoughts, reactions, and attitudes that are present in the relationship with the client. Being authentic or congruent also suggests having the capability to relate to the client and disclosing thoughts and events to build an alliance. Through authenticity, the therapist serves as a model of a human being struggling toward greater realness. This does not mean that therapists should impulsively share all their inner feelings and reactions, but self-disclosure should be both appropriate and well-timed (Corey, 2005).

Unconditional positive regard and acceptance entails that therapists needs to communicate ongoing genuineness and openly care for the client as a person. This caring should be unconditional and not contaminated by the judgment of the client's feelings, thoughts, and behaviors as either good or bad. If caring stems from therapists' own need to be liked and appreciated, then the relationship is not genuine. Therapists should value and accept a client without placing stipulations on their acceptance criteria. For example, this is not an attitude of "I'll always accept you when . . ."; rather, it is one of "I'll accept you as you are." Therapists' behavior should communicate that they value their clients as they are, and that clients are free to have feelings and experiences without risking the loss of their therapist's acceptance. Thus, acceptance is merely the recognition of a client's rights to her or his own beliefs and feelings.

Accurate empathetic understanding means that the PCT therapist understands the client's feelings and experiences sensitively and accurately, as they are revealed in the

moment-to-moment interaction during a therapy session. Empathic understanding implies that the therapist strives to sense the client's experiences in the here-and-now. In other words, the PCT therapist should sense the client's world as if it were her or his own. However, the therapist must sense the client's emotions without getting entangled in them. Two processes help the therapist foster and reinforce empathetic understanding: reflection and clarification. Reflection occurs when the therapist repeats fragments of what the client has said with little change, conveying to the client a nonjudgmental understanding of his or her statements. Thus, the therapist consciously enables clients to become more reflective about themselves. Clarification occurs when the therapist abstracts the core or the essence of a set of remarks by the client. It is a way to hear and then echo the meanings expressed by clients.

Empathy is an active ingredient of change that facilitates clients' cognitive processes and emotional self-regulation. Therapists need to be responsively attuned to their clients and to understand them emotionally as well as cognitively. This is not an artificial technique; it is a deep and subjective understanding of the client with the client. Therapists are able to share their own feelings that are like the client's feelings (i.e., disclosure).

Self-Actualization

Self-actualization is a person's lifelong process of realizing his or her potential to become a fully functioning person. The goal of self-actualization is to be that "true self," and the direction is toward the "good life," which is defined by what the client values. Rogers's evolving construct of self-actualization changed significantly in its theoretical meaning and usage over time. In the early period, he presented it as the central motivational construct; in later periods the tendency toward self-actualization became a part of a larger motivational model. As a master of motivational tendencies, he contended that if a person was self-actualizing, he or she was necessarily optimally healthy and growth-oriented. When actualization explicitly became the master tendency with self-actualization as a subsystem, it no longer meant health and growth were synchronized with one another (Ford, 1991).

Rogers took the approach that every individual has the resources for personal development and growth. It is the role of the counselor to provide the favorable conditions, which for Rogers were congruence, empathy, and unconditional positive regard, for the natural phenomenon of personal development to occur. As such, there is a natural urge within every being to develop in a positive direction. However, before this urge or actualization tendency can operate, it must be liberated by a permissive environment. He often saw personal development as the process of persons becoming more fully themselves (Ford, 1991).

Self-actualization in PCT is not to be confused with self-actualization as presented by Maslow. In PCT, it was illustrated as the central theoretical proposition; the organism has one basic tendency and striving: to actualize, maintain, and enhance the experiencing organism. It is the basic being of motivation. Self-actualization is not a state but a process, and it applies only to the part of the person delineated as the self. The self is a subsystem that becomes differentiated within the whole person (Wilkins, 2003). According to Bradley (1999), when it comes to motivation, even when the primary needs are satisfied and its homeostatic chores are done, an organism is alive, active, and up to something.

The process of self-actualization was associated with enhanced functioning in three areas: (1) openness to experience, (2) living existentially, and (3) placing full trust in

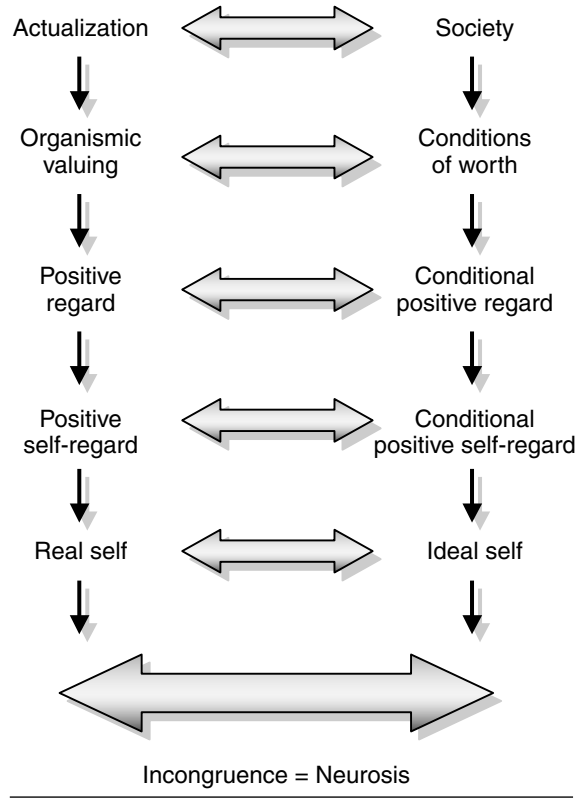


Figure 10.4 Real and ideal self-actualization

organismic institutions. In *being open to experiences*, the client's emotions, thoughts, and perceptions can consciously be considered. The client is aware of all that she or he is experiencing in these areas. When clients *live existentially*, they go with the flow of each moment in life by fully participating. They experience life in the here-and-now, without needing to control how things should be in the future. *Placing full trust in organismic institutions*, the client does what he or she feels is right after weighing all available information. She or he relies loosely on the past or social conventions. The self-actualizing person also appreciates free choice, creativity, and human nature's trustworthiness (Allen, 2003). Boeree (2006) stated that the aspect of being that is founded in the actualizing tendency, follows organismic valuing; needs and receives positive regard. Self-regard is what Rogers calls the real self (see Figure 10.4).

ADVANCED THEORETICAL PRINCIPLES

Conceptual Constructs

In PCT, the therapist strives to constantly promote a client's freedom of choice. Rogers maintained that the human organism has an underlying "actualizing tendency," which aims to develop all capacities in ways that maintain or enhance the organism and move it toward autonomy. The concept of the actualizing tendency is the sole motive force in the theory as

it encompasses all motivations, tension, need, or drive reductions, and creative as well as pleasure-seeking tendencies (Rogers, 1977).

Actualization theory viewed people as functioning as well as they can, given their circumstances at a particular time. This theory provided the intellectual grounding for this functional belief. In reciprocation, PCT is an endeavor that constantly tests the actualizing tendency premised with each client (Bradley, 1999).

As PCT developed, Rogers developed advanced theory as actualizing tendency became more salient to the therapeutic process. The actualizing tendency emerged from a tested hypothesis in human relations that always remained so speculative because it can never truly be conclusively proved or disproved. This hypothesis was to be field-tested with new clients based on assumptions that influence the way that the therapist proceeded as a helper. This theory also elaborated an idea of an inherent motivation, which was a kind of wisdom of the organism, to persist, to maintain its organization, to heal itself, if needed, and to develop its capacities (Bradley, 1999).

Rogers observed that clients in psychotherapy who did not benefit or gain skills were soon lost when therapists tried to guide, interpret, or direct them. Favorable circumstances promoted specific survival, integrative, and developmental processes and socially valued outcomes in behavior. The client may be able to function better if certain conditions are changed; if unfavorable internal or external circumstances can be determined and removed; and if favorable circumstances can be created. Understanding the concept of the actualizing tendency clarified the concept of the organism in Rogers's theory. The actualizing tendency is universal and the expression of the tendency is unique to each individual. The functioning of the actualizing tendency and the functioning of the organism as a whole are a changing gestalt, ongoing as its own entity and life force.

Human beings were essentially rational, constructive, positive, independent, realistic, trustworthy, and accepting, and these variables are established through experience, which was the key to Rogerian theory. Rogers stated that experience was the highest authority because each person's perception of his or her own experience is unique, and the client is the only expert on his or her own life. During this experience, a *person's worth* is conditional when his or her self-esteem is based on significant others' evaluation of experiences. Other major constructs, such as *congruence, incongruence, empathetic understanding, genuineness, defense, locus of evaluation, self-experiences*, and *frames of reference*, help each person reach his or her full potential in this regard. To explain how advanced theoretical principles underpin the therapeutic alliance, we will use the examples of genuineness and self-experience.

Genuineness is the state in which there is no difference between the real and the perceived self. Thus, if clients perceive themselves as being outgoing, their actions will mimic this representation. The person's total internal view of self in relation to the experience should match the person's functioning within the environment (self-concept). Similarly, *self-experience* is perceived as any event in the individual's perceptual field that he or she sees as relating to the self, "me," or "I" (Rogers, 1961).

Personality

Personality development is the development of the organized pattern of behaviors and attitudes that makes a person distinctive. Personality is also what makes a person a unique

person, and it is recognizable soon after birth. According to Rogers, the main determinant of whether we become self-actualized is childhood experience and the effect these experiences have on personality development. Rogers believed that it is crucial for children to receive positive regard and unconditional positive regard. *Positive regard* is affection and approval from important people in our lives. *Unconditional* positive regard is affection and acceptance with no strings attached (Rogers, 1977).

During therapy, a constructed theory of personality is developed by the client through the dynamics of her or his behavior. According to Rogers, personality theory was not a major concern for PCT; rather, the manner in which change comes about *in the human personality* is the focus (Sperry, 1990). The core characteristics of personality development are (a) *self,* (b) *need for positive regard,* and (c) *need for positive self-regard.* Personality is shaped partly by self-actualization tendencies and partly by others' evaluations. In other words, as the PCT therapist prescribes his or her perception of the individual as he or she appears in therapy, a theory of development of personality and the dynamics of behavior has been constructed. The characteristic of *self* is the person's conscious sense of who and what he or she is. It is available through one's awareness, although it is not always in one's awareness. Once the self is developed, two consequential needs are acquired: *the need for positive regard from others, and the need for positive self-regard.* These are developed through interactions with others and involve awareness of being and functioning. The self-concept is the organized set of characteristics that the individual perceives as peculiar to himself or herself and is based largely on the social evaluations he or she has experienced (Wilkins, 2003).

Central to PCT is the idea that every person has an innate need for positive self-regard. Positive regard was Rogers's umbrella term for emotional or physical pleasures such as love, affection, attention, and nurturance. For example, it is clear that babies need love and attention. In fact, it may well be that they die without them. They certainly fail to thrive, that is, become all they can be, without them. Rogers also stated that humans value positive self-regard, which consists of self-esteem, self-worth, and a positive self-image. Positive self-regard is an intrinsic attitude toward the self that is not dependent on the perceptions of significant others. This is achieved by experiencing the positive regard others show us during our years of growing up. Without this self-regard, we tend to feel small and helpless, and again we fail to become all that we can be (Rogers, 1961).

In the infant beginning stage of therapy, clients perceive their *experience* as reality; as a consequence, they have a greater potential of what reality is than someone else does. The client also has an inherent tendency toward actualizing his or her organism by interacting with his or her reality in terms of his or her basic actualizing tendency. Behaviors then become properly goal-directed in an attempt to satisfy experienced needs for actualization (Rogers, 1961).

Stages of the Therapeutic Process

Person-centered therapy aims for a greater degree of independence and integration of the whole self. Its focus is on the person, not on the person's presenting problem. Rogers contended that the aim of therapy was not to solve problems, but to assist clients in their life growth development. As such, ideally clients should be able to better cope with problems they are currently facing and with their future problems. Therapeutic change

depends symbiotically on clients' perceptions of both their own experience in therapy and the counselor's basic attitude (Corey, 2005).

Rogers's ideas about personality development, when applied to PCT, involved the assumption that, if certain conditions exist, then a characteristic process of personality change will occur naturally. The direction of change for clients in Rogerian therapy is from a personality that is fixed, detached from self, and tied to the past, a past that is spontaneous, integrated, and flowing with experiences that occurred in the present. Seven characteristic stages of this process unfold during therapy:

Stage 1: The client's communications are mostly about externals, not about self.

Stage 2: The client describes feelings but does not recognize or own them personally.

Stage 3: The client talks about self as an object, often in terms of past experiences.

Stage 4: The client experiences feelings in the present, but mainly just describes them, with distrust and fear, rather than expressing them directly.

Stage 5: The client experiences and expresses feelings freely in the present; feelings bubble up into awareness with a display of desire to experience them.

Stage 6: The client accepts his or her feelings in all their richness.

Stage 7: The client trusts new experiences and is able to relate to others, openly and freely. (Allen, 2003, p. 215)

When this process occurs, certain cognitive, emotional, and behavioral changes will occur. These changes reflect increases in congruence, openness to experience, adjustment, correspondence between actual and ideal self, positive self-regard, and acceptance of self and others. There is convincing evidence that therapeutic outcome is positively associated with the quality of the therapeutic relationship, particularly when perceived by the client (Cramer & Takens, 1992). The client will be able to express deep and motivating attitudes; explore his or her own attitudes and reactions more fully than he or she has previously done, and will come to be aware of aspects of his or her attitudes that he or she has previously denied; arrive at a clearer conscious realization of his or her motivating attitudes and will accept himself or herself more completely; and will choose to behave in a different fashion in order to reach these goals.

RECENT THEORETICAL DEVELOPMENTS

During the 1940s and 1950s Rogers and his colleagues developed a theory and a method of therapy that was initially characterized as nondirective, later as client-centered, and then person-centered. Client-centered therapy was practiced in the early days without much of a theoretical base. It was only in the late 1950s that Rogers set out the well-known theoretical schema that asserted that therapeutic movement will occur if and only if six conditions are present: (1) The client and therapist are in psychological contact; (2) the client is in a state of vulnerability and incongruence; (3) the therapist is congruent or integrated in the relationship; (4) the therapist experiences positive regard for the client; (5) the therapist is accepting and empathic toward the client; and (6) the client perceives these attitudes in the therapist (Allen, 2003). Central features of PCT are the motivational constructs of actualization and self-actualization. Later in his life, Rogers (1986) spoke of

the importance of the counselor being "present" and "there" for the client, a view that has been reemphasized (Corey, 2005).

According to Zimring and Rasking (1992), a new explanation of PCT is necessary because some of the theories that Rogers used to explain why change occurs do not match his therapy methods. Thus, in line with the old paradigm, his theory refers to experience, not awareness. The framework of a new paradigm may enable practitioners to describe their clients, during supervision, in ways that are respectful of the client, without reference to material they are unaware of.

RELEVANCE TO SOCIAL WORK

Both the social work profession and Rogerian PCT share the intellectual and cultural ideas of humanism and religious humanism. Thus, they promote a strong value-based mission and practice mandate to facilitate opportunities with clients for their human growth and actualization. Embedded within PCT and the social work profession are values and embodied convictions that blend the personal and professional use of self. The relevance of PCT is most lucid when viewing the social work profession as a principle-based approach to practice, as described subsequently by Biestek (1961). Biestek's key principles include the acceptance of clients with their strengths and weaknesses, a nonjudgmental attitude, respect for client self-determination, a duty to assist clients in activating their potential for self-direction, and a respect for the client as an individual human being worthy of full attention. Almost all of these resonate with social work's present Code of Ethics (National Association of Social Workers, 1996).

The social work profession and PCT are mutually congruent in what constitutes a beneficial helping and facilitating relationship with the client. For instance, principle-based approaches require a social worker (or counselor) to manifest grounding and awareness of the attitudes, beliefs, and personal attributes that he or she brings to the client relationship. Similarly, attitudes and manifestations of the Rogerian principles of accurate empathy, unconditional positive regard, genuineness, warmth, and counselor congruence provide the client with the experiences of facilitating, self-congruence, and self-actualization.

Rogerians do not emphasize techniques and psychoeducation, focusing more on the qualities of the helping relationship in a nondirective approach. The overt Rogerian values of client self-direction and determination resonate with the social work profession principle of client self-determination and subsequently the practice principle of meeting the client where the client is. The profound Rogerian genuine respect of client dignity allows for the possibility of empowering the client to become self-congruent and to take the lead in the working relationship through selecting the focus and topics to be discussed. Such a construction of the working relationship and the high regard for self-determination allow for a more equal distribution of power between the client and the counselor. Rogerian PCT promotes, as does the profession of social work, a collaborative model of the helping relationship whereby the social worker stays with the client, minimizes misuse of professional authority, and practices with the client instead of on the client. This avoids dehumanizing and de-personifying the client and provides for a more trusted and authentic experience of self than the client may otherwise feel permitted to experience or have available elsewhere in his or her environment.

Central principles guiding social work practice are empowering the client and building capacities for self-efficacy. Rogerian thought parallels empowering the client, as seen in the goal of promoting client self-actualization and through building developmentally on client strengths. The emphasis in PCT on the facilitative qualities of the helping relationship contribute to the social work understanding of the casework process as foundationally prescribed by the formative social work educator Perlman (1979). The Rogerian mandate of counselor authenticity, empathy, and unconditional positive regard allow for counselor transparency and promote a model for clients, which culminates in their regarding the counselor as having their best interest in mind. The effective use and manifestation of the previous three counselor attributes allow clients openly and honestly to explore themselves without having to fear, please, placate, or meet expectations of the social worker.

The humanistic anthropology of regarding people as ends in themselves and self-directed, not as a means to be exploited, can serve as a radically corrective reminder to monitor and repair any potential toxic disruptions during the formation of the treatment relationship. Foundational treatment relationship fractures can occur in managed care social work practices, in which the treatment relationship is driven by the entrepreneurial marketplace. This may result in entrapping the client as consumer and the social worker as provider. Such an institutional helping relationship paradigm in social work practice can corrode the development of a facilitative person-to-person helping relationship. When social workers primarily ground their attitudes toward clients in fiduciary exchanging postures, they can unknowingly characterize clients as means for a monetary or quota end.

The Rogerian principle of unconditional positive regard contributes to the mandate of social work to serve those who are oppressed and marginalized within society, the profession's present preoccupation with social justice (Wakefield, 2001). Oppressed and marginalized clients often feel inner conflicts and diminished self-efficacy. This especially occurs when their sense of self and human potential are derived from pejorative or stigmatic valuations from others in their intimate and larger social environments. Consequently, oppressed and marginalized clients live in a state of conditional positive regard. Person-centered therapy and social casework can promote fuller congruence between the ideal self and the real self through utilizing unconditional positive regard. This provides clients with an opportunity to self-actualize according to their intrinsic beliefs and not according to the restricting dynamics of an oppressive environment. For example, PCT has been utilized in assisting gay adolescent males to achieve greater self-regard and congruence in their process of coming out to their families and communities (Lemoire & Chen, 2005).

Training in PCT focuses on the processes and qualities of the helping relationship, instead of the outcome. Accordingly, Rogers often recorded therapy sessions in an effort to examine the therapist's interviewing skills, authenticity, positive regard, accurate empathy, and attending behaviors toward the client. Social work education and training, among other helping professions, benefit from the contributions that Rogers made in training person-centered therapists. Rogers encouraged what in social work is called "critical self-reflective thinking," whereby a social worker examines in detail the interviewing process with clients and, most important, evaluates his or her benevolent blending of the professional and personal use of self. In social work education, training, and specifically in (baccalaureate- and graduate-level) foundation practice courses, skills labs, and field education, students are evaluated and self-evaluate according to Rogers's three core conditions: empathy, congruence, and unconditional positive regard.

ASSESSMENT

Rogers opposed formally diagnosing clients with labels. He promotes the notion that formal and systematic assessments of clients, even history taking, were potentially harmful, unhelpful, and incongruent with the humanistic approach to helping others. Implementing systematic assessments may give clients the idea that the counselor omnisciently has the solution for their presenting issues. This consequently disempowers clients from tapping into their own inner resources and assuming responsibility for their life and the therapy process (Corey, 1996). Such a stance may appear dogmatically dismissive, given the current practice climate of utilizing standardized measures, normed psychometric tests, time-framed structured client interviews, risk-assessment models, and the like, all of which eventually lead to a psychosocial case formulation that may include the classifying of client problems and functioning into the five *DSM-IV* axes.

In PCT the clients are the experts about themselves, and no other external source of information or data, including the counselor, may serve as a substitute for definitively authentic client self-derived knowledge. Rogers and others in the humanistic and existential traditions in counseling offer helpful arguments and reasons about the harmful effects of assessing and diagnosing clients (Friedman & MacDonald, 2006). Assessments and diagnoses are reductionistic and typify the client as having a problem or, even worse, being the problem. Rogers was more interested in knowing persons and how they experience their lives rather than making judgments and investigating the etiology of the problem. The latter assumes that solving the origin of the problem will lead to a more self-congruent life. Friedman and MacDonald make the point that office-based assessments are artificially contained and take limited pictures of where clients actually live their lives (p. 518).

The phenomenological and existential underpinnings of PCT provide an appreciation of its incompatibility with the assessment and diagnostic protocols used today. The existential influences emphasize experiences and processes in human life more than the content, problems, or rationalizations of human experiences. Subsequently, meaning in life and self-knowledge are derived directly from the client's experiences and not from the essence of an external referent, such as psychometric testing based on general population norms with preconceived standard deviations.

Phenomenological thought posits that nothing has an essence in such a manner for it to stand alone in and of itself, outside of human existence and meaning. This approach to understanding a client's social and personal existence and relating to a client necessitates that counselors acknowledge that they are already in relationship with the client as a human to a human. The client relationship must not be preconceived or biased in any mediated assessment protocol that may discriminately typify a client. Likewise, the phenomenological approaches require the counselor to bracket, put aside, and forsake systematic assessment constructs (personality profiling, etc.). The disciplined and intentional use of the phenomenological approach to knowing the client as a person requires that the counselor create a helping relationship that allows clients to unfold, reveal, and present themselves authentically and uniquely. The basic posture of unconditional positive regard helps clients to reveal themselves willingly without complying with and meeting the performance demands of time-framed systematic assessments, such as psychodiagnostic testing. Therefore, the process of clients knowing themselves fuller is mediated through a direct, immediate experience of the here-and-now moments within the therapy session, which precludes time-framed assessment parameters.

Person-centered therapy does not use the constructs of normalcy and pathology of healthy and unhealthy. Rogers was interested in the process of becoming self-congruent, self-actualized, and authentic within the self and others. For Rogers, symptoms and expressions of such indicate that the client is suffering and seeking relief from inauthentic existence. Schmid (2003) regarded symptoms as unique expressions of the individual person and an invitation from the client to understand himself or herself and to be understood by others. Classifying symptoms and then linking them to uniform standardized treatment protocols is not a part of PCT because Rogers believed that the unique person should not be subsumed and lost in the generic, depersonalized world. As such, each client uniquely discovers his or her own solutions for self-actualization in his or her own time and in his or her own way. For example, a client who is labeled schizophrenic with symptoms of auditory hallucinations can become a more self-congruent and authentic person while manifesting his or her schizophrenic symptoms.

External referents of client data and formal assessments of clients are ideologically incompatible with PCT principles. Post-Rogerian thinkers and humanistic psychologists (Friedman & MacDonald, 2006), however, seek helpful ways to utilize formal assessments in PCT. Thus, they seek to incorporate external referents about the client that contribute to the client's ongoing self-understanding. Assessment measures such as rating scales, diagnostic testing, agency-mandated assessment forms, and personality and vocational testing are conditionally permitted as useful, only insofar as the clients interpret or appropriate the findings in their quest for self-understanding and congruence. In other words, external sources of data may be helpful for the client only when the client is the expert, not the counselor or the authority behind the data, in applying the findings to himself or herself. Few current assessments conducted in social work practice provide for the mutual partnership and empowering of the client in directing this process.

An example of utilizing noninvasive and nonnormed assessments to facilitate client self-awareness was implemented by Rogers early in his career. He adapted the Q-Sort assessment process to PCT. He offered the Q-Sort process as a learning tool for clients to measure their self-congruence between their real self and their ideal self. Rogers's adaptation of the Q-Sort method consisted of a deck of 100 cards, each of which contained an adjective describing various personality traits. Clients then selected each card as applicable or nonapplicable to their immediate, perceived true self. They then placed the cards on a 9-point continuum, ranging from "Not like me at all" to "Very much like me." Clients were instructed to place most of the cards in the middle of the continuum to depict a normal distribution of real self-perceived qualities. To depict the ideal self, clients then placed the cards as to how they would like to see themselves. They then utilized the distribution of personality traits between their real self and ideal self as a depiction of their self-congruence. Repeated Q-Sort assessments could allow clients to empirically gauge their own progress during therapy. Obviously, the more the Q-Sort distribution between the real and the ideal self became similar and correlated, the closer a person came to being self-actualized, congruent, and authentic (Stephenson, 1953).

INTERVENTION

According to Merriam-Webster's Collegiate Dictionary (2004), the word "intervention" derives from the Latin word *intervenire*, translated as "to come between." Accordingly,

applying the word intervention in a nondirective helping practice of PCT transforms it conceptually into an action-oriented and directive process in which the counselor steps in between the person and his or her problem. A more fitting word, which reflects Rogers's foundational practice principle of the working relationship of two people making direct psychological contact, is "facilitation."

The role of the counselor is to facilitate or to become a catalyst in giving the client a life-changing experience that allows him or her to become self-actualized. The counselor does not employ techniques, apply treatment manuals, ask questions, probe, interpret unconscious materials, or confront defense mechanisms. Instead, the counselor comports himself/herself to embody through intentional speech, attitudes, attending behaviors, reflective listening, and nondirective conversation the three necessary and sufficient dynamics: accurate empathy, congruence, and unconditional positive regard. Additionally, the counselor does not plan comportment as a technique to use with the client. Rather, the comportment is a nonintrusive attended and intentional state of being with himself or herself and the client. This distinctive comportment of counselor posture creates a canopy of care and moral kindness, which in turn openly presents the counselor as another person, whose sole purpose is being alongside the client in such a way that client and counselor can be with one another. The counselor is the agent of change who creates opportunities for the client to change through the unfolding process of the self-actualizing principle. Consequently, the client's experiences of the helping relationship are the treatment. For the student in training, sometimes accomplishing comportment can be frustrating, especially since the student desires foremost to know technically what to do, instead of practicing and experiencing how to be an attentive human being and counselor.

The course of PCT takes the path of clients experiencing discrepancies between the self-perception and the reality experiences within their life and environment. There is uncomfortable incongruence and a lack of authenticity within clients, which are typically expressed as anxiety. As clients gradually experience the empathy, congruence, and unconditional positive regard from the counselor, they become less guarded, feel more understood and accepted, and become more open to their experiences through trusting their own internal dialogues about themselves. Clients are more open to reconciling issues between the real self and the ideal self and thus activate their own healing (self-actualizing) processes. Thus, clients chart their own self-healing paths.

Accurate empathy is one of the three processes that promote a therapeutic relationship, as described earlier. Rogers (1959, pp. 210–211) described it as

> perceiv[ing] the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without ever losing the "as if" condition. Thus, it means to sense the hurt or the pleasure of another as he senses it and to perceive the causes thereof as he perceives them, but without ever losing the recognition that it is as if I were hurt or pleased and so forth.

Empathy also involves looking into and feeling the client's subjective experiences on behalf of the client. Empathy as experienced by the counselor involves both a cognitive understanding and an affective appreciation for the client's feelings. When clients sense the counselor's empathetic concern, it is almost as if the clients know that the counselor has their mind in his or her mind and can feel their feelings without the counselor losing

his or her own selfhood or professional posture. Practicing empathy requires a counselor to attend deeply and in detail to the client's total being.

Empathizing with a client is not the imposing of counselor insights onto the client, but rather reflecting back to the client that the counselor understands and appreciates the client's subjective experiences as framed within the client's worldview. Accurate empathizing does not add any new materials, topics, or dynamics to the client's conversations with the counselor. As counselors offer clients their empathy, clients can reject or modify the counselors' empathy. This back-and-forth dialogue eventually leads to accurate empathizing, as long as the counselor is attentive to the feedback from the client. Accurate empathy also deepens the client's self-disclosure and self-understanding by putting into words what the client cannot yet say and by giving the client the safety within the treatment relationship to say what he or she otherwise could not say in another context. The ongoing process of reflective responding and empathizing gives voice to what otherwise the client might not have words for. Accurate empathy has been shown to be relatively effective with different groups of clients as well as in concert with other forms of therapy (Gallant & Holosko, 2001; Gallant, Holosko, & Gallant, 2005).

The nondirective nature of the practice of PCT requires a counselor "to go at the client's pace" (Joseph, 2004). Staying with the client, as evidenced in a counselor's ongoing reflective listening and the selective use of the response skills of reflection of meaning and reflection of feeling, requires considerable patience and attentiveness. Rogerian reflective responding is commonly misunderstood as parroting verbatim responses from the client. To the contrary, a reflective empathetic response needs to capture the essence of what the client is saying by matching the felt meaning the client expresses without the counselor's taking away or adding content. Effective reflective responding connects more directly the counselor with the client, shows the client the counselor's appreciation for the client's frame of reference, and encourages deeper explication by the client without tempting the counselor to abstract the client's meaning or to exceed or lag behind the client's pace of processing (Sachse, 1990). An example of extracting abstract meaning from a client's conversation is the following dialogue:

Client: I don't know why, but every time my boyfriend says goodbye to me after our date, I feel as though I may never see him again.

Counselor: Sounds to me like you have long-standing issues of abandonment, which must relate to your earlier childhood experiences and lack of object constancy.

An example of the counselor's nondirective, evenly paced empathetic response, without abstracting meaning, is the following:

Counselor: You wonder and are bothered by how it is that you experience your boyfriend's customary goodbyes as ultimately signifying the final goodbye.

An example of a counselor response aimed at giving permission and unconditional regard for deepening client explication is as follows:

Client: Yes, I always dread his saying goodbye because I feel desperate about needing him and I try not to show it to him.

Counselor: You have strong and intense feelings for needing your boyfriend, which you keep tightly under wraps.

Client: I am not sure how much longer I can keep my needy feelings hidden from him. I feel ashamed for having them and I can't really tell if I have true love for him.

Rogerian principles of practice are applicable to the foundational structures of a working relationship in treating several kinds of presenting problems or client situations, especially when a supportive relationship is indicated, often in the practice of crisis intervention (Gallant et al., 2005). Utilizing unconditional positive regard, honoring client self-determination through client topic control during interviewing, empathizing, and using nondirective reflective responding to facilitate client exploration are useful in supportive work. For example, Joseph (2004) regarded PCT helpful in the supportive phases of working with clients who had experienced posttraumatic disorders. Such clients may be fearful or anxious when recapitulating the content of their trauma. When the emphasis is on the process of how clients express themselves during the immediate moments in counseling, and when content focus is minimized, clients can then begin to talk about the difficulties associated with the trauma (Gallant & Holosko, 2001).

EVIDENCE-BASED FOUNDATIONS

Person-centered therapy does not lend itself readily to the rigors of empirically assessing effectiveness and/or client outcomes. There are obvious reasons for this. Perhaps the most salient is that PCT and its humanistic roots are antithetical to the empiricism of the positivist tradition. Rogers and many loyal followers in the tradition of humanistic psychology posit that the process of psychotherapy itself is more important than its outcome. Qualitative methods of measuring client change are preferred significantly more than quantitative measures, which usually is the methodology applied in current evidence-based social work practice.

At the nexus of the issue is how subjective phenomenologically expressed experiences of human growth and self-actualization can be operationally measured, discretely quantified, controlled, and compared with other psychotherapeutic outcomes that may not emphasize the phenomenologically derived subjective experiences of the client (e.g., behavior therapy, cognitive-behavior therapy). Rogers (1970a, p. 133) sharply articulates the point this way:

> To my way of thinking this personal, phenomenological type of study—especially when one reads all of the responses is far more valuable than the traditional "hard-head" empirical approach. This kind of study, often scorned by psychologists as being merely self-reports, actually gives the deepest insight into what the experience has meant. It is definitely more valuable than to know that the participants did—or did not show a difference of significance from a control group of nonparticipants.

Humanistic psychologists in the tradition of Rogers (see Vermeersch & Lambert, 2003) see the need to respond to the current climate of evidence-based practice for evaluating the efficacy of PCT. Humanistic psychologists most commonly respond by developing their own paradigms for research and evaluation that remains congruent with and compatible to the subjective experiences of clients. Subsequently, most research into PCT remains

at describing and qualitatively measuring the facilitative processes instead of empirically measuring outcome, which is the primary area of investigation for evidence-based research (Thyer & Kazi, 2004).

A student adhering only to evidence-based practice approaches should not dismiss Rogers's highly regarded contributions to the importance of the helping relationship and to the student's training experiences in developing competent helping skills (Hill & Nakayama, 2000). Rogers's notion of the quality of the helping relationship is now well recognized in the literature of psychotherapy research and counseling practice (Hubble, Duncan, & Miller, 1999). Asay and Lambert (1999) find that psychotherapy outcome research and the factors that contribute to successful outcomes, which appear common to all forms of therapy, include the client's perception of the quality of the therapeutic alliance or relationship, which contributes 30% to positive outcomes. Other discernable factors that may contribute to positive outcomes are 40% for extratherapeutic and client factors, 15% expectancy for outcome and placebo effect, and 15% for techniques unique to specific forms of therapies (p. 31).

This confirms that the quality of the helping relationship or therapeutic alliance is one of many contributing factors for a positive outcome. However, psychotherapy research cannot confirm that the only quality contributing to successful outcome is the helping relationship. The apparent distinctive and unique elements in PCT may not be effective when utilized as only facilitating a growth process for the client. Indeed, many argue that Rogerian facilitating conditions of therapy are not distinctive at all, but rather common and generic to all forms of the most generally accepted effective psychotherapies (Harvard Health Publications, 2006).

CRITIQUES OF THIS APPROACH

From the beginning, PCT has had its critics—for the apparent vagueness of its principles, its antipathy to diagnosis, its claim that therapists need less training, and its emphasis on the client's self-evaluation as the primary way to judge the outcome of therapy. Social work practice with individuals, families, and groups is rooted in a vast range of borrowed and indigenous knowledge consisting of concepts, theories, models, practice wisdom, and research findings (Reid, 2002). Indeed, PCT has had a major influence on social work practice overall. Although Rogers's theory of counseling was typically incorporated in social work practice and ideology, his basic assumptions and guidelines for practitioners still permeate current social work practice and education. For instance, social workers developed certain practice values with regard to the people they served. Clients were seen as having inherent worth and dignity as human beings, and their right to self-determination was to be fostered. This remains one of the hallmark and defining characteristics of social work practice today.

Person-centered therapy provided a framework, a purpose, and a field-tested methodology that enabled one-on-one therapy (Neville, 1999). One problem with PCT was that there was no set time frame at which a client would reach self-actualization. Internally, this may affect a client's ability to receive optimal services due to time constraints (i.e., a limited number of therapy sessions). This may also impact the evaluation or outcome of the sessions. Since the requirement of the goals and objectives for clients is to be able

to reach a level of self-efficacy, practitioners using the PCT approach would not be able to readily identify these, as PCT is a developmental approach without time constraints. Rogers's classical PCT does not set goals, aside from self-actualization (Reid, 2002). Most therapists conducted therapy behind closed doors. Therefore, very little was known about what practitioners did in sessions or if they did what they claimed they did. As a result, very little was known about the processes or outcomes of therapy (Hill & Nakayama, 2000).

Conversely, Rogers insisted on testing PCT to show that it worked. To Rogers, that meant objective, quantifiable research. Unfortunately, there were few usable methodological procedures and no real examples of research in psychotherapy to use. Often, such research was considered impossible because therapists had never let anyone listen in, let alone measure, compare, and analyze case materials. Rogers was accused of violating the sanctity of the analytic relationship because he recorded therapy sessions. He sought baseline data and comparative research and he tried hard to get his psychoanalysts in training to record and test their therapy. This, he thought, would show whose sanctity was being protected. Rogers's group was the first to qualitatively analyze every sentence of hundreds of transcripts and to measure outcomes on psychometric (and other newly devised) tests given to clients before and after therapy, and also given to comparison or control groups (Gendlin, 2002).

Practitioners of PCT are required to have the appropriate therapeutic skills in facilitating individuals to identify vast resources that they have within themselves. These skills are (a) self-understanding, (b) self-concept, and (c) self-directed behavior (Coghlan & Mcllduff, 1999). By adhering to strongly ingrained values of nondirectiveness, PCT practitioners sometimes lost sight of the fact that they too needed to feel free and act freely if they were to offer or create optional conditions for growth in their clients (Cain, 1989). The PCT approach also assumed that all therapists could utilize and implement this approach in any client-worker relationship. However, it required a degree of supervision, continuous education, self-evaluation, and competence in which the practitioner must constantly be in tune with themselves (Hill & Nakayama, 2000).

It was also important not to confuse two related issues: applying principles of therapy and applying the approach they have been based on. In applying the principles of therapy, one is doing what one knows how to do. In doing so, it may be difficult to avoid therapeutic goals that are important in building a client-worker relationship as well as providing a climate for that client to self-actualize (Wood, 1995).

According to Freire and Tambara (2000), the PCT practitioner's commitment resided in the promotion of the client's growth forces, which is different from the usual helping relationships, which aim to diagnose and resolve. Although PCT itself seems to function effectively, applications of approach to education, small groups for encounter and psychotherapy, and large group workshops to improve transnational understanding, to facilitate conflict exploration, and to learn the nature of culture and its formation have revealed shortcomings in PCT practitioners' psychology. This psychology may have included the belief that people may be counted on to do the right thing and that people are always in charge of their own actions (Wood, 1995).

For example, there is only one technique that Rogerians are classically known for: reflection. Reflection is the mirroring of emotional communication: If the client says "I feel like crap!" the therapist may reflect this back to the client by saying something like "So, life's getting you down, hey?" By doing this, the therapist is communicating to the client that he or she is indeed listening and cares enough to understand. The therapist is

also letting the client know what it is the client is communicating. Reflection must be used cautiously, however. Many beginning therapists use it without thinking (or feeling) and just repeat every other phrase that comes out of the client's mouth. Then they think that the client doesn't notice, when in fact it has become a misattribution of Rogerian therapy, the same way sex and Mom have become misattributions of Freudian therapy. Reflection must come from the heart—it must be genuine, focused, and congruent (Wood, 1995).

Rogers died in 1986, and today only a small number of mental health professionals regard themselves chiefly as taking a client-centered or person-centered approach. But his ideas about personality are still found in numerous textbooks; one survey found 50 journals and 200 organizations all over the world now devoted to some variant of client-centered or person-centered therapy. Beyond that, PCT principles may have influenced the practice of many other therapists. For example, self-disclosure (transparency, congruence) has become more acceptable to psychodynamic and cognitive-behavioral therapists (Gendlin, 2002).

The principles of PCT are also central to anchoring motivational interviewing, which has been found to be as effective as cognitive-behavioral therapy in a clinical trial of alcoholism treatment (Wood, 1995). In this method, clients set the agenda, and the therapist acts as a partner in dialogue rather than an authority figure. Motivational interviewers avoid warnings, diagnosis, and direct attempts to argue, persuade, or educate. They try to offer accurate empathy and ongoing reflective listening. Instead of directly confronting resistance to change, they promote self-efficacy, which is related to self-actualization as conceived by Rogers (1995, p. 27).

Today, many practitioners are eclectic in their choice of methods or use several techniques in different situations with the same client. The PCT of motivational interviewing, for example, is designed for early phases of therapeutic change, called the precontemplation and contemplation stages. Rogers wrote in the 1940s that an experienced psychotherapist told him he had made explicit something the therapist had been groping toward for a long time. The legacy of PCT and its facilitating conditions may persist less as a specific technique than as a permanent background influence (Hill & Nakayama, 2000).

Although the PCT approach had its origins purely within the limits of the psychological clinic, it is proving to have implications, often of a startling nature, for very diverse fields of effort. According to Freire and Tambara (2000), there are several present and potential implications. Person-centered therapy may sound simple or limited because there is no particular structure that the therapist is trying to apply, but PCT in action may display a very rich and complicated process. People unravel their own identities, they discover new matters, take brave steps, and do not have to cope with a therapist who has used techniques with them. The therapist strives to understand and accept the client's issues. Over time, the client increasingly seeks to understand and accept his or her own self as well (p. 130).

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Chapter 11

GENETIC THEORY

Laura J. Pankow

Evolution by natural selection is the central theme of biology, and genetic processes are how natural selection shapes the evolutionary development of a species. *Genetics* is the study of inheritance. In human beings this involves the study of characteristics that a child receives from the combined influence of the genetic material possessed by his or her biological mother and father. Genetics contains the basic paradox of similarity and difference between child and parents, for children resemble each parent but are also distinctly different from each parent. Furthermore, children born to the same parents have distinct similarities and differences.

The physical and social environment into which we all are born does not inscribe its effects on a tabula rasa, a blank slate of a human being. Rather, all people possess a unique genetic history stretching back for generations, and ultimately to the origins of humanity itself. Our genetic endowment is responsible for a wide array of our physical characteristics and quite possibly aspects of our temperament and abilities. Striking advances in the scientific analysis of our genetic structure have led to important developments in the treatment and prevention of certain disorders with a genetic component. Quite literally, who we are and what we do is to a considerable extent a function of the intersection between our genetics (which are largely immutable) and our psychosocial environments (which are in a constant state of flux). An understanding of the role of genetics and their influence on human growth and development across the life span, and of the pragmatic applications of such an understanding in social work practice, is important conceptual knowledge for social workers in their quest to be competent practitioners. Knowledge of a client's genetic history can have a role within the processes of social work assessment (Bernhardt & Rauch, 1993) as well as practice (Bishop, 1993). Many social work clients present with issues related to genetic factors; clients may have health conditions related to inherited characteristics or may be in need of informational or supportive counseling (R. B. Black & Weiss, 1990; Schild, 1973; Weiss, 1976, 1981, 1993). Prenatal genetic testing revealing the existence of fetal abnormalities can present parents with difficult choices and life-changing decisions (Furlong & Black, 1984). Learning that one is afflicted with an incurable genetic condition, such as Huntington's chorea, presents people with critical issues that must be resolved, such as whether or not to have children.

In social work's history, members of our profession were collaborators in medical efforts to locate and refer for involuntary sterilization individuals with certain genetic disorders. This occurred in the United States during the early part of the twentieth century, in Nazi Germany, and in many other nations that adopted policies related to eugenics, attempts

to improve the human race by encouraging the genetically "fit" to reproduce (so-called positive genetics) and discouraging or preventing the genetically "unfit" to have children (so-called negative genetics). This history has recently been reviewed by LaPan and Platt (2005), with E. Black (2003) and Broberg and Roll-Hansen (1996) also being good sources. Papers dealing with eugenics were a frequent topic at national social welfare conferences 100 years ago, and an article titled "Eugenical Social Work" came out in 1930 (Lorimer, 1930). One widely held perspective is summarized as follows:

> If the extension of contraceptive practices is encouraged, perhaps supplemented by a more extensive development of voluntary sterilization procedures, sizes of family among these less privileged groups can quite possibly be reduced to the levels prevailing among the more privileged groups. (Lorimer, 1933, p. 42)

In other words, society was held to have an interest in discouraging the poor from having children.

The rise of genetic testing has enhanced society's ability to detect carriers of genetic abnormalities. So that social workers not be co-opted once again into supporting unethical practices made possible by these new technologies, our grasp of genetic theory and its derivative practices and our avoidance of myths and misconceptions may enable us to more readily advocate for genuinely humane social policies and avoid the tragic mistakes of past eras. For example, it has recently been asserted that declines in the rates of certain crimes are attributable to the widespread availability of legal abortion in recent decades, a resurgence, if subtle, of arguments made by the early eugenicists.

Many diseases affecting human beings have a genetic basis. All human babies born in hospitals are tested for phenylketonuria (PKU), a condition in which the body lacks an enzyme necessary to metabolize the amino acid phenylalanine. The amino acid builds up in the blood and can cause mental retardation at these abnormally high levels. The condition occurs in approximately 1 in 10,000 births in the United States, and mental retardation can be avoided by feeding the child a diet low in phenylalanine until the age of 7, when higher blood levels of the amino acid no longer affect the brain's rapid development. Down syndrome, another genetic disease, cannot be treated but can be identified by genetic testing, and recurrence can be prevented through education and genetic counseling. Genetics has also been used extensively in agriculture to develop desirable characteristics in plants and animals, from sweeter corn to cows producing more milk. Thomas Jefferson performed many experiments with plants before the patterns in plant offspring were reported in the mid-nineteenth century. All of these areas in which genetics is used affect the social environment.

Diversity of genes within a population in a geographical area is an important factor in survival. Laws prohibiting intermarriage between close relatives (i.e., brothers and sisters) were established largely for this reason. Experiments have shown that when closely related individuals have offspring, undesirable traits are more likely to emerge. The genetic disease Huntington's chorea, from which country-western singer Woody Guthrie died, is very prevalent in the Ohio River valley in southern Indiana. Due to many generations of intermarriage between cousins in the small communities there, a high prevalence of Huntington's chorea cases have been reported.

Gregor Mendel, an Austrian monk, published a paper in 1866, which reported his observations of selectively choosing certain characteristics in plants, such as height and color, and recording the percentage of offspring having these same characteristics. The scientific

community generally disregarded his work until 1900. Human beings have selectively bred plants and animals for desired characteristics for the past 10,000 years, yet it has only been in the past century that the theoretical explanations for the success of these practices has been available (e.g., genetic transmission via DNA).

Mendel's work provided evidence of hereditary pieces, one of which was received from each parent. These pieces of heredity are now called genes. The discipline of genetics studies the composition and operation of genes as well as how genes are conveyed from ancestor to offspring.

In 1953, James Watson, an American, and Francis Crick, of Great Britain, deciphered the chemical structure of DNA (deoxyribonucleic acid) at Cambridge University in England. In the early 1950s, Linus Pauling in California and Maurice Wilkins and Rosalind Franklin in London were also working with gene composition. Watson and Crick, in a one-page paper published in *Nature*, illustrated the double helix composition of DNA, the fundamental structure of the gene. An illustration of the double helix of DNA appears in Figure 11.1.

As the figure shows, DNA resembles a twisted ladder. The sides of the ladder are made up of sugars and phosphates. The rungs of the ladder are made up of chemical compounds (amino acids) called *purines* (adenine and guanine) and *pyrimidines* (thymine and cytosine). The rungs of the ladder are paired adenine with thymine and guanine with cytosine. This pairing pattern establishes the code of characteristics that are passed on from one generation to the next. The method by which the passage of hereditary material occurs is discussed later in the chapter.

Watson and Crick's work represents one of the most important discoveries in biology because it provided the physical structure of the gene, previously only an abstract concept.

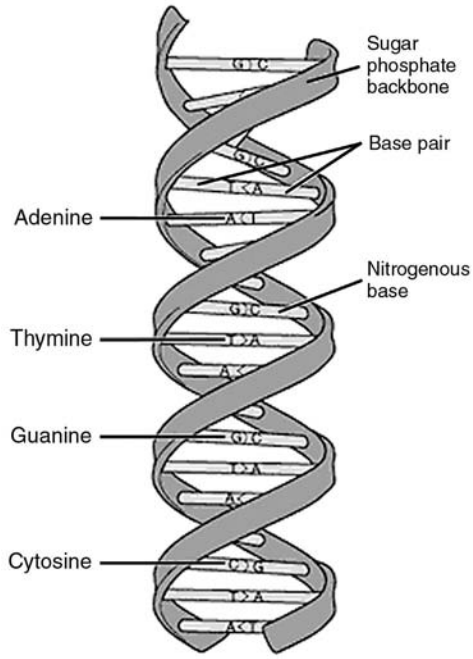


Figure 11.1 A diagram of the DNA double helix

They, along with Maurice Wilkins, won the Nobel Prize in medicine or physiology in 1962 for this discovery.

A gene is a section of DNA. Thus one DNA molecule contains many genes. The information encoded by DNA in each gene controls production of other molecules. The dynamic association between genes, the external environment, and the products of other genes is the mechanism of the function of a living organism.

Watson and Crick's discovery also provided an explanation for how DNA ensures that it can reliably reproduce itself. This process is termed *replication*. Their model also explains the process of *mutation*, by which hereditary material is changed, and *transmission genetics*, the way genetic material is passed from one generation to the next.

THE EUKARYOTIC CELL

Eukaryotic cells have a nucleus enclosed by a membrane. Their functional formed bodies (organelles) are also enclosed by membranes (Campbell, 1996, p. G8). Animals (including humans), plants, and fungi are all composed of this cell type. They contain more structures for capturing and processing energy from the environment than do their evolutionary predecessors, the prokaryotic cells.

Cells are the basic structure of all living things, and thus the basic structure of all human body organs and tissues. Muscle cells contract, allowing movement as a result of being stimulated by impulses traveling through nerve cells. Pancreas cells produce insulin to control blood sugar levels. Living things have the ability to reproduce, grow, metabolize (use energy to create chemicals and other substances), and adapt to changes occurring within and outside of the organism. Connective tissue fibers do not meet the definition of being alive because they do not have these properties.

Under the lower magnification of a light microscope, the eukaryotic cell appears to be a relatively simple entity. However, if viewed under the higher magnification of an electron microscope, it is observed to be more complex. Cells come in a variety of shapes and sizes. Muscle cells are long and spindle-shaped, and red blood cells have a more rounded shape. Sperm cells have tails called flagella, which enable them to move. A general cell's makeup is about 15% protein, 3% fat, 1% carbohydrate, 1% nucleic acids (DNA and RNA) and minerals, and 80% water (Kapit & Elson, 1993, p. 3). Each cell has *organelles*, structures that are responsible for performing the functions necessary for the cell to exist. Human beings have approximately 200 different types of cells.

All cells perform basic processes necessary for life, and thus there are certain functions common to all human cells. The organelles present in cells have been identified largely by examining cells with the combination of the magnification of a microscope and stains.

The *cell membrane* surrounds the cell and provides support for it. Human cells do not have the additional feature of a *cell wall*, which exists in plant, fungal, and prokaryotic cells. The cell membrane is composed of fats, proteins, and a few carbohydrates. It serves as a selective barrier to materials in the external and internal environments of the cell, admitting materials of benefit to the cell and allowing release of detrimental materials inside the cell.

The *nucleus* is the largest organelle in the cell and is surrounded by the *nuclear membrane*. The nuclear membrane serves as a selective barrier to substances inside and outside

of the nucleus. The *nucleoplasm* is the major component of the nucleus and contains *chromatin*, thin threads of DNA and protein, which is changed into chromosomes during cell division. Chromatin appears throughout the nucleus and is in the form of filaments, which stain lightly (euchromatin) or darkly (heterochromatin). It is made up of two components, protein and amino acids. The *nucleolus* is composed largely of RNA with some DNA and protein. It produces RNA units, which combine in the cytoplasm to form ribosomes. Under a microscope, the nucleolus and chromatin are very prominently observed. *Histone* is the main protein; there are five types, which basically show no diversity in structure in eukaryotic cells. In all, approximately 21 types of proteins are tightly bound to the DNA in the nucleus. Deoxyribonucleic acid is the only type of nucleic acid present in chromatin.

The material outside of the nuclear membrane is the *cytoplasm*. Within the cytoplasm a protein framework exists called the *cytoskeleton*. Fibers of this framework are seen throughout the cytoplasm, and their microfilaments provide the means through which muscles contract. The cytoplasm is a jelly-like fluid composed of water, sugars, fats (lipids), and proteins (amino acids), which contains the organelles responsible for performing the metabolic functions of the cell.

The cell membrane contains several folds in the cytoplasm. These folds are called the *endoplasmic reticulum*, of which there are two types: *rough* and *smooth*. The folds are flattened in rough endoplasmic reticulum and rounded in smooth endoplasmic reticulum.

Attached to some of these folds are small circular structures called *ribosomes*. Ribosomes are formed by RNA units sent into the cytoplasm by the nucleolus, and are the site where proteins are made from amino acids. Ribosomes are very active in cells of the pancreas and muscles, where high levels of protein are produced. Rough endoplasmic reticulum is responsible for carrying protein produced by the ribosomes to other locations in the cell. The *Gorge body* is a group of flat sacs that are lined with membrane. Here proteins and other substances are stored and "packaged" for the cell to use or to be exported from the cell. Smooth endoplasmic reticulum has different functions depending on the cell in which it resides. In liver cells, for example, it is responsible for breaking down substances that are poisonous to the cell; in muscle cells, it stores calcium, which is necessary for muscle movement.

The *centrosome* is situated close to the nucleus. It houses two cylinder-shaped structures called *controls*, which lie perpendicular to each other. They play an integral role in ordering cell division.

Many *mitochondria* are scattered throughout the cytoplasm. They are the cell's source of energy, for they contain many enzymes, which catalyze chemical reactions for the breakdown of carbohydrates to supply simpler chemical compounds that the cell uses to carry out its life processes. Two important features of these organelles are that they contain their own genetic information, exclusive of that contained in the DNA of the nucleus, and they are inherited only from the female parent. Muscle and sperm cells contain many mitochondria as these cells use a great deal of energy: muscles for movement of the various body parts and sperm cells for mobility. The nucleus is the primary site of DNA. Though the mitochondria contain their own DNA, they still require that contained in the nucleus in order to function.

The cell needs a constant supply of enzymes that can break down chemicals that are either poisonous to the cell or cannot be used in their present form. The cell stores enzymes, which break large chemical compounds down into smaller, usable units, in the *lysosome*.

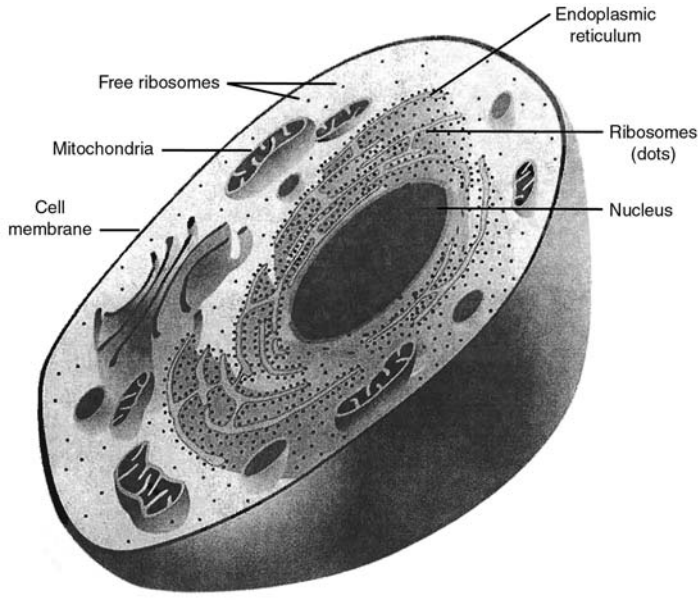


Figure 11.2 A diagram of a eukaryotic cell

Enzymes "digest" substances that are poisonous (toxic) to the cell, which is stored in *peroxisomes*, a large number of which are found in liver cells.

Eukaryotic cells can have two types of extensions: *microvilli* and *cilia*. Microvilli are projections from the cell, which resemble fingers and increase its surface area. They exist in the cells of the digestive tract, where one of the major functions of the cells is to absorb nutrients to be shared with the rest of the body. They also appear in the outermost layer of skin tissue, the epidermis. Cilia are longer and thinner than microvilli and resemble hair. They occur in the cells of the lungs and windpipe and capture dust and other particles that may interfere with breathing.

A notable exception to the prototypical eukaryotic cell is the red blood cell (erythrocyte) of mammals. These cells contain no nucleus or mitochondria and thus have no genetic material or means of producing energy through use of oxygen. These cells perform metabolism in a different way than other mammalian body cells. The red blood cells of other vertebrate classes do contain nuclei, so this type of red blood cell is unique to mammals. A diagram of a eukaryotic cell is shown in Figure 11.2.

CHROMOSOMES

Chromosomes are structures shaped like rods, numbering from 10 to 100, usually paired, in most eukaryotic cells. They are composed of DNA, histones, and other nuclear proteins. Chromosomes are visible in living cells under the microscope, but they are more easily seen in dead cells that have been stained. The stains elicit a banding pattern, which is unique to each chromosome pair.

Centromeres are constrictions that occur along the chromosome. *Metacentric* chromosomes have a constriction in the middle. *Submetacentric* chromosomes have a constriction

that is somewhat off center. *Achocentric* chromosomes have a constriction almost at one end, and *telocentric* chromosomes have a constriction at the end. Some chromosomes have a second centromere that separates a small fragment from the remainder of the chromosome. This fragment is a *chromosome satellite.*

Karyotype is a term used to refer to a photograph of the chromosomes of a single cell of an individual. This photograph is specially arranged so that the chromosomes appear from largest to smallest. For species with eukaryotic cells, this picture is unique to the species. While individuals within a species usually have the same number of chromosomes, an exception is found in bees. In this species, males have half the number of chromosomes of females. Each chromosome is identified by such characteristics as the banding pattern, the length, and the location of the centromere. Pairs of chromosomes are then numbered.

In many species eukaryotic cells have one pair of chromosomes that do not have identical appearances. This pair are the *sex chromosomes.* In these species members of the same sex are identical in chromosome appearance, but those of the opposite sex differ in chromosome appearance. The sex chromosomes, by convention, are given the highest number in the karyotype. All other chromosomes are termed *autosomes.* An important note is that the number of chromosomes has no relationship to the complexity or time in evolutionary history at which the species originated. Human beings have 46 chromosomes; some ferns have over 1,200.

Diploid species have chromosomes that occur in pairs. One chromosome of each pair came from the female parent and one from the male parent. The members of the pair are termed *homologous*, meaning that each chromosome is similar to the other in appearance and structure and also that the two chromosomes have the same gene sequence.

Each gene has a particular place or *locus* on the chromosome. As stated earlier, a gene is a section of DNA, which can take any one of several forms, called *alleles.* Thus a human being has two alleles for each gene, one on each of the chromosomes in the pair. One of these alleles comes from the mother and one from the father. If the two alleles are identical, the individual is said to be *homozygous* for that allele. If the alleles on the two chromosomes are different, the individual is termed *heterozygous* for that gene. The pair of alleles constitutes the individual's *genotype.* This concept is discussed more fully in a later section of the chapter describing Mendelian genetics.

In species with paired chromosomes, the number of pairs is termed the *haploid* number for that species. The diploid number is the number of chromosomes and the haploid number is the number of pairs. Thus, the haploid number is one half of the diploid number.

Errors may occur when cells are dividing in the process of producing offspring. When a human baby is born with a chromosome number greater or lesser than 46 pairs, he or she is termed *aneuploid.* In some cases individuals have extra pairs of chromosomes; these individuals are termed *polyploid.* This condition leads to death in human beings. In grains of wheat and rye, however, this condition results in plants that are more resistant to disease than those in the species with the normal karyotype and thus have a better survival rate.

The number of chromosomes is reflective of the relationship between species from an evolutionary standpoint. Dogs, wolves, foxes, and coyotes all have the same genus (Cani) and all have the same number of chromosomes, 78. Human beings have 46 chromosomes, and chimpanzees and gorillas, which are of the same order (vertebrae), have 48 chromosomes. A new species often originates as the results of a pairing of a set of chromosomes, which is called *fusion.* This reduces the diploid number. In human beings, for example,

chromosome 2 is homologous to two chromosomes in chimpanzees and gorillas. Another process that can account for a change in the number of chromosomes, creating a new species, is *fission*. In this case a pair of chromosomes divides into two or more pairs, thus increasing the diploid number. Therefore, while the genes within closely related species may be similar, the way they are organized may be very dissimilar.

When two species are closely related, it is sometimes possible for them to produce offspring. This process is called *hybridization*. A well-known example of this process in the animal kingdom is that of mating a male donkey and a female horse; the result is a mule. It is important to note that mules are sterile, and the only way to produce a mule is to breed a male donkey and a female horse. Hybridization is also common in agriculture, where two species of corn or other crop are cross-pollinated to produce offspring with desirable characteristics, such as enhanced color or taste.

REPRODUCTION

Only the basic processes of cell division and genetics will be discussed in addressing reproduction. The more complex elements of reproduction, including differentiation of organs and time periods over which development occurs prior to birth, will not be covered here.

In biology there are two types of reproduction, *sexual* and *asexual*. Some species use only one of these methods and some species use both. In sexual reproduction the genetic material of two parents come together to form offspring that are different from either parent. In asexual reproduction one parent produces offspring that are identical to itself in terms of genetic material.

In sexual reproduction in the majority of eukaryotic cell species, the uniting of two reproductive cells called gametes forms the offspring. Each gamete has one haploid set of one parent's chromosomes.

Gametes are produced through a process called *meiosis*, which occurs in the reproductive organs of each parent. The gamete formed in the female ovary is called an *ovum*. The gamete formed in the male testis is called *spermatozoa*. Meiosis causes reduction of a cell's chromosomes from the diploid number to the haploid number; the reproductive organs are the only place in the human body where this process occurs. The process of meiosis is discussed later in this chapter.

All cells of the human body, with the exception of gametes (eggs and spermatozoa), are *somatic* cells. These cells reproduce by a process called *mitosis*. In mitosis, unlike meiosis, the cell divides to produce two cells which each have a diploid number of chromosomes. Mitosis is also the method by which asexual reproduction occurs. Offspring that result from asexual reproduction have genetic material that is identical to that of the parent. The offspring are *clones* of the parent.

MITOSIS

During the life of a cell there is a period of a high amount of metabolism and growth, called the *interphase*. There are three parts to the interphase. The first step, called *G1*, is

the longest portion of the cell's cycle. Most cells require several hours to complete this step. The "G" notation for this phase stands for "gap" because it was originally thought that nothing was happening during this phase. However, during this period, studies have shown that the cell is preparing, through active metabolism, for the next phase, called *S*.

During the S step, chromosomes are making exact duplicates of themselves (replicating). The "S" notation stands for "sequence." This is a step of synthesis. Mistakes in replication usually lead to the death of offspring, so the accuracy of this synthesis is of the utmost importance. The time necessary for this step varies from one species to another. The *G2* step follows the S step. During this phase the cell is making protein for the active process of cell division.

There are four stages to the visibly dynamic process of mitosis: prophase, metaphase, anaphase, and telophase. In *prophase* the chromosomes become coiled and have two strands. Each strand is called a *chromatid*, and they are attached to a *sister chromosome* at the site of the centromere. As long as only one centromere exists, the composite structure is considered to be a single chromosome. While the chromatids do not have their own centromeres, and thus are not considered chromosomes at this point, they do possess complete genetic material identical to that of the sister chromosome.

During this phase, the nucleus and nuclear membrane disappear and the cytoplasm forms a structure called a *spindle apparatus*. In human and other animal cells, the centrioles separate and form the ends of these spindles. The spindle apparatus facilitates the movement of the chromosomes in later stages of mitosis.

In *metaphase* the chromosomes are attached to the spindle apparatus by the centromere of each pair of chromatids. The chromosomes then move to the plane midway between the centrioles and perpendicular to the line that connects them. This position is called the *equatorial plate*. All chromosomes then line up at the equatorial plate.

Anaphase begins when each centromere divides. At this point, each chromatid becomes a chromosome in its own right. Thus, for each chromosome in the cell, two new chromosomes now exist. The spindle apparatus then contracts and pulls the chromosomes to opposite ends of the cell. The centromere is the guiding force in this motion, so the chromosomes take on a J, V, or I shape depending on whether they are submetacentric, metacentric, or telocentric. This is the shortest step of mitosis.

Telophase is evidenced by the reappearance of the nuclear membrane. In human and other animal cells a crease appears in the cell membrane, which expands until the cell finally divides in two. The crease also divides the contents of the cytoplasm as it expands, but this division does not occur with the meticulousness of that of the nucleus and chromosomes. It is extremely important that both new cells receive mitochondria. If this does not occur, the new cell has no way to extract energy from the environment, and dies. Figure 11.3 diagrams the appearance of the chromosomes in the different phases of mitosis.

When cells increase in number, they are described as *proliferating*. If the body does not control this process, the result is cancer. During the 1980s, understanding of cell division increased greatly. *Cyclin* is a chemical produced continuously by the cell to control mitosis. When a sufficient amount of cyclin is present in the blood, a second chemical, called maturation-promoting factor (*MPF*), is produced. Maturation-promoting factor induces mitosis, degrades cyclin (leading to a decreased amount of MPF in the blood), and thus leads to the production of more cyclin. Thus a check-and-balance system for cell division is present in the cells of the body. Cells divide at different rates, but, as previously mentioned,

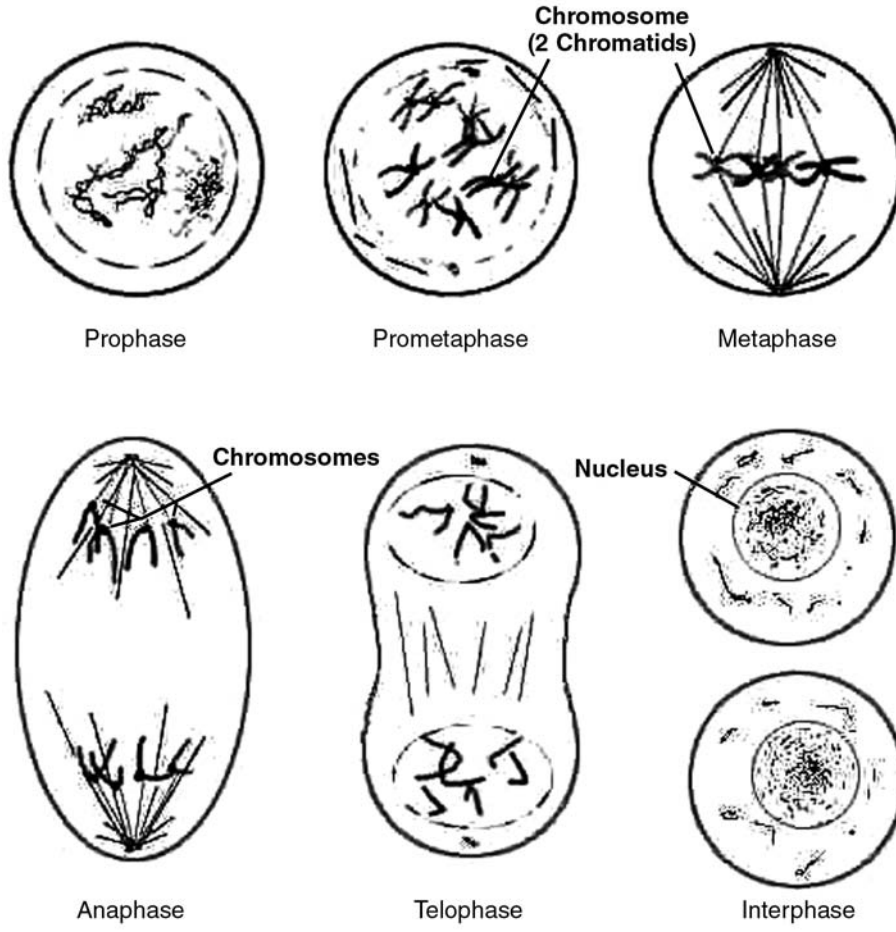


Figure 11.3 Diagrammatic representation of the phases of mitosis

nerve cells never divide; thus a much more complex set of factors than that outlined here is present in the human body. There is much about the process of mitosis that has yet to be discovered.

All forms of life begin as a single cell, but the majority of life spends most of its existence in a multicellular form. Cells *develop* into structures to perform specifically different functions. The process of this development has two parts: *growth* and *differentiation*.

Cells have a very limited range of sizes. Mitosis is the method by which an organism grows, and it occurs throughout the life of a multicellular organism. The largest animals known are blue whales and the largest living organisms known are giant sequoia trees and interconnected underground fungi.

Differentiation describes the method by which cells become specialized to perform a limited range of functions. It is important to remember that, though cells specialize during differentiation, all somatic cells contain all of the genetic material necessary to re-create the entire human being.

MENDELIAN GENETICS

Earlier in the chapter Gregor Mendel was mentioned as a leading figure in the history of genetics. He is the founder of the basic principles of inheritance. Mendel was not able to actually see genes; instead, he studied the *phenotype* of plants, that is, the physical appearance or trait that the gene produces in the organism. Mendel observed whether characteristics such as color and height were the same in a parent and its offspring.

Mendel's experiments are used to teach the model for scientific experimental design and systematic data collection. He focused on seven traits in pea plants (shape of seed, color of pea, color of seed coat, pod form, color of unripe pod, flower position, and stem length), carefully mated plants that differed in these traits, and counted the offspring of the two parents possessing alternative forms of these traits. These seven traits constitute *qualitative* diversity in the pea plants.

Quantitative diversity occurs in a factor such as height or weight, in which the diversity occurs on a continuous scale. It can be argued that stem length is a quantitative variable, but Mendel did not record it as such. The difference in height between plants with long stems and those with short was very distinct so that there was no area of overlap to cause confusion in this categorization.

Mendel began his experiments with *pure breeding* seeds, that is, seeds that had consistently given rise to the same alternative forms as the parent for the seven traits being studied, for several generations. He then mated parent plants that differed in alternative forms of only one trait, long stem and short stem, for example, but the other six traits were identical. These are termed *monohybrid* crosses. All of the monohybrid crosses yielded similar results. The first generation of offspring exhibited the trait being selectively crossed of one parent, and none represented the selected trait of the other. The trait that was not represented in the offspring was termed *recessive*. For example, when white seed coat and gray seed coat parents were crossed, none of the offspring had gray seed coats. Thus, the gray seed coat was a recessive trait. This occurrence is termed *Mendel's law of dominance*.

Mendel also observed that the sex of the parent had no influence on the traits represented in the offspring. This observance is termed *Mendel's law of parental equivalence*.

When monohybrid crosses were made for the seven traits of first-generation offspring, all seven monohybrid crosses resulted in a 3-to-l ratio of dominant trait to recessive trait in the offspring, Thus, in eight offspring plants, six had white seed coats and two had gray seed coats.

Mendel wrote about factors being transmitted from one generation to the next. Today Mendel's factors are called alleles. If an allele results in an observable trait in the individual who possesses it, it is called *dominant*. An allele whose trait is hidden or masked is called *recessive*. Individuals who possess the same allele on homologous chromosomes are called *homozygous* for that trait. Individuals who possess different forms of the same allele on homologous chromosomes are called *heterozygous* for that trait.

The conventional way of denoting the alleles present when attempting to determine expected outcomes for a particular trait in offspring is called a *Punnet square*. Dominant alleles are represented by a capital letter, and recessive alleles are represented with a lowercase letter. The Punnet square has one parent's alleles in the top row of the square and the other parent's alleles in the left hand column of the square. The resulting combinations

are then placed in a matrix within the square to determine expected ratios of phenotypes in the offspring. Figure 11.4 represents a Punnet square for two heterozygous parents for traits "A" and "a."

Mendel also made *test crosses*. A test cross occurs when a heterozygous parent is crossed with a homozygous recessive parent. When Mendel made this test cross for seed color, he found that the ratio of seed coat colors in the offspring were 1:1, white to gray. In this case, no homozygous white offspring exist. Fifty percent of the offspring are heterozygous white and 50% are homozygous gray. Try it with a Punnet square!

When Mendel observed this outcome, he wrote the *law of segregation*. This principle states that each allele of a pair keeps its own integrity, and when sex cells (gametes) are formed, only one allele is transmitted to each gamete.

Mendel crossed parents that were purebred for two of the traits that he was studying. Thus, he was crossing parents that were homozygous for seed color and stem length, for example. The first-generation offspring (conventionally given the notation F1) contained plants that were all white seed color and all had long stems.

Mendel then performed the equivalent of crossing two F1 generation plants by having the plants self-fertilize, as all plants of this generation have the same genotype (WwLl). The resulting ratio of traits in the next generation (denoted F2) is a 9:3:3:1 ratio of nine white seed coat and long stem, three white seed coat and short stem, three gray seed coat and long stem, and one gray seed coat and short stem. The 9:3:3:1 ratio is the standard outcome for a dihybrid cross. This finding demonstrates that seed coat color and stem length do not interact in gametes, which is the basic principle expressed in Mendel's *law of independent assortment*.

As is true of any scientific discovery, when Mendel's laws were read, scientists performed experiments like those of Mendel's but focusing on different phenotypic characteristics. It has been discovered, for example, that some genes have more than two alleles and that in these cases more than one allele may show equal dominance with another. It has also been discovered that sometimes an allele has incomplete dominance. When flower color was

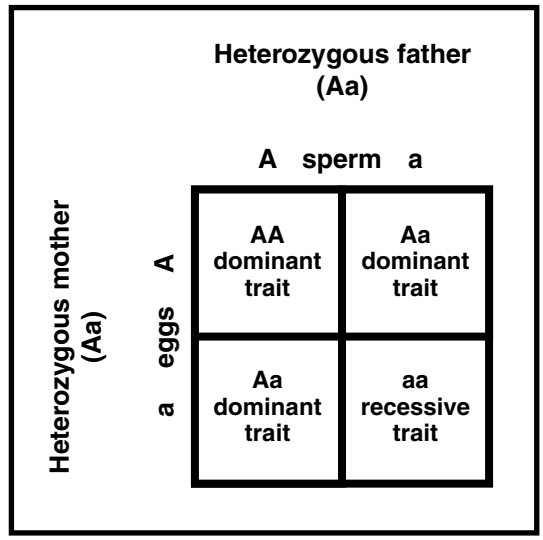


Figure 11.4 Punnet square for offspring of two heterozygous parents for traits A and a

studied, for example, flowers that had one allele for red color and one allele for white color (heterozygous for flower color) were pink. It has also been found that some characteristics, such as height, depend on more than one gene. In these cases the characteristic seen in the offspring is dependent on the interaction of these genes. This type of inheritance is termed *polygenic*.

The discovery of *linkage* caused a modification in Mendel's law of independent assortment. In linkage, a group of genes on the same chromosome are transmitted to a sex cell as a group. In cases where genes are linked, the 9:3:3:1 ratio expected in a dihybrid cross does not occur. It has been discovered that the reason all seven traits that Mendel observed in his pea plants demonstrated this expected ratio is the large distance between the genes for these traits on the chromosomes.

Mutation occurs when the DNA of an allele is changed during replication. Any mutations that occurred in Mendel's studies were so infrequent that they did not affect his outcome ratios.

THE PROCESS OF MEIOSIS

As in mitosis, *meiosis* has a period of growth and replication of the cell's chromosomes, which is called the interphase. Another similarity to mitosis is that when meiosis begins, each chromosome has a pair of sister chromatids that are bonded by one centromere.

Meiosis I

Meiosis has two sets of divisions, termed *meiosis I* and *meiosis II*. Meiosis I begins with a stage called *prophase I*. This stage is very complex and consists of a high degree of chromosome activity. In a process called *synapsis*, the two members of each homologous pair of chromosomes line up in a tight formation side by side. The chromosomes contract to a great degree during this phase, and several attachments between homologous pairs of chromosomes form during this time. The attachments form an X shape and are termed *chiasmata* (*chi* is the Greek letter x). This is the critical event in prophase I as it is the mechanism by which *crossing over* occurs. At the chiasmata, the chromosomes break and reattach to a broken end. If a chromosome repaired itself by reattaching to its own end or that of a sister chromatid, it would keep its original composition of genetic material. However, if it heals by reattaching itself to the broken end of a homologous chromosome or its nonsister chromatid, *genetic recombination* occurs. This is because homologous chromosomes have the same genes but different alleles; thus, when they reattach to each other, an equal exchange of segments occurs. In other words, the same genes will be present, but different alleles may attach to the broken chromosome. This is the process of crossing over. At this point in meiosis, each pair of homologous chromosomes has four chromatids. This entire structure is called a *bivalent*.

At the end of prophase I, the nuclear membrane disappears, a spindle starts to form, and the centromere of each bivalent attaches to the spindle.

In the next stage of meiosis I, *metaphase I*, spindle formation is complete, and the bivalents line up at the center of the spindle in a location called the *metaphase plate*.

During this phase the chiasmata move to the ends of the chromosomes and the homologous chromosomes are held together only by the chiasmata.

Anaphase I is the next stage. As in mitosis, the centromeres pull each member of the pairs of homologous chromosomes to opposite ends of the spindle. Meiosis differs from mitosis because in anaphase I of meiosis, centromeres do not divide. Remember that centromeres are the defining structures in a chromosome. Thus, because the centromeres do not divide, half the number of original chromosomes exist at the completion of anaphase I. For this reason, meiosis I is termed a *reduction division.* Another difference between meiosis I and mitosis is that after crossing over, the two sister chromatids of each chromosome may no longer have the same genetic material.

Telophase I is very similar to telophase in mitosis. The components of the cytoplasm are divided between the two new cells and a new nuclear membrane forms in eukaryotic cells.

Meiosis II

Another period of interphase occurs between meiosis I and meiosis II. This phase is very brief. In fact, in some species meiosis II begins immediately following anaphase I, with telophase I and interphase not occurring.

Meiosis II is less complex than meiosis I and resembles mitosis much more closely than does meiosis I. In *prophase II*, the nuclear membrane disappears. The chromosomes, widely distributed throughout the cell nucleus at the conclusion of meiosis I, begin to condense again in this phase. In prophase II there is no pairing of chromosomes because now the duplicated chromosomes have nothing with which to pair. Remember that in meiosis I each chromosome made only one duplicate, not two, as in mitosis. At the conclusion of this phase, the formation of a spindle begins.

In *metaphase II*, the chromosomes, which remain duplicated at this point and are each attached to the centromere, move to the middle of the spindle.

In *anaphase II*, the centromere of each chromosome divides, resulting in two single chromosomes. These haploid chromosomes move to opposite ends of the spindle to complete this phase.

Telophase II is constituted by a nuclear membrane forming around each new cell. The chromosomes spread out in the new cell nucleus, and the cytoplasm's contents are divided between the new cells.

Helpful points to remember in clarifying the differences between mitosis and meiosis are that in mitosis one cell division results in two new cells, which are each identical to the cell that divides. In meiosis, the cell goes through two divisions and forms four sex cells, or *spermatozoa* in males, and one functional sex cell, or *oocyte* in females. No two of these sex cells are alike due to the cross-over process. The number of possible combinations depends on the species' haploid number. The number of combinations is denoted as 2 to the nth power, where n is the haploid number. Thus, human beings, having 23 chromosomes or 46 chromosome pairs, have 2 to the 23rd power (2 multiplied by 2 23 times) for a total number of 8,388,608 different combinations of sex cells possible for each individual human being. Think of the amount of diversity that number has the potential to create when the combination of two individuals with that many different possibilities goes into creating one human baby!

PEDIGREES

A *pedigree* is a diagram in which a family's genealogy is depicted. Pedigrees are most commonly developed to demonstrate the path of inheritance of a particular phenotype. An example is the inheritance of sickle cell anemia (a condition in which the red blood cells are sickle-shaped rather than round and have a compromised ability to carry oxygen to the various body organs) that might occur in a family. Those readers familiar with genograms will note the similarity between genograms and pedigrees. Murray Bowen, MD, the psychiatrist who developed the idea of genograms, based them on the pedigree model. Due to the diversity in genetic material that occurs with multiple generations over time, geneticists generally limit pedigrees to 10 generations.

Most inherited conditions that are detrimental to an individual's existence, such as sickle cell anemia and phenylketonuria, are recessive alleles that must occur in the homozygous recessive state to exist in an individual. When close relatives (i.e., cousins) parent children, the chance of the homozygous state of these recessive alleles increases greatly. This is one of the reasons that most states prohibit marriage between siblings and between first cousins.

Individuals with sickle cell anemia and those with sickle cell trait are more resistant to malaria than individuals who do not carry an allele for sickle cell anemia. Therefore, maintenance of the sickle cell anemia allele is important to the survival of the human population.

It is important to dispel a common belief that sickle cell anemia only occurs in human beings of African descent. A genetic mutation was discovered in Portugal that has given rise to cases of sickle cell anemia in Caucasians (Monteiro, Rueff, Falcao, Portugal, Weatherall, & Kulozik, 1989).

There are some detrimental traits in human beings that are inherited through dominant alleles. Recall that in this case the individual is either homozygous or heterozygous for the dominant allele because the dominant allele "dominates" the recessive allele. Examples of these conditions are neurofibromatosis (a condition in which noncancerous tumors form all over the individual's body), Huntington's chorea (a disease in which the individual has involuntary muscle spasms and loss of memory and speech), and ptosis (drooping upper eyelids).

Before leaving the topic of pedigrees, a brief discussion of blood groups is in order. Blood groups in human beings are an interesting genetic phenomenon because the gene controlling this trait has three alleles instead of the usual two associated with most human genes. There are several blood groups that have been discovered in human beings, but because the ABO group is the most widely known, the discussion here is limited to that group.

Classification of blood type is based on chemical substances (antigens) on the red blood cells and chemicals in the blood's liquid portion (serum), which react to the substances on the surface of the red blood cells (antibodies). An individual never has chemicals in the serum that react with the chemicals on his or her red blood cells.

The four human blood types in the ABO group are A, B, AB, and O. A person with blood type A has A antigens and antibodies that react with the B antigen to destroy it. A person with B blood type has antibodies to the A antigen. The person with O blood type has no antigens but A and B antibodies. Finally, the person with AB type blood has no antibodies but has both A and B antigens. If the O allele is present with either an A or B

allele, it is masked or dominated by either antigen allele. If a person has A and B alleles, they are codominant; in other words, both antigens exist on the red blood cells.

When blood types are mixed, there can be disastrous effects if the types are not compatible. If a person with type A blood, for example, is given type B blood, the type B blood has antigens to the type A antigen and there is a chemical reaction that destroys the type A red blood cells. This process is called *agglutination*. Because type O blood has no antigens, it can be given to anyone of any blood type and agglutination will not occur. Thus people with type O blood are termed *universal donors*. However, those with type O blood have antibodies to both A and B antigens. Therefore, they can receive only O blood or they will have agglutination problems. People with type AB blood have no antibodies since they have both A and B antigens on their red blood cells. Thus, they can receive blood from any blood type and not experience agglutination. Individuals with this blood type are termed *universal receivers*. It is always preferable to use the same blood type if it is available.

DNA AND RNA

The Hereditary Information Molecules

Today, biologists know that the hereditary material for all species is *nucleic acid*. In the vast majority of species, including human beings, the nucleic acid is in the form of DNA (deoxyribonucleic acid). In a few viruses, it is in the form of RNA (ribonucleic acid). The primary functions of these molecules are to store and transmit hereditary material and to translate the hereditary material into protein, a form of information that the body can interpret and use.

Enzymes are a particular class of proteins that speed up (catalyze) chemical reactions necessary for the body to function on a minute-to-minute basis. Other proteins provide a structural brace for cells of the body, and still others (antibodies) help the body defend itself against disease.

Proteins are long chains of amino acids. There are 20 amino acids, which are common to most species, and the human body is able to make 12 of these amino acids. In a protein two amino acid molecules are held together by a *peptide bond* and a protein, consisting of a chain of many of these bonds, called a *polypeptide*.

The number of possible messages that a protein can carry is a function of the number of amino acids that it contains. The value 20 to the nth power, in which n represents the number of amino acids, determines the number of possible sequences. Therefore, if eight amino acids are present in a protein, 12,800,000 different combinations or hereditary messages are possible.

Because proteins are three-dimensional molecules, they do not exist simply in a straight line. Their structure can be twisted and turned in many different directions to further affect the possible information that they translate.

Until the early 1900s, protein itself was thought to be the material of heredity. However, in 1943, elaborate experiments by the American biologists Avery, MacLeod, and McCarty resulted in a separation of constituents of bacterial cells into DNA, protein, lipids (fatty substances), and carbohydrates.

As mentioned earlier in this chapter, DNA exists in the form of a double helix (see Figure 11.1). The deoxyribose (sugar) and phosphate portions of the DNA, which constitute the sides of the double helix, are identical in all DNA molecules regardless of species or information contained in the DNA. The bases differ from DNA molecule to DNA molecule, which make up the rungs of the twisted ladder. Recall from earlier in the chapter that these bases are adenine (A), guanine (G), cytosine (C), and thymine (T).

On the outside of the double helix, the base is attached to the sugar/phosphate chain. On the inside, the base is connected to another base. This is the gist of the code for hereditary information! Adenine is always paired with thymine, and guanine is always paired with cytosine. The sequence of the bases is the code for genetic information, and the predetermined pairing of the bases ensures that an accurate copy of each strand will be made when replication occurs.

With the four-symbol code of A-T and C-G, the DNA molecule can code an immense amount of hereditary data. Determination of the number of unique messages that a DNA molecule can code is a function of the number of base pairs in the molecule. Thus, with only six base pairs, 4,096 different messages can be contained in the molecule!

RNA resembles DNA but has three important differences in structure. First, the sugar in this molecule is ribose rather than deoxyribose (these two sugars differ only in the fact that deoxyribose has one fewer oxygen atom). Second, RNA typically has one strand rather than two. Third, the base thymine does not exist in RNA. It is replaced by the base *uracil* (U).

Some viruses have only RNA as their mode of coding information concerning heredity. However, all living organisms have three types of RNA. All of these types are copied from DNA in the cell's nucleus, and they are mediators between DNA and protein production. These types of RNA are termed *messenger RNA, ribosomal RNA*, and *transfer RNA*. A more complete discussion of their role in protein synthesis will be imparted following a discussion of the functions of DNA.

Remember from the description of the eukaryotic cell that each cell in an individual human body has an identical set of chromosomes. Each of these chromosomes contains one DNA molecule, which is surrounded by several types of proteins in the cells' nuclei, histones being one of the most important types. The DNA molecule is very long and would stretch several inches if uncoiled in a straight line. Histone is believed to serve a role in arranging the coiling of DNA, which enables such an immense amount of hereditary information to be enclosed in the small cell nucleus.

Also recall from the discussion of eukaryotic cell division that both mitosis and meiosis require DNA duplication. At this point, a return to the work of Watson and Crick is required to explain the function of DNA.

Francis Crick described the double helix model of DNA in 1958. There are several steps in which the hereditary information in DNA is translated into the physical characteristics observed in an individual human body. First, the information in the DNA molecule is copied to messenger RNA. This process is termed *transcription*. In human and all other eukaryotic cells, messenger RNA then moves from the nucleus of the cell to the surrounding cytoplasm, where its hereditary information is read by both ribosomal and transfer RNA. Ribosomal and transfer RNA then produce proteins based on the information they receive from the messenger RNA. Proteins then function as chemicals in the process of development of physical characteristics within the individual. Enzymes are a particularly important type of protein for this job.

Crick also explained that the DNA duplication process ensured that every cell in an individual human body contains the same hereditary material as the original cell that resulted from the combination of a female egg and a male sperm.

Complementary base pairing of adenine and thymine and cytosine and guanine is the method by which DNA is able to duplicate itself precisely, for it enables each DNA strand to synthesize a completely new strand. During replication each DNA strand serves as a *template* for the creation of a new strand of DNA with complementary bases. Enzymes are responsible for this process. One enzyme breaks bonds between the paired bases in the original double helix and "unzips" the DNA. Another enzyme then mediates the linking of the single-strand base with its complementary base. Thus each single strand forms a double strand, and where one DNA molecule existed, now there are two identical molecules.

Crick also proposed that each base pair is the code for a particular amino acid, which is part of a protein. Because he knew there are 20 amino acids, he devised a three-base system for determining amino acids. Each three-base group was termed a *codon*. Messenger RNA (mRNA) production occurs during the G1 and G2 steps of mitosis. This type of RNA is formed from only one DNA strand, called the *sense strand*. Remember that with mRNA uracil pairs with adenine, not thymine, as in DNA replication. Each strand of mRNA has a *leader site* (signified by the base sequence AUG = adenine, uracil, guanine) to which the cell's ribosomes can bind. Recall that the ribosome is the site of protein synthesis for the cell. The ribosomes move down the mRNA strand and *translate* the strand into a series of amino acids dependent on the order of the bases. Each strand of mRNA ends with a codon, which does not code for any amino acid. This tells the ribosome that the protein code is complete. This type of RNA is a very long molecule and generally has a life expectancy of only a few minutes.

Ribosomal RNA (rRNA) constitutes approximately 80% of a eukaryotic cell's RNA. This type of RNA, like mRNA, is formed directly from the DNA in the cell's nucleus. It then moves immediately to the cytoplasm, where it connects with proteins to form ribosomes.

Transfer RNA (tRNA) is the smallest of the three types of RNA molecules. Its job is to bring amino acids to the ribosomes for assembly into proteins. While all RNA is a single strand, tRNA has a twisting form, which causes it to resemble a cloverleaf and appear double-stranded. The tRNA therefore has two free ends. One attaches to the amino acid for which the tRNA is coded at the loop of the cloverleaf, which is located opposite the free ends. This is termed an *anticodon* because it has the exact sequence of bases as the DNA (with the exception of uracil replacing thymine) from which a unique mRNA was formed for the protein of which this amino acid is one component. More than 50 types of tRNA have been identified, each of which is responsible for carrying one amino acid to the cell's ribosome.

A final note to this brief survey of DNA and RNA is the hypothesis of a one-to-one correspondence between genes and polypeptides. Termed the *one gene–one polypeptide hypothesis*, the postulation is that each gene contains the code for one polypeptide, which is most often a protein. The polypeptide then participates in a variety of different chemical reactions, which lead to the production of the physical characteristic of the individual possessing it. Remember the discussion of PKU earlier in this chapter; in this case, an error in coding in a gene causes the absence of an enzyme necessary to metabolize phenylalanine, leading to mental retardation if left untreated.

THE GENETICS OF GENDER

The process of reproduction is obviously a crucial part of genetics. In this section, only the genetics of gender are discussed. Remember from earlier in this chapter that male spermatozoa and female oocytes are both produced by a process called meiosis, which reduces the number of chromosomes in the sex cells to the haploid number for the species. The male produces two types of spermatozoa, those containing X chromosomes and those containing Y chromosomes. The female oocytes contain only X chromosomes.

Male offspring possess an X chromosome from the mother and a Y chromosome from the father. Female offspring contain an X chromosome from each parent. Thus, the father determines the gender of the offspring.

There are several genetic gender disorders that result from abnormal numbers of X and Y chromosomes in offspring. *Turner's syndrome* occurs when an individual has only one X chromosome and no Y chromosome. Such a person is a female because she possesses no Y chromosome, but these individuals are usually short in height and have underdeveloped ovaries and breasts. These individuals are incapable of reproduction because both X chromosomes are necessary for a female to produce oocytes. Another type of genetic disorder is labeled *Klinefelter's syndrome*. This occurs when an individual has two X chromosomes and a Y chromosome. This individual is a male because he has a Y chromosome. These individuals have longer arms and legs than those with an XY genotype, and many of the secondary gender characteristics are more feminine than in XY males. These individuals, like those with Turner's syndrome, are unable to reproduce.

Some males are born with one X and two Y chromosomes. These men are taller than XY males but they are able to reproduce. Individuals of this genotype have been a source of study in terms of tendencies toward aggression, as it was discovered that they have a disproportionately high representation in Caucasian males in prisons and mental institutions. Present studies, however, have shown that while men with this genotype may have a higher tendency to be in the penal system, they do not appear to have a higher degree of aggressive tendencies than XY males.

Fragile X syndrome is a condition in which one of the arms of the X chromosome is constricted during mitosis. This condition causes a variety of abnormal characteristics among individuals possessing it, including ears that protrude extensively from the head, large head, long face, and a high weight at birth, and flat feet. In males with fragile X syndrome the testes are larger than in the XY male not having the syndrome.

Sex-Linked Genetics

Genes that occur on the sex chromosomes X and Y are termed *sex-linked*. The X chromosome contains many genes. When the term sex-linked is used in common language, the speaker is usually referring to the gene causing a physical characteristic being located on the X chromosome. There is only one gene proven to exist on the Y chromosome. This gene codes for the testis to develop in males.

X-linked genes have a unique pattern for expressing their characteristics in offspring because females have two X chromosomes and males have only one. Thus, if a recessive allele is on the one and only X chromosome that a male receives, he will exhibit the trait. In a female, however, if one recessive allele and one dominant allele are received, the female

is a *carrier* of the gene for the trait but does not exhibit it. Therefore, males have a 50% chance of inheriting the recessive gene if the mother is a carrier and the father does not have the disease. A female, on the other hand, has no chance of exhibiting the trait of the recessive gene because even if she receives a recessive allele from her mother, she receives a dominant allele from her father. She has a 50% chance of being a carrier.

One of the best-known cases of this type of inheritance is hemophilia, a blood disorder in which the blood does not have sufficient platelets, and the blood component produces clotting. The person with hemophilia must receive frequent blood transfusions to avoid bleeding to death from injuries that cause bleeding or bruising. When testing for the AIDS virus was not as sophisticated as it is today, many with hemophilia contracted AIDS due to frequent blood transfusions. Queen Victoria of England was a carrier of this disease, and her pedigree is often illustrated as an example of this type of inheritance.

Deuteranopia (red-green color blindness), a condition in which the eye lacks the pigment necessary to differentiate between red, orange, yellow, and green, also has this mode of inheritance. This is the reason that approximately 1 in 30,000 males are born with this defect, but it is very rare in females. Approximately 9 million Americans have this form of color blindness, 10% of the population. A particular type of muscular dystrophy called Duchenne is also inherited in this manner. Jerry Lewis has familiarized the public with this type of disease through his extensive work with various forms of muscular dystrophy.

Genetic Counseling

The ability to predict the probability of offspring having inherited diseases has led to the medical service of genetic counseling for potential parents who know that members of their family have experienced these diseases. While potential parents sometimes initiate this process, more commonly parents who have had a child exhibiting a disease such as sickle cell anemia are referred to genetic counseling to learn about the potential of producing future offspring with the same condition. Sickle cell anemia, in particular, has initiated a great deal of controversy because screening programs for the presence of the disease in infants is mandatory in many states. Because this disease is most prevalent in those of African American origin, these screenings and subsequent mandated genetic counseling have sometimes been perceived to be a method of birth control imposed on the African American minority by the Caucasian majority.

It is obvious that there are many ethical implications in counseling of this type. Social workers and other counselors must be very sensitive when discussing options to live birth, such as abortion and adoption, with prospective parents. To date, genetic counseling has not proven to be a deterrent to future childbirth to parents with sickle cell anemia (Neal-Cooper & Scott, 1988; Samuels-Reid, Scott, & Brown, 1984). Other research has shown that the threat of genetic disease is not an important deterrent to parenthood (Frets et al., 1990).

Genetic Engineering

In the past several years, genetic engineering, the ability to change the hereditary information in different living organisms, has become a topic of great discussion and controversy. On one hand, it makes possible the elimination of many inherited diseases; on the other

hand, it offers the possibility of creating new individuals from one parent rather than requiring the genetic material of two parents, which can lead to a decrease in diversity with a consequent increased chance of detrimental genetic conditions manifesting themselves. The great debate about the ethics of reproductive cloning human beings after the news of Dolly, the cloned sheep, is an example.

In *DNA cloning*, a bacterial cell is used as a site for combining desired genetic material for reproduction. For example, a desirable trait such as disease resistance might have an identified gene controlling it. The gene is extracted and placed in a virus cell, which then attaches to the host bacterial cell (usually of the species *Escherichia coli*). Enzymes are used to divide the DNA of the gene into segments. The bacterial cell incorporates this DNA fragment into its own DNA. The bacteria are then grown in a culture so that multiple samples of the DNA for the desired trait can be gathered from it.

The DNA is then searched for the desired gene, which may be a very lengthy process. When the desired segment of DNA is found, it is analyzed for the method by which this DNA segment was incorporated into the bacterial cell's DNA so that the technique can be reproduced in future cases when it is needed.

Safety is a key issue here because segments of DNA are often taken from diseased tissues in an effort to determine which gene contains the coding for that disease. Ecologists are very concerned about the release of genetically altered organisms into the environment for which no defenses may currently be available. One of the well-known achievements of genetic technology was the creation of human insulin through DNA recombination, which occurred on a widespread basis in the 1980s. Prior to this time human beings with diabetes had to use the insulin of pigs or cows, which is chemically different from that of human beings and has been shown to cause deleterious side effects with use over time. Many individuals developed immunity to these foreign insulins, and over a period of time the insulins became ineffective in lowering blood sugar. Animal insulins were also suspected of contributing to the development of complications of diabetes, such as kidney and eye disease. There were also cases of allergies to these animal insulins and concerns about what would happen in the case of warfare if a sufficient supply of insulin could not be maintained.

Biologists have identified the genes that contain the hereditary material for many diseases. This enables testing of DNA at any point in life for these detrimental genes. Embryos can be tested in the mother's uterus for such conditions as Huntington's chorea, Down syndrome, sickle cell anemia, as well as many other diseases. This often presents an ethical dilemma. For example, does a person want to be checked at age 15 to determine whether he or she will contract Huntington's chorea at age 35 in an effort to avoid passing the disease on to offspring? There is also a test currently available for alleles that have been shown to present a greater risk for Alzheimer's disease in about 10% of the population. Should insurance companies be allowed to require these tests before life insurance or health insurance will be granted to an individual (Andomo, 2002)?

Finally, the subject of *DNA fingerprinting* became a matter of public knowledge in the O. J. Simpson trial. Because each individual is genetically unique, the banding pattern that DNA exhibits when restricted segments of it are analyzed is unique to each individual, just as his or her fingerprints are. This technique is superior to blood typing in identifying parenthood, in which the tested person could be told with certainty only that he or she was not the parent.

THE HUMAN GENOME PROJECT

The Human Genome Project began in 1953 when Watson and Crick discovered the structure of DNA. The *genome* of a species is the sequencing of all DNA in the nucleus of each cell of that species. It matches the organism's bases (alanine, thymine, cytosine, and guanine). The human genome is a chain of 3.4 billion bases. The genome of two different human beings varies by one base per thousand on average (www.lexicon-biology.com/biology/definition_56.html). The draft sequence of the human genome was published in *Science* and *Nature* in February 2001. In October 2004, *Nature* published the completed human genome sequence. The sequencing, authored by the International Human Genome Consortium, was the result of work by more than 2,800 scientists in France, Germany, Japan, China, Great Britain, and the United States. The Human Genome Project was completed ahead of schedule and at substantially less expense than originally anticipated, a rare occurrence in funded research.

The completed human genome sequencing covers approximately 99% of the human genome and has precision of approximately 1 event/100,000 bases error, an accuracy rate of 99.999%. This precision level is 10 times the meticulousness of the initial goal. Currently, the human genome has 2.85 billion nucleotides, with only 341 gaps in sequencing. Completing these gaps will require new technological methods (see www.nature.com/nature/journal/v431/n7011/nature03001.html).

Researchers determined that the human genome contains only 20,000 to 25,000 protein-encoding genes, compared to 35,000 predicted in the 2001 draft. The number of protein-encoding genes in the human genome is dramatically lower than estimates of 50,000 to 100,000 genes made in biology texts of the 1990s. The human genome sequencing was deposited into free public databases for research use in April 2003. Continuous sequencing was greatly improved between 2001 and 2003. Genes are "stretches" of DNA that code for particular proteins (www.genome.gov/12513430/). Gene-to-gene high-quality sequencing is currently 475 times longer than the draft sequence published in 2001. These continuous DNA sequences tremendously aid researchers searching for genes and the adjacent DNA sequences that might control the gene's protein-coding activity. The great precision in this sequencing decreases time and cost of locating human genome areas having small and exceptional deviations associated with disease.

The number of gaps decreased from 500,000 in the 2001 draft sequence to 341 in the current human genome sequence. Segment duplication is present in 5.3% of the human genome, compared to 3% in the rat genome. Segment duplications afford observation of how humans and other animals have evolved and continue to evolve. The human Y chromosome has segment duplication over 25% of its length, making it an excellent specimen for study of this phenomenon. Because this duplication often occurs in the middle (centromere) or end (telomere) of the chromosome, scientists have proposed that these two chromosome areas serve as sources of genetic material to create new genes with new roles.

The human genome sequence has also given researchers information about gene birth and death. Since humans diverged from rodents about 75 million years ago, 1,000 new genes have materialized in the human genome. The majority of these new genes have roles in reproductive, immune, and olfactory processes. In contrast, 33 human genes have experienced one or more mutations that have resulted in cessation of role performance, or "death." Ten of these mutant genes appear to have had a role in olfactory reception. The

death of these genes provides a partial explanation of the poorer sense of smell in humans compared to rats and mice, in which these genes have full function.

In addition to human beings, plants, other animals, and bacteria have had their genomes completely sequenced. Humans, rats, and mice all have approximately the same gene density of 1 gene/100,000 bases, though these three animal species have different numbers of chromosomes (human 46, rat 42, mouse 40). All of these animals have approximately 30,000 bases as well. Humans have 2.9 billion base pairs, rats have 2.75 billion, and mice have 2.5 billion. In fact, most mammals, including humans, mice, dogs, cats, rabbits, monkeys, and apes, have approximately the same number of nucleotides in their genomes: 3 billion base pairs. This similarity of DNA composition suggests that mammals have about the same number of genes. This proposal is confirmed by the work of the Human Genome Project. The vast majority of mouse genes have a complement in the human genome.

There are social, ethical, and legal implications of the Human Genome Project. The Ethical, Legal, and Social Implications (ELSI) program was initiated in 1990 as a basic component of the Human Genome Project. The ELSI program was charged with recognizing and tackling genome research issues that affect families, individuals, and society. These issues have been addressed by ELSI, resulting in identification of four main areas of possible consequences of genomic research: (1) privacy and justice in use of genetic information, including the potential for genetic bias in employment and insurance; (2) incorporation of new genetic technologies, such as genetic testing, into clinical medical practice; (3) ethical issues surrounding the design and method of genetic research with human subjects, including informed consent; and (4) "education of health care professionals, policy makers, students, and the public" regarding genetics and the sophisticated issues that arise in genomic research (www.ghr.nlm.nih.gov/info=genomic_resesarch/show/elsi/).

The first gene therapy protocol was approved in 1981. Gene therapy has had a mixture of positive and negative outcomes. An interdisciplinary group composed a document in 1984 and 1985 with 110 questions posed to investigators as they pondered a decision regarding use of gene therapy on human patients. The document makes the reader aware of the realm of issues that arise when such a decision is considered. Examples of issues discussed included recipient selection, recipient confidentiality and privacy, other therapy options, and prospective benefits and harms. The document continues to serve as a checklist for contemporary gene therapy.

The early years of gene therapy had a very public review process, a crucial component of gene therapy's acceptance. Policy makers knew precisely what was occurring, investigator discussions were open to the public, and the public was privy to questions and had access to a list of approved gene therapy procedures. Since 1981 important information has been gleaned from gene therapy discussion and procedures. First, gene therapy was effectively differentiated from genetic engineering. The goal of *gene therapy* is cure of a genetic disease by placing normal genes in cells containing defective genes so the cell can produce the correct protein (www.lexicon-biology.com/biology/definition_65.html). *Genetic engineering*, also termed "bioengineering," is a general term referring to any change of an organism's genes for practical purposes (www.library.thinkquest.org/19697/data/OV1Def-b.html).

There are a variety of obstacles to overcome in gene therapy. Delivery tools for the gene have to be investigated. Genes need to be inserted into the body cells via *vectors*. Viruses are the most common vectors currently used because they have evolved a way to encapsulate their genetic material to place it in the human cell.

Researchers have also experimented with instituting a 47th chromosome into the human body. The chromosome would exist in parallel with the other 46 chromosomes without causing any change in these chromosomes, including mutation.

Another impediment to gene therapy is the lack of knowledge regarding which genes control which body functions. Most genetic diseases are caused by multiple genes. The environment also plays a role in the development of genetic diseases. The fact that two identical twins do not exhibit genetic diseases at the same rate is unquestionable evidence that the environment plays a role in genetic diseases (www.nih.gov/news/panelrep.html).

When a gene is defective, the protein that it codes does not function correctly. Investigators have also suggested that "human gene transfer" may be less biased and emotionally loaded than "human gene therapy," which implies benefit to the recipient. Third, the success of gene therapy was very modest in its first 8 years of use. Investigators have expressed regret and disappointment in the researchers and businesses that embellished these early results. Finally, the investigators determined that an optimum location would be required for a national public review body to scrutinize new biomedical technology (www.ornl.gov/sci/techresources/Human_Genome/publicat/hgn/v10n/16walter.shtml).

To date, human gene therapy has involved only somatic cells, not reproductive cells (sperm and egg cells). Somatic cells have already been altered in HIV-AIDS and advanced cancer patients in an attempt to enhance their immune systems. Any changes in the genetic structure of these cells would not be conveyed to offspring. Proposals have been made to perform genetic alteration of sperm and eggs, termed "germ line gene therapy." This type of gene therapy would result in an altered future population (www.ornl.gov/sci/techresources/Human_Genome/publicat/v10n/16walter.shtml). There is wide-ranging public consensus that human somatic cell gene therapy must not lead to germ-line transmission of genetic change. However, there are contrasting opinions about the ethics of performing gene therapy on egg and sperm cells. Carter (2002) has expressed the opinion that if germ-line gene therapy can be safely performed and is effective, the principle of beneficence will impose a moral duty on the medical profession to pursue this technology. In 2001, scientists confirmed the birth of 30 genetically changed babies. The mothers had received *ooplasmic transfer*, a procedure in which the mothers who had experienced problems with infertility had their egg cells injected with DNA from a woman who had not experienced infertility problems. The hope was to cause the mitochondria of the embryonic cells to be stronger and thus provide more energy for the developing baby. However, these babies had three parents, a father and two mothers, because they contained DNA from two women. This was an unintentional crossing of the germ-line boundary, but the offspring of these children will all have the mixed mitochondria DNA (genome.gsc.riken.go.jp/hgmis/medicine/genetherapy.html).

With the sequencing of the human genome virtually complete, a likely future proposal will be to locate defective genes that cause disease and suffering, remove them, and replace them with genes programmed to properly perform human physiological functions. This type of intervention is the only procedure currently possible to correct diseases that a mother passes on to her baby in the uterus that cause a malfunction in the mitochondria of the embryo's somatic cells. When the embryo consists of four cells, these cells could have their nuclei removed and replaced with the nuclei or a donor who does not have the defective gene. This procedure would consist of germ-line genetic intervention and reproductive cloning.

Gene therapy has the potential to propagate myriad legal questions. Gene therapy may evolve to a stage of being able to prevent, cure, or better treat previously inevitable,

permanent, and fatal diseases. If this potential is realized, there will be a huge demand for gene therapy. If the new therapy is more cost-effective than current treatments, major insurers will readily endorse it. However, if the gene therapy proves more expensive, as in the case where treatment was previously unavailable so no treatment costs were incurred, insurers will not be as enthusiastic.

Access to specific medical treatment has a history of being addressed by the court. An individual's decision to challenge an insurer's refusal to pay for a procedure such as gene therapy can take time and delay treatment. Insurers are understandably motivated to save money. Medicare, for example, does not pay for any treatments that are not "medically necessary." Experimental procedures that do not have a proven track record are not considered medically necessary.

Courts will be called on to settle arguments regarding ownership of intellectual property that will undoubtedly arise between scientists and research sponsors. There is also the potential for disputes between researchers and their subjects when scientific findings are used for financial gain. The California Supreme Court has ruled that patients need to be informed and have a right to negotiate a financial gain if they are participating in commercial research.

The courts will also be asked to determine standard of care when gene therapy is available to potentially alleviate or treat a genetic condition that was previously chronic. A patient can learn of gene therapy and demand to receive it when it is yet to be part of standard medical practice. Physicians and other health care providers can be sued for medical malpractice, particularly if they do not inform a patient of a procedure that can offer treatment of genetic disease when nothing is currently available in general medical practice. Genetic counselors are a group at increased risk for legal liability with the advancement of human gene therapy in terms of both apprising patients of potential technological solutions to inherited diseases and poor outcomes if these technological treatments are pursued.

Finally, the extent of parental authority to manipulate the genes of their children is an issue that may well come before the court. The judiciary may find itself deciding at what point parental rights to modify a child's genetic material ends. Should a parent be able to abort a child if he or she does not have the desired hair color, eye color, or sex? This question involves fundamental philosophical beliefs of our legal system, including equal opportunity and other basic rights.

Court decisions have shown great variance with respect to issues of injustice, making it hard to predict how the judicial system will handle such issues as the inequality of genetic enhancement. In some cases, the court has ignored discrimination; in other cases, the court has ruled that the more powerful party must act in the other party's best interest.

Finally, the courts will be asked to establish the standard of care to which individuals are expected to comply when they cause risk for each other. With the potential for genetic enhancement, should genetically enhanced human beings be held to the standard of an enhanced person in terms of responsibility, as opposed to the standard expected of a non-enhanced person (www.ornl.gov/sci/techresources/Human_Genome/publicat/judicature/article6.html)?

Use of DNA in the courts has been widely reported in the news media. Genetic identification is commonplace in criminal cases. Genetic proof of parenthood is routine in paternity cases. Genetic evidence is now inundating the court, claiming to support both medical and nonmedical assertions. Questions such as "Should long-term care insurance be denied to a person with a family history of Alzheimer's disease?" and "Should a woman with a family history of breast cancer be denied a home mortgage?" are commonplace in this era of genetic

testing (www.ornl.gov/sci/techresourcees/Human_Genome/courts/courts.shtml). This type of scientific evidence was responsible for cessation of the death penalty in Illinois when it was determined that a significant number of individuals had been erroneously convicted and punished for murders that they did not commit. In 1999, Attorney General Janet Reno asked the Legal Issues Working Group of the Human Genome Project to ponder several "profound" issues of privacy that had arisen with the use of DNA evidence in the legal system.

One of these issues was preservation of DNA samples after testing is concluded. The attorney general expressed concern that as DNA technology evolved, retained samples would be available for tests to be performed that were not originally intended. Another issue she raised was the right to test arrested individuals versus convicted offenders. While considering this dilemma, the Legal Issues Working Group provisionally advised that the Department of Justice should abstain from advocating a policy supporting DNA sampling of arrestees unless three conditions were met: (1) The convicted offender databases backlog was eradicated; (2) significant resources were provided for examination of nonsuspects; and (3) enough money was allocated for collection and examination of DNA samples from arrested individuals. The major concern was that laboratories were being overworked to provide DNA analysis for convicted offenders, a significantly smaller group than all of those arrested!

The final concern expressed by the attorney general was the issue of the statute of limitation for filing charges as well as appeals. With the ability of DNA testing to investigate crimes that occurred beyond the statutes of limitation in many states, statutes of limitation, which were arbitrarily assigned in many states prior to the advent of DNA technology, may now be limiting factors to victims who could otherwise have had their cases solved (www.ornl.goov/sci/techresources/Human_Genome/publicat/juddicature/article9.html).

CONCLUSION

Genetics is a very complex topic, which has been consolidated into a minimal number of pages in this chapter. Many topics, such as regulation of gene expression, extensive discussion of mutation, and the effect of genes on the immune system, are beyond the scope of this chapter. Further reading in these areas is encouraged for a more complete understanding of this very intricate and ethically loaded topic. Technological advances in genetic analysis and possible genetic manipulation have not been matched by corresponding advances in human wisdom regarding how to apply these developments. Knowledge of human genetics has great potential to improve the human condition, as well as great potential to be injurious. Wielding this two-edged sword requires highly informed social work professionals who are not only armed with technical knowledge but are also well trained in the areas of human morality and ethical conduct.

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Chapter 12

ECOSYSTEMS THEORY

Mark A. Mattaini

The purpose of social work is to improve the quality of transactions among clients and their physical and social environments, in ways that are consistent with social justice (Mattaini & Lowery, 2007). This may seem a simple statement, but the reality is the contrary. Clients include individual persons, families of many diverse forms, neighborhoods, formed and natural groups, organizations and associations of many kinds, communities, even nations. Environments include the built and natural environment; institutions and their policies; personal, collective, and structural oppression; and human, social, ecological, spiritual, and physical assets and needs. Institutions include the education, justice, economic, governmental, and religious systems. The transactions among all of these are an additional order of magnitude more complex than transactions among individuals. Social justice is increasingly recognized as the organizing value of the social work profession (Lowery, 2007; Marsh, 2005). Social justice is only actualized, however, in these interlocking patterns of transactions, because justice is active: It can be realized (made real) only in action (Young, 1990).

Client experiences may be concurrently affected by many of these variables, and the impacts may be as critical as life or death, or dramatic changes in the potential for a fulfilling, and fully human, life. There is, therefore, no more important profession than social work—and none more complex. It is not surprising that both students and professionals can be drawn to oversimplifications of the work to be done, but the history of the profession convincingly demonstrates that neglecting critical transactional realities leads to poor outcomes for clients. This reality has critical ethical implications.

Social work involves, at its core, work with interconnected transactional networks. The ecosystems perspective has been almost universally accepted in social work because it provides a framework for thinking about and understanding such networks in their complexity. This strategy for viewing the world can at first seem rather abstract, however, so it may be useful to explore why it was developed and has been so widely adopted.

THE ECOSYSTEMS PERSPECTIVE IN SOCIAL WORK

Origins of the Perspective

Beginning with Mary Richmond (1917), social work theoreticians have understood that both person and environment are important for understanding people's lives. Although the

Portions of this work have been informed by work done in collaboration with Carol H. Meyer during the 1990s. Many of the most important insights here are probably originally hers.

person-in-environment (psychosocial) concept was defined and redefined throughout the twentieth century (e.g., Hamilton, 1951; Hollis, 1972; Richmond, 1917; Sheffield, 1937), its hyphenated structure nonetheless consistently failed to draw balanced attention to each side of the hyphen. Practitioners have often focused primarily on one side or the other, and as a result have failed to note key variables affecting the lives of their clients. Often, practitioners have selected a focus that was compatible with their preferences, largely ignoring either person or environment—usually the environment (Kemp, Whittaker, & Tracy, 1997). Practitioners' preferences have commonly led them to avoid environmental interventions, instead attempting to change individual people amputated from their transactional realities. No doubt a desire among many to achieve and maintain professional status as psychotherapists equivalent to psychologists and psychiatrists played a part. Also, however, there is a more extensive knowledge base to draw from regarding individuals (and to some extent families). The knowledge base regarding environments—and in particular, transactions between people and environments—is much less thoroughly developed.

This issue remains a serious disciplinary concern. For example, research by Rosen and Livne (1992) demonstrated that social workers tend to focus particularly on intrapersonal issues at the expense of transactional problems with significant environmental roots. Nurius, Kemp, and Gibson (1999) similarly found that workers often do not attend to environmental variables unless they are specifically prompted to do so. Lindsey (1998) found that social workers often do not recognize shortages of financial resources, housing assistance, social support, or substance abuse services as significant barriers to restabilizing homeless families and may also underestimate the importance of battering.

Looking back on this extensive history of the failure of the person-in-environment and psychosocial constructs, Meyer and Mattaini (2002, p. 4) note:

> Thus, the psychosocial purposes of social work were being eroded, and the person-in-environment construct did not appear to be helping. . . . Beyond these consequences for direct practice, the severe social upheaval of the 1960s and 1970s brought awakened populations calling for social services. Previously noticed mainly in public services, poor people, members of ethnic and racial minority groups, women, people with severe social problems, and those with new (or newly acknowledged) lifestyles demanded help from social workers in the voluntary sector. Problems such as child abuse, family violence, AIDS, and homelessness caused all professions to redefine their approaches to account for the evident psychosocial features of these problems. By 1970 it became clear that it was essential to review and rethink the person-in-environment construct so that social workers would find it more possible to intervene in a more transactional fashion in cases that were clearly (nonhyphenated) psychosocial events. The "invented" construct was called "the ecosystems perspective."

The Rational for Ecosystems in Social Work

A fundamental function in all professional practice, including social work, is individualizing the case, for if all cases are to be treated in the same way, there is no need for professional judgment or professional training; simple rules consistently applied by paraprofessionals would do (Meyer, 1993). In social work, this individualizing process is required for practice with client systems of all sizes, including persons, families, groups, and communities. No client system, however, can be understood apart from its defining social context. The ecosystems perspective is designed to ensure that attention is paid to

the case in its full transactional complexity, reducing the danger of artificially amputating the client system from its environment in assessment and intervention. The perspective can guide the practitioner in a partnership of shared power with the client to see connectedness and to eliminate the hyphen between the person and his or her environment—to recognize the deeply interconnected field of events into which person and environment are seamlessly interwoven.

The purpose of any perspective, including ecosystems, is to provide guidance in determining what to look at, what needs to be examined, what the boundaries of the case are, and how case phenomena are transactionally functioning. The ecosystems perspective should be understood not as a practice model (which tells one what to do), but as a framework that tells one how to look at cases—a process that must happen *prior* to deciding what to do. Once case realities are clarified by using ecosystems as a structured assessment guide for understanding the transactional realities present in the case, a social worker then draws on practice models to suggest what can be done to change the identified patterns. As noted, the data clearly indicate that without such a perspective social workers are likely to notice dimensions of the case that tend to resonate with their own cognitive biases and to neglect others (Mattaini, 1993a, p. 250). As will become clear subsequently, however, things are not so simple; in important ways, theoretical models of human and other system behavior must be copresent with the ecosystems perspective to achieve coherence. More background, however, is needed before we turn to that question.

Systemic versus Linear Perspectives

Systemic thinking, as in the ecosystems perspective, enables the practitioner to notice the transactional realities present in a case and therefore to consider interventions anywhere in the transactional field. Linear thinking oversimplifies many case situations, leading to limited understanding and an artificially narrow range of recognized possibilities. As will be discussed in detail later, advances in systems theories and the emergence of complexity theory have shifted the perspective in many disciplines—including the hard sciences—more and more toward systemic views and away from looking for simple causation (Warren, Franklin, & Streeter, 1998). (Interestingly, and importantly, this shift is bringing Western science increasingly in line with indigenous views worldwide; Ross, 2006.) The change is epistemological; it involves a change in ways of seeing and knowing.

Linear thinking can be comforting, in that it suggests greater certainty; simple understandings of causation may lead to simple interventions or to (premature) closure regarding possibilities. In systems thinking, by contrast, causes are recognized as potentially multiple, reciprocal, and often contingent on events and conditions that are widely dispersed in the transactional field. Many such conditions and events may be involved in maintaining the current situation, and many may offer potential for intervention. Clearly this is a more challenging view and does not have the same air of certainty. Yet if linear thinking leads to conclusions that seem certain but are false, it must be discarded, and this appears to be the case in many areas of social work. This is not to say that causation is never simple, but given realities of the world with which social work deals, simplicity should not be assumed. Systems thinking is intended to recognize and accommodate multiplicity, complexity, and uncertainty, and these appear to be characteristic of client realities, both historically and in the twenty-first century.

THE CONCEPTUAL ROOTS OF THE ECOSYSTEMS PERSPECTIVE

The ecosystems perspective in social work and related fields (Auerswald, 1968; Meyer, 1976) emerged from two conceptual frameworks drawn from the sciences: ecology (e.g., DuBos, 1972) and general systems theory (GST; especially from the work of von Bertalanffy, 1968); both clearly are rooted in varieties of systems theory. In the early and mid-twentieth century, a variety of thinkers and scientists were moving toward systems thinking and systems theories. Capra (1996) describes a number of examples, including the ecologist Odum (1953), who tried to clarify ecological phenomena by using flow diagrams; Bogdanov's *tektology*, which sought "to arrive at a systematic formulation of the principles of organization operating in living and nonliving systems" (Capra, 1996, p. 44); and Cannon's (1939) concept of systemic homeostasis.

For social work, and for the field of systems theory in general, however, von Bertalanffy's work was clearly seminal. Von Bertalanffy's (1968, p. 86) aim was breathtakingly ambitious: the "Unity of Science"! He wrote:

> The fact that certain principles apply to systems in general, irrespective of the nature of the systems and of the entities concerned, explains that corresponding conceptions and laws appear independently in different fields of science, causing the remarkable parallelism in their modern development. Thus, concepts such as wholeness and sum, mechanization, centralization, hierarchical order, stationary and steady states, equifinality, etc., are found in different fields of natural science, as well as in psychology and sociology. . . . Reality, in the modern conception, appears as a tremendous hierarchical order of organized entities, leading, in a superposition of many levels, from physical and chemical to biological and sociological systems. Unity of Science is granted, not by a utopian reduction of all sciences to physics and chemistry, but by the structural uniformities of the different levels of reality. (pp. 86–87)

The shift from traditional thinking in this statement, even in the sciences, is profound. A critical point is that von Bertalanffy was not suggesting in his *general* system *theory* (later usually referred to as general *systems* theory) some sort of metaphysical or metaphoric project (though the term "ecosystems" has sometimes been used this way in social work), but rather a deeply scientific perspective for attempting to clarify and model the complexities of dynamic realities.

Similarly, ecology is a science, a division of biology. This science is concerned with the adaptive fit of organisms and their environments and the processes by which they achieve or fail to achieve a dynamic equilibrium that results in survival—and sometimes in flourishing. One of the founders of ecology, Marston Bates (1950/1990, p. 7), described "natural history" (his term for ecology, which only later became the standard terminology) as "the study of life at the level of the individual—of what plants and animals do, how they react to each other and their environment, how they are organized into larger groupings like populations and communities." Ever since, ecological writings (e.g., Wilson, 1992) have emphasized the search for scientific principles to understand such phenomena as diversity and survival at the interfaces of individual, population, and environment.

Ecosystems: Science or Metaphor?

Like GST, ecology is a scientific discipline. The integration of GST and ecology in social work that occurs in the ecosystems perspective has not always been considered in scientific

terms, however. For example, the *life model* of social work practice uses ecology (and in some cases ecosystems) in an unequivocally and explicitly metaphoric manner (Germain & Gitterman, 1996). Ecological terms such as *habitat, niche, adaptation*, and *pollution*, used extensively in the life model, are understood as heuristic metaphors rather than in scientific terms. Germain and Gitterman clearly recognize, however, that humans are animals living in transaction with the natural, built, and social environments, and ecological concepts even when used heuristically have proven practically helpful in communicating this embeddedness to students and practitioners.

Carol Meyer (1976, 1983, 1988, 1993, 1995), probably the primary architect of the ecosystems perspective in social work, was less clear on the extent to which the scientific origins of ecosystems should be maintained in the profession. She was a strong supporter of the development of research-grounded refinements of the perspective and explicitly rejected ecosystems as exclusively metaphoric (Meyer, personal communication, 1987); instead, she emphasized its use as an epistemological framework for understanding. As will become clear later in this chapter, the epistemic utility of ecosystems should not be lightly dismissed. I will also argue that the epistemic utility of ecosystems as a way of understanding phenomena of interest to social work *scientifically*, however, has been underemphasized.

Ecological Theory

Ecology, a subdiscipline of biology, is the science of adaptedness. Ecological investigations focus on mutual adaptations between the organism and the environment, with recognition that such adaptation is often (although not always) mutual. In ecological terms, in some cases an organism (including persons) simply *adjust* to the environment; the term "adaptation" is often reserved for those situations where both organism and environment change in complementary and transactional ways. According to Germain and Bloom (1999, p. 12), "There is a general tendency for each party to this interaction to seek a goodness of fit or positive *adaptedness* vis-à-vis themselves and the other party." *Maladaptation* reflects problems in this fit and is regarded as the target of intervention in ecological social work.

While GST pays considerable attention to *interactions* between multiple elements, an ecological view understands interactions somewhat differently, as dynamically transactional and not simply as involving multiple elements having impacts on each other at various moments. Intervention, in the ecological view, may not be with the person, nor with the environment, but *with the transaction itself* (although it may begin at a single point in the field). Note that this understanding is different from that of Meyer (1983, p. 25), who indicated that "in the end, interventions have to be directed to the person or environment." Within the ecological model of social work, best elaborated by Carel Germain and coauthors (e.g., Germain & Bloom, 1999; Germain & Gitterman, 1996) *person:environment fit* is regarded as the fundamental unit of analysis for an applied social science—not the person, not the group, not the environment, however understood. This is a bold and intriguing assertion that has been difficult to operationalize (which may be why Meyer resisted it). I suggest later in this chapter, however, that these understandings of fit, and particularly of transaction, take us a step closer to a genuinely scientific understanding of ecosystems for social work.

Niche and Habitat

Among ecological concepts that have been emphasized in social work are those of *social niche* and *habitat*. "The social niche is used as a metaphor for the status or social position

occupied by particular persons in the social structure of a community" (Germain & Bloom, 1999, p. 64). Such niches may be *enabling*, offering opportunities for positive growth and development, or *entrapping*, failing to provide for basic human needs and leaving few routes to escape (Sullivan & Rapp, 2006). *Habitat* in ecological science refers to the physical and geographic surroundings in which an organism lives; metaphorically in social work it is typically used to refer to "physical and social settings within a cultural context" (Germain & Gitterman, 1996, p. 20). Ecological practice may involve targeting dimensions of niche and habitat, often emphasizing considerations of stress and coping, vulnerability and oppression, and social and technological "pollution" that may be transactionally structured into niches or present in the habitat.

Germain and Bloom (1999) and Germain and Gitterman (1996) provide comprehensive discussions of the applications of ecological thinking to social work practice, including rich case examples. Important to note here, however, is that these recent statements of the thought of Germain and her collaborators clarify that an ecological view does not suggest a sanitizing, Pollyana-esque view of social and physical realities in which somehow everything and everyone inevitably finds a healthy balance of adaptedness and goodness of fit. Their recent emphasis on ecological concepts like predation and pollution for understanding issues of oppression and social injustice has helped begin to address that concern.

Ecofeminists in social work take these concerns a step further and concurrently may move ecological thought in social work one step closer to ecological science. (Depending how the approach is interpreted, however, it may also draw the profession further from science.) As the name suggests, ecofeminism emerged from the intersection of ecological science and feminist thought (Besthorn & McMillen, 2002; Spretnak, 1990). Human beings are recognized as simply part of the natural ecosystem, and all oppressive power structures (e.g., sexism and the destruction of the natural environment) are seen as interrelated. Dominance hierarchies (e.g., man over woman, human over nature, human over other species) are viewed as central to all ecological problems; ecofeminism calls for "wild justice" to challenge those hierarchies. The social justice implications of ecofeminism are important; so, potentially, may be the recognition of human life as genuinely—not metaphorically—part of the natural world, which may move toward a more integrated scientific perspective on all of human life. Some versions of ecofeminist thought challenge the utility of scientific method for understanding the world; ecologists, however, and ecologically minded social workers have found science a critical tool.

General Systems Theory

According to von Bertalanffy (1968, p. 32):

> There exist models, principles, and laws that apply to generalized systems or their subclasses, irrespective of their particular kind, the nature of their component elements, and the relations or "forces" between them. It seems legitimate to ask for a theory, not of systems of a more or less special kind, but of universal principles applying to systems in general.

This is the definition of GST, a theory of universal principles that are understood to apply to all transactional systems, living and nonliving.

All organized systems, as understood by GST and more recent varieties of related systems theories, are characterized by a number of common properties. Following Meyer

(1988), these include common structural features, the influences of contextual variables, and hierarchical organization.

Structural Dimensions

Systems have *boundaries;* as discussed later, living systems often actually create their own boundaries. These boundaries can be reflected in physical space, as in a classroom in which the class is a system. Or they can be drawn conceptually, as the social worker identifies salient transactional patterns that affect the client in systemic ways. (Systems have patterned relationships; students meet regularly in classrooms, for example. In contrast, if an accident happens on the street, the people who gather to watch it are not a system but a random aggregate.) A physical boundary is usually self-evident; a classroom or a school building, for example, has walls. Conceptual boundaries are identified by tracing transactional patterns. A family has a boundary, for example; some people are in the family, and others are not. Who is, and who is not, a member of the family system may be verbally defined by participants differently than it might be defined by tracing patterns of transactions. Different definitions in this case may both be correct, but for different purposes.

If the social worker collaborates with the client in a dynamic of shared power, the clarification of boundaries and thereby the definition of the case becomes a co-creative act. In some kinds of practice, the social worker attempts to become a temporary part of the client system. Minuchin (1974), for example, emphasizes temporarily "joining" the family as a critical step in family treatment, a position from which one can have an impact "from the inside." Although this usage is somewhat metaphoric, in highly engaged forms of family treatment like Minuchin's, the therapist may in fact become a central source and nexus of transactions within the family for a period of time.

For living systems to survive, their boundaries must to some extent be open, or *permeable*. Living systems must at a minimum be able to import energy from the environment and to eliminate waste products; in many cases there is much more exchange than this, as discussed under the influence of contextual variables. Such exchange enables the system to grow and permits its elements to differentiate and develop. Closed (self-contained) systems cannot survive; they run down through a process of entropy. All systems move toward disorganization or death without regular importation of energy. Systems that import more energy from the environment than they expend are displaying what is termed *negative entropy* (which, note, is not a bad thing). They can then move toward greater complexity through *elaboration* and *differentiation*.

Systemic survival requires substantial structural stability. Systems therefore tend to preserve their structure (persistent patterns among elements and transactions). For example, in family therapy, the members of the parental subsystem usually do not change, although the parents may come to behave differently. Within this basic structure, however, living systems are in continuing dynamic process. A living system in which all transactions stop ceases to live. Stable systems tend to resist extreme change and to maintain a *steady state*. But because living systems are *dissipative structures* that disappear if all processes stop, the steady state must be a dynamic balance, not a static equilibrium.

By definition, systems are characterized by dynamic *interconnectedness* and *reciprocity*. An action by one member of the system will often (but not always) have an effect on other members, and actions by other members are likely to have an impact on the first. Active interventions in one or another aspect of the case always resonate through other elements of the case in some way. These reverberating (and in some cases amplifying) effects have great

practical implications because the social worker and client, working together, can sometimes influence relatively distal variables by intervening in more available or accessible areas.

In closed systems, the final state is determined by the initial conditions. If one knows enough about the initial state of a machine that has stopped, one can predict its state 10 minutes after it has been turned on; the state of the solar system centuries from now can be predicted with great accuracy. This is usually not true of living systems, however. Because of the complexities of transactions within the system and exchanges outside the system, many eventual outcomes are possible given any particular beginning state (*multifinality*). Similarly, it is possible to reach a particular outcome through many different transactional paths (*equifinality*).

These factors can be both advantageous and challenging in practice. A childhood history of trauma may, but need not, lead to lifelong depression (multifinality)—a hopeful perspective compared to traditional linear views that suggest that the effects of childhood trauma could not be substantially moderated by later events. On the other hand, because of interactions among many conditions and events throughout the transactional field, using the same intervention strategy will not lead to the same outcome in every case, which emphasizes the need for careful case monitoring. For example, there are several evidence-based ways to work with a person with significant depression (equifinality), so if one is blocked, another might be tried. Given the enormous individual variation in the outcomes of any particular treatment approach, practice evaluation remains critical even when using an intervention with strong empirical support. Multifinality and equifinality are not abstract possibilities; it is clear that they are characteristic of social work in any area in which complex variables are in play.

Contextual Factors

As noted earlier, all living systems require regular exchanges with the larger environment. (Some varieties of systems theory, especially those dealing with organizations that are designed to generate physical or behavioral products, emphasize inputs, outputs, and throughputs in discussing these exchanges; e.g., M. E. Malott, 2003.) Using the individual as the focal system, Bronfenbrenner (1979) discusses contextual factors in terms of *microsystemic* factors (family, school, work, peers, etc.), *mesosystemic* interactions (transactions among microsystemic elements), *exosystemic* factors (extended family, mass media, and other systems of which the individual is not a part but that influence individuals and microsystems), and the macrosystem (larger sociocultural forces). In some formulations, Bronfenbrenner also discussed the *chronosystem*, which roughly encompassed the place of time and sociohistorical conditions.

The individual or family system, for example, can be powerfully influenced by the very immediate environment (the home, each other, television; Saleebey, 2006), as well as by economic forces, social agencies, national social welfare policies, and many contextual variables, and these influences shift over time. Some transactions with environmental forces can nourish, and others can overwhelm the resilience of the system. A functioning system maintains its balance through rich but manageable transactions with the environment.

Hierarchy

General systems theory clarifies that any system may be viewed simultaneously as the *focal system* (the one being considered primary at the moment, say, the family in family

therapy), as a *subsystem* of a larger system (the family as a subsystem of the community), and as a *suprasystem* that is constituted of other systems (the family is a suprasystem, with individuals as constituents). Any system is therefore a *holon*, simultaneously a whole and a part (Anderson & Carter, 1999). It is therefore possible to shift one's frame of reference from one level to another as such shifts are useful. This is precisely what occurred with the emergence of family therapy. The family had previously been considered primarily as simply background context for work with the individual as focal system. With the coming of family therapy, the family became the primary focus of attention, with individuals as members (and subsets of individuals) seen as subsystems. Salvador Minuchin (1974), for example, talked about the parental subsystem, the couple subsystem (sometimes the same people as those constituting the parental subsystem, but looked at from a different functional perspective), and the sibling subsystem.

Recent Advances in Systems Thought

As in other sciences, knowledge in ecological systems theory continues to advance. Several principles with direct application to social work emerge from recent systemic research and theory, often described as *dynamic* (or *dynamical*) *systems theory*. Important emerging concepts from this work include the following:

- An understanding emerging from modern physics that networks of transactional relationships, rather than objects, should be regarded as the basic elements of reality.
- An appreciation of the central place of self-organization in those networks.
- A recognition that diversity is critical to stability and survival in ecological systems.
- An acknowledgment that chaos and complexity theory may in the future make unique contributions to our understanding of systems with potential utility for applied work.

The Primacy of Relationships

Contemporary research and theory in physics and biology suggest that reality is best thought of not as a collection of objects, but as an "inseparable web of relationships" (Capra, 1996, p. 37). The relational components of this web are *patterns of transactional events;* objects (including organisms) are more like emergent consequences of those transactions, and have reality only in networks of relationships. Cells, organisms, and ecosystems are all organized and defined by such network patterns. The hierarchical organization of systems described in GST (subsystems, focal systems, suprasystems) emerges from levels of networks. "Members of an ecological community are interconnected in a vast and intricate network of relationships, the web of life. They derive their essential properties and, in fact, their very existence from their relationships to other things" (p. 298). A neighborhood, then, *is* the relationships among families, residents, businesses, churches, and other elements present within a geographic area, along with their larger context; a family *is* the relationships among members.

The work of social work is action taken to influence those transactional webs of relationship. The social worker is part of the web, the client is part of the web, and the work they do together will be supported, opposed, or both by transactions elsewhere in the web. A comparison with related American Indian thinking is useful here; from certain Native

perspectives, every action taken can be viewed as strengthening or damaging the web of life, or in some cases some of each (Lowery & Mattaini, 2001). This is, at its heart, a spiritual recognition; science and spirit, however, need not be viewed as antagonistic, and may be ultimately indistinguishable. The world-renowned biologist Ursula Goodenough (1998) elaborates a view of life (religious naturalism) in her book, *The Sacred Depths of Nature*, which reviews scientific findings from cosmology to microbiology. This tour of contemporary scientific knowledge in all its complexity and connectedness leads her to the deepest spiritual experiences of awe and reverence and provides ultimate meaning:

> And so, I profess my Faith. For me, the existence of all this complexity and awareness and intent and beauty, and my ability to apprehend it, serves as the ultimate meaning and the ultimate value. The continuation of life reaches around, grabs its own tail, and forms a sacred circle that requires no further justification, no Creator, no superordinate meaning of meaning, no purpose other than that the continuation continue until the sun collapses or the final meteor collides. I confess a credo of continuation. (p. 171)

Self-Organizing Networks

Recent systems work has also expanded our understanding of the structure and boundaries of living, self-organizing networks (Hudson, 2000). These *autopoietic* networks are literally "self-making": They dynamically organize and construct themselves without guidance from outside. The dynamic patterns of transactions that constitute an autopoietic system are organized *by the network itself* and construct their own boundaries, because the boundary of such a network is a natural result of how it functions. Such natural boundaries (e.g., that of a family or a network of fictive kin) need to be honored in practice, because they are real. They cannot simply be artificially invented by the practitioner; should the practitioner attempt to do so, natural homeostatic processes would likely neutralize the impact of the work being done.

Autopoietic systems couple with their contextual environments by means of transactions across the boundary. How any particular network responds to an influence from outside is determined by the state and structure of the network. For example, two economically stressed families may both live in a dangerous, high-crime neighborhood that offers little access to social capital or support. One family may respond by simply dissipating, with its diffuse boundaries eventually dissolving and members lost to the street. Another, however, may demonstrate great resilience, taking collective steps to couple with healthier networks (churches and youth organizations, for example) while closing its boundaries to negative influences. Thus the enduring patterns of transactions within each family are key determinants of outcome, which cannot be predicted from knowing only about the impinging environment. (Note, however, that the resilience literature indicates that progressively fewer families can survive in healthy ways as environmental stressors increase, and that survival will often involve substantial costs, even for the most resilient; Benard, 2006.)

The Role of Diversity

Ecological science has established that diversity is key to ecosystemic balance: "A diverse ecosystem will also be resilient. . . . The more complex the network is, the more complex its pattern of interconnections, the more resilient it will be" (Capra, 1996, p. 303). Racism, heterosexism, ageism, sexism, and many other forms of oppression and discrimination

result in unearned privilege for some, as well as severe lack of opportunity, violations of human rights, and even loss of life for others. Acts of prejudice and bias are common toward those who are different from oneself and are associated with physical, emotional, and structural violence of many kinds, contributing to a socially toxic environment for all.

In addition, however, ecological science suggests that variation is critical to survival, and thus that respect and appreciation for those different from oneself and one's group are adaptive and critically important at a sociocultural level. Each enduring cultural group has developed unique ways to survive in the world, each adapted to different environmental and social conditions. As a result, in many cases one cultural group struggling with an apparently intractable social problem can turn to others to find solutions that do not emerge within their own matrix of cultural practices. For example, the justice systems in the United States and Russia are, from most perspectives, hopelessly broken (see, e.g., Farmer, 2003). Escalating resources are dedicated to those systems, and yet enormous amounts of potentially productive human resources remain locked away—with other enormous amounts of human resources required to keep them that way. There is no obvious route out of this pattern within these systems, because they are deeply grounded in existing cultural values and economic arrangements. Other cultures around the world, however, have found quite different ways to deal with issues of crime and justice, and there is strong evidence that some of those practices can be successfully integrated into cultures that have found no solutions internally (Ross, 2006). Similarly, women in some parts of the world have begun to find ways to challenge sexist oppression. In part as a result of the globalization of communication, increasingly those practices are being adopted and adapted by women in other cultures (Lowery, 2007).

The analogy with biological diversity is evident. Because particular cultural practices have proven adaptive under differing conditions, the diversity of these practices is a source of potentially valuable variations. Maintaining cultural diversity preserves banks of potentially useful possibilities for responding to changing circumstances. Unfortunately, the practices of cultures quite different from one's own often appear peculiar, and sometimes even primitive and shameful. In an increasingly globalized world, however, recognition of the crucial importance of diversity may prove central to the future of the human species. Some practices—for example, those inconsistent with universal human rights—should be abandoned (although cross-cultural perspectives on human rights have also not received adequate attention, and there remain serious challenges in that area). But the richness of cultural and human diversity is a primary resource for human survival.

Chaos and Complexity Theories

Two related advances in dynamic systems theory that may ultimately prove important to social work are chaos theory and complexity theory (Warren, Franklin, & Streeter, 1998; see also Robbins, Chatterjee, & Canda, 2006). Both draw on the emerging science of nonlinear dynamics, which involves moving not only beyond linear causation (as all systems theory does), but also in many cases beyond determinate prediction. This work attempts to model the nonlinear dynamics of such processes as family functioning, in which relationships often do not change along a smooth curve (a bit better, a bit better yet, a bit better yet), but rather at some point a threshold may be reached, and sudden change for better or worse emerges.

Several central concepts from chaos and complexity theory may be metaphorically useful for social work. *Deterministic chaos,* for example, "arises within feedback systems, never precisely repeating itself, but staying within a certain range of possibilities" (Warren et al., 1998, p. 361). Such a pattern may in fact be characteristic of many social systems in which it is astonishingly difficult (or impossible) to know exactly what will happen at any moment due to sensitive dependence on initial conditions and complex feedback networks, but the general limits of what is likely to happen may be predictable. Complexity theory also suggests that the concepts of balance and stability commonly used in traditional systems theory have been overemphasized. In fact, many complex systems operate far from equilibrium (or "at the edge of chaos"), so that they may become more and more complex, often at rapidly accelerating rates; creative variation and change may be most likely under such conditions.

Chaos and complexity theories are at their heart deeply mathematical and are only beginning to be studied scientifically in the case of social phenomena. It is therefore not yet possible to apply these concepts rigorously in social work practice. Some may be heuristically useful for social work (many of these concepts have already been integrated into the more recent heuristic statements of ecosystems to a considerable extent); their rigorous scientific application to social work, however, awaits substantial further advances in the basic science.

EVALUATING THE ECOSYSTEMS PERSPECTIVE

> The eco-systems perspective . . . is not a model, with prescriptions for addressing cases; it does not draw from a particular theory of personality. It is often misunderstood as being a treatment model, however. When it fails to live up to people's false expectations, it is denigrated as being "too abstract for practitioners to use," "too nonspecific for the case at hand," and "nonclinical in its orientation." . . . Its major claim is that it is a model for assessment, and because it can encompass *any* treatment model, it has the potential for serving as a unifying perspective in social work practice (Meyer, 1983). Given the proliferation of disparate treatment models, this unifying idea seems vital for the future coherence of practice in social work. (Meyer, 1988, p. 275)

Although the ecosystems perspective has been almost universally accepted in social work over the past 3 decades, some critiques (e.g., Wakefield, 1996a, 1996b) draw the profession's attention to the perspective's inevitable limitations and have also been helpful in sharpening ecosystemic thought. No single perspective is adequate for work as complex as social work (Mattaini & Lowery, 2007). Other frameworks, such as the strengths and human rights perspectives, clearly are also useful for practice. Perspectives (and practice theories) are valuable to the extent that they contribute to positive outcomes. It is not surprising that no single perspective, theory, or worldview can justifiably be regarded as universally best; this is simply another example of the importance of diversity for survival of any living system, including the social work profession.

The issue of level of abstraction raised in the extract from Meyer (1988) is real; an ecosystemic examination of a social work case does involve substantial complexity, and the perspective probably cannot be meaningfully applied without a grounding in substantive theory/ies. A perspective is likely to be useful only if it can be grounded in the concrete.

Practitioners are only likely to notice transactions that are consistent with their own personal practice models (Mullen, 1983), for example. And yet, without such a perspective, substantive knowledge and theory may lead one astray, as the multiple studies demonstrating typical lack of attention to environmental factors demonstrate. As will be discussed subsequently, graphic models and simulations have proven useful for concretizing the otherwise potentially highly abstract perspective.

Wakefield (1996a, 1996b) raised several important questions about the utility of the ecosystems perspective. Only some of those need be addressed here. In particular, I will not discuss in depth his efforts to establish minimal distributive justice—rather than achieving adaptive person:environment fit consistent with social justice, as emphasized by ecosystems—as social work's professional purpose and organizing value (see also Wakefield, 1988, 1996c). Rawlsian minimal distributive justice as elaborated by Wakefield, which constitutes an important conceptual underpinning for contemporary neoliberal thought, has grave limitations as a basis for work toward social justice (Alejandro, 1998; Worku, 1997). In particular, efforts to examine rights, opportunities, self-respect and self-esteem, mental health, and in particular power using a distributive paradigm are deeply unpersuasive (Young, 1990). Wakefield does, however, raise several other important substantive issues related to ecosystems; some of his arguments are clearly correct. (See also Gitterman, 1996, for further response to Wakefield.)

Connectedness and the Transactional Focus

Wakefield (1996a, p. 276) questions, first of all, the ecosystems assertion of connectedness, for example as found in Meyer (1988):

> The underlying philosophical position of the eco-systems perspective is that the person is connected to others, as well as to the social institutions, cultural forces, and the physical space that make up his or her environment. Although there is no explicit assumption about the substantive nature of things or people, there is, in this perspective, heavy reliance upon the person's *connectedness*.

Wakefield suggests that the connectedness claim is trivial without a "substantive account of the nature of the hypothesized connections" (p. 10). He is referring here, as I understand it, to domain-specific theory (e.g., various personality theories, social learning theory) as well as empirically grounded knowledge about the phenomenon or issue being examined.

With some qualifications, this assertion, I believe, is true. One cannot apply the ecosystems perspective without substantive understandings of how people and the world work (from theory, practice models, and research). And yet the evidence suggests that, even with all of this but without the perspective, social workers do not in fact examine the transactional field with adequate breadth to notice critical connections. In other words, the perspective can be helpful in drawing attention to connectedness regardless of practice approach, but not without a practice approach.

Wakefield (1996a) also provides several examples where he believes the connectedness construct is potentially distorting and misguided, but some of his examples, if examined in their full complexity, appear in fact to support the assertion of connectedness. For example, he suggests it would be problematic to assert that "institutionalized mental patients' symptoms are due to feedback from the asylum's social structure" (p. 12). While there is little

doubt that severe mental illness usually has biological roots, we have available nearly 5 decades of research that indicate that the institutional environment can be a powerful factor in shaping and maintaining patients' symptoms (Wong, 2007), as can surrounding cultural factors (Castillo, 1997).

Similarly, Wakefield (1996a) asserts that child abuse is the result of a one-way linear process, but the child and family literature has clarified that factors such as difficult child temperament and behavior problems, insularity, and poverty, among other child, family, and contextual variables, are associated with increased risk of abuse (Lutzker, 1998; Mattaini, McGowan, & Williams, 1996). This is not to say that there are not times when simple linear interventions can be useful, but that such interventions need to be designed with awareness of the transactional field. A careful examination of the research in every area of social work practice is likely to support the ontological assertion that connectedness is real; certainly it has proven epistemologically robust.

A related issue is Wakefield's (1996a) concern with the "circularity" of causation he believes to be present in ecosystemic thought. His discussion purports to deal specifically with the work of Meyer, but the phrase "circular causality" that he uses throughout his critique does not appear to be present in Meyer's work and is, from my analysis of that work and personal discussions with Meyer, inconsistent with it. Wakefield does cite one statement from Germain and Gitterman (rather than Meyer) related to "circular feedback processes," but his extensive repetition of the phrase "circular causality" in discussion of Meyer's work appears to be a rhetorical flourish (unjustified and unsupportable, from my examination of the evidence) designed to associate that work with circular reasoning. Meyer clearly meant to draw attention to the complexity and interactivity present in the social and physical world; there is nothing "circular" in recognizing the reality of interconnectedness and reciprocity. The same is probably true of Germain and Gitterman's work; feedback processes clearly can be reciprocal and may reverberate and be amplified cyclically (as in many couples and parent-child disputes), but a thorough reading of the ecosystemic literature in social work does not support an assertion of circular causality as a primary theme.

Utility for Assessment

One additional concern raised by critics requires some attention: doubts that the ecosystems perspective has utility for assessment. For example, Wakefield (1996a, p. 14) holds that "assessment is, to a large extent, a matter of defining a client's problem." Only within a narrow, pathology-focused, and relatively exclusively treatment-oriented view of social work would this be the case—and only if that view does not recognize the dynamics of living systems. Assessment in social work is a much more complex process of understanding the case in context, contrasting the current state with the desired state, and determining what would be required to get from the former to the latter (Mattaini, 2007; Meyer, 1993). As noted by Meyer (1983, pp. 21–22; and quoted by Wakefield) in describing a case of truancy, "At the least, a practitioner would need a clear picture of the complex, interrelated components of the case before determining which methodological intervention to use." If reality is complex, assessment clearly needs to take that complexity into account in moving toward effective action. Wakefield (1996a, p. 17) is trivially correct in asserting that "no assessment can be infinitely complex"—but a responsible assessment must be complex enough to capture the primary dynamics of the case.

Wakefield (1996a, p. 17) also questions the need to examine contextual factors such as oppression in assessment, asserting that clinicians' role is generally to help clients to cope, "without directly confronting or assessing larger systems." This has, in fact, commonly been true in social work practice, but there is now substantial movement away from this narrow focus. In recent years a number of practice approaches have emerged that involve challenging social justice and human rights issues even in direct practice. Parker (2003) describes practice at the Institute for Family Services in Somerset, New Jersey, for instance, in which clients are assisted through "culture circles" to collectively examine and challenge gender, class, and other systemic forms of oppression. Finn and Jacobson (2003) have formulated a "just practice" approach oriented toward supporting social justice in practice in ways that challenge injustice. Vodde and Gallant (2002) have developed an approach designed to bridge micro and macro practice, organized around understanding power and oppression and encouraging collective advocacy. Mattaini and Lowery (2007) discuss how moment-by-moment practice events can either support or interfere with justice, even in clinical work. These advances would not be occurring if practitioners did not explicitly attend to issues of systemic injustice in practice at all system levels, with recognition of existing power dynamics and willingness to confront them where possible.

At the same time, Wakefield is clearly correct that the ecosystems perspective cannot stand on its own in assessment. Social workers need ways to understand what the perspective leads them to see, and that understanding comes from practice theory and practice models. Psychodynamic, feminist, and ecobehavioral theories and practice approaches will, and should, understand the patterns of transactions present in a case differently. Without substantive, and often domain-specific, knowledge, assessment would be content-free, and therefore not helpful. Wakefield's assertion of the need for substantive knowledge and theory, therefore, is important; it does not, however, invalidate the utility of the ecosystems perspective.

Other Issues

There are several other important issues that Wakefield and others raise, including questioning whether an ecosystems perspective does in fact reduce the common bias toward excessive focus on individual or environmental factors (usually the first). Wakefield's arguments are conceptual, but ultimately this is an empirical issue. If tools that have been developed to operationalize the perspective do lead to more balanced consideration, there is reason to accept the bias correction claim. There is much more work to be done here, but the limited studies that have been done suggest that the claim has some validity (Mattaini, 1993a, p. 250; Nurius et al., 1999).

A final question involves ecosystems as a means toward possible theoretical integration for the profession. Greif and Lynch (1983, pp. 35–36) asserted, "The ecosystems perspective can serve as an integrating force for social work practice models, coordinating assessment and various conceptualizations of knowledge and methods." Vickery (1974, p. 390) made a similar assertion, indicating that the perspective "can help social workers to organize and integrate a multitude of perspectives and methodological approaches."

Although these statements may be somewhat ambiguous, they appear to suggest that multiple bodies of theory and the multiple practice models that emerge from them can somehow be integrated into a single whole. It is difficult to imagine how this could be

the case; different theories are often based on conflicting or incommensurate understandings of phenomena and cannot therefore be simplistically integrated by the ecosystems perspective—or anything else. Both Carol Meyer (1987, personal communication) and Alex Gitterman (1988, personal communication) explicitly rejected the notion of theoretical integration, instead believing that ecosystems could be helpful in unifying *the profession,* as opposed to unifying practice models. The core notion is that social workers operating from any practice model that recognizes contextual complexity would all notice the multiple transactional dynamics in a case, though they may understand them differently based on substantive theory. Beginning certainly by 1970, this was Meyer's highest intellectual aspiration.

RETURNING TO THE SCIENCE

"Content-free" ecosystems appear to be indefensible. There clearly is a need for substantive knowledge and theory to apply the perspective. As the ecosystems perspective has played itself out over the past 3 decades, it appears that there are two approaches that have the potential to use ecosystems in relatively robust ways. One involves practice models that use ecosystems in metaphoric and heuristic ways. The life model (Germain & Gitterman, 1996) and narrative approaches (e.g., Vodde & Gallant, 2002) are particularly strong examples and are widely used in practice.

A second possibility that I believe has been insufficiently recognized is *returning to science*. Recall that ecology is a science; general systems theory and its recent expansions are scientific theories. Practice theory and approaches that rely on scientific understandings of human development and behavior, and scientific approaches to sociocultural and environmental processes, should be relatively easy to integrate into a scientific understanding of the ecosystems perspective. In the material that follows, I briefly sketch a deeply scientifically grounded approach to ecosystemic understanding for social work. Readers are urged to explore the references provided for further detail.

Human beings and human systems are part of the natural world, and from a scientific perspective on practice, this fact is not trivial. The ecofeminists are clearly correct in asserting the unity of natural existence, although their strong reservations about the utility of the scientific method are, in my opinion, overdrawn. There is much that science can and has contributed to effective practice, and there is therefore an ethical obligation to avoid premature rejection of approaches to knowledge development that may help vulnerable people. The world, including people, consists ultimately of transactions at a subatomic level; phenomena (molecules, people, stars) emerge from that transactional matrix in organized ways that systems theory attempts to understand. (*Emergence* is an important area of contemporary scientific study in several fields.) There is therefore every reason to believe that the sciences of human behavior and cultural processes would involve such emergence, and would find transactional connectedness with the rest of the physical universe.

The basic elements of the science of behavior are not complex: actions, consequences, contextual signals as to when behavior is and is not likely to be effective, simple modeling and social learning processes (R. W. Malott, Trojan Suarez, & Malott, 2003), coupled with biology and environment. Even cultural practices are constructed of the same simple elements, which, however, are organized in even more complex ways than is individual

behavior (Mattaini, 1996). Contemporary science continues to find that great complexity, when it is found, typically emerges from very simple elements in many fields; the genetic code is one example. The interface between computer science and natural science suggests the same (Wolfram, 2002). Complexity is real, but is the result of interlocked patterns of simple transactions.

The social worker is part of the client's environment, and transactions between worker and client are transactions between person and environment. The client's environment, however, is much larger than the social worker, and ecosystems thinking scientifically understood suggests that many other environmental processes may be not just tangentially, but essentially involved in client experience. Recalling that emerging systems theory views transactions, not objects, as primary, a person can be scientifically understood as "an accumulation of acts grounded in the behavior (i.e., movements and postures) of a single organism" (Lee, 1988, p. 93). Using Lee's terms, acts are not bodily movements, but *transdermal events* involving the organism and the environment, "things done"—transactions, in ecosystems terms. Further, a scientific understanding of human behavior "resides in the interpenetration of the organism with the contingencies of the culture" (p. 114). In addition, conduct is organic; any particular action "is embedded in a network of overlapping and interlocking actions" (p. 57) and is likely one part of a more complex action (e.g., studying is an act and is part of completing a degree).

Practice that emerges from these principles has been termed *ecobehavioral* (Lutzker, 1997; Mattaini & Moore, 2004). An ecobehavioral understanding of the sciences of behavior and cultural analysis guides the social worker to notice particular kinds of person:environment transactions (Baer & Pinkston, 1997; Goldiamond, 2002). Consistent with understanding behaviors and actions as "things done"—personal activities that have an impact on the environment—consequences are clearly critical to a scientific analysis. Why would a person do what he or she does? For example, why does a child talk back to his or her parent? Patterson's (1976, 1982) model of the escalating coercive cycle that commonly develops in families with aggressive children helps us to understand this. In this pattern, parent and child reciprocally turn to more and more aversive statements or actions until one backs down. The lesson learned from this result, of course, is that if one acts very aggressively and escalates as necessary, one will ultimately achieve the desired consequences.

At a higher systems level, an analysis of multiple interacting consequences of common cultural practices leads to deeper understanding than a search for linear causes might. Why, for example, does racial discrimination persist? Briggs and Paulson (1996) and Guerin (2005) provide detailed scientific analyses related to the maintenance of racial discrimination, privilege, and advantage. Extensive interlocks among cultural practices (including in housing, employment, financial, educational, and other institutions) can maintain discriminatory practices even in the absence of intention and overt bias (which, of course, is seldom entirely absent). The interlocking consequences involved for different classes of actors can be tracked and analyzed scientifically. Antecedent and contextual factors are also powerful environmental determinants of human action and cultural processes that interlock with consequences (see Mattaini, 1997, 1999, for details).

Organizations, communities, nations—in fact, all cultural entities can be viewed ecobehaviorally as organized and constituted of interlocking patterns of "things done": actions in transaction with consequences and environmental context (Mattaini, 1996). Intervention

in those cultural networks often requires the analysis of these patterns. For example, we know that the frequent use of written recognition improves student behavior and achievement in schools (Embry, 2004). It has, however, proven very difficult to maintain the practice of providing such recognition on a rich enough schedule over time. An analysis of other practices in the school environment that support or oppose this one can clarify the obstacles, and what might be done about them (Erickson, Mattaini, & McGuire, 2004).

It is always possible to focus narrowly on simple processes, but an ecobehavioral understanding rooted in an ecosystems perspective consistently reminds the social worker that events in the client's world are multiply determined (and often overdetermined), so a single intervention may not result in change that will be maintained. In fact, in many areas of human behavior achieving change is relatively simple, whereas maintaining change is much more challenging. A single parent may learn effective parenting skills, for example, but is unlikely to maintain them over time without significant environmental support (Dumas & Wahler, 1983; Webster-Stratton, 1997). Similarly, it has proven much more difficult to maintain effective prevention programs in schools and communities over extended periods of time than to establish them.

A careful ecobehavioral analysis can clarify the contextual challenges to be addressed (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998) and the kinds of change that are more likely to be naturally maintained through "behavior traps" (Lutzker, 1997; R. W. Malott et al., 2003). The heart of ecobehavioral practice is the design of interventions that will bring the behavior of actors in the case (whether clients, family members, agency staff members, or anyone anywhere in the ecological matrix) into contact with existing variables that have a realistic chance of maintaining the new repertoires. This can be done only by analysis of the transactional patterns within which the case is embedded. (Ecobehavioral analysis can be conducted, and interventions thereby designed for work with individuals, families, groups, communities, and organizations; Mattaini & Moore, 2004.)

MAPPING PRACTICE

The transactional focus, in which all processes are addressed to the person in the environment, distinguishes social work (although not entirely) from other professional disciplines such as psychiatry and psychology. It implies that individuals and their environments are always actually or potentially adaptive to each other, that interventions involve action directed toward the transactions present, and that the results may reverberate through other parts of the network. The ecosystems perspective has enabled social workers to enhance this psychosocial focus through the use of a systemic lens that does not separate the person from the environment but requires that they be seen in their transactional interconnectedness. This, however, is a quite abstract notion as it stands. Graphic visualization and simulations have proven very useful in other scientific and applied areas dealing with the complex (e.g., meteorology, radiology, and theoretical physics). Similarly, the use of the ecomap and related graphic representations to depict the case allows both practitioners and clients to literally see the case in its complexity (Mattaini, 1993a). I established earlier that social workers tend to miss much of this complexity if not specifically prompted to look at it.

Preliminary research (Mattaini, 1993a) indicates that social work students are more likely to view a case in its transactional complexity if they prepare a simple ecomap.

Traditional ecomaps as elaborated by Meyer (1976, 1993) and Hartman (1978) were essentially heuristic, using arrows to represent reified "connections," which might be strong, tenuous, or stressful. They are a useful start, and nothing more complex was used in the study with students cited in the previous paragraph. It is possible, however, to quantify the exchanges more specifically, as well as to note that both positive and aversive exchanges may be involved in a relationship (as is relatively typical). This move toward quantification through transactional ecomaps is a valuable support for an emerging scientific understanding of the ecosystems perspective (Mattaini, 1993a). It is also possible to develop computerized approaches to simplify the quantification and presentation of transactional mapping (Mattaini, 1993b).

From the patterns discovered, factors with significant social justice implications are often identified. Young (1990) identified domination (structural or systemic arrangements that exclude people from participating in determining their actions or the conditions of the actions) and oppression (systematic or institutional constraints on self-determination) as the two core dimensions of social injustice that need to be challenged to work toward justice. She also identified five "faces of oppression" (p. 39), as follows:

1. *Exploitation:* The transfer of results of labor of one social group to benefit another.
2. *Marginalization:* Exclusion from system of labor, economic systems, and other important sources of resources.
3. *Powerlessness:* Lack of voice, authority, status, privilege, and sense of self.
4. *Cultural imperialism:* Dominant meanings in society that render the perspective of one's own group invisible while simultaneously stereotyping that group and labeling it as Other.
5. *Violence:* Living with the knowledge that one must fear random, unprovoked attacks on persons, property, or self that appear to be motivated to damage, humiliate, or destroy.

Domination and oppression involve the exercise of power, and like all social patterns are grounded in action. Many of those patterns are structural in nature; many different interlocking cultural practices tend to maintain them in systemic and systematic ways (Farmer, 2003; Young, 1990). What is important here is that social workers who both are able to see the case (whether individual or class) in its contextual complexity and are sensitized to recognize regularities of pattern consistent with domination and oppression (both in individual cases and for classes of persons) can see the social justice implications of the case on the ecomap they and their clients construct, drawing on all available sources of information for that process. They will also, based on the scientific underpinnings of the perspective, have a clear view of where change, if it is going to happen, needs to take place.

Drawing an ecomap that clarifies the significant elements of a case and the transactions among them offers the practitioner and client opportunities to explore and assess the dynamic relationships among case variables. Furthermore, although neither systems thinking nor the ecomap prescribes actions, laying out the case as a field of forces enables the practitioner to select intervention approaches likely to influence the primary transactional issues that emerge. An ecomap therefore opens options while ensuring that the most critical factors in the case receive attention.

CONCLUSION

We have, then, come full circle. The ecosystems perspective emerged in social work in the 1970s from two bodies of scientific theory, general systems theory and ecological theory. There is little doubt, given the research that has been done, that social workers often did and do fail to notice many essential variables in their cases, including patterns of domination and oppression, and there is evidence that the ecosystems perspective or something like it can be of use in minimizing those errors. Even mapping the case in a fairly rough manner appears to be of some use. Since the 1970s, the perspective has been considered primarily a heuristic or metaphoric tool, with little consideration of or reference to science. It appears likely that this lack of attention to rigor has limited the impact of the perspective. Ecosystemic thinking grounded in scientific rigor, however, may have the potential to greatly expand the impact of the perspective. Certainly a great deal of recent social work research has used an ecological view of some kind for purposes of design and interpretation.

In this chapter, I have suggested that an ecological systems understanding of human beings in context is not just a metaphor; transactional connectedness is real. Humans and human societies are essentially woven into the fabric of a larger ecological field, and that ecological field can be understood scientifically. Returning to the science, as in ecobehavioral practice, may be enormously usefully in reconnecting the social work view of cases with the transactional reality in which those cases are embedded, whether or not this is acknowledged. The heuristic use of ecosystems has been and will continue to be useful in social work education and practice; there is also enormous power in science, however, and a transparent, collaborative application of ecosystems science may bring that power to bear for the vulnerable, who often have little access to other sources of power. If this proves to be true, social work has an ethical obligation to enlist that science in everyday practice.

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Chapter 13

MORAL DEVELOPMENT THEORY

Frederick P. Buttell and Michelle Mohr Carney

The purpose of this chapter is to briefly explain the theory of moral development and to link moral development to professional social work. Importantly, the construct of moral development, as a developmental theory, spans virtually every professional discipline (e.g., law, medicine, psychology, social work), and a cursory literature search using "moral development" as a search term yields thousands of hits in the professional databases (e.g., PsycInfo). Consequently, the purpose of this chapter is not to present an exhaustive review of the literature on moral development. Rather, we provide an overview of Kohlberg's theory of moral development, summarize the core tenets of the theory while evaluating the empirical support for them, identify an area of practice where the application of moral development theory has the most relevance to professional social work, provide some brief biographical information on the founder of modern moral development theory, and discuss the two most frequently used instruments to measure moral development.

HISTORICAL AND CONCEPTUAL ORIGINS

Lawrence Kohlberg was born in 1927 in New York (Walsh, 2000). He was a Zionist, and he smuggled Jewish refugees past the British blockade in Palestine (Hayes, 1994). Kohlberg initially trained as a clinical psychologist at the University of Chicago and then observed the moral development in children in graduate school at Harvard (Walsh, 2000). It seems clear that his interest in morality stemmed from the Nazis' treatment of the Jews during World War II. Specifically, the experience of the Holocaust led him to conclude that, from a societal perspective, the concept of moral relativism is untenable and that there must be some way of conceptualizing morality so that it could be investigated and understood as a developmental construct (Walsh, 2000). Kohlberg's ideas about morality stem from both neo-Kantian concepts of justice and the philosopher John Rawls's definition of the morality of universal rules (Rest, Narvaez, Bebeau, & Thoma, 1999). Specifically, Kohlberg echoed Rawls's thinking regarding morality in his creation of a new model of moral development by using Rawls's concept of a "social contract" as the basis for conceptualizing cooperation in society.

BASIC THEORETICAL PRINCIPLES

Kohlberg's theory of moral development states that moral reasoning changes over time in predictable stages, moving from the simple (low) to the complex (high). He holds that

the complex, or higher, stages are more adaptive and are different from the simple, lower stages (Kohlberg, 1977). Kohlberg held that people prefer to reason at the highest level of which they are capable because moral issues are resolved more effectively at a higher stage than they are at a lower stage. Five basic tenets are inherent in Kohlberg's staged model: (1) Each stage implies distinct or qualitative differences in modes of reasoning; (2) these modes occur in an invariant sequence during the process of moral development; (3) although cultural factors may speed up, slow down, or stop development, they do not change the sequence; (4) stages are structural wholes that are not tied to content but represent an underlying organization of thought; and (5) stages are hierarchal integrations (i.e., lower stages are subsumed into higher ones that enable individuals to comprehend all stages below and one stage above their current stage of reasoning). Kohlberg grouped six stages of moral development into three levels; preconventional (stages 1 and 2), conventional (stages 3 and 4), and postconventional (stages 5 and 6).

Preconventional Moral Reasoning

The preconventional moral level is the level of most children under age 9, some adolescents, and most juvenile and adult criminal offenders (Kohlberg, 1984). The individual at the preconventional level has not yet come to understand and uphold conventional or societal rules and expectations. In stage 1 of the preconventional moral level, judgments of justice are based on whether a behavior is rewarded or punished. In other words, in stage 1, moral decisions are based on power differentials and "might makes right." According to Gibbs, Potter, and Goldstein (1995), morality at stage 1 is defined by authority figures and, consequently, morality gets defined by consequences and punishments. If a behavior goes unnoticed and unpunished, it is "right," but if a behavior runs afoul of an authority figure and results in punishment, it is "wrong." The primary limitation of stage 1 reasoning, from a societal perspective, is that individuals employing stage 1 reasoning do not understand the morality underlying rules of behavior and conduct and equate moral rightness with physical power. Therefore, if no one is around to monitor and enforce rules or a code of conduct, individuals at this stage are allowed to do whatever they like and perceive it as acceptable behavior.

In stage 2, moral judgments are based on self-interest, or whether the consequences will be good "for me and my family." In other words, moral decisions are based on the interaction between self-interest and exchange theory. According to Gibbs et al. (1995), morality at stage 2 is defined by deal making and is best understood as an exchange of favors. It is epitomized by the question "What's in it for me?" The primary limitation of stage 2 reasoning, from a societal perspective, is that individuals employing stage 2 reasoning are very egocentric and do not understand the concept of relationship at a level beyond themselves (i.e., they do not understand the concept of a mutually rewarding social contract and rules that benefit the community). Interestingly, Gibbs et al. contend that stage 2 reasoners are much more adept at identifying ways that others have wronged them than they are at understanding the impact of their behaviors on others.

Conventional Moral Reasoning

The conventional moral level is the level at which most adolescents and adults in our society and in other societies function (Kohlberg, 1984). The term "conventional" means

conforming to and upholding the rules, expectations, and conventions of society simply because they are society's rules, expectations, or conventions (i.e., the social contract). The individual at the conventional level has internalized the rules and expectations of others, especially authority figures. In stage 3, moral reasoning is internally motivated by loyalty to other persons and by a desire to live up to what is expected by significant others. In other words, moral decisions are based on the concepts of trust and mutuality. According to Gibbs et al. (1995), morality at stage 3 is defined by a moral orientation that stresses loyalty to others and can best be understood by stating that individuals at stage 3 understand the Golden Rule: "Do unto others as you would have them do unto you."

In stage 4, moral reasoning is concerned with upholding the social order and is characterized by a shift from loyalty to duty (Kohlberg, 1984). In other words, there is a shift in focus from the micro to the macro, and individuals at stage 4 begin to develop a moral orientation that considers the concepts of respect and responsibility as the basis for societal relationships. According to Gibbs et al. (1995), morality at stage 4 can best be understood as an expansion, rather than replacement, of stage 3 reasoning to include society, in addition to interpersonal relationships.

Postconventional Moral Reasoning

The postconventional moral level is reached by a minority of adults and usually only after the age of 20. An individual at the postconventional level understands and basically accepts society's rules, but acceptance is based on formulating and accepting the general moral principles that underlie these rules. If these principles come into conflict with society's rules, the postconventional individual will make moral judgments based on principle rather than convention. In stage 5, moral reasoning is determined by a sense of obligation to the law because of one's social contract to make and abide by laws for the welfare of all and for the protection of every person's rights. Finally, in stage 6, moral reasoning is based on the development of a universal set of principles that apply across time and culture and that transcend the laws and conventions of a specific society (Kohlberg, 1984). Research has indicated that stage 6 reasoning is extremely rare (often cited stage 6 reasoners include Mahatma Gandhi, Mother Teresa, and Dr. Martin Luther King Jr.), and Kohlberg (1984) advocated the inclusion of stage 6 only as a hypothetical construct to which moral reasoning may progress.

As the preceding discussion illustrates, the application of moral development to professional social work is largely confined to the first two levels and four stages (i.e., preconventional stages 1 and 2 and conventional stages 3 and 4). Specifically, the persistence of preconventional moral reasoning levels into adulthood suggests a level of egocentrism and immaturity in perspective taking that often leads individuals into the kinds and types of situations that force them to become involuntary clients (e.g., offenders in community-based intervention programs and service recipients of child and family services units). Consequently, professional social workers are usually not concerned with targeting clients' moral development for intervention in an effort to get them to shift from stage 4 to stage 5. Rather, professional social workers are typically more concerned with assisting clients to develop perspective-taking opportunities in an effort to get them to consider the impact of their behavior on themselves and others, which usually involves attempting to shift clients from the preconventional level (immature) to the conventional level (mature).

ADVANCED THEORETICAL PRINCIPLES

The Upward Progression of Moral Development

As a cognitive-developmental theory, moral development is separate from but related to two other developmental constructs: cognitive development and social development. Specifically, as the preceding discussion illustrates, both conventional and postconventional reasoning depend on an individual's ability to think abstractly. Consequently, it would be inconsistent with moral development theory to expect that a 6-year-old would demonstrate stage 5 reasoning. Thus, there is a strong relationship, particularly for the early stages, for moral development to piggyback on cognitive development. Despite this early connection, there is overwhelming empirical evidence that the two are distinct constructs. For example, a 46-year-old may still engage in stage 2 reasoning (for an excellent review of this research literature, see Walker, 1989). In terms of the natural progression of moral development and the relationship between these three constructs, Kohlberg (1972, 1976) has argued that both cognitive development and perspective-taking development (i.e., social development) are necessary prerequisites for moral development. He has stated that under typical circumstances cognitive development, perspective-taking development, and moral reasoning develop as separate but parallel structures and that the attainment of a particular stage of moral development is dependent on the attainment of the requisite cognitive and perspective-taking stages. For example, Walker (1980) assessed the cognitive, perspective-taking, and moral development of 146 fourth- through seventh-grade children. Consistent with the model articulated by Kohlberg, results of the study indicated a pattern of development in which moral development tended to lag behind perspective-taking development, and perspective-taking development tended to lag behind cognitive development. Walker concluded that the evidence clearly supported Kohlberg's (1976) claim that cognitive and perspective-taking development were necessary prerequisites of moral development.

The naturally occurring vehicle for stimulating moral development is a process that Kohlberg (1977) termed "cognitive disequilibrium." Cognitive disequilibrium occurs when there is a discrepancy between what is known and unknown and results from the individual's efforts to reconcile new perspectives and ideas about basic moral concepts with existing views about what is right and wrong. Cognitive disequilibrium can result from interactions with parents or peers. Parents can create cognitive disequilibrium with their use of explanations and inductions regarding a moral dilemma. Similarly, cognitive disequilibrium can result from social interactions with peers that facilitate discussions of moral issues and ideas that enhance moral development. Interestingly, Walker and Taylor (1991) contend that both Kohlberg and Piaget largely discounted the role of parents in fostering moral development among their children, relative to that of the school environment and the peer group. Specifically, they suggest that Kohlberg and Piaget "regarded parents as simply a small part of the general social environment that provides role taking opportunities" (p. 264). In their view, Kohlberg tended to discount parents in favor of the peer group for two reasons. First, they assert that Kohlberg's diminishment of the parental role in fostering moral development was a direct result of dissatisfaction with psychoanalytic theory's heavy focus on parent-child relationships. Second, because parents serve as both authority figures and disciplinarians, this interferes with their ability to provide the optimal kinds

of discussions and interactions that lead to stimulating moral development among their children. Consequently, in the moral development literature, there is a heavy emphasis on the role of peer groups in promoting moral reasoning.

Despite the early discounting of parents as important agents for fostering moral development in children, more recent research suggests that parents play a vital role in promoting moral development among children. For example, Eisenberg's (2000) critical review of the research literature on the relationship between emotional development and morality among children revealed that parents are the most important instruments in teaching children emotional regulation and using emotions to develop moral capacity. Specifically, she indicates that parents promote feelings of empathy in their children, which leads to the ability to take the perspective of others, which is the foundation of moral development. Interestingly, this review also links moral development to both attachment theory and parental discipline.

Attachment theory proposes that the overall quality of the infant-caretaker relationship during infancy and early childhood is both the primary determinant of core personality traits in adulthood (Ainsworth, 1969) and a model for later interpersonal relationships (Bowlby, 1980). Originally, three primary adult-child attachment patterns were identified: secure, anxious-avoidant, and anxious-resistant (Ainsworth, Blehar, Waters, & Wall, 1978). Although subsequent research has identified a fourth type of negative attachment representing a combination of avoidant and resistant (e.g., Crittenden, 1985), for the purposes of this discussion, it is important only to distinguish between secure attachment and insecure attachment. Given that parents are the primary vehicles for fostering attachment and moral development among children, it seems clear that the type of parenting that leads to a securely attached child will also lend itself to the type of parenting that promotes perspective taking and moral development. Conversely, the type of parenting that results in children being anxious and insecurely attached would also likely lead to a type of parenting that results in immature moral development. These types of parenting are intimately connected to the kinds of parental discipline practices parents employ with their children. In brief, Hoffman (1977) has identified three different types of parental discipline: power assertion (physical punishment), love withdrawal (promoting guilt by expressing disapproval), and inductions (explaining why a behavior is wrong by identifying the consequences of the behaviors for others). Clearly there is a strong association between attachment style, parental disciplinary practices, and level of moral development. Current research suggests that a parenting style that employs inductive explanations rather than power assertion is positively correlated with secure attachment in toddlerhood (e.g., Kochanska, 1991, 1995, 1997), and that these same inductive parental explanations also promote the kinds of discussions of moral dilemmas that result in cognitive disequilibrium and moral advancement (e.g., White, 2000).

RECENT THEORETICAL DEVELOPMENTS

The group of theorists that have expanded Kohlberg's model of moral development are collectively referred to as neo-Kohlbergians. In general, what most neo-Kohlbergians have in common is their belief that moral judgment is only one process in the development of moral behavior, rather than an end in itself (Narvaez, 2005). Specifically, neo-Kohlbergians allow for a broader definition of morality than Kohlberg did. The concepts that they find important include constructs like moral sensitivity, moral judgment, moral motivation, and

moral character (Narvaez, 2005). By way of illustration, James Rest, a disciple of Kohlberg and the developer of the Defining Issues Test (discussed at length later in the chapter), believed that factors other than just moral development affected moral action and that a more comprehensive model was required to adequately capture the relationship between moral thinking and moral action (Bergman, 2002). For example, if you ask undergraduates their perceptions of drinking and driving, all will be opposed and be able to articulate a detailed explanation about why it is wrong. However, if you then observe these same students after a party on a Friday evening, some of them will attempt to get into cars and drive home after drinking at the party. It is this apparent incongruence between moral thinking and moral action that interests the neo-Kohlbergians.

Despite the concerns about possible limitations in the Kohlbergian model, there is strong empirical evidence suggesting a linear relationship between moral reasoning and moral action. In one of the most comprehensive reviews of the moral development literature, Blasi (1980) discovered that 57 of 75 studies investigating the relationship between moral development and moral action showed a strong positive correlation between the two concepts. Blasi concluded that "the body of research reviewed here seems to offer considerable support for the hypothesis that moral reasoning and moral action are statistically related" (p. 37).

RELEVANCE TO SOCIAL WORK PRACTICE

For the theory of moral development to have practical relevance for professional social work, it will need to be shown that (a) all humans experience development in moral reasoning; (b) an individual's level of moral reasoning can be intentionally altered; and (c) higher levels of moral development are associated with more socially acceptable behaviors. This section shows how research centering on Kohlberg's theory of moral development meets these requirements for applicability.

The Universality of the Theory

The cornerstone of Kohlberg's (1984) theory of moral development is his concept of universality, which distinguishes between *structure* (held to be universal and to follow the laws of development) and *content* (held to vary with different types of experiences and to follow the laws of learning). Kohlberg states that content tells us *what* a person believes as a result of differential cultural experiences, whereas structure tells us *how* a person thinks about a situation. This latter feature, according to Kohlberg (1976), is universal. Kohlberg's concern with the structure rather than the content of thought was based on Piaget's developmental model. For both Piaget and Kohlberg, the primary interest was not the subject's answer to a question but how the subject arrived at that answer (i.e., the reasoning behind the answer).

In defense of the universality of his theory, Kohlberg and his associates have gathered empirical evidence from different cultures. For example, Nisan and Kohlberg (1982) conducted a longitudinal and cross-sectional study in Turkey with 46 adolescents and young adults. Their purpose was to determine whether the process of staged development in moral reasoning, which originated out of research in the United States, could find empirical support in a different culture. Results indicated that the responses of these individuals

to situations calling for moral reasoning fit the structures developed in the United States and that the staged sequence was consistent with the American studies. The Turkish study found a consistent pattern of sequential advancement in the stages of moral development, and results from the study were the same in villages as well as in cities. In a similar study by Snarey, Reimer, and Kohlberg (1985), the moral development of 92 adolescents in India were studied to evaluate the validity of Kohlberg's model. The developmental findings strongly supported Kohlberg's claim of universality. Changes in stages were found to be consistent in that they were from lower to higher, occurred gradually over time, and changed at different rates from one person to another. To evaluate Kohlberg's claim for the universality of the structure of moral development, Snarey (1985) reviewed 45 studies carried out in 27 countries (38 cross-sectional and seven longitudinal). The longitudinal studies were done in the Bahamas, Canada, India, Indonesia, Israel, Turkey, and the United States. The cross-sectional studies were carried out in England, Finland, Germany, Guatemala, Honduras, Hong Kong, Iran, Japan, Kenya, Mexico, New Zealand, Nigeria, New Guinea, Pakistan, Puerto Rico, Taiwan, Thailand, the United States, and Zambia. Thousands of subjects of various ages (children, adolescents, and adults) participated in the 45 studies. The findings provided strong empirical support for Kohlberg's claim for cross-cultural universality, including invariant stage sequence, full range of stages, and general applicability of the stages. Research has consistently indicated that the subjects in these studies used forms of reasoning that were identical to those used by American samples and that both adolescents and adults in every culture used higher levels of moral reasoning than those used by children (Nisan & Kohlberg, 1982; Rest, 1986; Snarey, 1985; Snarey et al., 1985).

Changing Reasoning Levels

Over the past decade, considerable evidence has been gathered indicating that changes in the level of moral reasoning can be facilitated through moral education programs. In a meta-analysis of 55 studies described in journal articles, dissertations, and theses, Thoma (1984) found that moral education programs were effective in promoting moral development, especially if the programs were of moderate duration and were designed around a dilemma discussion program. Short-term interventions and academic courses alone were not found to significantly influence moral judgment. Perhaps most important to the current discussion was the discovery that treatment effects were most powerful for adults. Thoma indicated that these findings suggested that morality was not fixed at an early age and that moral education programs could raise the moral reasoning levels of adults. In fact, in regard to the application of moral development to professional social work, there is considerable evidence indicating that the moral reasoning of adult offenders is not fixed and can be facilitated through moral education programs (Blasi, 1980; MacPhail, 1989; Rest, 1986; Rest & Narvaez, 1994).

Facilitating Moral Development Results in More Prosocial Behaviors

For moral development theory to have practical relevance as an intervention theory for professional social workers, it must be established that enhancing the moral reasoning of criminal offenders has resulted in decreased criminal activity. Kohlberg (1976) has asserted that people with higher moral reasoning skills are less likely to engage in unjust behavior

toward others, and research has demonstrated that inmates who reach Kohlberg's stage 3 or 4 in their moral development prior to their release from prison are less likely to be reincarcerated than those who remain at stages 1 and 2 when they are released. Blasi (1980) and Kohlberg and Candee (1984) found that moral action increases with moral judgment at higher stages, and MacPhail (1989, p. 156) concluded that "the behavior of a person becomes more prosocial and law-abiding-oriented as his or her structure of moral development develops to the conventional level." Similarly, MacPhail argues that "promoting moral reasoning in inmates is critical to increasing the likelihood of making socially acceptable choices and thus decreasing the likelihood of engaging in criminal behavior" (p. 82).

Uses in Intervention

The Role of Moral Development in Forensic Social Work

Regarding the relationship between moral development and criminal behavior, there is strong empirical support indicating that (a) the structure of moral development is universal (e.g., equally applicable to men and women, African Americans and Caucasians; Gielen & Markoulis, 1994; Kohlberg, 1984; Nisan & Kohlberg, 1982; Rest, 1993; Snarey, 1985; Snarey et al., 1985; Wilson, 1995); (b) offenders most often employ a preconventional level of moral reasoning (Blasi, 1980; DeWolfe, Jackson, & Winterberger, 1988; Jennings, Kilkenny, & Kohlberg, 1983; Jurkovic, 1980; Little, Robinson, & Burnette, 1993; Little, Robinson, Burnette, & Swan, 1999; MacKinnon & Njaa, 1995); (c) moral education programs are effective in raising the level of moral reasoning (Bebeau & Thoma, 1994; Blasi, 1980; MacPhail, 1989; Rest, 1986; Rest & Narvaez, 1994; Self & Olivarez, 1996; Thoma, 1984); and (d) enhancing moral reasoning results in decreased criminal activity (Blasi, 1980; Kohlberg & Candee, 1984; Little, Robinson, Burnette, & Swan, 1996, 1999; Ma, 1989; MacPhail, 1989). The remainder of this section discusses how moral development can be used by social workers as an intervention theory in their work with clients. The example of community-based work with domestic violence offenders (i.e., batterers) is used to illustrate how moral development might be applied by social workers in a community context.

Although there is theoretical evidence suggesting the potential importance of moral development as a treatment construct for batterers, only recently have any studies explored the role of moral development in the etiology and maintenance of abusive behaviors among male batterers (Buttell, 1998, 1999a, 1999b) or evaluated the impact of treatment on altering moral reasoning among male batterers (Buttell, 2001, 2003). In a study of 111 adult men, 66% African American, court-ordered into a standard group treatment program for domestic violence offenders, Buttell (1999a) investigated the moral reasoning levels of batterers beginning treatment. Comparison of the batterer sample to national normative data revealed that the entire sample of batterers was employing a level of moral reasoning 2 standard deviations lower than adults in general. The level of moral reasoning of the batterers in this study was similar to institutionalized juvenile delinquents. In a similar study, Buttell (1999b) investigated the level of moral reasoning of 60 men, 84% African American, court-ordered into treatment for domestic violence offenses. The results were remarkably consistent with the earlier work by Buttell (1999a) in that the batterers in this study were

also employing a level of moral reasoning similar to institutionalized juvenile delinquents. Perhaps more important, a posttest evaluation indicated that there was no significant increase in moral reasoning at the conclusion of the treatment program, suggesting that the current treatment program was ineffective in influencing moral reasoning (Buttell, 2001). Taken as a whole, these preliminary studies might suggest that moral development could be important in any model attempting to explain battering or develop culturally relevant intervention efforts.

The research on batterers attending a community-based batterer intervention program, when viewed in conjunction with the other research on moral development among offenders, suggests that moral development may hold considerable potential for helping explain the development of abusive behaviors. In brief, because moral reasoning requires structural changes in thinking in order to develop, it seems plausible that men who assault women and are court-ordered into treatment approach problem solving differently from nonviolent men. Specifically, the available evidence suggests that men who assault their partners view violence as an appropriate means of conflict resolution in those situations where they feel wronged. For example, many treatment providers have understood for years that batterers resort to violence when they feel that their partner has deliberately failed to perform a particular task. It is not uncommon in these situations for the batterer to justify his violence by stating that "she should have known to have dinner ready when I arrived home from work." The benefit of using moral development as a partial explanation in these situations is that it helps explain such troubling reasoning. From a moral development perspective, such a response would be expected from men employing preconventional levels of moral reasoning. For these men, self-interest is more important than empathy, and using violence to accomplish a goal that serves self-interest is justified. In these situations the batterer has no remorse because he does not feel that he has behaved in a way that requires an apology or an explanation. In terms of placing moral development in the context of other domestic violence explanatory theories, it is consistent with both cognitive-behavioral and feminist explanations of battering. In brief, once the batterer realizes that the violence works to accomplish a goal and that it will not be punished, their thinking is reinforced. This discussion is not meant to imply that moral development replace any of the existing theories regarding the development of abusive behaviors. Rather, moral development should be viewed as a complementary theory that adds a unique perspective to explaining the development of abusive behaviors.

Fostering Moral Development in Groups of Batterers

An important aspect of Kohlberg's (1977) theory for intervention with batterers is that moral development occurs through the process of cognitive disequilibrium. As mentioned previously, cognitive disequilibrium occurs when there is a discrepancy between what is known and unknown and results from the individual's efforts to reconcile new perspectives and ideas about basic moral concepts with existing views about what is right and wrong. Cognitive disequilibrium can result from interactions with parents or peers. Parents can create cognitive disequilibrium with their use of explanations and inductions regarding a moral dilemma. Similarly, cognitive disequilibrium can result from social interactions with peers that facilitate discussions of moral issues and ideas and enhances moral development. Moral development can also be stimulated through a deliberate process called moral conflict, which Scharf (1978) found is the most studied process for effecting change in moral

reasoning. According to Kohlberg (1976), moral conflict involves presenting a person with a situation in which finding a solution to a moral dilemma is difficult and arouses dissatisfaction with his or her concept of good and bad. The person is then placed in a discussion group among peers where the level of discussion is a stage ahead of, but not too far advanced beyond, the person's current level of moral reasoning. This last feature is important because research has demonstrated that individuals can understand and utilize concepts from a stage above their current level of moral reasoning but that they feel "lost" if the discussion is too far advanced in terms of moral reasoning for them to follow (Mwamwenda, 1992; Turiel, 1966).

According to Buttell (1998, 2001, 2003), the group environment that is becoming institutionalized under state standards is ideal for fostering moral development. In summary, moral development can be deliberately facilitated in a group environment when participants are brought together in dilemma discussion groups. In this model, a scenario is described that involves a moral dilemma, and participants are asked to engage in a discussion regarding what ought to be done to resolve the dilemma. For batterers, the discussion should be organized around preconventional reasoning and, as ideas and concepts from this level of moral reasoning are deliberated and discarded as ineffective, the discussion should proceed upward to include conventional-level ideas and concepts. As mentioned previously, there is an abundance of empirical research suggesting that this method of intervention boosts levels of moral reasoning for other types of offenders and that these higher levels of moral reasoning translate into reduced recidivism. The benefits for batterer treatment programs of incorporating a moral development component into treatment are (a) the empirical evidence suggesting that both African American and Caucasian batterers would benefit from moral education and (b) the fact that any moral dilemma scenarios used can be organized around culturally sensitive topics (e.g., racism and discrimination). Perhaps more important, the more obvious benefit of incorporating moral development into the standardized treatment model is that it represents the first construct with demonstrated relevance for both African American and Caucasian batterers.

USES IN ASSESSMENT

Historically, the level of moral reasoning of an individual was established through the use of a semi-structured interview, Kohlberg's Moral Judgment Interview (MJI). In the MJI, subjects are presented with several hypothetical moral dilemmas and then probed about their rationale for advocating one behavior as more moral than another. Scoring the MJI is a complex and cumbersome task. The current scoring system is described in a manual over 800 pages in length (Colby & Kohlberg, 1987a, 1987b). Basically, scoring involves transcribing the subject's interview and then comparing the subject's responses with examples and criteria in the scoring guide. Based on the rules described in the manual, each subject receives an overall stage score using the designations described earlier in this chapter.

To simplify this procedure, the Defining Issues Test (DIT) was developed. The DIT operationalizes Kohlberg's method of assessing moral reasoning. In contrast to the MJI, where subjects are interviewed and have their responses analyzed by a trained rater, "the DIT is a multiple-choice test that can be group administered and computer scored" (Rest &

Narvaez, 1994, p. 11). In the DIT, a subject is presented with a moral dilemma and is then asked to evaluate a list of questions (items) that an individual might consider in making a decision about what ought to be done in the situation. The DIT contains six of these dilemmas, each with a set of 12 items, for a total of 72 items for the whole test (Rest, 1986). Interestingly, some of the same moral dilemmas used by Kohlberg in the MJI are used in the DIT, including the familiar "Heinz and the drug" dilemma (Rest, 1986).

In his description of the development of the DIT, Rest (1986) indicated that items were (a) written with comparable vocabulary and sentence syntax; (b) couched as questions "so that subjects would focus on the form of argument rather than on the action advocated by a statement (e.g., to steal or not to steal in the Heinz dilemma)" (p. 196); and (c) designed to represent the different considerations that are typical of the different stages of moral development. Therefore, in contrast to the MJI, the subject's task with the DIT is not to produce reasons justifying a particular action but to evaluate (among the 12 items given) those items that describe the most important issues in deciding what to do. Specifically, subjects are instructed to rate the relative importance of each of the 12 items on a 5-point scale (from "Great importance" to "No importance") and then rank which of the 12 items is most important, second most important, and so on. The basic assumption underlying the DIT is that people at different developmental levels define the most important issue of a dilemma in different ways and that the selection of items reflects a person's level of moral development (Rest, 1979, 1986; Rest & Narvaez, 1994).

As mentioned previously, items for any given dilemma are written as questions; they are also a mixture of different levels of thinking about a dilemma (e.g., item 1 reflects stage 5, item 2 reflects stage 3, and so forth). The assumption is that if subjects understand a particular stage of thinking, they will recognize the DIT items written at that stage. If subjects are not capable of the stage of thinking contained in an item, the item won't make sense to the subject and will appear as a "meaningless jumble of words" (Rest & Narvaez, 1994, p. 12). It is also assumed that although subjects may understand an item, they may not necessarily rate the item highly or rank the item as "Most important" because they find it simplistic or immature. Therefore, because subjects are at different developmental levels, they will differ in their ratings and rankings of the items (Rest, 1986; Rest & Narvaez, 1994).

A score (P-score) is produced that is based on the ratings and rankings of the 72 items over the six dilemmas. The P stands for "principled morality," and the P-score is interpreted as the relative importance that subjects give to items representing stages 5 and 6, principled moral thinking (Rest, 1993). The P-score is usually expressed in terms of a percentage and can range from 0 to 95, with a high number indicating high moral judgment development. Rest (1986) explains that the P-score is calculated by summing the number of times that items reflecting stage 5 and 6 levels of reasoning are ranked first, second, third, or fourth in importance; weighting these ranks 4, 3, 2, and 1, respectively; and dividing by 72 (the total number of items). Other scores can also be calculated from the DIT, including the M-score, the consistency check. The M stands for "meaningless," and the M-score serves as an internal check on whether or not subjects are following directions. M items are written in a manner that sounds complex and pretentious but that doesn't really represent any point of view or type of moral reasoning. Rest (1993) has indicated that a high M-score signifies that the subject is attending more to the perceived complexity of the items rather than to the meaning of the items.

Reliability

The DIT has been used quite extensively since its development in the 1970s. Rest and Narvarez (1994) found over 1,000 studies using the DIT involving hundreds of thousands of subjects. The DIT has been used in over 40 countries, and 150 new studies use the DIT each year. The DIT literature is so extensive that Rest (1979, 1986) has devoted two books to reviewing it. What emerges from this literature is documentation of an extremely reliable instrument. Average test-retest correlations of the DIT (over a period of several weeks) are in the .80s. Additionally, the internal consistency reliability (Cronbach's alpha) of the DIT averages in the .80s (Rest, 1979, 1986).

Validity

Rest (1993, p. 28) has argued that a crucial demonstration of the construct validity of any developmental measure is to show change in the direction of "higher stages" for subjects who are retested. Dozens of longitudinal studies are reported by Rest (1979, 1986), with analyses of individual patterns of change showing significant upward trends. Cohort-sequential and time-sequential analyses indicate that this upward movement cannot be attributed to generational or cultural change but rather to "individual ontogenetic change" (Rest, 1993, p. 28). One 10-year longitudinal study reported by Rest (1986) is particularly interesting. Although the results documented the usual findings of gains in moral judgment with age, it also found that education was a much more powerful predictor of changes in moral development than was chronological age. Rest (1986) also reported the results of two meta-analyses of about 10,000 subjects which indicated that age and education trends accounted for between 30% and 50% of the variance in DIT scores. A rough gauge of the upward trends described in the literature are reflected by the fact that junior high students typically averaged in the 20s on the P-score, senior high students in the 30s, college students in the 40s, graduate students in the 50s, and moral philosophers in the 60s. By contrast, institutionalized delinquents averaged 19, and prison inmates had average P-scores of 24 (Rest, 1986).

Another potential challenge to the validity of the DIT relates to the ability of an individual to intentionally distort the measure. To explore this possibility, McGeorge (1975) instructed one group of subjects to "fake good" on the DIT by pretending that they were taking the test to show "the highest principles of justice"; a second group was instructed to "fake bad"; and a third group was instructed to take the DIT under regular conditions. Results indicated that under the "fake bad" condition, scores were lower than under the usual condition, but the "fake good" scores were no higher than under the normal test condition. These findings, along with others reviewed by Rest (1979, 1986), suggest that, under normal conditions, subjects cannot perform at a level higher than their current level of moral reasoning.

According to Nunnally and Bernstein (1994), convergent validity indicates that a measure should be correlated with theoretically similar measures, and divergent validity indicates that a measure should not be correlated with theoretically different measures. Rest (1979, 1986) has reported that the DIT correlates approximately .7 with other measures of moral reasoning (e.g., MJI and the Comprehension of Moral Concepts) and that the DIT is nonsignificantly correlated with social desirability and most other personality measures

(e.g., Minnesota Multiphasic Personality Inventory, self-esteem). As may be expected given the cognitive nature of moral reasoning, the DIT is moderately correlated with IQ and aptitude measures (ranging from .2 to .5; Rest, 1986).

Although, as mentioned previously, the DIT was derived from Kohlberg's work on moral judgment, certain methodological differences between the DIT and the MJI may account for their less than perfect intercorrelation with one another. Because the DIT is a multiple-choice test (recognition task) and the MJI is an interview procedure (production task), the DIT usually credits subjects with more advanced moral thinking than does the MJI (Rest, 1986). For example, any trace of stage 5 thinking on the MJI is extremely rare, even among professional, middle-aged adults (because to get credit for stage 5 thinking an individual essentially has to engage in a philosophical lecture on morality), whereas on the DIT at least a hint of stage 5 thinking is present in adolescents.

Another important difference between the DIT and the MJI is the approach each takes to assessing moral reasoning. On both instruments, all subjects can display reasoning from different stages. On the MJI, however, this range of responses is ignored and subjects are typed into whichever stage predominates. By contrast, the DIT presents the full range of stages for each subject and indicates the amount of reasoning taking place at each stage. The P-score is interpreted as the relative importance that subjects assign to items representing Stages 5 and 6 (i.e., reasoning based on moral principles; Rest, 1994). Therefore, the DIT P-score differs from the stage score on the MJI in that it is more continuous. Despite these differences, the two measures complement each other in providing empirical support for the full six-stage theory of moral development. Specifically, the MJI has provided an abundance of empirical evidence for the first four stages, although (for the reason just mentioned) the empirical evidence is sparse for stages 5 and 6. Conversely, because the DIT cannot be used with subjects under age 13, the DIT provides little evidence for developmental stages 1 to 4 but has clearly demonstrated the orderly progression of stages 5 and 6. Overall, Rest (1986, p. 198) concluded that the two measures "show similar kinds of longitudinal trends, correlational patterns, and responsiveness to educational interventions."

Given the gender issues surrounding Kohlberg's theory (discussed later), it is important to evaluate the validity of the DIT for assessing moral reasoning among women. Although many studies have investigated sex differences in DIT performance, only one meta-analysis is reviewed here. Thoma (1986) conducted a meta-analysis and secondary analysis of 56 samples involving 6,000 male and female subjects to determine if there were any sex differences in moral reasoning as measured by the DIT. Although the results indicated that females scored significantly higher than males at every age and educational level, "less than 1/2% of 1% of the variance can be accounted for by gender differences" (p. 171). Consequently, the empirical evidence suggests that the DIT is a valid measure of moral reasoning for both men and women.

CRITIQUES OF THIS APPROACH

It would be remiss to discuss the theory of moral development and its application to professional social work practice and not attend to the gender debate that has occurred in the field since the late 1970s. Gilligan (1977, 1982) has questioned the validity of Kohlberg's

(1976) theory of moral development for women. Arguing that Kohlberg's reliance on a male normative sample resulted in a theory and measurement system that were insensitive to the traditionally female concerns of responsibility and care, Gilligan proposed significant modifications to the conceptualization and measurement of moral reasoning. Although empirical investigations into Gilligan's claim of gender bias in Kohlberg's (1981, 1984) theory have discovered negligible differences in levels of moral reasoning between men and women (for an excellent review, see Walker, 1984), the validity of Kohlberg's theory for women is an important issue for professional social work.

Many studies have investigated the empirical basis of the claim of gender bias, and it is beyond the scope of this chapter to discuss them in any depth. Therefore, rather than presenting an enumeration of the research addressing this issue, only one meta-analysis is reviewed. Walker (1984) conducted a meta-analysis of 79 studies involving 108 independent samples to determine if there were any sex differences in moral reasoning as measured by Kohlberg's MJI. Using the Stouffer method for combining significance levels, he discovered a nonsignificant tendency to favor males ($Z = .73$, $p = .23$). Walker concluded that males and females perform similarly on the MJI and attributed any differences between males and females to factors unrelated to the theory or measurement instrument. However, despite empirical findings suggesting that males and females perform similarly on measures of moral reasoning, many remain convinced that moral development is a gendered construct (Woods, 1996).

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Chapter 14

SMALL GROUP THEORY

Lorraine Moya Salas, Dominique Roe-Sepowitz, and Craig Winston LeCroy

Group work has become an increasingly common form of practice in the social work field and other helping professions. In many settings, social workers provide a broad array of group services, such as educational, supportive, socialization-oriented, therapeutic, community relations, and social activism. In addition to providing direct services to client groups, social workers are often called on to work on multidisciplinary care teams, to be a part of staff work groups, and to serve on community task forces or consumer groups. Involvement in group work is an inevitable component of a social worker's responsibilities, which he or she may partake in either as a member, facilitator, or leader. In the current age of managed care and with an emphasis on cost effectiveness, it is reasonable to expect that group work practice will increase. Thus it is essential for social workers to be knowledgeable about group work and the foundations on which it is built.

There are several advantages to engaging in work with groups. Perhaps the most obvious advantage is that groups are efficient, allowing practitioners to assist many individuals at once. Other benefits include the fact that they help to alleviate isolation and provide members with a sense of hope brought by the other group members (Rose, 2004; Rose & LeCroy, 2005). As individuals in a group share their concerns, members come to recognize that they are not alone in their problems. They are able to receive help in the form of support, validation, and feedback from peers. Group members have the opportunity to observe how peers who may be at different stages in their development have dealt with life issues and troubles and are given the opportunity to learn from the experiences of others. Consequently, peers can become role models for one another. In addition to receiving help, group members have the opportunity to be dispensers of assistance and potentially see themselves in a different light (Rose & LeCroy, 2005; Toseland & Rivas, 2005). Another benefit is that groups provide the context for individuals to practice new behaviors in a setting that is safe and more similar to real-world situations than individual treatment may be. This increases the likelihood that newly learned skills will transfer to the natural environments of group members (Rose, 2004). As group members share their often different perspectives, this may trigger new thoughts and perspectives in other participants. Thus the synergy of groups creates the potential for new awareness and for consciousness raising. Together the group can achieve what none of the participants could achieve individually. Another and perhaps most significant aspect of group work is that in some settings it has been found to be effective in fostering change within group members. Studies indicate that

group treatment is at least as effective as individual treatment and in some instances is more effective (Toseland & Siporin, 1986).

Of course, groups are not without limitations. Groups are not necessarily suitable for everyone, nor are they the intervention of choice for all types of problems. Some of the challenges associated with group work are increased potential for breaches in confidentiality, the chance that members will become dependent on one another, and the possibility that the group may scapegoat particular individuals and/or succumb to group thinking. A few talkative members might monopolize discussion, and the needs of more quiet individuals may not be met. Also, group process often requires a certain level of communication, which may not be appropriate for all individuals, such as children who are nonverbal, adults with a severe mental illness who may be ostracized by other members for their differences, or certain cultural groups for whom it is not acceptable to share personal problems. Ascertaining for whom and when groups are suitable requires some knowledge of group work. Additionally, the ability to modify groups to meet the needs of participants, to create an atmosphere that obviates some of the potential challenges inherent in group work, and to utilize group process to maximize the benefits of group work requires a certain amount of competence (Toseland & Rivas, 2005). Yet, although group work entails many challenges, the power of groups is undeniable and has been repeatedly documented in the literature (Barlow, Burlingame, & Fuhriman, 2005).

Despite the benefits of group work and the likelihood that social workers will engage in group work at some point in their careers, many MSW students graduate without ever receiving training in this modality. A survey conducted by Birnbaum and Auerbach (1994) as cited in Stroizer, 1997) of 89 graduate schools of social work revealed that only 19% of schools require a class in group work, and only 46% of schools surveyed provide group work courses as electives. This indicates that many social workers graduate without ever receiving training in group work and consequently may be ill prepared to engage in small group work. This chapter is designed to enhance social workers' knowledge so that they might be better prepared to engage in effective work with small groups. We focus on the theories that guide small group practice.

Groups are extremely complex, with many factors operating at once. This calls for a theoretical framework that allows the social worker to consider the forces that work simultaneously within a group (Wood, Phillips, & Pedersen, 1996). We examine some of the most widely accepted and utilized theories of small groups and their relevance to social work practice. Further, we review the empirical literature to ascertain what works with small groups and what questions remain unanswered. First, we explore definitions of group work and small groups. This is followed by a review of the history of small group theory and practice so that we might learn from the historic traditions of group workers and more fully understand some of the contemporary issues challenging group workers today.

DEFINITIONS

Group work entails bringing together small groups of individuals to serve a need. It is generally agreed that small groups are not a mere aggregate of people in close proximity; they are not distinguished by one ideal or magic number; and they are more than a gathering of people who have similar characteristics (Hutchinson, 2003). Instead, a small group is

distinguished by interaction, purpose, a sense of belonging, and the conduct or behavior of group members. It is commonly recommended that small groups range from three to a maximum of 15 participants. Rather than size of the group, however, what is crucial is that members have the opportunity to share thoughts and feelings, respond to other members, and engage in interaction with one another. The size of small groups can vary depending on the purpose of the group (Cathcart, Samovar, & Henman, 1996). For example, socialization and educational groups may be larger than therapeutic groups, where it is crucial for all group members to have the opportunity to address their concerns and to be heard. Small groups are further distinguished by the fact that they are goal-directed and can include an array of purposes. They can be task-oriented, where the purpose is to achieve a goal that may or may not address the needs of the group but rather affects a broader collection of people. They can be treatment-oriented, where the purpose is to meet the socioemotional needs of group members. A unique characteristic of small groups is that the success of the group is connected to the success of its participants. Thus group members develop feelings of mutual interdependence (Cathcart et al., 1996; Toseland & Rivas, 2005). Participants in small groups feel a sense of belonging often based on shared characteristics, values, or purpose, and they self-identify as members of a group. Finally, small groups typically have norms for behavior and roles for group members. These rules may be explicit or implicit, and achievement of goals is partially contingent on members fulfilling these norms (Cathcart et al., 1996).

A definition of small groups provided by Johnson and Johnson (2006, p. 8) exemplifies many of the qualities of small groups discussed herein:

> Two or more individuals in face to face interaction who are aware of their positive interdependence as they strive to achieve mutual goals, each aware of their membership in the group, and each aware of the others who belong to the group.

Toseland and Rivas (2005, p. 12) provide the following definition of group work:

> Goal directed activity with small treatment and task groups aimed at meeting socioemotional needs and accomplishing tasks. This activity is directed to individual members of a group and to the group as a whole within a system of service delivery.

These definitions reflects the dual focus of group work, that is, individuals and the group as a whole. Practitioners frequently differ in the degree of emphasis they place on the individuals or the group as a whole. Most group workers take a group orientation that assumes when individuals form a group a new entity is created and the group cannot be understood solely by looking at individual members. Consequently, the group as a whole must be addressed. In this sense, there are two clients: the group as a whole and the individuals within the group. Toseland and Rivas's definition of group work further notes that groups exist in relation to a larger social context. As such, groups are both influenced by and can influence the larger environment (Toseland & Rivas, 2005).

HISTORY AND CONCEPTUAL ORIGINS

This is not a comprehensive reporting of the history of small group theory and practice, but a summary. We attempt to highlight the evolution of small group practice with a particular

focus on the connection to social work and ultimately professionalization. Further, we look at the philosophy and knowledge base that has informed small group work throughout its development (Andrews, 2001).

Small Group Practice and Professionalization

Early group work is frequently described as a movement, not a method (Papell, 1983, as cited in Middlemann & Wood, 1990; Reid, 1981). This is not surprising given that group work emerged in the context of the progressive movement, the recreation movement, and the adult education movement. In its beginning stages, group workers were not associated with one profession but usually aligned themselves with the agencies with which they worked. Group workers came from recreation, Christian youth organizations, Jewish centers, settlement houses, camps, scouts, and education. Group work was guided by a philosophy rooted in democratic ideals, social reform, and human connection (Andrews, 2001).

During the late nineteenth century and the beginning of the twentieth century, urbanization, industrialization, and massive immigration challenged America. With these changes in the structure of society numerous social problems emerged, such as "poverty, unemployment, disease, child labor, slum housing, dangerous working conditions and political corruption" (Reid, 1981, p. 77). Group workers attempted to address these social ills by participating in endeavors of social reform and by creating opportunities for human connection. In the recreation movement there was recognition of the importance of viewing people holistically. It was assumed that an individual's development could be strengthened and the problems of urban living addressed by satisfying people's leisure time. It was also assumed that recreation could assist with the socialization of individuals. There was an emergence of sand gardens, organized sports, clubs, parks, and social centers, and group workers were involved in every aspect of the recreation movement (Reid, 1981).

The adult education movement also surfaced during this time, as adults sought self-advancement. Adult education addressed the needs of immigrants, of those who had not had schooling or had been forced to drop out of school, and of those who had needs related to their new lifestyle. Classes that became available through the adult education movement included reading, writing, English proficiency, citizenship, general health, parenting, child care, homemaking, and occupational training and industrial rehabilitation of people who were without employment due to mechanization. Classes that focused on helping people make good use of their increased leisure time also materialized, and literature, art, drama, and music classes were provided. The adult education movement had a political function as well that was concerned with preparing individuals to participate in and influence the political process. Training was provided on political action and public forums were sponsored. Mary Parker Follet (1920), a well-known and influential thinker of the time, believed that for democracy to work individuals needed to organize into neighborhood groups and advocate for their needs. Thus neighborhood organizations were born. The adult education movement utilized group process and actively engaged students in their learning. The group worker was tasked with keeping the discussion going in the desired direction, gaining the participation of all members, and pointing out inconsistencies (Reid, 1981).

During this period of social upheaval, social work's focus broadened from the individual to the family and the many socioeconomic factors that could either hinder or promote

well-being (Reid, 1981). The settlement movement commenced; social workers lived among the poor in settlement houses that provided playgrounds, kindergartens, and adult education classes, and they engaged in social reform efforts. Small groups were utilized to teach social skills, and efforts were divided between development and environmental reform (Gitterman, 2004). Social workers along with consumers advocated for such things as the regulation of sanitation, prohibition of child labor, and decent, standardized wages (Reid, 1981).

In addition to group work provided in recreation, education, and settlement settings, psychologists also began to experiment with small groups. In 1906, John Pratt established a small group with 15 of his tuberculosis patients, which he referred to as "thought control classes." These groups involved a set of general agreements and consisted primarily of lecture but also allowed for participants to discuss their problems. Thereafter, other psychologists began to engage in small group work with schizophrenic patients, alcoholics, neurotic patients, and disturbed children in "activity groups." Also in the early 1900s, Freud met with his group of analysts, which came to be known as the Wednesday Evening Society. The group was intended to be educational, with discussion of theoretical concepts, but members regularly engaged in mutual sharing, with Freud in the role of leader. Some of the analysts had experienced Freud as a therapist and consequently the groups took on the tone of a group therapy session (Rutan & Stone, 2001).

Group workers, however, remained largely concerned with social reform until the 1920s, when there was a shift in focus from environmental factors to the individual and the psyche. This transformation was connected to the many changes occurring in society. Many Americans experienced a higher standard of living, and after World War I the country assumed an isolationist stance. This was the time of the Red Scare. Consequently, there was a desire for conformity and a fear of anything perceived as radical. Furthermore, by this time psychoanalytic theory was pervasive and informed much of social casework, and the settlement movement declined somewhat. Group workers began to work in different settings: as psychiatric social workers with veterans and in child guidance clinics. Group workers continued with this individualistic focus until the stock market crashed and the Depression challenged this country. After this, once again environmental factors could not be denied and social reform efforts increased. Group workers assembled groups of consumers to study the Depression and to advocate for improved living conditions, for work relief through public works, and for cash benefits for older adults (Reid, 1981).

Despite the renewed interest in social reform, by the 1930s psychoanalytic principles were taught in schools of social work. The first course on group work was provided in 1923 at the School of Social Work at Western Reserve University. Grace Coyle, who drew from the work of John Dewey, taught this initial course. Many social workers thought it was premature to offer group work courses at the university, indicating that group work did not have a comprehensive knowledge base (Reid, 1981). A student at the University of Chicago during the 1930s recounts being told by a teacher that "she was wasting herself by being a person who worked with groups" (Andrews, 2001, p. 49). Many social caseworkers believed that work not informed by psychological dynamics did not belong in social work. In spite of this, there was a steady growth in group work courses, and by 1936 33 schools of social work offered group work courses. Group workers were cognizant of the need for a reformulation of group work and began to search for other sources of knowledge to inform

practice (Reid, 1981). Coyle (1947, as cited in Reid, 1981, p. 122) wrote the following regarding the need for trained group workers:

> It is not enough merely to open our clubrooms and classrooms, recreation centers and playgrounds. The doors of our agencies have stood open for 50 to 60 years. As we have worked within those clubrooms we have been forced to recognize that, when certain people acted as leaders, the groups were not only more fun for the participants but that more people got more out of them. When others led them, the groups were arid, mechanical, sometimes sentimental, occasionally, actually demoralizing.

Toward the end of World War II, once again there was a change in focus from social reform and preparing group members for social responsibility to a concern with mental health, as 1.5 million men were not accepted in the armed forces or were discharged for emotional problems. When the war ended, social workers were tasked with addressing the needs of millions of soldiers and their families. Services were desired that could meet the needs of large groups of people (Reid, 1981). Alexander Wolf, a psychiatrist, had already begun to apply psychoanalytic concepts and techniques to groups in 1938. His focus was on individuals within a group setting (G. Corey, 1990). Social workers, along with psychologists and psychiatrists, began to work together in therapeutic settings. Group techniques were used in hospitals, correctional institutions, schools, and family agencies (Garvin, 1997). Casework was informed predominantly by Freud's theory of personality, and group work students in social work were also being trained in this knowledge base. Further, the social action component of group work, with its tolerance for diversity and understanding of others, was not appreciated by the anti-Communist and McCarthyist climate of the day (Andrews, 2001). Hence, group work concerned itself with treatment and rehabilitation.

Confusion about the purpose of group work mounted as group workers reflected on whether group work was a medium for individual development or a means of furthering social change and strengthening democracy. Group workers struggled with the nature of group work, their professional identity, and the limited knowledge base that guided group work. As they grappled with some of these issues, in 1936 they formed the National Association for the Study of Group Work (NASGW), dedicated to enhancing the knowledge and skills of group workers and to addressing many of the issues that challenged group work. The NASGW produced several publications that reflected the diversity of group work. It was acknowledged that group work was a "therapeutic tool, a reform movement, an educational method, a small part of the recreation movement and closely akin to the methods and values of social welfare agencies" (Reid, 1981, p. 141).

After much debate about their professional status, in 1946 at the National Conference on Social Work, Grace Coyle, along with other group workers, proclaimed that group work fell under the scope of social work because group workers shared many common concerns with caseworkers. Ultimately, this led to the formation of the American Association of Group Workers (AAGW), a professional organization (Garvin, 1997). By 1952, the AAGW voted to merge with existing social work professional organizations, and in 1955 this became the National Association of Social Workers (NASW). With this move group work solidified its identification with social work. Although there were benefits to this union, group workers cited many costs. Group work's connection with recreation and education was weakened, and there was a renewed interest in talk therapy. Group work assumed a more clinical

focus, and social action took a back seat to individual development. By the 1960s and early 1970s, the boundaries between caseworkers and group workers were more flexible as an increased number of caseworkers began to engage in small group work and groups were being provided in numerous settings (Andrews, 2001; Reid, 1981).

As a profession, social work sought unification and to firmly establish the essence of social work. The profession was in search of a common knowledge base that could prepare all social workers to address the needs of clients without trying to fit them into the worker's mode or specialization. In the 1950s and early 1960s, social work students were required to select a method and field of practice that they would then specialize in (Reid, 1981). In 1962, the NASW Delegate Assembly decided to eliminate practice sections and attempted to integrate the three methods: group work, casework, and community organizing. This generic approach to education resulted in few schools maintaining separate group work programs. Many group workers felt that group work was being washed out of social work and that the generic thrust was biased toward preparing social workers to work with individuals and families. Many often refer to this period as "generocide." However, work with small groups continued in many settings, often without workers receiving specialized training (Garvin, 1997).

Despite this apparent setback, group workers continued to make advances in group work and continued to explore the diverse purposes of groups. In 1962, Papell and Rothman, building on the work of others, delineated three models of group work: the social goals, remedial, and reciprocal models. All three of these models continue to guide practice theory. The social goals model is primarily concerned with social change. Through participation in groups, members' social consciousness is stimulated, citizens are informed, and members are engaged in social action. The role of the group worker is to model desired behavior and to enable participants to engage in responsible citizenship. This model stems from group work's early history and commitment to social reform and is still practiced by citizen, neighborhood, and community groups. The second model outlined by Papell and Rothman is the remedial model and is more closely aligned with the clinical interests of group work. In this model group leaders are concerned with restoring or rehabilitating individuals who are deviant or behaving dysfunctionally. The individual is the focus of change. The group leader's responsibility is diagnosis and treatment so that individuals can attain a more desirable level of functioning. The goal of the reciprocal model is to create a group that assists members in achieving optimal adaptation. This is achieved by fostering a system of mutual aid among group members. The role of the group worker in this model is that of mediator between the group and society, and the focus is on group processes (Douglas, 1979; Toseland & Rivas, 2005). The three models reflect group workers' commitment to the multiple purposes of group work despite strong pressure to assume an individualistic focus that would narrow the potential of groups.

The second half of the 1970s was characterized by a revitalization in group work that was largely precipitated by practitioners who remained committed to quality group work and to the development of a theoretical knowledge base. Papell and Rothman, in collaboration with Hawthorne Press, initiated a group work journal entitled *Social Work with Groups: A Journal of Community and Clinical Practice*. This journal filled a void by covering content that other journals had failed to address and provided an outlet for group workers to share their knowledge and expertise. It was devoted entirely to group research and developments in direct practice and community work. In 1978, group workers attending

the annual meeting of the Council on Social Work Education gathered to form a committee for the advancement of social work with groups. This later became the Association for the Advancement of Social Work with Groups, International. One of the first tasks of the committee was to plan a group work conference, since other conferences rarely if ever covered group work content. In 1979, the first Group Work Symposium was held, with more than 350 group workers in attendance. Since then, this conference has become an annual event. These series of events laid the groundwork for the rebirth and strengthening of group work that continued into the 1980s (Andrews, 2001; Garvin, 1997).

Theoretical Underpinnings of Small Group Work

Early group work practice reveals that no one theory of human behavior guided all group workers. Rather, group work was influenced by the climate of the day and the many movements that were under way. Through the mid-1930s, group work predominantly utilized methods from progressive education. As small group practice matured, it was increasingly influenced by the practice wisdom of group workers and the research occurring in sociology and psychology. As the twentieth century progressed, however, psychology began to overshadow other disciplines in its influence on small group theory (Reid, 1981).

In the early 1900s, sociologists were intrigued by the power of groups. Sociologists such as Cooley, Durkheim, and Simmel were investigating and writing about groups. The concept of "primary groups" originated with Cooley (1943), who described families and playgroups as the primary place where individuals learned standards of behavior, values, mutual identification, and solidarity. He hypothesized that into adulthood socialization takes place through small primary group associations. The characteristics of groups and how groups formed fascinated Durkheim (1997). He felt that to understand the group one must look at the structure of the whole group and not just at the characteristics of individual members. Simmel (1950) studied group size and was interested in how this impacted group interactions and power alliances within groups (Reid, 1981).

Psychology also made significant contributions to group work (Reid, 1981). The French psychologist Lebon (1896) began to explore the effect of large groups on individuals. He noted that when individuals become part of a group, their behavior changes and they develop a "group mind." He observed the strength of groups and the contagion and suggestibility that occurs. In 1920, William McDougall published the text *The Group Mind*. He too observed the power of groups to change individual behavior and viewed the group process as a potential tool to assist individuals in changing their behavior in positive ways. For this to occur, he felt groups must be organized and have a clear purpose. Freud too observed large groups and began to ponder what constitutes a group. He posited that groups require a purpose and a leader. Freud indicated that groups form when individuals develop libidinal connections with the leader and each other. With this sense of identification among group members comes regression and de-differentiation. Consequently, group members lose some individuality and strive to meet group goals. Freud further described the dynamic of the group member relinquishing his or her ego ideal and embracing the group leader's purposes. These suppositions were the first attempts to explain the phenomenon of groupthink (Ashford, LeCroy, & Lortie, 2006). Groupthink occurs when a cohesive group emphasizes consensus at the expense of critical thinking when attempting to solve a problem.

Group workers themselves attempted to add to the knowledge of small groups as they wrote of their experiences and observations. Group workers concerned with continuity of services developed a form for recording what occurs in group sessions. By the 1930s, records from social work students from University Neighborhood Centers were published. These records were used to describe important facets of group organization and development. In 1938, research was published regarding a study of a group of boys on a camping excursion. This study suggested that individuals could grow through group work and focused on the bonding, interaction, and status among group members. In 1930, Grace Coyle published *Social Process in Organized Groups*, in which she addressed the structure and evolution of small groups. In 1938, Liberman published *New Trends in Group Work*; this was a compilation of writings by group workers of the day. A theme in this collection was that group work was educational and contributed to personality development (Reid, 1981).

Contributions to group work came from both researchers and theorists. In the 1940s, the work of Kurt Lewin significantly added to group theory. Field theory is considered the precursor of systems theory in the social sciences. Lewin (1939) was one of the first psychologists to acknowledge that human behavior could best be understood by studying individuals in their environmental context. He presumed that the person and the environment were an interdependent whole, which he referred to as the life space or field. Specifically, field refers to the environment where social units such as individuals or groups are located, where they relate and are impacted by a field of forces (Dale, Smith, Norlin, & Chess, 2006). Individual personality development is influenced by both positive forces that push individuals toward goals and by negative forces that resist movement. The group as a social unit also experiences forces that account for behavior in small groups. Lewin coined the term "group dynamics" to describe these forces occurring in a group. Per Lewin's theory, group workers are tasked with becoming aware of the forces or group dynamics that function within a group so that these forces can be increased or decreased to assist the group and members in achieving change (Douglas, 1979). Whereas practitioners described their work with groups, Lewin experimented with groups by operationalizing some of the forces inherent in the group process. His research provided information about group dynamics and leadership styles and how these factors influence group outcomes. For Lewin, the focus was on the here and now and on personal growth. Although Lewin died in 1947, his work led to the first National Training Laboratory in *group development* and to what is now referred to as t-groups, encounter groups, or sensitivity groups (Rutan & Stone, 2001).

By the 1930s, psychoanalytic principles were widely accepted in the United States as a way of understanding human behavior (Reid, 1981). While Lewin was conducting his research on group dynamics, other theorists were expanding on Freud's theory of personality. Ego psychology, object-relations theory, and other psychoanalytic perspectives emerged, each of which emphasized different aspects of human behavior and development and provided different outlooks on motivation. Eventually group workers began to apply psychoanalytic concepts to small groups (Geller, 2005). Alexander Wolf (Wolf & Schwartz, 1962) and Slavson (1964) were among the first to engage in small group work utilizing psychoanalytic principles. They took an intrapsychic approach and focused on treating the individual within a group milieu and not on treating the group. Wolf used psychoanalytic techniques to bring unconscious conflicts into awareness and to assist the client in reformulating his or her personality system (G. Corey, 1990; Rutan & Stone, 2001).

Interpersonal theories of small group work also emerged. Interpersonal theories assume that the group is a microcosm of the individual's social universe. Through experiences in group, feedback received from other group members, and self-observation, individuals learn about their maladaptive style of interacting with others and of their perceptual distortions. It is assumed that with insight group members are able to change their dysfunctional patterns of interaction (Rutan & Stone, 2001).

Another form of small group theory emerged with the work of Wilfred R. Bion, a psychoanalyst who had been trained in the object-relations tradition (Geller, 2005). Bion conducted his research with small groups at London's Tavistock Institute of Human Relations in the 1940s, but his work did not have influence in the United States until the 1960s. Bion viewed the group as a collective entity and was concerned with both overt and covert aspects of group work. Overt aspects are the task or purpose of the group and group norms; covert aspects of group functioning include hidden agendas and unconscious emotions and the basic assumptions of group functioning. The group leader must attend to both levels of group functioning but is primarily concerned with the basic assumptions: group projections and beliefs about what the group needs to survive. The work group is disturbed by the basic assumptions. Bion postulated that there are three basic assumptions. The first is the dependency group, which assumes that security and protection can be obtained from a group member, usually the leader. Consequently, group members may act helpless and incompetent in the hopes that the group leader will rescue them. When this does not occur, group members may become angry or express their disappointment in other ways. The second basic assumption is the fight-flight group. Examples of flight include tardiness, absences, and, in extreme cases, dropping out of the group; fight is demonstrated by resisting reflection and self-examination or by engaging in insignificant talk to avoid real issues. The final basic assumption identified by Bion is the pairing group. Here two group members form a bond and invest in planning for the future with the belief that this plan will produce something akin to a Messiah that will save the group. The rest of the group may become inactive as the pair rely on each other and exclude other group members (Rutan & Stone, 2001). Bion did not rule out the possibility that there could be other basic assumptions operating in groups. In fact, Turquet (1974) later identified another basic assumption, oneness, that can interfere with the work group function. Bion assumed that people enter a group with valence, which is an individual's natural tendency for one of the basic assumptions. Per Bion's theory, the function of the group leader is to help the group members become aware of their basic assumptions and their valence. The role of the group leader is at times characterized by noninvolvement, followed by moments of pointing out group behavior. It is assumed that through this process individuals will learn about their problems with authority and peers, which will free them from their historic bonds. In addition to Bion's view of groups as a collective, he brought attention to the unconscious processes that occur in groups and that must be attended to. Later, other theorists built on Bion's work and additional group-as-a-whole theories emerged (Rutan & Stone, 2001).

By the 1960s and 1970s there was a proliferation of theories in the social sciences that influenced social work and, more specifically, group work, including role theory, humanistic and existential theories, and behavioral and systems theories, to name a few (Reid, 1981). These theories emerged partly due to the incompleteness in psychodynamic theories in providing an understanding of human behavior. It is important to note that none of these theories has attained universal acceptance in group work (Rutan & Stone, 2001). Theories

have continued to evolve as theorists build on the work of previous researchers, and theories have been adapted for work with small groups; new theories will undoubtedly emerge as we move into the twenty-first century.

Summary

Group work historically has responded to the needs of society by providing recreational and leisure activities, education, rehabilitation, and treatment and has influenced society through social action and reform efforts. Group work is committed to changing both people and society. Group work matured along with the evolution of social theories. Small group work stemmed from a philosophy of people working together for mutual gain and grew from the practice wisdom of individuals and researchers who began to observe and document the power of groups. Gradually, theory emerged to provide clarity regarding the dynamics of groups, to inform the change process, and to provide an understanding of human behavior. There are now numerous theories that inform small group work, some of which focus on the individual within a group milieu and others that focus on the group as a whole. Recently, practitioners have begun to recognize the importance of a dual emphasis. In any event, group work can no longer be criticized for not having a clear theoretical knowledge base. It is rare, however, for practitioners to utilize one theory exclusively. Rather, the group worker is tasked with integrating theory (Rutan & Stone, 2001). It is with this in mind that we move into addressing current theoretical principles of small group work.

BASIC THEORETICAL PRINCIPLES

Given the diverse beginnings of small group work, it is not surprising that there is no one theoretical orientation that unifies group work. Social workers often equate practice without an explicit theoretical rationale to navigating a plane without a map. Theory is the map that informs one's assumptions about human behavior and guides how we explain behavior and group interactions and decide on group goals and our role in the group process (G. Corey, 1990). It is important to be mindful that not all theories lead to the same destination; nor does one theory reflect the ultimate "truth." Regardless of whether social workers are aware of their theoretical orientation, their behavior is, in all likelihood, informed by their assumptions, and it would serve group practitioners well to reflect on their values and beliefs.

The Association for Specialists in Group Work's "Best Practice Guidelines" indicates the necessity of developing a theoretical framework to guide group practice and support one's techniques and interventions. Practitioners are responsible for formulating their own theoretical framework that is derived from the synthesis of the best of many theories and that is aligned with their natural views and inclinations. To achieve this it is imperative that practitioners be self-aware and grounded in theories of small group work, including the strengths and limitations of numerous theories (M. S. Corey & Corey, 2002). Only then can the group practitioner select theories and interventions that are advantageous and an appropriate fit for the consumer. Here we consider systems theory, as it provides a means for understanding and working with small groups that goes beyond a focus on the individual or interpersonal exchanges. It provides a lens through which we can look at the whole group

and its multiple levels (Connors & Caple, 2005). Additionally, it can be used in combination with other theoretical approaches. Psychoanalytic theory is also addressed, as more than any other theory it has influenced subsequent theories (G. Corey, 1990). Learning theory is reviewed because it has gained momentum in group work practice. Many approaches to group work rely on learning principles, particularly psychoeducational groups and prevention groups (Toseland & Rivas, 2005).

Systems Theory

General systems theory was developed by Ludwig von Bertalanffy (1968), a biologist who believed that the best way to understand living phenomena was to view them in context, where they could be examined as part of a larger system. Bertalanffy's theory parallels many of Lewin's (1939) ideas, which emphasized the importance of understanding an individual's life space. Like Lewin's field theory, systems theory emphasizes a holistic and interdependent view of organisms and their functioning. Just as there are numerous variants of psychoanalytic theory, there are many forms of systems theory. Here we highlight some of the central tenets of systems theories.

No system or individual acts in isolation but is interconnected with other systems. Every system is part of another system, and every part of a system is also a system itself; therefore, change at any level impacts all systems. A group system is influenced by the interactions of its members, by how the group leader interacts with group members, and by the external environment that impacts individuals and what they bring to the group process. Both nonparticipating group members and group members who dominate discussion influence group dynamics (Connors & Caple, 2005). The method used by the group leader to respond to a particular group member who violates the norms of the group affects that member, the group as a whole, and the group leader. The agency sponsoring a group as a system impacts groups with its mission statement, the employees it hires, and the resources it allocates for group work. With these examples, we see that "all parts of a system interact dynamically and constantly" (p. 14). Further, this interaction is bidirectional: The environment impacts a group, and the group can impact the larger social environment. It is the transaction within and between systems that is central. Linear, cause-and-effect thinking does not sufficiently capture what occurs in groups. The commonly heard phrase "A system is more than the sum of its parts" recognizes the new features that are produced through interaction (Donigian & Malnati, 1997).

In addition to grasping the importance of interaction and connectedness among systems, understanding the group as a whole is primary (Wood, Phillips, & Pedersen, 1996). The difference between an individual perspective and a group-as-a-whole perspective is best illustrated with a story shared by Agazarian (1997) in her text *Systems-Centered Therapy for Groups*. She describes sitting near a pond when her companion threw a portion of his hamburger into the water. One of the faster fish got to the food first and swam away with it. It was too big for the fish to gulp down, so the other fish swam along and also nibbled away at it. Her companion reported:

> From the perspective of the fish in general, we see an efficient distribution and feeding system; one fish is playing a role for the whole shoal of fish by catching the hamburger and holding it in his mouth while the whole group of fish feed. We see something different when we take the perspective of the individual fish, who is having his dinner stolen from him before he can eat it. (p. 8)

Group workers with a systems orientation are concerned with the big picture or the group as a whole and not just individual needs and perspectives. Consequently, group workers attend to group dynamics and development (Connors & Caple, 2005).

Systems theory purports that all organisms have a similarity of function and structure, or are isomorphic. Structure includes boundaries and power structures that make decisions regarding the input and output of energy. Boundaries define an entity, contain the energy of a system, and are potentially permeable. When boundaries are open, energy exchange occurs across systems. A change in any part of a system creates change in that system and the other systems that it is embedded in. Fortunately, systems are naturally self-organizing and goal-directed. They organize themselves to survive and adjust to their ever-changing environment. Systems self-stabilize or attempt to maintain equilibrium by adopting new information into their current structure or by changing their structure, whereby evolution occurs (Connors & Caple, 2005). Systems inevitably transform and move from simple to more complex; closed systems with rigid or impermeable boundaries are a threat to the survival of a system (Agazarian, 1997).

Within groups, systems exchange energy or interact dynamically through communication among group members. Individuals consistently make decisions regarding the rigidness of their boundaries, that is, whether they should be open or closed and whether to share and accept feedback. Some groups can be flexible and accept new members; others are more rigid, resist change of any sort, and have strict group membership requirements. The group leader can assist the group in considering their closedness and their feelings about change. Additionally, group members can challenge each other. Newly formed groups may struggle initially as they seek stability, which is facilitated when group norms, goals, and roles are established (Connors & Caple, 2005).

Generally, systems theorists who work with groups are particularly aware of the power of groups to influence individuals. They recognize the properties that surface from the interaction of individuals in a group. Group workers operating with a systems orientation are attuned to subsystems and external environmental systems that impact the groups' functioning. They recognize that the group, like other systems, is continually in transformation; therefore, the group as a whole moves through its own developmental stages. Group systems, like other systems, struggle to survive when threatened with conflicts and will dissipate when no longer needed (Connors & Caple, 2005; Toseland & Rivas, 2005).

Psychoanalytic Theory

There are multiple psychoanalytic perspectives that have led to intrapsychic, interpersonal, and group-as-a-whole approaches to small group practice. Additionally, many psychoanalytic concepts have found their way into other theories of human behavior. Rather than focusing on the differences among each approach, we highlight the commonalties or the core principles that set psychoanalytic theories apart from other theories (Geller, 2005).

At the crux of psychoanalytic theory is its focus on unconscious processes. It is assumed that people at times are irrational and have unconscious conflicts, thoughts, and feelings. The possibility of the unconscious surfacing leads to anxiety and fear. To protect themselves from this fear and anxiety individuals employ resistance and defense mechanisms, such as repression, denial, regression, projection, displacement, reaction formation, and rationalism. The therapeutic process is designed to illuminate the unconscious and to make

individuals aware of their defense mechanisms. It is presumed that much of human behavior is motivated by the unconscious. Hence, by making the unconscious conscious the individual is freed and can become autonomous (G. Corey, 1990).

The primary mechanism for bringing the unconscious into awareness is transference. Transference occurs when the group member puts feelings, attitudes, or fantasies about significant others onto the therapist or other group members. Countertransference occurs when the group leader puts his or her own feelings onto a group member and the leader's view of that member becomes distorted. It is important to note that transferences can consist of either positive or negative content. Group members are assisted in using transference to relive their past in a setting that will not be harsh and punishing. In this way, group members gain insight and work through unresolved, unconscious conflicts that make it difficult for them to move forward. Small groups potentially provide a reflection of how members relate socially outside of the group, and they allow for the possibility of multiple transferences to occur. To a large degree, the leader's role is to assist group members in exploring the extent to which they relate to group members as they do family members and to aid in re-creating the family of origin in the group setting (G. Corey, 1990).

In psychoanalytic theory the focus is on understanding how present behavior is connected to early development. Therefore, there is a continual weaving back and forth from the here and now to the past. At the core of psychoanalytic theory is identifying and interpreting transference and defense mechanisms. The group leader attempts to explain the underlying meaning of an individual's behavior and/or points out the behavior of the group as a whole (G. Corey, 1990). The basic assumption, as described by Bion (1959), is that the group's collective defense mechanism must be brought to the group's attention. The extent to which various psychoanalytic perspectives focus on the individual or the group as a whole varies. However, there is growing appreciation for the combined boundaries between the self and the group. This relationship is excellently described by Malcolm Pines (1992, as cited in Geller, 2005) in his article "The Self as a Group: The Group as a Self." Pines states, "If we grasp the complexity of the individual both constituted from and functioning as a group, it becomes less problematic to look at the contrasting notion of the group as a self" (p. 94). Consistent with this perspective is the notion that the individual expresses feelings that stem from the whole group. Feelings and thoughts that the group may be unaware of are projected onto a group member, often a scapegoat. If the scapegoat leaves the group, a new scapegoat will likely emerge. It is necessary for the group leader to make members aware of their unconscious feelings and thoughts that are being projected. In this way, the scapegoat is released from the feelings he or she carries for the group, and the group members are able to work through their issues. To some extent, the collective dynamics of the group must be dealt with for growth to occur. Ultimately, psychoanalytic theorists operate under the assumption that problems in behavior are virtually always driven by the unconscious, which remains the domain of all psychoanalytic theories (Geller, 2005).

Social Learning Theory

Many social workers are familiar with social learning concepts. Bandura's (1971) theory is perhaps the most well-known; it attempts to understand people as conscious, thinking beings who can have an influence on their environment. Social learning theorists assume that the behavior of group members is learned based on their interaction with the

environment. Further, social learning theorists acknowledge the reciprocal relationship between the individual and the environment. Individuals are not just a product of their environment but can process information to actively influence how the environment controls them.

Perhaps most critical to group work is social learning's emphasis on how observation can lead to learning. It is assumed that learning can occur by observing others, without direct involvement in the learning experience. Thus, social learning theory is an approach that combines learning principles with cognitive processes, plus the effects of observational learning, to explain behavior.

Group workers can make use of social learning theory's emphasis on observational learning. Exposing group members to models can influence behavior. Research on modeling suggests that imitation is enhanced with models of people who are liked and respected. In addition, imitation is more likely when people see similarity between themselves and the model. People are more likely to imitate a model if they see the model's behavior leading to positive outcomes.

An important aspect of social learning theory is the notion of self-efficacy. Self-efficacy refers to a person's belief about his or her ability to perform behaviors that lead to expected outcomes. When people have a strong belief in their ability to perform certain behaviors, their confidence is high. This means they are likely to persist in their endeavors. When people have low self-efficacy, they are not very confident and are likely to give up easily. As a result, the decision to engage in a situation, as well as the intensity of the effort expended in the situation, is determined by a person's self-efficacy.

ADVANCED THEORETICAL PRINCIPLES

Systems theory, psychoanalytic theories, and social learning theory are fully developed theories of human behavior that inform practice. Here we look specifically at how these theories have been expanded to apply to small groups. Helen Durkin (1972), for example, first utilized systems theory in group therapy in the early 1970s. Subsequently, others have applied systems theory to work with groups. Agazarian's (Agazarian & Gantt, 2005) formulation of systems theory and its application to small groups is arguably the most comprehensive and will be discussed here. Irving D. Yalom's (1995) interpersonal learning theory is one of the better-known approaches to small group work. A study by Stroizer (1997) that looked at the content of MSW group work courses in the United States revealed that Yalom's text was most often listed in syllabi as the required text in the 51 group work courses in the sample. Hence, this theory will also be addressed. Learning theory gave rise to cognitive-behavioral group work, which has a strong empirical base and is widely utilized. This model is reviewed in the section on recent theoretical developments (Toseland & Rivas, 2005).

Systems-Centered Therapy for Groups

Yvonne M. Agazarian (1997) draws from the work of many theorists and expands on systems concepts with her theory of small group work. As is true of all systems, the primary goal of the systems-centered therapy (SCT) group is survival and transformation.

In an SCT group this entails developing a problem-solving system, whereby members learn to resolve their own problems within and outside of the group. This requires mobilizing the energy of the systems toward the group's goals and structuring a group climate conducive to this aim. This climate is referred to as a system-centered culture and "exists when group members are both aware of themselves and of themselves in a hierarchy of contexts" (p. 21).

Agazarian and Gantt (2005) reframe Lewin's (1939) formulation of a field of forces in terms of decreasing restraining forces and increasing driving forces within the field to get to the goal. Problems are conceived of in terms of the permeability of boundaries. Boundaries are permeable if driving forces are stronger than restraining forces. In SCT the task is to minimize restraining forces. Achieving goals necessitates opening boundaries to energy and information and closing boundaries to noise. Noise includes cognitive distortions, contradictions, redundancy, and vague communication. Moreover, Agazarian (1997) elaborates on the tendency of human systems to integrate similarities and close boundaries to differences. Integrating similarity keeps systems stable in the short run, but in the long term this leads to rigidity and is dangerous for the survival of the system. When systems close their boundaries to differences, energy is expelled to deal with the differences. For systems to change and transform themselves, differences must be integrated. When systems reorganize and integrate differences, energy previously used to manage difference is available for working on goals.

To create a system-centered culture and to direct energy toward goals, SCT utilizes four methods or techniques: functional subgrouping, fork in the road, filtering techniques, and contextualizing. Just as systems theory acknowledges a hierarchy of systems, SCT identifies the core systems of a group as group members, subgroups, and the group as a whole. Subgroups exist within the environment of the group as a whole and are the environment for members. Unlike in other group therapy approaches, the subgroup and not the individual is the basic unit of the group and the target of intervention. Because the subgroup shares boundaries with both individual members and the group as a whole, it is considered most efficient to influence subgroups. Change in any of the core systems leads to change in the other two systems as well (Agazarian & Gantt, 2005).

Systems-centered therapy observes that people naturally gravitate toward that which is similar and separate around differences. This results in splitting in a stereotypical fashion. The status quo is maintained, and groups remains stable for the short term. An alternative to stereotyping that increases the likelihood that differences will be integrated is functional subgrouping. This is when subgroups are deliberately formed around differences or conflicts, and exploration of the unknown is allowed. Typically, groups deny differences by splitting and projecting, and resources for doing the work of the group are lost. Functional subgroups, on the other hand, contain conflicts and differences so that they can later be integrated. It is by integrating differences that systems develop and transform into more complex systems. Additionally, members can avoid ambivalence by working on one side of a personal conflict while allowing another subgroup to work on the other side of the dilemma. The incongruity is contained within the group as a whole, and the member no longer has to bear the conflict alone. Subgrouping around conflicts allows members to experience each half of a conflict rather than projecting, splitting, denying, or acting out while attempting to deal with both sides of an issue. Group leaders look for conflicts and differences that emerge and invite exploration. For example, "yes, but" communication is

identified and members are invited to explore. Group leaders may ask whether anyone else agrees with the "yes" portion of the statement, or whether the "yes" resonates for anyone else. The subgroup actively works and members build on each other's experiences until there is a pause in discussion. At this point, the group leader invites other group members to explore the other side of the issue by asking who agrees with the "but" portion of the statement; thus another subgroup is formed and permitted to explore this part of the conflict. As subgroups explore their side of a conflict, small differences within the subgroup surface and are integrated. Differentiation occurs with subgroup members, and similarities between subgroups are also recognized. In this way, differences are integrated in the group as a whole and information is exchanged across systems (Agazarian, 1997).

The fork in the road technique is also used in SCT and puts into practice discriminating and integrating, which is required for transformation. The fork in the road is when members choose one side of a dilemma to explore within a subgroup and energy is vectored or directed toward the system's goals. The first fork in the road requires recognizing the difference between explaining/thinking and exploring/feeling. Rather than explaining and intellectualizing a conflict, members are required to explore it. Explanation leads to what one already knows, whereas exploration allows new experiences to surface (Agazarian & Gantt, 2005). Members describe what they are feeling instead of interpreting, which can lead to cognitive distortions. The boundaries between the two subsystems of the self, the cognitive portion of the self that leads to comprehension and the apprehensive part that stems from intuition, become permeable so that energy and information can cross between the two subsystems. Ultimately, systemic change comes through insight derived from both experience and understanding (Agazarian, 1997).

Another method used in SCT is boundarying, or filtering out noise. By filtering out noise, boundaries become permeable, and clear information comes into the group and is available for group tasks (Agazarian & Gantt, 2005). Systems move from simple to complex when noise is stopped at the boundaries and when clear information and communication cross boundaries. One of the primary tasks of SCT groups is to assist members in recognizing when boundaries are crossed. This includes crossing physical and psychological space and time boundaries and reality and role boundaries. Just as there are geographic boundaries that members cross as they enter the circle of the group at the designated time, there are psychological space and time boundaries as well. Members are made aware of psychological boundaries that include bringing all of their attention to the group process and the ability to focus on the present. In SCT groups, of concern is whether time functions as a restraining or a driving force. Often, when the present becomes too challenging, group members flee into the safety of the past or future. This results in members reliving the past in the present. Instead, members are encouraged to address the past in the here and now and assisted in recognizing the differences between the present and the past. Members may also take flight into the future by making predictions and living in the "as if" world they have created. This too keeps attention away from the present and sets up barriers along the boundaries, and all information that does not fit one's expectations is kept out. Another boundary members are made conscious of is the boundary between reality and irreality. In SCT the group's attention is refocused away from mind reading and prediction to the reality of the group. Members are encouraged to check out their assumptions, fears, and fantasies with other group members. Again, members are required to experience present reality rather than explain it, and misconstructions caused by faulty explanations are compared to

reality-tested information obtained through exploration. Group members begin to develop an awareness of different contexts that lead to different interpretations, such as the past, the future, and the irreality of the mind. It is recognized that only in the context of real and current group life can problems be solved (Agazarian, 1997).

Groups using SCT also address role boundaries. Roles are systems in and of themselves, characterized by behavior, function, and goals. They change with context and are not simply a person. This is exemplified by the parental role, for which the goal is rearing children. Parental behavior changes with context; for instance, bedtime behavior differs from playtime behavior. Further, one can assume many roles and can cross boundaries from, say, the marital role back to the parental role. In an SCT group, members become cognizant of their many roles and how behavior and perspective change with roles. Group participants can operate in their person role; the group member role, in which they abide by group norms; a functional subgroup role, in which they operate according to one side of a conflict; or as a member of the group as a whole. Each role embodies a different context, and as roles shift, perspectives change. Members gradually begin to see how behavior, perspective, role, and context are connected and gain the capacity to see problems or situations from more than one perspective. In the end, SCT members are challenged to vector energy across boundaries from outside to inside the group, from the past and future to the present, from irreality to reality, and across group roles (Agazarian, 1997).

The fourth method of SCT, contextualizing, refers to the ability to see multiple contexts. This entails moving from a self-centered system that sees only oneself and consequently personalizes problems to a system-centered system, in which the individual sees himself or herself within a hierarchy of contexts. Here the impact of context is appreciated, and it is recognized that as perspectives change, experience also changes.

Through functional subgrouping, fork in the road, filtering techniques, and contextualizing, a system-centered culture is established and energy is directed toward achieving the goals of the system. For more specific information on how to apply SCT to small groups, readers should consult Agazarian's (1997) text, *Systems-Centered Therapy for Groups*, where a detailed blueprint is provided.

Interpersonal Learning

Yalom's (1995) interpersonal learning theory holds that all problems are in fact the result of interpersonal pathology. Yalom studied with Sullivan; thus his work emerged from a psychoanalytic tradition and his theory has much in common with this perspective. Interpersonal learning focuses on irrational behavior that is largely unconscious and that causes problems for individuals as they relate with others. The group is the vehicle by which individuals learn of their maladaptive behavior patterns and of their parataxic distortions. Parataxic distortions are similar to transference, as they include distortions of others and refer to all interpersonal relationships. One of the group leader's primary tasks is to set up group conditions that allow members to behave in an unguarded, spontaneous manner. It is assumed that by doing so and with time, group members eventually behave in the group as they do in their social sphere. The group then becomes a microcosm of the group members' social universe. Group members display their interpersonal pathology and receive feedback from other members regarding their behavior. Yalom described the process of consensual validation, whereby individuals compare their interpersonal evaluations with those of the

other group members. Through consensual validation group members become aware of their own behavior, how others view them, the feelings their behavior elicits in others, and ultimately how this impacts how they see themselves (Yalom, 1995).

Unlike many psychoanalytic perspectives, interpersonal learning focuses on the here and now and assumes that the power and effectiveness of the group increases as members are able to focus on what happens in the group during the session. Members observe behavior as it unfolds. Consequently, a historical assessment of the lives of group members is not required. Yalom's theory holds that the past is present, or manifests itself in the here and now. When members talk about past situations and their personal history, the group leader moves the group back to a focus on their relationship with one another. For example, if a group member reports that she is consistently angry with her partner, the group leader might ask if she were to be angry like that with someone from the group, who it would be. Yalom (1995) provides numerous examples in his text *The Theory and Practice of Group Psychotherapy* regarding how group leaders can move group members into the here and now.

In addition to moving group members into the here and now, the group leader's role is to illuminate process. Process refers to "the nature of the relationship between interacting individuals" (Yalom, 1995, p. 130). The process, not the content, of group discussion is of primary importance. Group leaders are concerned with the why and how of behavior and of statements made throughout the group process. The difference between focusing on process and focusing on content is made clear in an example provided by Yalom. He describes an incident in which a group member spoke negatively about parenthood to another group member, knowing full well that the majority of group members were parents. The group proceeded to discuss the content of the statements and debated the merits of parenthood. Instead, a concern with process might include exploring why this group member chose to share his sentiments about parenthood with this particular group member and what that indicates about their relationship. Another possibility is to explore why the individual set himself up to be attacked by the group and what that revealed about his way of interacting with others. There are often multiple processes that can be explored, and the leader decides which processes to delve into based on what is deemed most helpful to the individual and the group. Whereas Bion (1959) stressed attention to whole-group processes, Yalom's focus is on interpersonal processes. This is not to say that whole-group processes are unimportant. When the group is presenting obstacles to the working of the entire group, this takes precedence. For example, in the previous scenario, perhaps the individual was filling a role for the group and creating a diversion whereby the group could spend an entire session discussing parenting and thus avoid more honest discussion and self-disclosure. In any event, a central role of the group leader is to help group members examine and understand processes (Yalom, 1995).

Fundamental to assisting group members in addressing their interpersonal pathology is the corrective emotional experience. This entails experiencing an emotional situation within the group in a restorative fashion. In a sense, the group member experiences a past trauma or relives a script that he or she plays out in social interactions, but the group facilitates the elimination of distortions and the experience becomes healing. Within the safety of the group, raw emotions surface, and via honest feedback and consensual validation the group provides the basis for reality testing. Both the emotional experience and intellectual insight are essential to the corrective emotional experience. Catharsis alone is insufficient for

change. A cognitive component is needed for individuals to make sense of their feelings and to understand the inappropriateness of their interpersonal behavior. For Yalom, intellectual insight can occur on four levels. The first level is awareness of how one is seen by others. The second level is recognition of patterns of behavior and interaction. The third level entails individuals' understanding why they do what they do. The fourth level is referred to as genetic insight; it is at this level that individuals see how they got to be the way they are. Contrary to psychoanalytic perspectives, it is not necessary to achieve genetic insight or an understanding of the past for change to occur. Insight at any of the first three levels followed by personal responsibility will suffice (Yalom, 1995).

Yalom (1995) conceived of the group both as an agent of change and as providing the conditions that help patients. He specifically explored what it is about group therapy that benefits patients. He recognized that there are many factors that can help group members. Interpersonal learning is key for the achievement of change. Yet this curative factor does not exist in isolation. There are many factors that are interdependent and function together. For example, for interpersonal learning to take place, group cohesion is pivotal. Without a sense of safety and trust that occurs in a cohesive group, it is unlikely that group members will take the risks involved in interpersonal learning. It is also possible that being part of a cohesive group where one belongs and is accepted is in itself sufficient to trigger change. Other therapeutic factors include catharsis, which is a component of the corrective emotional experience, and the corrective recapitulation of the primary family group, in which group members interact with one another as they would with parents and siblings. Although there is no consensus regarding why group members change, Yalom drew from the accounts of group members and leaders and from systematic research to identify 11 therapeutic factors that form the foundation for effective group therapy: instillation of hope, universality, imparting information, altruism, the corrective recapitulation of the primary family group, development of socializing techniques, imitative behavior, interpersonal learning, group cohesiveness, catharsis, and existential factors where individuals ultimately accept responsibility for their life. It is the group leader's task to cultivate these therapeutic factors, thus creating a climate for effective group therapy (Yalom, 1995).

RECENT THEORETICAL DEVELOPMENTS

In response to the needs of society, group work has acquired many different modalities that range in focus from social change and social justice goals to the promotion of individual functioning and growth-oriented goals. In this section we discuss two models that currently drive practice, each of which provides a substantially different approach to group work: the cognitive-behavioral model and the mutual aid model (Garvin, Gutiérrez, & Galinsky, 2004).

Cognitive-Behavioral Model

The cognitive-behavioral model is closely aligned with the remedial model. It stems from existing research on what has proven effective, just as the remedial model was derived from its commitment to scientific strategies. It is focused on individual change at either the behavioral, emotional, or cognitive level and utilizes group conditions to achieve these

aims. Cognitive-behavioral group work (CBGW) is a highly structured program that draws on behavioral and cognitive theory and small group strategies (Rose, 2004; Rose & LeCroy, 2006).

The structure of group consists of five phases: beginning the group, motivational enhancement, assessment, intervention, and generalization. In beginning the group, the leader is tasked with developing group cohesion, with explaining what the group process entails, and with delineating what is expected of group members. The motivational enhancement phase begins from the moment the group is initiated and continues through subsequent phases. This is where the group leader attempts to increase participants' motivation to work on the problems that brought them to group. Often participants are reluctant to engage in treatment; they may be in denial of their problems or unwilling to self-disclose. This is especially true for involuntary clients. In the assessment phase, the group leader gathers specific information regarding the problem, including the what, where, who, and when of the situation. Particulars are gathered either through formal assessment instruments or through sharing in the group, with the group leader modeling how to describe the issue. Group members are assisted in examining the short- and long-term consequences of the situation, and their level of satisfaction with their current response to the dilemma is noted. Setting measurable goals is essential to the assessment phase, along with specific timelines. Both individual and common treatment goals are formulated. When group members share common goals, the working of the group can be more efficient, with information and activities structured to facilitate goal attainment. Group goals can be formulated that pertain to the interaction of the whole group; for example, attraction of members to the group will increase from the end of one session to the next, as measured by a standardized questionnaire on group cohesion. Both the group leader and members can assist in identifying goals for themselves and other group members. The intervention phase includes a variety of strategies primarily based on social learning principles. A few such interventions are cognitive change strategies, modeling, role-playing, problem solving, guided group exposure, relaxation techniques, and operant procedures. Group members are an active part of many of the interventions. For example, the group leader and multiple group members provide modeling, feedback, and positive reinforcement for desired behaviors and/or withhold reinforcement in an attempt to extinguish behaviors. Group members assist with all of the specified steps in the problem-solving process, that is, in suggesting alternatives and evaluating outcomes. Additionally, group members are available to provide support to each other as they implement identified tasks. The final phase of the group process is generalization. In this phase, group members are prepared to maintain key learning and to take what they have learned during the group process into their natural environment. This occurs, in part, throughout the course of treatment as members are assigned homework activities at the end of each session that are to be completed in real-world settings (Rose, 2004).

Throughout the group process and at the end of each session, members may be asked to rate various aspects of the group process, such as how close they felt to other group members or how much they self-disclosed during the session. Members may also set short-term, measurable goals that are to be met in a few sessions that will lead to fulfillment of long-term goals. Measurement, outcomes, and evaluation are crucial components of CBGW. The role of the group leader is that of change agent and expert in implementing the treatment process, and the group is both the context and the means (Rose, 2004).

Mutual Aid Model

The mutual aid model presented here is an evolution of the reciprocal model, or the interactional model as it has also been referred to. The mutual aid model reflects the reciprocal relationship or interaction among group members and between the group and the larger social environment. It stems mainly from the work of Schwartz (1962), who utilized systems thinking in his formulation of group work. His systemic approach conceived of the group worker as a mediator within a dynamic system that is mutually influencing. In his view, individuals and society are in a symbiotic relationship, each needing the other for survival and growth; the unique task of the social worker is to act as an intermediary. In the context of group work, this takes the form of assisting group members in establishing a system of mutual aid among themselves and in developing favorable interactions with the environment (Gitterman, 2004).

The role of the group worker is that of external and internal mediator. The group worker acts on behalf of both the group and the agency that employs him or her. He or she is a resource and attempts to improve the fit between group members' needs and the services provided by the agency and/or the larger society. Internally the group worker is focused on minimizing interpersonal tension within the group and strives to establish mutual bonds among group members (Gitterman, 2004). Although all groups to varying degrees recognize the importance of establishing mutual aid among group members, for this model mutual aid is central. Schwartz (1962, as cited in Gitterman, 2004, p. 98) defined the group as

> an enterprise in mutual aid, an alliance of individuals who need each other, in varying degrees, to work on certain common problems. The important fact is that this is a helping system in which the clients need each other as well as the worker. This need to use each other, to create not one but many helping relationships, is a vital ingredient of the group process and constituted a common need over and above the specific task for which the group was formed.

Engaging members in sharing experiences and developing a common purpose facilitates bonding. Through sharing and listening to the concerns of others, members begin to see that their troubles are not as unique as they originally thought. They gradually begin to feel less isolated and pathologized and begin to see the universality of their situation. Members reach out and help one another and engage in collective problem solving. They discuss issues, disagree, give each other feedback, provide different perspectives, and build on each other's ideas. In the context of a "multiplicity of helping relationships" (Gitterman, 2004, p. 99), group members can change maladaptive perceptions and behaviors. New behaviors can be rehearsed within the safe context of the group. Additionally, members begin to make connections between private issues and societal conditions, and the consciousness of group members is raised. The collectivity of the group often increases the courage of group members who may opt to engage in social change efforts (Gitterman, 2004).

Like CBGW, the mutual aid model has phases that characterize the group process. In the first phase, preparation, the group leader gets ready by considering logistics such as time, location, child care, food, recruitment, and the purpose of the group. The second phase is characterized by the development of mutual agreements. Here group members are assisted in deciding what they will do in the group or the purpose of the group and how they will go about the work and agree on group responsibilities, In the work phase, the group leader assists members to find commonalities between group members and the systems that

impact their lives. Group members, with the assistance of the group leader, identify and deal with obstacles to the workings of the group. The group leader facilitates the mutual aid process through modeling and teaching and by reinforcing cooperative norms, directing member's comments to one another, and linking the comments of different group members. Engaging group members in collective activities also encourages the mutual aid process (Gitterman, 2004). In the early phases of the group, the leader is active in facilitating the mutual aid process, yet both influences and is influenced by the group. Mutual aid groups are characterized by shared responsibility and partnership (Toseland & Rivas, 2005).

RELEVANCE TO SOCIAL WORK PRACTICE

Group workers make numerous decisions prior to engaging in group work and throughout the group process. Decisions include types of groups to provide, that is, task groups or treatment groups; if a treatment group is selected, whether its focus will be on skill attainment, rehabilitation, growth, socialization, or support and who gets to decide; how goals will be achieved; how groups will be structured; what the group worker's role will be; and what the responsibilities of the members will be. The theoretical orientation of the worker, the agency, and the climate of the larger social environment influences many of these decisions (G. Corey, 1990). Although not exhaustive, we have reviewed a number of theoretical orientations for small group work. In this section, we demonstrate some of the ways these theories impact assessment and intervention.

Uses in Assessment

Assessment consists of gathering information and making judgments about the data collected to guide interventions. It often begins prior to group formulation with an appraisal of the needs of the community and continues throughout the course of services. There is not one theoretical framework for assessment; rather, assessments differ depending on the theoretical orientation of the worker or agency, the type of group being provided, and the goals of the group. For example, treatment groups often focus on the problems of individual members, whereas the focal point of task groups is the resources and barriers in the community that will help or hinder goal attainment (Toseland & Rivas, 2005). Another example is an agency with a clinical or psychoanalytic orientation where the intake process includes a thorough assessment of early development and family-of-origin issues versus a community center where assessment focuses primarily on current needs and resources. Each agency has a different purpose and in all likelihood a different philosophical orientation about the root cause of human suffering, which in turn influences the assessment process.

Typically, assessment consists of individual assessment, group-as-a-whole assessment, and assessment of the external environment. It is the emphasis on each that varies. Individual assessment entails assessing the functioning of individual members and gathering information about the causes and consequences of behavior. Part of an individual assessment includes looking at the interpersonal functioning of group members, that is, their social skills and the support network of the individual. It also includes looking at the environmental context in which members function (Toseland & Rivas, 2005). Assessment with multicultural group members considers issues of acculturation, discrimination, institutional

oppression, and the possibility that dysfunction may stem in part from sociocultural dissonance (Chau, 1992). Further, the group worker must be mindful that social functioning is characterized differently within various social groups and resist the tendency to apply his or her own cultural lens to others as if it were universal truth (Garvin & Reed, 1994). Remedial, CBGW, and some psychoanalytic groups tend to be more individualistically oriented, and consequently assessment is mainly focused on the presenting problems and functioning of individual group members. This is not to say that these types of groups do not assess group conditions as well, but research indicates that among group workers more attention is devoted to individual assessment than to group interaction and broader environmental factors (Toseland & Rivas, 2005).

Group-as-a-whole assessment centers on the functioning of the group and on group processes. The group worker is especially attuned to communication and interaction patterns. Group workers assess such factors as who dominates discussion, who doesn't speak at all, and whether interactions are predominantly member to leader or member to member. Other group dynamics that are monitored include group cohesion, norms, status hierarchies, and roles taken on by group members. The group worker assesses what roles are being played. For example, is there a gatekeeper who is keeping the group from discussing sensitive issues, or a scapegoat who is blamed for all of the troubles of the group, and what does this mean for the group as a whole (Toseland & Rivas, 2005)? The group leader assesses the extent to which members feel attracted to the group and whether it provides sociocultural safety for diverse members. That is, are differences respected and inequities addressed? Questions to consider include how racial and gender composition impact group interaction, whether subgroups are forming around social identities, whether minority group members speak up and are heard, and whether status positions outside of the group are being re-created within the group. The multicultural group worker must continually assess how the social microcosm of the group might be re-creating the micro inequities that exist in society (Garvin & Reed, 1994). Of primary interest is the functioning of the group as a whole and whether group dynamics are conducive to the achievement of group goals.

Mutual aid and systems-oriented groups are particularly interested in group processes. These orientations recognize that groups cannot be understood simply by assessing individual group members. Like the scientist who understands that to know water is to not only recognize its properties but to understand the combination of hydrogen and oxygen, systems theorists and followers of the mutual aid model recognize that it is the interaction produced in groups that must be assessed (Johnson & Johnson, 2006). Interpersonal learning theorists too are concerned with group conditions and the presence of curative factors, but assessment is more narrowly focused on interpersonal transactions (Yalom, 1995).

Environmental assessment consists of assessing factors that impact the group as a whole and not simply environmental factors that affect individual functioning. Such environmental factors include the sponsoring agency, its mission statement, and the resources it allocates for the group, and potentially other service providers. Of consideration is whether other organizations will refer participants to the group or will perceive the group as competition and an unnecessary duplication of services. Another factor worthy of assessment is the broader community and its prevailing attitude about groups, the issue being addressed, and the providing agency. Does the agency have a positive reputation for working with diverse clients and staff who look like community members and speak their language (Toseland & Rivas, 2005)? All of these variables can affect the success of the group and are worthy

of attention. Groups that are task-oriented or based on the social goals model are apt to be more concerned with environmental assessment. Also, social workers with a strong systems orientation who place more weight on a holistic view of human systems might be more inclined to undertake a thorough environmental assessment. Systems theorists are concerned with all systems the group and its members are embedded in, and especially with assessing boundary permeability between systems (Toseland & Rivas, 2005). Theoretical orientation influences the assessment process, but in varying degrees group workers engage in assessment at all three levels (Garvin, 1997).

Uses in Intervention

Just as assessment is influenced by theory, so too are interventions. Goals, group structure, role of the group leader, and intervention strategies vary with theoretical orientation. The goal of psychoanalytic groups is mainly to bring the unconscious into the awareness of group members. This is achieved primarily by creating a climate in the group that allows members to delve into the past and explore family-of-origin issues or traumas that continue to impact behavior (Geller, 2005). The group leader is relatively detached and allows members to raise issues through free association. Free association is when group members communicate whatever thoughts or feelings come to mind without censoring them. An adaptation of free association is the go-around technique, in which each member in turn is engaged in free association and is actively involved in group work and making interpretations. The leader assists members in moving unconscious issues into consciousness by interpreting free associations, transference, defense mechanisms, dreams, resistance, slips of the tongue, and group projections. Interpretations are hypotheses that can be accurate or off-base, and it is essential that they be presented as such. Gradually, members engage in making their own interpretations and in sharing insights about other group members. Group members often provide perceptive observations and direct feedback to each other. Having observed interpretations made by the therapist, group members become adept at explaining the underlying meaning of behavior, thus uncovering the unconscious in themselves and other group members. Interpretation of dreams is yet another significant intervention strategy used in psychoanalytically oriented groups. Dream analysis allows unconscious fears, wishes, and repressed experiences to move into consciousness. Members are encouraged to share their dreams and the meaning they derive from them. Group members then give their impressions of the dream, which often consists of interpretation and their own projections. Through free association, dream analysis, and interpretation, members become aware of the causes of their present troubles. However, insight alone is not sufficient; members must be assisted in working through their troubles. This is achieved by reexperiencing the unresolved issue within the context of the group and arriving at a more favorable resolution (G. Corey, 1990).

Group workers with a theoretical orientation based on learning principles often assume a more directive position in group than those from a psychoanalytic tradition. Group workers frequently take on the role of teacher, coach, or trainer, and groups are often highly structured, with activities designed to facilitate new learning. Generally, goals are aimed at behavioral, emotional, or cognitive change that will result in the eradication of maladaptive behaviors. More specifically, measurable goals are formulated in the early phases of the group with group members (G. Corey, 1990). Interventions include modeling techniques,

problem-solving techniques, cognitive change procedures, guided group exposure, relaxation training, and operant procedures. Modeling is one of the most effectual strategies used in group work because there are numerous potential models and sources for feedback. Group members are taught early on how to give feedback, which entails giving praise and encouragement for desired behavior and giving specific direction for changing unwanted behavior (Rose & LeCroy, 2006). The group leader can direct role-playing through coaching, thus ensuring that desired behaviors are reinforced and undesirable behaviors modified (LeCroy, 2002). Systematic problem solving is not unlike what occurs in individual services, but in the group members participate in the process. Group members bring problems to the group, and other group members assist in clearly defining the problem, generating solutions, examining possible consequences, identifying potential resources or obstacles, and evaluating outcomes (Rose & LeCroy, 2006). Group members may role-play the problem situation and the selected solution and then be assigned the homework of carrying out the task in the real world. At the next group session, the member would then report on the outcome. Cognitive change methods are utilized in group to minimize self-defeating thoughts and irrational self-talk. This entails teaching clients to identify and control cognitive distortions. Group members are engaged in making positive affirmations and in group exercises designed to alter distortions. Group members challenge the distorted thinking of others and receive corrective information through feedback (G. Corey, 1990; Rose & LeCroy, 2006). Another intervention based on learning theory is guided group exposure. This is when members are exposed to a feared situation within the group and later alone in the real world. This is done in stages, while members use cognitive restructuring techniques, relaxation techniques, and the modeling sequence to cope with the situation. Other interventions already alluded to are relaxation and operant methods (see Rose & LeCroy, 2006).

Systems theory has often been criticized for being too broad and not providing specific direction or intervention strategies that can be followed by systems-oriented group workers. With SCT numerous interventions are provided, such as functional subgrouping, the fork in the road technique, and boundarying, which have already been discussed. Also, systems-oriented practitioners frequently combine their orientation with other theoretical approaches. Donigian and Malnati (1997) in their book *Systemic Group Therapy* discuss group interventions that integrate systems theory with concepts from interpersonal learning theory. The group leader observes the interaction between the different systems in the group—member to member, leader to member, leader to subgroup, and leader to the group as a whole—and describes patterns of behavior. The group worker promotes member-to-member interaction and encourages members to provide each other consensual validation. Interventions consist mainly of interpretation, process illumination, and moving members into the here and now. In this way, the goal of "releasing the power of the group" (p. 82) is achieved and members become conscious of their interpersonal interactions.

Multicultural Group Work

We have demonstrated some of the ways that theory at least minimally influences the assessment process and guides interventions. When working with multicultural populations, it is imperative to examine the goodness of fit between different theoretical approaches and various cultural groups. This requires some knowledge of the cultural background, values,

and traditions of clients. When little is known about the social identity groups of members, the group worker can provide opportunities for members to share about their cultural background. This simple intervention can be included in virtually all types of groups, regardless of theoretical framework. For example, if the group is addressing assertive communication, the group worker could ask members how cultural background affects one's ability to be assertive. If the group is engaged in problem solving, the leader might ask group members to think about how others from their cultural background might address this issue (Toseland & Rivas, 2005).

Additionally, the group worker must model acceptance, being nonjudgmental of differences, and intervene as necessary to prevent discrimination from occurring in the group (Toseland & Rivas, 2005). It is often easier for group workers to identify individual prejudice and more difficult to recognize institutional oppression. For group workers who have difficulty acknowledging societal conditions that lead to personal troubles it may prove extremely challenging to work effectively with diverse populations (Garvin & Reed, 1994). This may be especially true with certain types of groups, such as mutual aid groups and groups based on the social goals model. Further, the group worker would be limited in his or her ability to create an anti-oppressive group structure in any type of group. Hence, it is essential for group workers to engage in considerable self-reflection about their own culture and personal biases about different social identity groups (Toseland & Rivas, 2005).

The group worker must continually assess whether the group process is appropriate for certain cultural groups and how processes can be modified. For example, one must consider how group members from diverse cultures will respond to a psychoanalytically oriented group where the group worker assumes a detached role. This could be problematic for those from a Mexican background, where *personalismo*, maintaining warm interpersonal relationships, is highly valued (Cauce & Domenech-Rodríguez, 2000). Also for consideration is how members of certain cultural groups will respond in groups where members are expected to consistently share personal troubles. For some cultural groups, it may not be acceptable to share family issues in public (Toseland & Rivas, 2005). In this case, groups that are more activity-oriented and structured might be more beneficial, or simply acknowledging difficulties about sharing private issues and respecting cultural values might suffice. Another potential challenge is the expectation in interpersonal learning groups that members provide consensual validation to one another. This could present an obstacle for some group members who are not direct communicators and for those whose values seemingly conflict with this expectation. For instance, in the Mexican culture *simpatía* is highly valued; this is when individuals choose to maintain interpersonal harmony by avoiding conflict (Marín & Marín, 1991). Hence, providing others with direct feedback might seem foreign and unacceptable to Mexican group members. If using a systems-oriented approach to group work, one must consider how boundary permeability might differ for different cultural groups and how family systems rather than individual systems can be involved in groups.

In addition to considering which approaches to group may prove challenging, it is essential to consider which theoretical frameworks and interventions might be particularly suited for diverse groups. For example, for years Mexican women have engaged in conversations as a way of dealing with adversity, perhaps in the form of *platica* around the kitchen table with their sisters, neighbors, or mother (Madriz, 2003). Group workers can build on this cultural strength by forming mutual aid groups in which group members continue to support

one another and perhaps engage in social action to alter some of the causes of their personal suffering.

This is not meant to be an exhaustive discussion of potential problems that may surface in groups with multicultural populations, nor is it meant to specifically address how to engage in culturally competent group work. Rather, our aim is to encourage practitioners to continually reflect on their theoretical orientation, assessment process, and group interventions to determine how best to meet the needs of diverse cultural groups.

EVIDENCE-BASED FOUNDATIONS

Just as practitioners engaged in individual practice are increasingly being called on to demonstrate the efficacy of their services, group workers too are being challenged to illustrate the effectiveness of group work. It is expected that group workers be familiar with factors associated with successful groups and that practice be informed by research on group process and outcomes. Some also suggest that group workers should partake in research to bridge the gap between research and practice and to add to the knowledge base of group work (M. S. Corey & Corey, 2002).

Group research has evolved, as has practice and theory. The complexity of group work, in which multiple interacting variables occur simultaneously, has made group research challenging. Despite numerous methodological challenges, there is now substantial evidence that group work is effective. Barlow et al. (2005), expanding on the seminal work of Furhiman and Burlingame (1994), examined 30 reviews of group work from the 1960s through 2002. They highlighted the growth in knowledge by decade and the ever-increasing rigor in research. By the 1960s research that included comparison groups was well under way. However, nonequivalent comparison groups were utilized, primarily with patients who were institutionalized. Researchers noted tremendous group variability in therapists, patients, and treatment models. These early studies provided only tentative support for the efficacy of groups. Generally, findings were that groups are complementary when delivered in conjunction with other services. By the 1970s, outcomes were more promising. Studies regularly demonstrated that group work was at least as effective as individual treatment. By this time, studies were utilizing appropriate comparison groups and more representative samples. The past 4 decades of research reveals that groups are effective for a number of problems using various treatment models. Many have begun to question why groups are not used more regularly given their cost-effectiveness (Barlow et al., 2005).

In 1977, with the introduction of the statistical method of meta-analysis, researchers were able to compare different types of treatment. Meta-analysis yields an effect size, or an estimate of the average amount of change. Hence, studies began to compare the relative effectiveness of groups and individual treatment. Restricting the data to a single index resulted in contradictory findings. In numerous studies, individual treatment had a larger effect size than group treatment. Horne and Rosenthal (1997, cited in Barlow et al., 2005) noted that individual treatment exceeded the outcomes of group treatment in studies where groups were used as an expedient service, and leaders did not focus on curative factors, nor were these examined in the research process. Studies that focused on therapeutic factors yielded larger effect sizes. Other meta-analyses have compared long-term and short-term formats and different kinds of group formats. These studies indicate that groups are effective

regardless of length and specific group format (Barlow et al., 2005). The recent finding that no one type of treatment is superior to another is consistent with earlier research conducted by Lieberman, Yalom, and Miles (1973, as cited in Johnson & Johnson, 2006), in which 206 college students were randomly put into one of 18 different types of growth or therapy groups. None of the different groups was found to be superior to the others (as cited in Johnson & Johnson, 2006).

There is a great deal of empirical research that looks at the effectiveness of groups with target populations and at the differential effectiveness of various group protocols that are guided by different theoretical orientations. G. M. Burlingame, Kapetanovic, and Ross (2005) looked at several reviews and meta-analyses and found groups to be effective with depressed patients and with those suffering from eating disorders, anxiety disorders, mood disorders, substance abuse, and personality disorders. They did not find any specific theory of change to be more effective than another. Studies of depressed patients found groups to be as effective as individual treatment, and some studies found the rate of effectiveness similar regardless of whether cognitive-behavioral, interpersonal learning, or support group models were used. Four studies also found self-help groups free of professional leadership to be commensurate in member gains to groups guided by formal change theories. This has led researchers to speculate about the factors inherent in groups that make them effective independent of theoretical orientation and group protocols. Similarly, several studies support the efficacy of cognitive-behavioral group therapy in treating Bulimia Nervosa. In general, outcomes were greater when groups were used in conjunction with other treatment modalities, such as individual treatment or pharmacotherapy. In other research, two studies found interpersonal learning groups are just as effective as cognitive-behavioral therapy groups on indicators of bingeing and emotional eating. Research also demonstrates the effectiveness of CBGT in treating Agoraphobia and Social Phobia. Yet these positive results are clouded by other studies that indicate that unstructured discussion groups or self-help bibliotherapy, a 3-day CBT workshop, and process-oriented groups result in similar patient improvements. Again, this leads to speculation about the unspecified elements of group work that play a part in patient change (G. M. Burlingame et al., 2005).

Given that research indicates that groups are effective across different theoretical frameworks, many have begun to speculate about what it is about groups that makes them effective. By the 1980s, researchers were exploring how process variables connect with outcomes. Researchers began to look at leader characteristics and behavior and how this relates to group outcomes. Additionally, researchers have consistently looked at therapeutic factors and curative factors. A challenge has been that a majority of studies consider only client reports of factors that helped them and do not consider other measurement strategies (Barlow, Fuhriman, & Burlingame, 2004). Numerous studies support the importance of the 11 therapeutic factors Yalom proposed as essential to the group therapy process, yet there is no agreement on the relative importance of each factor in relation to client outcomes (DeLucia-Waack & Kalodner, 2004). Yalom's (1995) research indicates that therapists and clients are rarely in agreement about which therapeutic factors are essential to the change process. Further, different populations, including individual factors and level of functioning, stage in the group process, and type of group all seem to influence which therapeutic factors are most influential. Generally, group members emphasize the importance of relationship factors. This is consistent with research that points to the importance of leader behaviors that convey warmth, acceptance, support, and genuine interest. Regardless of theoretical

orientation, effective group leaders demonstrate these characteristics (DeLucia-Waack & Kalodner, 2004; Yalom, 1995).

Future directions in group research include looking at the effectiveness of long-term interventions, examining how process and content interact to produce positive outcomes (G. M. Burlingame et al., 2005), and, as G. Burlingame, MacKenzie, and Strauss (2004) suggest, discovering underlying group principles across group protocols that are essential for successful groups regardless of theoretical orientation (as cited in Barlow et al., 2005).

CRITIQUES OF THIS APPROACH

Historically group work was denounced for having an insufficient knowledge base and was not considered by many to be a legitimate form of service. Currently, many theories exist to guide group work, and theories based on individual development have been adapted to be more applicable to group work. Systems theories, psychoanalytic theories, interpersonal learning theory, and social learning theories have all been applied to group work. Research consistently indicates that group work is effective, yet there are still many gaps in knowledge. Researchers are now concerned with uncovering which variables lead to effective group outcomes with which populations and under what circumstances. Aspirations for the future include the possibility of matching clients with the appropriate combination of therapeutic factors to maximize positive group outcomes (DeLucia-Waack & Kalodner, 2004).

All theories have their strengths and limitations. Groups based on learning principles have been criticized for being overly concerned with the individual and not focusing sufficiently on group dynamics. Yet learning theorists have made significant contributions to group work, such as stressing the importance of setting measurable goals, evaluating outcomes, and contracting with individual group members (Toseland & Rivas, 2005).

Psychoanalytic theory as a whole is under tremendous scrutiny (Geller, 2005). Like learning theorists, psychoanalytic group workers have been chastised for focusing extensively on the individual in spite of the contributions of numerous group-as-a-whole theorists. Other limitations of psychoanalytic group work include the length of the treatment process, which is at odds with the managed care system, and its focusing so heavily on the past. Adaptations to psychoanalytic frameworks and interpersonal learning theory now emphasize the here and now and only minimally focus on the past. Despite the limitations of psychoanalytic theory, it has contributed to small group theory and practice. Psychoanalytic concepts such as insight, defense mechanisms, transference, and ego strength have been incorporated into other frameworks of small group practice (Toseland & Rivas, 2005).

Systems theory provides a broad conceptual lens that is used by a plethora of group workers, often in conjunction with other theories of human behavior. This framework allows group workers to look at groups on multiple levels. Systemic group workers bring a holistic view to group work that looks beyond the individual and linear thinking. Systems theory, more than the other theories addressed herein, highlights societal systems, whole group processes, and the energy that is produced when groups of people interact in a group context (Connors & Caple, 2005). However, systemic group work is not beyond reproach. It is often criticized for being too broad and providing inadequate direction for group workers attempting to put theory into practice. Systems theory provides little guidance on how to

change oppressive structures and is accused of maintaining the status quo (Schriver, 2004). This is perhaps the greatest criticism of many of the current theories that guide small group work: They are focused on individual change and have lost their interest in social change and reform. Many feel it is imperative for group workers to address not only individual problems but also the societal conditions that produce them. In fact, for many this is the unique mission of social work, and group work is particularly suited for this endeavor as there is strength in numbers and because of the potential of groups to raise consciousness (Garvin & Reed, 1994).

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Chapter 15

FAMILY SYSTEMS THEORY

Martha Morrison Dore

The twentieth century was marked by efforts of scholars from a variety of disciplines to conceptualize the role of the family in society and in the life of the individual. As a result, there is no single entity that can be termed "family theory," but a multiplicity of theories that have informed our understanding of the function of family as shaped by culture, class, and historical context. This chapter briefly examines the historical and conceptual origins of family theory in Western society, culminating in the identification of the contemporary family theory that has the most salience for social work practice: family systems theory. I identify basic and advanced principles of this theory as well as recent theoretical principles that contribute to our current interpretation and application of this theory in practice. The application of family systems theory in assessment and therapeutic intervention is illustrated with examples from case practice. Finally, the evidence base for this theory is examined, as are historical and contemporary critiques of family systems theory and its application to social and individual functioning.

HISTORICAL AND CONCEPTUAL ORIGINS

To understand the origins and development of theories of the family it is necessary to view these theories in the historical context of their times. Prior to the mid-nineteenth century in Western cultures, the primary role of family in society was an economic one. Before the advent of widespread industrialization, families were largely independent economic units, expected to produce sufficient goods to be self-sustaining, whether by their own labor or through the labor of those they maintained. Activities that we now consider functions of the community or state, such as education, care for the ill and disabled, and marketing the results of production, were then managed largely by the family unit. Families supported the larger society, rather than the other way around.

Life during this period was precarious. Pre–Civil War era graveyards are dotted with the graves of young wives dead in childbirth and of infants who failed to survive past toddlerhood. It is not unusual to see a grave marker for a husband and father of the period surrounded by the graves of several wives and the many young children who predeceased him. The exigencies of family life during these times suggest to some historians of the family that the value placed on individual family members, including children, was different than in present times.

Childhood was not a protected and protracted period, as it is today. Children as young as 3 years were expected to contribute their labor to the family's economic well-being.

On the farm, even very young children could feed the chickens and gather eggs or help sow seeds at planting time. In urban areas, selling pencils, apples, or newspapers on city streets occupied the waking hours of children who would nowadays be learning their ABCs in kindergarten. With the advent of manufacturing, first in the Northeast and then, after the Civil War, in other parts of the country, children as young as 5 or 6 spent 10 hours a day working the looms of textile plants or sewing buttons on shirts in back alley sweatshops.

Economic survival dominated family life prior to the twentieth century and, for some, well into that century. However, after the Civil War, as federal, state, and local governments began gradually to expand their functions, taking on more and more of the responsibilities that formerly belonged to the family, the shape of family life in the United States began to change. As a substantial middle class emerged from the aftermath of the Industrial Revolution and the shift in this country from an agrarian to a manufacturing economy increased in tempo, fewer and fewer families needed to depend on the economic contributions of their youngest members. As a result, domesticity and family life took on heightened meaning. The late nineteenth and early twentieth centuries saw the publication of women's magazines devoted to the art of homemaking. Except for poor and single women who had no other choice but to work at low-wage jobs, the roles of women became increasingly restricted to those of wife and mother.

At the same time, childhood was increasingly recognized as a special period of psychological and social development in which essential learning and socialization take place. This recognition was codified at the turn of the twentieth century in the American public school movement, which sought to prepare youth for participation in the larger society, as well as through federal legislation that limited the working hours of children and banned them altogether from working in certain high-risk occupations. Like the rise in magazines and manuals instructing women in the finer points of caring for a home, there was a similar effort on the part of "experts" to educate parents, more particularly mothers, regarding modern approaches to child rearing.

It was around this time that the first theories of the family were promulgated to explain the changing role of the family in twentieth-century society. The first coherent family theory was based on the functionalism of Auguste Comte and Emil Durkheim, social philosophers who held that society is like the human body; it is made up of various parts or structures, such as government and the family, which must function together in a way that ensures equilibrium for the society as a whole. Each of these structures has a specific role to play; however, these roles are interdependent and must function smoothly if the society is to sustain itself. These structural functionalists argued that there is consensus within a society as to roles and functions of the various social structures. Norms and values are expressed through sanctions, punishment, and social approval and disapproval and are transmitted at the most basic level by the family.

During the first half of the twentieth century, the developing profession of sociology in the United States was in the forefront of advocating structural-functional theory. Talcott Parsons was perhaps the best known proponent of this theory. He further refined structural-functional theory and its application to the family, introducing the concepts of expressive and instrumental roles. Parsons recognized that many of the functions that were formerly carried out by the family, such as education and economic production, had been assigned to other social structures in contemporary society. The family in the twentieth century, as

he saw it, had two primary functions: (1) procreation and the socialization of children and (2) meeting the expressive needs of its adult members.

The intact nuclear family was viewed as the ideal structure to carry out these functions. In this theoretical model, the instrumental functions of the family, that is, the provision of economic resources, were carried out by the male head of household, while the expressive functions were the responsibility of the adult female in the family, in this theory, the wife. She was responsible not only for the care and socialization of the children, but for providing emotional support for her spouse. This division of labor, according to Parsons, was functional not only for the family as a unit, but also for the marital relationship. It was also functional for the larger society in which the family was expected to maintain itself as an autonomous and isolated unit, linked to the larger social system only through the male household head's instrumental role.

In the 1960s, structural-functional theory came under increasing attack for its failure to explain the existence of poverty, social change, and social injustice. The argument that inequity served a functional purpose for society did not satisfy those seeking a more equitable distribution of society's goods and services. The theory appeared to justify the status quo, particularly the dominance and privilege of a patriarchal social system and, by extension, a patriarchal view of the family. The fixed nature of family roles, the family's static position in society, the rigid division between instrumental and expressive functions, and the inherently conservative and consensus nature of this theoretical model were all subjected to severe criticism during this era. Today, structural-functional family theory is largely discredited by sociologists as a reflection of an earlier time, although many recognize Parsons for his pioneering efforts to define the role of the family in society and his description of the internal structure of family life.

An alternative to structural-functional theory, developed primarily by economists and social psychologists beginning in the late 1950s and early 1960s, is social exchange theory (Blau, 1964). This theory is based on the premise that all human interaction is based on exchange of rewards and costs. It assumes that individuals establish and continue social relations based on the expectation of mutual advantage (Nye, 1979). This mutual advantage is framed in concepts such as reward and punishment, pleasure and pain, cost and benefit.

Applying this theory to the family, social psychologists have frequently used it in analyzing mate selection, the underlying rationale for choosing one partner over another (Rosenfeld, 2005). The notion of social exchange as a basis for creating a family is clearly illustrated in the customs of cultures with arranged marriages, where the social and economic value of a potential spouse is carefully weighed by each of the participating families. But even in the United States, where marriages ostensibly occur because of love, not barter, according to exchange theorists there is an underlying expectation of mutual advantage that shapes decisions about who is an appropriate marriage candidate. At its most obvious, this is why elderly rich men can marry beautiful young women. Or why statistics show that highly educated African American women are more likely to remain single than similarly educated Anglo women: The opportunities for equal exchange are fewer because there are fewer highly educated African American males relative to females than Anglo males. Exchange theory suggests that individuals select relationships, particularly long-term relationships, that maximize social and economic advantage.

Social exchange theory also holds that the elements of exchange in a relationship strengthen social bonds of obligation, trust, and solidarity. Exchange does not have to take

place at the same point in time; parents may invest emotionally and economically in their children with the expectation that the children will reciprocate by performing well in school, staying out of trouble with the authorities, excelling in sports, or engaging in other behaviors that reflect well on their parents. They may also help support their parents in old age.

Indeed, another frequent application of social exchange theory in family life is in the area of intergenerational assistance as scholars seek to understand the obligations of succeeding generations to those that preceded them (Hogan, Eggebeen, & Clogg, 1993). Why, for example, do many adult children feel obligated to assist elderly parents or grandparents, sometimes to their own detriment? Social exchange theorists view this as a type of exchange in which the younger generation reciprocates for earlier care and support.

Like structural-functional theory before it, social exchange theory has come under fire for its reduction of human relationships to matters of rational choice and for its neglect of the impact of institutional power as opposed to personal power, authority relations, coercion, and other aspects of the larger society on individual capacity for social exchange (Molm, Quist, & Wiseley, 1994). It would also seem to exclude nonrational aspects of human functioning such as intuition and altruism as a basis for social interaction and family relations (Macy & Flache, 1995). Like structural-functionalism, social exchange theory has also been criticized for embracing a patriarchal understanding of family formation. In a society where men hold a disproportionate amount of power and resources, women are left with little bargaining power in exchange relationships except for physical attractiveness and their willingness to accede to the needs of men (Markovsky, Willer, Simpson, & Lovardia, 1997).

A third theoretical perspective that has been widely applied to the family is symbolic interactionism, arguably the most enduring and, some would say, important theoretical framework in contemporary sociology in the United States. Like social exchange theory, symbolic interactionism focuses on understanding and interpreting the interactions between individuals in society (Blumer, 1969). The theory holds that individuals respond not directly to the actions of others, but to their subjective interpretations of these actions. In this theory, human interaction is mediated by the use of symbols, which are used to communicate commonly understood meanings within a society (Berger & Luckmann, 1967).

However, unlike the theories examined previously, in symbolic interactionism the individual interprets and responds to the symbol in his or her own way (Charon, 1979). This may or may not be the interpretation and response determined by the larger society. For example, the flag of the United States is a commonly understood symbol, denoting to many the ideals of participatory democracy, equality, and justice for all. The usual response to the flag as a symbol of these qualities is to treat it as a representational object in a particular, prescribed way. However, for some individuals in society, this symbol may have a very different meaning that determines different responses to the flag and results in actions that reflect contempt, anger, frustration, or rejection. The periodic debates in Congress over flag burning are illustrative of how symbols are used to communicate deeper issues that divide a populace.

It is not difficult to see that, when applied to families, symbolic interactionism is a much more nuanced, flexible, and contextual understanding of family interaction and functioning than either structural-functional or social exchange theory. In symbolic interactionism, the individual occupying a familial role, such as mother or father, has considerable flexibility and innovation in determining how that role is carried out overall and in any particular

situation. At the same time, there is a common, shared definition of the roles of mother and father in every culture that acts as a symbolic referent of how a mother and father act in a given situation (Blumer, 1969). Contrast this with structural-functional theory in which family roles are rigidly defined by the structure of the family and its function in the larger society, and any failure to conform is viewed as deviant. Research that has focused on the single-parent family as an inherently inadequate family structure reflects a structural-functional interpretation of the family.

The critique of symbolic interactionism as a theory of family has focused on its viewpoint that all participants in social interaction have equal power in relationships. Feminists have questioned, for example, whether women are truly free to create the roles of wife and mother as they wish, or whether these roles are so prescribed by the larger society and the local community that deviation from expected behavior is sanctioned. Consider, for example, that, although 80% of mothers of children over the age of 1 year are in the workforce, there is little or no collective dialogue about public policies that support parents in the workplace, such as the paid parental leave so common in other postindustrialized nations. Publicly funded child care, except for the neediest families and then only for a specified period of time, is a topic that is hardly discussed. Could it be that, despite the overwhelming majority of mothers with small children who are working outside the home, our collective definition of the role of mother is still shaped by the symbol of mother as the primary, or only, source of care and nurture for children?

Although each of these theories of the family has something to offer in broadening our understanding of the role and function of this institution in society, their individual contributions to our understanding of individual psychosocial development and functioning in context are limited. It wasn't until the emergence of family systems theory in the 1960s and 1970s that a theory of the family that could inform both policy and practice with regard to families and individuals came to the fore. Many see family systems theory as the dominant contemporary paradigm for informing understanding and interpretation of the cognitive, social, and emotional functioning of individuals in society.

Family systems theory grew out of general systems theory, promulgated, beginning in the late 1920s, by Ludwig von Bertalanffy (1968), a biologist, who was concerned with understanding the totality of an organism as more than the sum of its individual parts and processes. Borrowing from emerging ideas in mathematics and engineering, von Bertalanffy applied concepts such as wholeness and differentiation, hierarchy, and finality and equifinality to analysis of life forms as well as to symbolic systems such as the family, which he viewed as occupying the highest level of system types. D'Andrade (1986) further developed this hierarchical model of system complexity, with the first level occupied by inanimate systems whose interrelationships can be quantified in mathematical forms. The second level of complexity is reflected in biological systems, the domain of the natural sciences. As in von Bertalanffy's conceptualization, the third and highest level of abstraction is composed of symbol systems constructed from and dependent on the meanings bestowed on them by their participants. Thus, a family is not a family until it is imbued with the symbols that denote the concept of "family" in a culture and among its immediate members.

For example, in the United States in the early twenty-first century, individuals in a long-term same-sex relationship that includes young children may define themselves as a family, as may others in their immediate community. However, there are some who would reject the

term "family" for describing this partnership, arguing that a family has been traditionally defined as composed of a heterosexual couple and their offspring. This illustration points to the complexity of family systems theory and to its utility in shaping our understanding of the concept of family and its functioning as a whole in relation to its various parts.

In 1954, the Society for the Advancement of General Systems Theory was established to foment cross-disciplinary discussion and research on von Bertalanffy's theory. Simultaneously there was a growing science called cybernetics that focused on feedback systems and communication technology. The principles and concepts of cybernetics were believed to apply to human functioning as much as to the functioning of machines. Cybernetics was a multidisciplinary science, and its developers included social scientists such as Kurt Lewin, a social psychologist, and Gregory Bateson and Margaret Mead, anthropologists. Bateson and Lewin communicated with one another and with von Bertalanffy so that general systems thinking became infused with ideas from cybernetics and vice versa, and the theory was increasingly used to advance understanding of human functioning.

During the mid-1950s, Bateson was part of a research team at the Veterans Administration Hospital in Palo Alto, California, focused on applying principles of cybernetics and communications theory to the study of Schizophrenia. Of particular interest to this team were the effects of paradoxical communication on the development of Schizophrenia. In addition to Bateson, the research team also included Don Jackson, a psychiatrist who had trained with Henry Stack Sullivan; Jay Haley, who was to become a nationally recognized figure in the family therapy movement in the United States; and John Weakland, an expert in the use of paradox in humor. These four authored a famous paper on their work entitled "Toward a Theory of Schizophrenia" (Bateson, Jackson, Haley, & Weakland, 1956), which drew on case examples to support their theory that Schizophrenia results from a mother's use of paradoxical communication, which places her offspring in a "double bind." In a double bind, the recipient of paradoxical communication cannot respond to one message in the communication without failing to respond to another, literally driving the recipient crazy. Treatment, therefore, must focus on the nature of the communication between mother and child, rather than on the intrapsychic functioning of the individual diagnosed with Schizophrenia, as was dictated by Freudian psychodynamic theory widely in use at the time.

Although this theory regarding the genesis of Schizophrenia has since been discredited, it marked the first time that interpersonal processes within a family system were examined for their effects on individual family members' functioning. Interestingly, there is a current body of research on "expressed emotion" in families of persons with Schizophrenia that supports the belief of the Palo Alto researchers that communication within families has an effect on the course of the illness, just not in the way that they understood.

During the time that he worked with the Palo Alto VA group, Don Jackson founded the Mental Research Institute, which provided clinical services based on an integration of general systems theory, cybernetics, and communications theory. He was joined in this activity by Paul Watzlawick, a Jungian psychologist, and Virginia Satir, a social worker trained at the University of Chicago School of Social Service Administration. Watzlawick and especially Satir went on to distinguished careers integrating family systems theory into strategies for treating family dysfunction.

Interestingly, once the notion was introduced that the principles of general systems theory were applicable to human systems, small pockets of family researchers and clinicians began to spring up around the country to apply the theory and refine it in practice. In addition to the

Palo Alto group, the mid-1950s saw the arrival at the National Institute of Mental Health in Bethesda, Maryland, of the psychiatrist Murray Bowen, who was to become seminal in the development and application of family systems theory in clinical practice. He was at NIMH to embark on a study of Schizophrenia in young adults that involved hospitalizing the entire family along with the mentally ill member. He came from the Menninger Foundation in Topeka, Kansas, where he had received his psychiatric training and stayed on to become a staff member in the Menninger Clinic.

It is likely that while at Menninger's, Bowen had become aware of the new approaches to child guidance promulgated by the Menninger Child Guidance Clinic's chief psychiatrist, Nathan Ackerman. Ackerman discarded the traditional child guidance model of having a psychiatrist treat the problematic child, while the parents, or most often, the mother, were seen by a social worker. Instead, Ackerman, though still interpreting family functioning through a psychodynamic lens, advocated seeing all family members together in treating a child with emotional or behavioral problems (Ackerman, 1954, 1958).

A few years before Bowen arrived at Menninger's, Ackerman (1938, as cited in Broderick, 1993) published his first two papers advocating for a whole-family approach to treating psychological problems in individual members, "The Unity of the Family" and "Family Diagnosis: An Approach to the Preschool Child." In his conceptualization of the family, Ackerman drew on elements of social exchange theory, defining the interactions among family members in terms of the exchange of love and material goods. He saw families not as a composite of individual members operating in isolation from one another, but as an interactive whole, in constant interaction, influencing one another, a basic tenet of family systems theory.

Ackerman was also influenced by symbolic interactionism in his emphasis on the influence of social roles, particularly in the ways these roles are defined and carried out within the family. Unlike the communications theorists in Palo Alto, Ackerman believed that communicated understandings about roles within the family are insufficient, that the actual performance of the role is key to understanding family dynamics and functioning. Families got into trouble, according to Ackerman, when role performance was either too rigid and unable to adapt to changing environmental circumstances, or too loose and undefined, thereby failing to carry out significant aspects of role performance.

At the same time that Ackerman and Bowen were beginning to develop their interpretations of family systems theory and apply them in practice, the psychiatrist Carl Whitaker assumed the chairmanship of the Emory University Department of Psychiatry in Atlanta, where he, too, was involved in treating individuals with Schizophrenia and their families. Though he left Emory in the mid-1950s, Whitaker continued to develop his approach to working with families with colleagues Thomas Malone and John Warkentin at the Atlanta Psychiatric Clinic. Like Nathan Ackerman, he had been trained in classical psychodynamic theory, and like Ackerman he began to move away from the individual focus of this framework and toward a more systemic understanding of human functioning. Over a period of many years, during which he served as a professor of psychiatry at the University of Wisconsin, Whitaker developed an approach to the clinical treatment of families that he called symbolic-experiential, based on the principles of family systems theory.

In his seminal work *The Structure of Scientific Revolutions* (1964/1970), Thomas S. Kuhn notes that radical shifts in disciplinary matrices, which are sets of concepts, values, techniques, and methodologies, come when an increasing body of evidence undermines

the basic tenets of current practice. Because of contextual changes in the social or cultural environment, traditional matrices no longer seem to fit the existing traditions of scientific practice. Nontraditional thinkers begin to explore alternative theoretical paradigms. The simultaneous exploration and adoption by researchers and theoreticians in widely dispersed locations in the United States of general systems theory as the preferred explanatory model for understanding and interpreting the development of individuals in the context of the family illustrate events described by Kuhn's model.

BASIC THEORETICAL PRINCIPLES

Although general systems theory has been developed over the years since it was first promulgated by von Bertalanffy and enlarged upon according to the discipline to which it is being applied, there are common theoretical principles that span applications. First is the concept of system itself. A *system* is an entity composed of elements in interaction to achieve a specified purpose or goal. The function of a system is to process resources or materials into a product or outcome that achieves that purpose or goal. This resource processing requires energy, whether man-made or naturally occurring, that is sustained in various ways. A system is said to be more than the sum of its various parts. While each part may be distinguishable, how the parts fit together and produce a unique entity is distinguishable from other, similar systems. The term *synergy* is used in systems theory to describe the process by which a system's elements or properties work together to generate a whole that is greater than the sum of its parts.

This definition of system can be applied as easily to a single-cell organism as to a built machine or a bureaucratic organization. What differentiates these entities is, first of all, their level of *complexity*.

As noted previously, general systems theory organizes systems according to their level of complexity, which describes their responsiveness to external stimulation or change and their ability to self-regulate. A clock is an example of a system at a low level of complexity. Although its components are organized to achieve a specific goal, that of telling time, it is relatively limited in its ability to respond to events in its environment (being dropped, for example) and its capacity to self-regulate in response (it either breaks or it does not). A clock represents what we would call a *closed system*. There are fixed, automatic relationships among its parts, and it can neither initiate nor respond to events taking place outside its own boundaries. Indeed, the *boundaries* that define what is part of the clock and what is not are easily observed and clearly defined.

In an *open system*, on the other hand, boundaries are more permeable, such that the system itself is influenced by, and in turn influences, its environment. A university is a perfect example of an open system. Its primary function is the creation, generation, and dissemination of knowledge, and, to carry out this function, it must receive *inputs* from the larger environment in which it exists, in the form of students, faculty, financial resources, and information. These inputs are transformed by the university into new materials or *outputs*, which include graduates who are able to contribute to the functioning of the larger social system of which the university is a part, as well as new knowledge of particular aspects of that environment.

The concepts of boundaries and their permeability are key in general systems theory and, as we shall see, in their application to the family as one type of system. Boundaries differentiate a specific system from its larger environmental context. A boundary is the line or point at which something is either outside or inside a particular system. Boundaries also differentiate *subsystems* within a single system. In a bureaucratic organization, for example, boundaries are clearly defined between various organizational levels such that those individuals on the lowest organizational level must relate only to their immediate superiors in the hierarchy or risk violating rigidly constructed boundaries that define who can discuss various aspects of the organization's day-to-day work with whom. Taking problems or complaints directly to a unit director, bypassing one's immediate supervisor, is usually considered a clear violation of bureaucratic subsystem boundaries and is open to sanction by the organization.

Hierarchy is also a central concept in systems theory, not only denoting a descending level of complexity of various systems, but also describing the levels of organization within more complex systems. Bureaucratic organizations represent an obvious example of systems with clearly defined hierarchies, as suggested by the example just given. An ecological food chain may represent another kind of hierarchy, in which larger animals depend for survival on eating less powerful or agile animals, which in turn depend on even smaller animals, who in turn depend on insects or plants for survival. Although not a system in the same sense as an organizational bureaucracy, an ecological food chain is a system in that its boundaries are clearly defined (lions prey on antelope and wildebeests, not other lions or elephants) and its elements interact to serve a specific purpose or function: survival of the species.

Equifinality is another term associated with general systems theory that has been applied in family systems theory as well. Equifinality refers to the notion that there is more than one way to achieve a particular outcome in a given system. In the education system, for instance, young children can be taught to read using phonetics and sounding out various words, or by memorization and sight reading, or by tactile methods such as cutting letters out of various materials and arranging them in various ways. Each method requires different resources and skills on the part of the teacher and engages different aspects of a child's cognitive and sensory systems. One or another method may be a better fit for an individual child. However, all can eventuate in the same outcome, that of reading.

Finally, von Bertalanffy and his followers recognized that all systems require energy to support system functioning over time. *Homeostasis* represents a system's ideal state, when the energy expended by the system is perfectly balanced by the energy coming into the system from the environment. All systems seek homeostasis and will do whatever it takes to reach and maintain that steady state. *Entropy* is the processes a system uses to balance its inputs, especially its energy inputs, and outputs over time. A university that cannot attract new students or faculty begins to lose energy and cannot maintain its output of high-achieving graduates and new knowledge over time. Such an organization is said to be in a state of *negative entropy*, in which it lacks the energy to fulfill its function in the larger environment.

Readers who are familiar with the concepts of family systems theory recognize how the terms used in general systems theory have been applied to describe elements of family functioning and interaction. This application is explicated in the following section.

ADVANCED THEORETICAL PRINCIPLES

As the concepts and principles of general systems theory were increasingly incorporated into the rubric of family systems theory, they were expanded to explain the unique elements in family system functioning. The early pioneers in family systems thinking contributed their own understanding and interpretations to the lexicon of family systems theory. One of the earliest and most remarkable of these contributors was Murray Bowen, whose early research on mothers and their schizophrenic children at the Menninger Clinic and, later, at the National Institute of Mental Health, where he studied whole families, resulted in his concept of *differentiation*. Differentiation refers to the capacity of the individual for individuation from others and for employing thinking over feeling as a basis for action. In his NIMH study, in which he observed fathers as well as mothers of young adults with Schizophrenia, Bowen identified the process of *triangulation* in families, whereby conflict between two family members is diverted by bringing in a third party, whether this is another family member or an outsider, such as a therapist.

Perhaps Bowen's (1978) most famous contribution to the advancement of family systems theory was his concept of the *multigenerational transmission of nuclear family processes*. This important concept is reflected in the reliance in family treatment on the use of genograms to identify dysfunctional patterns and emotional processes that occur across generations of the same family (Klever, 2004). Bowen held that an individual's level of differentiation was always reflective of that of his or her parents; however, how that level of differentiation manifests in subsequent generations varies and increases or decreases depending on the specific social and political environments in which succeeding generations live and function. Bowen believed, for example, that wartime always brought about a reduction in differentiation among the general populace, resulting in reliance on emotion over thought and opening society to the influence of propaganda. He would not be surprised, for example, at the vulnerability of the American people to manipulation by those in power in the aftermath of the September 11 attack on the World Trade Center in New York, when collective emotions of shock and fear were running high.

Don Jackson, a member of the Palo Alto group discussed earlier, was also at the forefront of advancing systems theory application to families. His conceptualization of the *homeostatic process* in families, in which families organize to resist change, was a defining principle in family systems theory for decades. A clinical example of homeostasis in families is one in which a child becomes symptomatic in order to divert her parents' attention from their increasingly rancorous marital relationship and to provide an opportunity for the parents to work together to address her difficulties.

Jackson (1959) noted what he called the *redundancy* in families' interaction patterns. He observed that each family develops a set of unspoken rules that govern these redundant interaction patterns, which he called his *rules hypothesis*. These rules may limit the options for change available to families when their interaction patterns are no longer functional. For instance, a family's rules may require the father to carry full responsibility for the family's instrumental functions, while the mother attends to the expressive needs of family members. If there is no flexibility in these rules and the mother becomes seriously ill and unable to meet the family's expressive needs, the system will be unable to adapt and this family function will be unfilled or will be filled in dysfunctional ways (e.g., adolescent

daughter begins sexual relationship with older man; 10-year-old boy steals beer and liquor from home and begins drinking and hanging out with antisocial peers).

According to Jackson (1965), all husbands and wives establish what he called the *marital quid pro quo*, which determines the rights and responsibilities of each in the relationship. Some of these arrangements are *complementary*, which means that each partner brings something different to the relationship. One might be more social and the other more retiring, for example, or one might be dominant and the other submissive in the relationship. Other relationships are more *symmetrical*, with both partners contributing equally in all aspects of the relationship, including in the instrumental and affective realms. As the economic system changed in the United States in the late twentieth century, requiring labor force participation by most mothers as well as fathers, the demand for more *symmetrical* marriages increased, placing a great deal of stress on couples whose marital quid pro quo called for complementarity.

Jackson and other members of the Palo Alto group focused much of their attention on the marital subsystem in families. Salvador Minuchin (1974), on the other hand, focused on the family system in its entirety, particularly on its *structure*, which he defined as those family transactions that, through repetition, develop a patterned regularity. Like Jackson's rules hypothesis, Minuchin saw each couple as negotiating a pattern of behaviors that lend structure to the family system. Each new experience, such as the birth of a child, generates a process of negotiation, spoken and unspoken, regarding roles and responsibilities that continually shape and reshape the family's structure.

The maintenance of the family structure, according to Minuchin (1974), is accomplished by emotional *boundaries*, which regulate emotional closeness and distance in a family. This emotional closeness/distance ranges from *enmeshment*, in which there are no clear boundaries delineating where one family member's emotional life ends and another's begins, to *disengagement*, in which emotional boundaries between family members are so rigid as to wall off the emotional life of one from another, making them emotionally inaccessible to one another. Most families are somewhere along a continuum between these two extremes, with cultural origins contributing a great deal to the boundary pattern in individual families.

Another important principle introduced into family systems theory is the *family life cycle*, which conceptualizes the family as a system moving through time, encountering specific stage-related tasks that must be integrated into the family process. For example, two individuals come together to form a marital or partner system. This coming together is a process that requires the individuals to rework their relationships with their families of origin as well as their friendship networks. The couple must begin to develop the family structure, including the rules that govern the roles and responsibilities of each partner, that will characterize the new family system. The family life cycle concept was first developed by sociologists Reuben Hill and Evelyn Duvall. Duvall (1977) proposed an eight-stage model of the family life cycle that formed the basis for later adaptation by family systems theorists.

Perhaps the most thorough and well-known explication of the family life cycle came with the publication in 1980 of the first edition of *The Family Life Cycle* by social workers and family therapists Betty Carter and Monica McGoldrick, who incorporated family systems concepts into Duvall's life cycle stages, including a multigenerational perspective on family

processes. In subsequent editions of their book (1989, 2005), Carter and McGoldrick further integrated elements of systems thinking, particularly with regard to family context, including culture, class, and community, as well as the impact of changes in the family system brought about by divorce, single parenthood, and remarriage.

Lee Combrinck-Graham (1985) further elaborated the life cycle concept, which she called the *family life spiral*, incorporating a systemic notion of process into the framework. The effects of changes in the family system were determined to be either centripetal, or drawing family members together, or centrifugal, pushing them apart. A centripetal event would be the birth of a child, and a centrifugal event would be when the last child leaves home. According to Combrinck-Graham's conceptualization, all families move in an oscillating fashion through the family life cycle, experiencing natural periods of closeness and distance. Problems may occur when a family's capacity to manage the demand for closeness or distance is unequal to the task or when the timing or rhythm of the oscillating spiral is out of sync. For example, an adult child returns to live at home, or an infant is stillborn; in the first example, the demand for closeness or distance is unclear, and in the second, the demand for closeness occasioned by the birth of a new family member is disrupted by the shock and grief of mourning the child's loss.

Finally, it is important to acknowledge the emphasis of family systems theorists on the concept of *normal family processes* (Walsh, 1982, 1993). This concept focuses on the functioning of the family over time within the larger environment in relation to the nurture and psychosocial development of its individual members. It accepts that certain stressors on the family are normative and to be expected, such as the birth of a new baby or the entrance into college of a teenage son or daughter. Most families are able to handle these normative stressors within their customary structures. However, there are stressors that are of such traumatic import as to challenge even the most well-functioning families. How a family system responds as a functional unit to such traumatic events indicates its flexibility and resilience and is critical to restoration of homeostasis. According to the principles of family systems theory, there are multiple paths to mastery over stressful life events (equifinality); the important question is whether these processes are functional for individual family members as well as for the system as a whole.

RECENT THEORETICAL DEVELOPMENTS

> Over the past two decades, the family as a relational environment with systems qualities has received more and more attention from developmental psychologists and ethologists. The recognition that individuals and families are embedded in a larger network of social systems can also be seen in life span theories, ecological theories and Lewin's psychological field theory. (Cox & Paley, 1997, p. 245)

Systems theory has provided the explanatory underpinnings for current explorations of normative and pathological child development in the context of the family and its subsystems. In developmental psychology, the emphasis has traditionally been on the mother-infant dyad, or parent-child subsystem in family systems parlance.

The concept of attachment is thoroughly embedded in our understanding of family relationships, their formation and maintenance (Marvin & Stewart, 1990). Indeed, research on mother-infant attachment has expanded its purview to examine the role that the father

plays, both directly and indirectly, in facilitating or hindering the mother-infant bond. For example, conflict in the marital relationship or subsystem has been determined to heighten tension and difficulty in the mother-infant attachment process (Cummings & Davies, 2002; Erel & Burman, 1995). Further, attachment theorists are paying increased attention to the larger environment in which the family resides to enhance understanding of impediments to parent-child attachment (Belsky, 1999).

The concept of attachment in a family systems perspective supports Bowen's theory of the intergenerational transmission of family processes. It appears that attachment styles are often handed down from one generation to the next. Research has found that adults with attachment styles that have been termed "preoccupied" (the individual is anxious and ambivalent in his or her intimate relationships) tend to seek out partners who have more dismissive or avoidant attachment styles (Kirkpatrick & Davis, 1994). Couples with this combination of attachment styles (sometimes called pursuer-distancer relationships) are frequently in conflict, manifesting high levels of distress, hostility, and anxiety in their relationship. High conflict in the marital subsystem has been shown to interfere with the development of secure attachment between the mother and infant. This, in turn, suggests development of an insecure form of relating to others, which the child will take into adulthood, resulting in a next generation of preoccupied or avoidant relationships.

In addition to its impact on the formation of attachment, conflict in the marital subsystem has direct effects on child functioning (Cummings & Davies, 2002). Multiple studies have found that children who come from families where there is a high degree of stress in the marital relationship demonstrate a range of emotional and behavior problems as early as the preschool years.

Another area that has been further developed in family systems theory in recent years is the relationship of the family to larger systems in the community and how these affect and are affected by the family system. Garbarino's 1980 study of two Chicago neighborhoods, both economically deprived, one with high rates of reported child maltreatment and the other with low rates, was a beginning demonstration of how the social environment in a community can affect families' functioning. Garbarino found that the neighborhood with high child maltreatment also had high rates of housing instability, limiting neighbor-to-neighbor contact, and increasing social isolation of families (Garbarino & Sherman, 1980). Social isolation is a frequent characteristic of abusive and neglectful families.

Similarly, in a study of Cleveland neighborhoods at low, moderate, and high risk of child maltreatment, Coulton (1996) found that a rise in the use of crack cocaine was associated with a significant decrease in community cohesion, such that residents felt they could no longer count on one another during difficult times. Furstenberg (1993) had similar findings in his study of families in low-income Philadelphia neighborhoods. Families living in a violence-prone public housing project isolated themselves and their children, even from organized activities in a local community center that might have provided both children and parents the kind of interpersonal relationships that could help support them in their daily lives. Furstenburg contrasted his findings regarding the social isolation of families in the housing project with another low-income neighborhood that had a high rate of home ownership and strong kinship networks.

Cross-cultural studies of the relationship between community involvement and child maltreatment show similar findings. In a study comparing communities in Spain and Colombia, Garcia and Musito (2003) found that maltreating families in both countries were less

integrated into their communities, demonstrated lower participation in community social activities, and made less use of formal and informal support services than nonmaltreating families.

Families who must raise their children in environments that are unsupportive, even hostile, that lack even the most rudimentary resources for advancing child development, such as community centers, adequate day care, libraries, safe and accessible parks and playgrounds, are at greatly increased risk for difficulties in functioning in ways that prevent providing nurture and care to individual family members (Bishop & Leadbeater, 1999; Cicchetti & Lynch, 1993).

In addition to looking outward at the ecology of family life, recent work in refining family systems theory has examined the cultural dimensions of this theoretical framework (Rothbaum, Rosen, Ujiie, & Uchida, 2002; Weinstein, 2004). McAdoo was one of the first to raise questions about the cross-cultural applicability of family systems theory in her 1977 article "Family Therapy in the Black Community." Other analyses of the Black family and how its dynamics differed from those of White families also influenced family systems discourse (Allen, 1978; Axelson, 1970; Billingsley, 1968; Hill, 1972; Hines & Boyd-Franklin, 1982; McAdoo, 1980). Questions raised by these pioneers soon inspired others to examine family systems theory through the lenses of ethnicity, race, class, and gender (Falicov, 1983; Hare-Mustin, 1978; Luepnitz, 1988; McGoldrick, Pearce, & Giordano, 1982). As we shall see, these analyses challenged some of the basic tenets of family systems theory and its application in practice.

RELEVANCE TO SOCIAL WORK PRACTICE

The profession of social work has long embraced the family as its primary focus of attention. The earliest social workers, whether Charity Organization Society field workers or residents of a settlement house, viewed the family as a crucible in which individuals were socialized to fill acceptable social roles. In Mary E. Richmond's landmark 1917 book, *Social Diagnosis*, she clearly viewed the family as the unit of analysis in formulating a diagnostic assessment for case planning. Although the language of general systems theory was not available to M. E. Richmond (1917/1944, p. 137), she acknowledges the importance of seeing family members together, "in their own home environment, *acting and reacting upon one another* [italics added], each taking a share in the development of the client's story, each revealing in ways other than words, social facts of real significance." She also anticipates the family systems theory concepts of family cohesion and disengagement when she differentiates between the "united" and the "unstable" family, describing the united family as showing solidarity with one another, as "hanging together through thick or thin," whereas in the unstable family "there is no bond to hold them together at all" (p. 139). M. E. Richmond recognizes the importance of the functioning of the marital subsystem and advocates that the caseworker explore with the couple those factors, individual and environmental, that place particular stresses on the marital relationship, including differences in background and life histories. She seems to anticipate the work of Bowen and his intergenerational transmission of family processes in her case presentation of three generations of women in the Doyle family, in which the theme of alcoholism abounded. She also foreshadows the contextual understanding of family systems theory when she admonishes

the caseworker in the Doyle case, who had closed the case once she had obtained support for the family from the missing husband/father, that the focus of work should be on "the synthetic relation of the industrial, physical, moral and social facts which affect [the Doyle family's] welfare" (p. 142). In modern terms, the totality of the system's functioning should be attended to in order to ensure the optimal nurturance and development of each family member.

It is no accident that one of the first journals for the rapidly professionalizing field of social work was entitled *The Family* (later changed to *Social Casework*, and still later to *Families and Society*). Early issues of *The Family*, which began publication in the early 1920s under the aegis of the Charity Organization Society, which later became the Family Service Association of America, are replete with practitioners' descriptions of their casework with multiple members of a single family, recognizing the importance of family interactions to individual functioning. It is clear from these case accounts that social workers were well aware that when a child was in trouble, there was often trouble at home, and that trouble at home frequently stemmed from problems in parenting and/or from stresses originating in the family's social environment.

Despite the strong influence of individual psychodynamic theory in social work beginning in the 1920s, as evidenced by the diagnostic and functional schools of thought based on the respective works of Sigmund Freud and Otto Rank (Dore, 1990, 1999), family-centered practice has been a consistent theme in professional social work practice (Hartman & Laird, 1983). However, it wasn't until the introduction of family systems theory to the field in the 1950s and 1960s that social workers had a theoretical framework to support their practice with families.

In the first edition of her widely used social work textbook, *Casework: A Psychosocial Therapy*, Florence Hollis (1964), a professor at the Columbia University School of Social Work, made brief reference to the new procedure of interviewing whole families together, but it is clear that she sees this as simply informing the diagnostic assessment of the individual and not as a form of treatment of the family as a whole. In her third edition of this text, coauthored with Mary E. Woods and published in 1981, Hollis devotes an entire chapter to the integration of family systems theory into casework practice. Her citations indicate that she is familiar with the seminal literature in family systems theory, although, as the case discussion in her next chapter indicates, aspects of family systems theory, particularly with regard to the influence of environment, are more difficult to integrate for a scholar so immersed in psychodynamic theory and practice.

Interestingly, unlike other theories for social work practice that were developed in the academy and inculcated in students who then practiced them in the field, family systems theory and the family therapy practice that it spawned seemed to influence social work practice in the field first, and then filter inward to the academy. This was despite the introduction of general systems theory to social workers through a series of social work journal articles and books beginning in the late 1960s (Hearn, 1969; Janchill, 1969; Stein, 1971). It may have been that the level of abstraction at which general systems theory was integrated into social work practice in these introductory missives made it difficult for practitioners to see the implications for their work with clients. It was not until Germain and Gitterman published their formulation of the life model for social work practice in 1980 that a practice approach incorporating systems thinking was readily accessible to social work practitioners. Family systems theory, on the other hand, consists of concepts and

principles that are easily applied in practice and are testable and their results observable in the moment.

One of the most positive effects of the incorporation of family systems theory into social work practice over the past 2 decades has been the decline in "family blaming" and the corresponding emphasis on engaging families as partners in the process of change. Although several of the early family systems theorists promulgated theories of mental illness that held families, particularly mothers, responsible for the problems of their offspring, as these same theorists increasingly interacted with families of young people with major mental illnesses they came to appreciate the very difficult struggles that such families encounter in managing the day-to-day effects of their child's illness. The rubric "parents as partners" has come to define provision of mental health services to children and their families in recognition of the primacy of parents in identifying and advocating for appropriate care (Alexander & Dore, 1999). Social workers have been at the forefront of efforts to include families in treatment planning and service delivery across systems of care (Friesen & Poertner, 1995).

Social workers have long been involved with families known to the child welfare system and have sought ways to intervene effectively with these very vulnerable families to prevent child maltreatment and poor psychosocial outcome for their children. Removing children thought to be at high risk for abuse or neglect from their families and placing them in foster homes, often for years at a time, was once considered standard child welfare practice (Dore & Feldman, 2005). Little effort was made to maintain family ties and to help families work to overcome the problems that had contributed to the removal of their children. However, influenced by family systems theory and the growing understanding of the importance of attachment and consistent caregiving in a child's life, efforts were increasingly made to stabilize families in crisis and prevent out-of-home placement of children where possible.

Family preservation to prevent child placement and reunify families became the focus of child welfare practice in the 1980s and early 1990s. Over time, however, it became clear that there were some families whose problems were so great, often due to substance abuse, and their ability to adequately parent their children so limited, that preserving the child's biological family was not feasible. Recognizing a child's need for emotional attachment to extended family, placement with relatives, or "kinship care," became the placement of choice. When there was no extended family to care for a child, adoption was seen as providing an opportunity for attachment and stability outside the biological family.

Under the Adoption and Safe Families Act, passed by Congress in 1997, state child welfare agencies were mandated to terminate the rights of parents within a specified period of time and place children of all ages and with a range of psychosocial needs in adoptive homes. There were financial incentives for states to make adoptive placements. However, as researchers studying postadoption family functioning have found, removing children from a dysfunctional family system and placing them in a loving, nurturing family environment is not a panacea (Dore, 2006). Children who have failed to form even tenuous attachments in their family of origin may present significant emotional and behavioral challenges to kin and adoptive families as they struggle to integrate into the family system (Combrinck-Graham & McKenna, 2006). Family systems theory provides a lens though which the problems and processes of absorbing a new member into an established family system can be viewed and understood.

Uses in Assessment

Assessment from a family systems perspective is an ongoing process that is informed by observation and integration of information about the family as a whole, about its interlocking subsystems, and about the context in which the family is located. It is not a linear, cause-and-effect process, but one that employs the concept of *circular causality*. We don't simply observe 4-year-old Tommy hitting and biting other children in his preschool classroom, interview his mother to determine his developmental and family histories, then conclude in our assessment that Tommy is displacing his anger and aggression on his classmates that he feels toward his mom, who has recently gone back to work full time.

It may well be that Tommy is in fact angry about this change in his life, but a family systems approach would go further and observe Tommy at home with his mom and dad and whoever else is in the home. If we did so, we might see that his mom and dad are engaged in a struggle over the affections of their son and that Tommy is being triangulated into this conflict in the marital subsystem. When a child is triangulated into a marital conflict, this places a great deal of stress on the child, who usually loves and wants to please both parents. In a triangulation, the child is unable to please one parent without displeasing the other, clearly an impossible situation for a young child to manage.

In practice informed by family systems theory, attention is always paid to assessing the functioning not just of the family system as a whole, but of the interlocking subsystems as well. We look at the adult partners in the home, usually but not always the marital subsystem, to determine the dynamics of that relationship apart from their roles as parents in the parenting subsystem. Is there affection and respect between these two individuals, or does one demean or belittle the other? How do they communicate their feelings to one another? Is one a distancer, that is, does he or she withdraw from emotional connection with others, while the other partner pursues and attempts to gain the attention of the distancer through nagging, criticism, helplessness, or other strategies to regain emotional connection? Is there psychological or emotional violence in the relationship? Does one partner seem to fear the other, while at the same time goading him or her in ways that generate rage?

Assessment from a family systems perspective is about identifying the rules that structure family interactions in predictable patterns. This identification can come only through repeated observations of family dynamics, which is why interviews with all family members present are essential. When we interview a family over time, we frequently observe sequences of behavior that indicate the presence of a particular pattern of interaction between family members. Mom never talks directly to Dad but, instead, delivers her messages through her adolescent daughter. When Billy, age 9, feels demeaned by his father, he strikes out at his younger sister, who, in turn, complains to her mother, with whom she is allied against the father, who takes out on Billy his frustration at his wife's emotional inaccessibility. These are the kinds of patterned behaviors that become apparent in family sessions and can help the clinician assess the family system dynamics.

The concept of *boundaries* is an important one in family system assessment. Not only is there a boundary that defines who is in and who is outside the family, but there are boundaries internal to the family that separate subsystems from one another. In a well-functioning family, these boundaries are clear, allowing each subsystem to perform its appropriate function within the family system. For example, when there are clear boundaries that define the marital or partner subsystem, children in the family know that their parents

have a relationship that is special to adults and apart from them. In families where incest occurs, the boundaries around the marital or partner subsystem are permeable, and a child becomes a participant in that relationship, with emotionally traumatic results.

In the parental subsystem, boundaries define who can act as a parent to the children in the family. When an older child is given parental authority and responsibilities over younger siblings, this inducts that child into the parental subsystem, which not only changes the dynamics of that subsystem and may result in the adults in the family treating the coparenting child as an adult before he or she is developmentally prepared, but it also changes the dynamics of the sibling subsystem, which plays an important role in socializing children in their peer relationships outside the family. This is a family pattern that is often seen in single-parent households, where the parent relies on the oldest child, or more often, the oldest girl, as coparent of younger siblings.

From a family systems perspective, it is important to remember that nontraditional family dynamics are not automatically pathological. Awareness of cultural and ethnic differences in family dynamics has certainly taught us as much. The important determination in a family systems assessment is how the family's unique patterns and structure are facilitating the optimal functioning and development of individual family members. In a family where an older child is part of the parental subsystem, it is essential to assess how this role is impacting the child's psychosocial functioning. Is the child overburdened with responsibilities that he or she cannot handle, or that are interfering with his or her own social and emotional development?

Single parents and parents in an unhappy marriage may also be tempted to induct an older child into the marital or partner subsystem such that the child receives confidences about the parent's adult activities and emotions and is expected to provide comfort and nurture to the parent much as a partner or spouse would. Again, an assessment would examine the subsystem boundaries and functioning to determine whether the child is being exploited in ways that inhibit or distort his or her own development. Children in such situations are often very protective of the parent with whom they are allied and feel wanted and needed in their companion role, making systemic changes difficult for all concerned.

Another important dimension of family system interaction that is open to assessment is that of *emotional proximity and distance*, which ranges from emotionally enmeshed to disengaged. An enmeshed family is one in which the boundaries among individual family members are highly permeable; it's difficult to know where one person ends and the other begins. In interviews, family members feel free to interrupt and/or speak for one another, to express one another's feelings and ideas. If one family member feels stress, they all feel it; if one member is affected by an event outside the family system, whether positively or negatively, they are all affected. Interestingly, families who are highly enmeshed and have poor subsystem boundaries often have very rigid boundaries around the family system itself, such that members are highly dependent on one another and have few outside alliances or resources. There are strong rules regarding family loyalty such that members' individuality and autonomy may suffer.

A family on the disengaged end of the proximity-distance continuum has unusually rigid internal boundaries such that communication within and across subsystems is inhibited and infrequent. There is little affective responsiveness or affective involvement within the family system. On the other hand, in disengaged families the boundaries that separate family members from the outside environment are often diffuse. External systems feel free

to enter into and impinge upon this family system at will. These are the families who are known to and involved with multiple agencies and organizations in the community, yet are unresponsive to these external ministrations because of their internal disarray. Family members, even very young ones, are expected to be autonomous and independent, essentially to care for themselves. Emotional nurturance and dependence are discouraged, and these families often fail in their responsibility to socialize their members to function according to social norms.

Again, it is important to highlight that any assessment of enmeshment and disengagement in families must take into account the cultural context of the family system. Some cultures value a high level of emotional involvement among family members; other cultures reward emotional distance and self-containment. A wonderful illustration of this is a scene from the Woody Allen film *Annie Hall*. In the film Allen, who is Jewish and a New Yorker, is meeting his girlfriend Annie Hall's midwestern WASP family for the first time. They are all at the dinner table on Easter, and Allen is struck by their distancing communication, which is all about "swap meets and boat basins." He imagines his own family dinners in the Bronx, where family members all talk over one another, reach for food on one another's plates, and introduce highly emotionally charged and personal subject matter such as physical illnesses and complaints. Clearly a highly enmeshed family system! This scene also reminds us that it is essential for clinicians who are assessing the dynamics of other family systems to be aware of the expectations of their own.

Another element of assessment from a family systems orientation is that of the family *hierarchy*. This concept refers to how the family is organized in terms of status and power. Who is in control? In well-functioning families there are clear lines of authority and responsibility. Someone must be in charge, and it shouldn't be the 5-year-old, although in a surprising number of families seen in child guidance clinics this is so. Well-meaning parents who have been brainwashed by the psychodynamic literature on parenting into believing that young children should not be stifled in any way and who have an unusually strongly willed child sometimes abdicate all power and control in the family to the child. And what child wouldn't love to have the adults in their life at their beck and call? Unfortunately for these children, in the real world outside the family system, most adults are not willing to be bossed around by a 5-year-old and they soon run into difficulties in preschool or kindergarten.

While it is clear to most of us that a 5-year-old should not be at the top of the status and power hierarchy in a family, the question remains as to who should be. In the early years of family systems work, most of the key theoreticians were men, and most of them had a very traditional patriarchal view of family hierarchy. This was also the height of the *Leave It to Beaver* era, when the ideal family was thought to be structured around an instrumental male head of household and an affective female as second in command, much like the structural-functional model Talcott Parsons proposed. The feminist critique of this family structure and its incorporation into family theory called attention to alternative ways of organizing the family hierarchy that allowed for power and authority to be shared in partnership or distributed according to family members' capacity or the specific task rather than assigned by gender (McGoldrick, Anderson, & Walsh, 1991).

However the family hierarchy is organized, it is important to assess how power and authority are distributed and exercised and how family decisions are made and communicated to family members. A well-functioning family has clear lines of authority with open communication regarding family rules and expectations of family members.

Finally, *homeostasis* is an important concept from general systems theory that has been adopted in family systems thinking. Like all systems, families are constantly adapting to change, both externally and internally driven. As the family moves through the life cycle, the system must adjust and readjust to the developmental needs and circumstances of its individual members. Similarly, there are environmental changes that impact the family system: a job loss, a move, a shift in the political climate or cultural expectations. All place stresses and strains on the adaptive capacity of the family. These stresses place pressure on the family system's customary structures and ways of doing things, its homeostasis.

The greater the stressful life event or the more events that occur at the same time, the more likely it is that the homeostatic state will become unbalanced and the family will be challenged to find new ways of adapting to threats to its customary ways of functioning. Families often present themselves in clinical settings when life events have left the system unbalanced and unable to successfully return to a homeostatic state. Loss, whether acute as in death or divorce, or chronic as in a job loss or the birth of a child whose functioning is severely impaired, often precipitates a crisis in the homeostatic functioning of the family system as various family members struggle to adapt to the traumatic event together and alone. Assessing a family's history of stressful life events can provide important information about the family's ability to respond to challenges to its adaptive capacity.

Clinicians working from a family systems perspective have developed some tools that have proven very useful in assessing family dynamics. One of these, particularly useful for social workers who are especially attuned to the family's interactions with the environmental context in which it is embedded, is the ecomap (Hartman & Laird, 1983). The ecomap is a visual mapping of the family in relation to the variety of individuals, organizations, and institutions to which it relates or fails to relate in the larger environment. The family members who live together in a household are depicted in a circle in the middle of the ecomap. The relevant individuals and organizations in the community to which the family relates or that are available as potential resources for the family are depicted in a series of circles arranged around the central family circle. These are usually identified in collaboration with the family itself, although information regarding some institutional relationships may come from referral sources or from collateral contacts made as part of the assessment. Lines are then drawn connecting various family members to those individuals, organizations, and institutions to which they are connected or could potentially be connected as resources.

The structure of the line itself—solid, broken, or crosshatched—indicates the nature of the current relationship with the specific community entity. For example, if the household consists of a divorced mother and her two children, a crosshatched line, representing a conflicted or stressful relationship, may extend from the mother to her former husband, who is represented by a circle with his name inside located outside the family's circle. If the children have little or infrequent contacts with their father, the line from each child to him would be a broken one; however, if their relationship with him is a positive source of support for them, the line would be solid.

The use of the ecomap not only indicates the presence or absence of resources in the community and family members' relationships to these resources, but it can also indicate the permeability of the family's external boundaries. A family with very rigid boundaries that is socially isolated from the community with few or no relationships with outside individuals or institutions would be quickly identified using this instrument.

Another important assessment tool in the armamentarium of the family systems practitioner is the genogram (McGoldrick, Gerson, & Shellenberger, 1999). The genogram is a graphic representation of complex intergenerational family patterns. It maps relationships, life events, and patterns of functioning across three or more generations. Family systems theorists generally believe that families repeat similar patterns in functioning from one generation to the next. Recent research has offered support for this belief. Klever (2004, p. 346) conducted a longitudinal study of 49 midwestern couples and found statistically significant evidence that "nuclear family emotional processes and areas of symptomology were transferred across generations."

Using the genogram in the family assessment process can help the clinician quickly summarize a great deal of information in a way that informs understanding of current family dynamics in the context of the intergenerational family system (McGoldrick et al., 1999). Genograms also help locate critical life events in the intergenerational life cycle. Repetitive family patterns become clear. Intergenerational family themes such as mental illness, substance abuse, loss and abandonment, high achievement, and creativity and artistic talent are highlighted through the use of this tool.

Although the structure of the genogram is too complex to describe fully here, McGoldrick et al. (1999) have succinctly presented a standardized format that was agreed upon by a committee of family clinicians and is currently in general use in family assessment. The reader is referred to that resource for a full description of this tool.

A number of family theorists and researchers have developed standardized instruments to assess various dimensions of family functioning as part of the assessment process. David Olson and his colleagues at the University of Minnesota (Olson, Sprenkle, & Russell, 1979) developed the Family Adaptability and Cohesion Evaluation Scales (FACES), which, as the name suggests, is designed to capture the family's functioning on two dimensions: flexibility and cohesion. Olson's cohesion dimension reflects concepts in family systems theory regarding emotional proximity and distance; that is, it measures enmeshment and disengagement. He defines cohesion as emotional bonding.

His flexibility dimension is related to family system theory's notions of family structure, hierarchy, power, and control. Olson defines flexibility as the family system's potential for change in its organization (rules, roles, authority structure, etc.) in response to internal or external demands. He notes that families need both stability (homeostasis) and the ability to change their ways of doing things when appropriate.

The FACES instrument, which is currently in its third edition (FACES III), has been used in hundreds of studies and has been generally found to have good psychometric properties (but see cautionary studies by Daley, Sowers-Hoag, & Thyer, 1990, 1991). Perhaps more important for the discussion here, its properties of flexibility and cohesion have clear clinical applications (Olson, 1993).

Another family assessment instrument that has been widely used in clinical settings is the Family Assessment Device (FAD), developed by family researchers and clinicians who were originally located at McMaster University in Canada and are now affiliated with Brown University Hospital in Rhode Island (Epstein, Baldwin, & Bishop, 1983). The FAD is based on a model of healthy family functioning called the McMaster model, which focuses on those dimensions of family functioning such as communication, problem solving, and affective responsiveness that appear to have the greatest impact on the functioning of individual family members.

The authors of this assessment instrument subscribe to a family systems perspective, noting the importance of family structure and organization (Epstein, Bishop, Ryan, Miller, & Keitner, 1999). Their instrument attempts to capture the transactional nature of family interactions by integrating family members' perspectives on six critical dimensions into a measure of overall family functioning. This instrument has been widely used in the family treatment field, and its scores repeatedly predict family outcomes such as child behavior problems. The FAD is easily administered and scored and gives clinicians useful information about clinically relevant aspects of family functioning and dynamics.

Other standardized instruments are available to assess the dynamics of family subsystems such as the marital relationship and parent-child interaction. These can be a useful addition to the assessment, particularly if there are problems presented in a family subsystem when the request for treatment is made. However, in clinical practice using a family systems framework it is important to focus primarily on assessing the functioning of the family system as a whole to gain the most understanding of complex family dynamics and their association with the presenting problem or issue.

Uses in Intervention

The family systems practice literature repeatedly emphasizes that the focus of intervention in family treatment is to help the family discover ways of interacting that allow for the optimal development of individual family members and of the family as a whole. The focus in treatment is on the family process: who speaks to whom, what members are aligned with one another, who is valued and who is scapegoated, whose voice is heard and whose is not, and so on. Observation and analysis of this process as well as use of the various assessment tools described earlier allow the clinician to gain a clearer understanding of what is problematic in the family process and where to focus efforts at change.

There are nearly as many approaches to bringing about change in family dynamics as there are family therapists. Some, such as Carl Whittaker (Napier & Whitaker, 1978; Whitaker & Keith, 1981), immerse themselves in the family system and use their ability to join with the family and their own intuitive skills to bring about systems change. This approach is referred to as experiential because it relies on experiencing the family in interaction to understand the dynamics that require change. *The Family Crucible* (1978), written with his cotherapist Gus Napier, provides a compelling account of the treatment of a family using Whitaker's experiential approach.

Other family clinicians focus on the communication style and content within the family system. They notice who talks with whom, who has the "big" voice and who has a "small" voice, and whose communications are routinely ignored. They also attend to the content of communication and note whether it is clear and direct or muddled and containing many mixed messages. The family systems theorists who began with the Palo Alto group and who made substantial contributions to the development of a treatment approach with families, such as Jay Haley and Virginia Satir, continued to focus on family communication to inform their treatment, although Haley was eventually to be aligned with both the structural and strategic schools of family treatment.

The structural approach to family therapy is perhaps the most straightforward of all the intervention approaches. It was developed purposefully in such a way that it could easily be learned by therapists without a great deal of formal education or training. It is also

clearly based on family system principles of hierarchy and power and authority. Structural family therapists believe that parents should be in charge of children and that, in many families where children are experiencing emotional and behavioral difficulties, parents are not exercising appropriate authority. Either parent-child alliances are undermining the authority of the parental subsystem or the parental subsystem is failing to function because of problems in the marital dyad. At the risk of oversimplifying, the key in the structural approach to family treatment is to empower the adults in the family to assert their authority and control and to work as a team in doing so. If there is only one adult, he or she is encouraged to look outside the family system for support and gratification from other adults, rather than relying on a child to fill that function, which empowers the child and disempowers the parent.

The Bowenian approach to family therapy, based on Murray Bowen's ideas about intergenerational family process and differentiation of self, focuses on increasing the ability of the family to base decision making and problem solving on a rational rather than an emotional process. Many family therapy approaches purposely heighten family anxiety to open up the family system to change. Bowen (1978), on the other hand, believed that change required a rational approach and sought to lower family anxiety rather than increase it. If a family came into treatment in crisis, the first order of business for Bowen and his adherents was to decrease the emotional tone by allowing family members to ventilate their feelings.

Differentiation of self in the Bowenian approach requires that clients actively rework their individual relationships with members of their extended family system. Bowen believed strongly that, until members of a family were freed from participating in the intergenerational family process, which could be accomplished only by reworking disconnected or distorted family relationships, they would be unable to create a functional family system in the present. There is also a great deal of emphasis in Bowen's approach on managing triangulation therapeutically. Conflict between two members of a family, usually husband and wife, is dealt with by bringing someone else into the relationship to deflect the emotional tension between the pair. The triangulated individual is often a child. The therapist's task in such family triangles is to actively work to remove the child from the triangle and help the pair communicate directly with one another, with the therapist as coach.

Another major approach to treating the family system is that of the strategic and systemic family therapists. These clinicians focus primarily on bringing about behavior change to resolve the family's presenting problem. They do this by trying to identify the sequence of actions that support and reinforce problem behavior, much like a behaviorist would do. Except that unlike the behaviorist who looks at an individual behavior sequence, strategic and systemic clinicians study the interactions in the entire family system to understand the complex sequence of events that combine to result in a particular behavior. Rather than directly working to change some family system dynamic, such as the family structure, to bring about change in the presenting problem, strategic and systemic clinicians focus on the problem itself, directing the family's efforts to change the problem behavior as an impetus for systemic change.

Strategic therapists, in particular, rely on such strategies as *enactments*, having the family act out alternatives to the problem situation in a treatment session, and *directives*, assigning homework such as a family outing with particular meaning to the family to help the family experience themselves in a different way. The use of these strategies is very creative, is based on a thoroughgoing understanding of the dynamics of the family system that support

the problem situation, and is designed to subtly challenge a family's way of seeing things that keeps them mired in a dysfunctional process.

EVIDENCE-BASED FOUNDATIONS

The research that supports various elements of family systems theory is voluminous and growing. What is presented here is a brief overview of the current evidence base for this theory. Much of the research related to family systems has focused on patterns of interaction within and across family subsystems. One major focus of study has been the relationship between parent-child interaction and child functioning. Although this research has traditionally investigated mother-child interaction and its effects on child development, recent work has explored the role of the father both in direct interaction with the child and indirectly as a facilitator of or hindrance to the mother-child relationship (Johnson, 2001). There is increasing evidence that fathers have unique effects on children's psychosocial development, apart from mothers' effects (Marsiglio, Amato, Day, & Lamb, 2000).

Parents' attachment styles and children's functioning have also been the subject of numerous studies of the family system (Cowan, Cowan, Cohn, & Pearson, 1996; Marvin & Stewart, 1990). Using the Adult Attachment Interview schedule, researchers studied the attachment styles of 27 mothers and 27 fathers to determine the relationship with their children's behavioral functioning in kindergarten (Cowan et al., 1996). Fathers' attachment styles were predictive of variance in children's externalizing behaviors, as reported by teachers, whereas mothers' attachment styles were more predictive of internalizing behavior in sample children.

More recently, researchers have investigated the influence of parents' experiences outside the family, particularly in the workplace, on their interactions within the family system, both in the marital relationship and with respect to the parenting role.

Research on family system functioning has also turned attention to the sibling subsystem. One recent line of research has looked at the impact on siblings of having a child with special needs in a family (Fisman, Wolf, Ellison, & Freeman, 2000). These studies have generally found that siblings of children with a variety of chronic illnesses and disabilities do not fare as well as children in families where there is no child with special needs, although much appears to depend on the type of disorder (Dyson, Edgar, & Crnic, 1989; Fisman et al., 1996).

Family systems theorists, with support from the empirical literature, have developed a model of the effect on the family system of having a child with special needs. In this model, the mother becomes overinvolved with the disabled child because of the demands of attending to the health care and educational needs of this child. The father disengages from the family because his affective needs are not being met by his partner. The well children in the family are left to manage on their own without the emotional support they need to effectively manage their responses to the disabled child. As a result, they may internalize their feelings of distress and become anxious and depressed, or they may act them out in externalizing ways that discharge their stress on the environment (Gold, 1993). Either way, having a sibling with special needs clearly presents special demands on well children in the family, and these are often unattended to.

Studies of the marital subsystem and how its functioning impacts the family system as a whole as well as other subsystems in the family lend additional support to family systems

theory. A substantial body of research has established the relationship between conflict in the marital subsystem and emotional and behavioral problems in children (Emery, Fincham, & Cummings, 1992; Jouriles et al., 1991; Katz & Woodin, 2002; Lindahl & Malik, 1999; Porter & O'Leary, 1980; Rice, Harold, Shelton, & Thapar, 2006). Recently, the focus of study has shifted from establishing a direct relationship between marital conflict and child adjustment problems to observing the process of influence. As predicted by family systems theory, research shows that marital conflict not only directly impacts child functioning, but also influences how the adults involved carry out their other family roles, including parenting and maintaining the family structure (Erel & Burman, 1995). When a husband and wife are in conflict, studies indicate that they may be less able to maintain appropriate subsystem boundaries such that one parent may emotionally ally with a child against the other parent (Kerig, 1995; Vuchinich, Emery, & Cassidy, 1988), or family cohesion may suffer so that there is little affective involvement between family members (Lindahl & Malik, 1999). These indirect impacts on the family system are associated with problematic child adjustment and functioning.

In addition to research on subsystem interaction in the family system, researchers have also studied various dimensions of family functioning as a whole (Johnson, 2003). For example, a recent study on the association between family cohesion and the externalizing behavior of adolescent siblings found an inverse relationship between cohesion in the family system and adolescent behavior problems (M. K. Richmond & Stocker, 2006). Other researchers examined four categories of family functioning—cohesion, enmeshment, disengagement, and adequate (high control, low discord, and high warmth)—and found that children in both enmeshed and disengaged families demonstrated more insecurity in their family relationships and more internalizing and externalizing behaviors, both at the time of the study and 12 months later (Davies, Cummings, & Winter, 2004). A third study of family emotional climate found that high conflict and low emotional engagement in families predicted bulimic activity in a sample of 20 adolescent girls diagnosed with Bulimia Nervosa (Okon, Greene, & Smith, 2003).

In yet another study, researchers examined the concept of family hierarchy, which is a central concept in family systems theory (Shaw, Criss, Schonberg, & Beck, 2004). They looked at the development of family hierarchy over time as well as the relationship between strong family hierarchy and children's conduct problems. These researchers found that adolescent parenting and parent-child conflict were directly associated with low levels of family hierarchy. There was an indirect association between low hierarchy and poor marital functioning, negative child behavior, and living in disadvantaged circumstances. The relationship between level of family hierarchy and antisocial behavior in children was mediated by ethnicity and neighborhood context.

In addition to testing various concepts of family systems theory, researchers have also examined specific theoretical frameworks, such as the family systems theory of Murray Bowen (Miller, Anderson, & Keala, 2004). This research has provided empirical support for Bowen's concept of differentiation and its association with marital satisfaction. Another study examined Bowen's concept of the intergenerational transmission of family process by examining role reversal, a relationship disturbance in which the parent looks to a child to meet his or her unmet emotional needs rather than to another adult (Macfie, McElwain, Houts, & Cox, 2005). Role reversal is associated with problems in attention, behavior, and social interaction in children. Macfie et al. found that women who reported experiencing

role reversal with their own mother on the Adult Attachment Interview were significantly more likely to engage in role reversal with their preschool daughters.

Other studies that appear to support Bowen's intergenerational transmission of family process theory have looked at patterns of attachment across generations (Kretchmar & Jacobvitz, 2002; van IJzendoorn, 1992) or at intergenerational pathology in parenting (Egeland, Jacobvitz, & Sroufe, 1988; Oliver, 1993; Simons, Whitbeck, Conger, & Wu, 1991). Other elements in Bowen's framework have not received the same empirical support, including the assumption that couples who marry share the same level of differentiation from their families of origin.

The criticism that family systems theory is formulated from a majority perspective has led in recent years to greater research on its applicability to a variety of racial and ethnic groups. Research on African American families has expanded the perspective of family theory to include three-generation households and the role of grandmothers and other extended family members in the parenting subsystem. Relationships in the parent-child subsystem may also be different in African American families, with fathers having a more direct role in caregiving than is recognized in the structure of family systems theory (Pleck & Masciadrelli, 2003). It is likely that empirical research on other ethnic groups will present similar challenges to traditional family systems theory, opening it up to new insights into successful alternative models of family functioning.

CRITIQUES OF THIS THEORY

Various critiques of family systems theory have been referenced throughout this chapter. The major criticisms of the framework are based on its origins in the work of White male scholars and clinicians who are perceived as viewing the family through a patriarchal lens. Women scholars, in particular, saw many of the formulations of the early pioneers of family systems theory in practice as reflecting a dominant male orientation (Goldner, 1985). For example, Bowen's emphasis on differentiation and autonomy and his belief in the primacy of intellect over emotion were interpreted by women scholars as overvaluing a male perspective. The early focus on mothers as singularly responsible for the problems encountered by their children was particularly anathema to women in the field (Caplan & Hall-McCorquodale, 1985).

In addition, some of the efforts in family systems theory to define the structure of a well-functioning family system appeared to privilege male power and control within the family system and contained limited recognition of the impact of social forces such as sexism and wage discrimination in the workplace on the functioning of women within the family system (Bograd, 1984; James & McIntyre, 1983; Taggart, 1985). Women scholars believed that some interpretations of family systems theory reinforced traditional gender roles, blaming wives and mothers for failing to sufficiently attend to the affective needs of husbands and children (Hare-Mustin, 1978).

That family systems theory and its clinical applications were informed by a limited White male perspective was also the criticism of minority scholars, as noted earlier. The emphasis of the theory on a particular model of family structure based on a heterosexual, two-parent couple and their biological or adopted children did not resonate with scholars from racial and ethnic groups where other family forms were widely accepted. The three-generation

household, headed by a grandmother, with her adult children, their offspring, and often containing children or other adults who were unrelated by blood, was not addressed in the discourse on well-functioning family systems. Nor were the struggles of these households caused by historical discrimination and poverty entered into the family systems equation. African American and other nonmajority family researchers and clinicians gradually began to find their voices and influence the discourse on family systems theory. The publication in 1982 of the first edition of *Ethnicity and Family Therapy* (McGoldrick et al., 1982) marked a turning point in the recognition of the importance of cultural awareness in applying principles of family systems theory to practice.

As the review of family systems research illustrates, elements of family systems theory are now an accepted part of our understanding of how the individual develops in the context of the family and the larger society. There is no longer any question that the child both influences and is influenced by the family system into which he or she is born. Interestingly, however, as the principles and concepts of family systems theory have become increasingly imbued in our therapeutic approaches to working with individuals, the earlier emphasis on treatment of the family as a whole has diminished. Whether this is because of the influence of current sources of funding for mental health treatment, which focus on a medical approach requiring a diagnosis and emphasizing the biological bases of mental disorders, or because current evidence-based interventions such as cognitive-behavioral therapies are primarily focused on treating the individual, there has been a diminution over the past 2 decades in treating the family system as a way of changing individual behavior.

That is not to say there are not evidence-based models for treating various disorders that involve whole families. Multisystemic therapy, which is a well-supported model for treating conduct disordered youth (but see Littell, 2005, 2006, for some cautions), involves the family in the treatment process, but it is not focused on changing family dynamics as much as helping the family change the adolescent's behavior by giving them the knowledge and skills to do so. Similarly, the family psychoeducation model used in treating adults with major mental illnesses such as Schizophrenia also recognizes the importance of families in the lives of individuals with these disorders. However, again, this approach is about giving families information and support in order for them to better cope with their mentally ill member. How they integrate that member into the family system, or whether they do it at all, is not addressed.

The fact that so many applications of family systems theory in practice seemed to blame families for the difficulties of their children may account for the current reluctance to focus treatment on the family system as a whole. Yet, given our current knowledge about the dynamics of families and their systemic impact on the development and functioning of all family members, it is important that we do not lose sight of the family system as the focus of change.

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Chapter 16

ORGANIZATIONAL THEORY

John E. Tropman

The twenty-first century can be called the century of organizations. Organizations not only provide the framework for the way things work, but formal organizations—governmental, commercial, and nonprofit (e.g., nongovernmental organizations)—are a vital element of world society. Organizations are familiar to us as agencies, companies, corporations, and governmental bodies of all kinds. In social work, we are especially interested in organizations called social agencies, human service organizations, people-processing organizations, and people-changing organizations. But social helping does not occur only in social agencies. It occurs in corporations (day care and employee assistance programs, for example), as well as in governmental bodies (departments of social services). Indeed, social work is interested in any organized process established and run to assist individuals and families to achieve their potential or that help communities, organizations, and states function more humanely.

SOCIAL ORGANIZATION AND FORMAL ORGANIZATION

The word *organization* has multiple referents that it is helpful to clarify. In one meaning, an organization is some entity or process that has parts and elements with understandable and regular interaction. Interaction may occur at a moment in time or over time. Processes are organizations that, typically, exist over time. The concept of *social organization*, for sociologists at least, refers to the minded interaction that characterizes social structures that are groups, communities, organizations, societies, world regions, and the world itself. Social organizations have both structure and culture.

What is *formal organization?* An early definition of formal organizations comes from Peter Blau (1968; pp. 297–298):

> [A formal] organization comes into existence when explicit procedures are established to coordinate the activities of a group in the interest of achieving specified objectives. [The formal part involves activities, or directed] procedures for mobilizing and coordinating the efforts of various, usually specialized, subgroups in the pursuit of joint objectives.

This material draws on my recent volume *Supervision and Management in Nonprofit Organizations* (Tropman, 2006). I would like to thank Gerald Davis and Jane Dutton of the Ross Business School, University of Michigan, for their thoughtful commentary on this chapter.

To expand this definition somewhat, formal organizations are rationalized, described relations among individuals and groups that specify organizational positions, roles, and processes, and their interconnections over time and space. They are often officially registered and many times have legal status in national and international systems. Common examples are governments and governmental bureaus, corporations, and nongovernmental organizations (NGOs, nonprofits in the United States). The rationalization is comprised of written statements of purposes and goals (ends); the achievement of which is the basis for other documentation concerning the appropriate interactions and procedures for their accomplishment (means). Formal organizations have a structure, often described in an organization chart. They have a culture, which embodies the organization's ideas, values, beliefs, norms, and attitudes. They have a history (short or long), and the conditions and issues crucial and pressing at their founding often have a special and long-term influence on their structure and culture. They typically go through a life cycle, involving stages of founding, growth, maturity, and decline/renewal. Formal organizations usually specify who *belongs* to/with/in them, using categories like citizen, member, employee, student, etc. This specification also has the property of making it clear who is *outside* of the organization. There are usually rights and responsibilities associated with such membership.

Alternatively, *informal organizations* do not usually possess legal status and are largely voluntaristic and fluid in interactions and membership.

Levels of Social Organization

The list I just mentioned refers to levels of social organization. The dyad, or two-person group, is perhaps the lowest level of social organization, but then groups, communities, formal organizations, regions, nation-states, and societies exist as well. Each level is composed of lower levels but has, as well, a reality in and of itself (Tropman & Richards-Schuester, 2000).

Formal organizations are one kind of social organization. Formal organizations are, as just noted, typically, what we think of when we use the phrase *an organization*. It is a formal entity developed to accomplish some specific product or service or to achieve some goal.

The Importance of Formal Organizations

Formal organizations are vital because they produce results that individuals could not accomplish on their own. They collate diversity (of materials, people, locations, and time periods) into a unity (or series of units) we call products and services. The outcomes we seek from an organization, whether an adoption, the development of a personal career path, a recreational and community center that locals would actually use, are all the result of interconnected skills being applied in a disciplined and sequential manner. Although we recognize the product, we often do not recognize or appreciate the upstream set of activities that make our use and/or enjoyment of the product possible. All too frequently we make attribution errors and give credit either to the last element of the organization with which we deal (tipping the server, for example, and making a substantial donation to a hospice) while failing to realize that the server just delivers the organization's product, and that the value of hospice care (and it is valuable) needs to be seen in connection with the large amount of

previous medical care that the patient has received. The server example is instructive as one at the bottom of organizational hierarchy; similar attributions are made for executives, who often (in both the nonprofit and the for-profit worlds) receive substantial compensation, as if they made everything happen. The quality guru Edwards Deming (1982) makes a similar point. He argues that a significantly substantial fraction of an organization's product is generated by the system, and a small fraction by individuals, although many of us think exactly the reverse is true. His views were well understood and accepted in Japan (where the highest award for quality is the Deming Award) but are still not accepted in the United States in any profound way.

ORGANIZATIONAL BEHAVIOR

When one thinks about organizations, two types of behavior come readily to mind. One is behavior *of* the organization, activities in which the organization engages as an organizational entity. Organizational policy is one example of formal organizational action: the agency's office hours, sickness and absenteeism policy, and how many clients one should see in a day. There is also informal organizational activity, called practice, which may vary from policy and yet have the apparent force of policy. For example, it may be practice that, although the agency formally opens at 8:00 AM, clients are not scheduled until 9:00 AM.

The other type of organizational behavior is behavior *in* the organization, or how people in the organization relate to each other. Here again, there are formal ways in which one interacts with one's supervisor and colleagues; there are also informal ways in which workers interact with each other and with clients.

HISTORICAL AND CONCEPTUAL ORIGINS

There have been several important leaders and theorists in the organizational field; some you have heard about or will want to know about to better understand organizational theory.

Early Twentieth Century

Max Weber

The German sociologist Max Weber was perhaps the earliest *contemporary* thinker on organizations, in this case, bureaucratic organizations. During his time, Weber explored the topic of authority. His research resulted in the development of three different ideas of authority: traditional authority, charismatic authority, and legal authority. His work with legal authority further inspired him to think about bureaucratic organizations. From his perspective, a bureaucracy is made up of a division of labor and attendant functional interdependence, an administrative apparatus, a hierarchy of authority, and impersonal rules; it is characterized by full-time paying jobs and careers. Bureaucratic work also is based on written documents, and there is a clear separation of home and office (Gearth & Mills, 1947/1958, chap. 8).

The Principles of Scientific Management

Frederick W. Taylor wrote the first book on *industrial human resources* in 1911. Taylor looked at workers as interchangeable parts that made the assembly lines work. The scientific component of his work was the way he investigated the optimal output efficiency of a line worker. Specifically, Taylor set out to determine the most efficient set of tasks that a worker could accomplish in so many minutes. In a way, it was an awful, inhumane system, but perhaps suited to immigrant workers who came from rural Europe and spoke no English (Bolman & Deal, 2003, p. 45).

Hawthorne Studies

Elton Mayo and his colleagues conducted the Hawthorne studies in the early 1930s; they studied a group of women working on specific tasks at the Wester Electric Plant in Illinois. He and his colleagues manipulated a variety of variables and discovered that no matter what they changed, the women's production seemed to improve. Don Clark (1999) draws four conclusions from the study that I think are generally true:

1. *The aptitudes of individuals are imperfect predictors of job performance*. Although they give some indication of the physical and mental potential of the individual, the amount produced is strongly influenced by social factors.
2. *Informal organization affects productivity.* The Hawthorne researchers discovered a group life among the workers. The studies also showed that the relations that supervisors develop with workers tend to influence the manner in which the workers carry out directives.
3. *Work group norms affect productivity.* The Hawthorne researchers were not the first to recognize that work groups tend to arrive at norms of what is "a fair day's work," but they provided the best systematic description and interpretation of this phenomenon.
4. *The workplace is a social system.* The Hawthorne researchers came to view the workplace as a social system made up of interdependent parts.

As other experts have pointed out, however, variables such as the work group itself and the fact that the Depression may have made people hesitant to do anything that would risk their job needed consideration. However, it was not until 1978 that this was carefully looked at (Frank & Kaul, 1978). From a methodological perspective, the Hawthorne studies have flaws that render their conclusions suspect. That said, those results have proven largely correct, and the points D. Clark made have reliability and validity.

The 1930s also saw the beginnings of interest in administration. Leonard D. White (1931) wrote about the city manager as an administrative functionary, and Chester I. Barnard (1938/1962) wrote about the functions of the executive.

1940s and 1950s

Administrative Behavior

In the late 1940s and the 1950s there was a burgeoning development of studies on *administrative behavior*, the science and art of actually running organizations. This might have been a result of World War II, or just a developing consciousness of the people-organization

interface, or even a combination of these and other factors. World War II produced a greater emphasis on and interest in teams and their relationship to organizations. Of course, the military is hierarchically organized, yet much of the actual work of the armed forces goes on in teams; patrols, aircraft carriers, bomber squads, and how they function is of vital importance.* The war also created interest in *management and managers*, the function of integration, and the behavior of those who do (or do not do) the integrating. Three works are of special importance in exploring this phenomenon: *Administrative Behavior* (Simon, 1947/1957), *TVA and the Grass Roots* (Selznick, 1949), and *Public Administration* (Smithburg & Thompson, 1950).

Herbert Simon's (1947/1957) *Administrative Behavior* addressed his interest in rational behavior in organizations and its limits. His book is also focused a lot on decision making within organizations. Simon covers topics such as "Fact and Value in Decision Making" (Chapter 3), "The Psychology of Administrative Decisions" (Chapter 5), and "The Anatomy of an Organization" (Chapter 11). The conclusion of this book offers an appendix considering "What Is Administrative Science?"

In 1949, Phillip Selznick wrote *TVA and the Grass Roots*. It is a study of the development and operation of the Tennessee Valley Authority, specifically the relationship between a developing megabureaucracy and the locals who lived in the Tennessee Valley. This was a huge administrative undertaking and was intermixed with much ideology (as evidenced by David Lilienthal's 1934/1974 book *The TVA: Democracy on the March*).

The historian Leonard White (1954, 1958a, 1958b) got into the act again with three volumes on an administrative history of the United States. Building on his work on municipal management (previously mentioned), he turned to national administration in *The Jeffersonians: An Administrative History from 1801–1829, The Jacksonians: An Administrative History from 1829–1861*, and *The Republican Era: An Administrative History from 1861–1901*. After reading any of White's work, one has an enhanced appreciation of the role of management in developing the U.S. government.

The Nobel laureate Herbert Simon and two colleagues, Smithburg and Thompson, wrote *Public Administration* (1950). This classic book addressed how public (federal) administrators get managerial work accomplished. It deals with issues of formal and informal structures in organizations and the issues of power and change. In Chapter 22 of this book they address the five impediments to change, which the authors refer to as the costs of change and which continue to have amazing relevance for those interested in organizational change today. The five impediments to change are (1) inertia costs, (2) moral costs (we would call them cultural costs today), (3) self-interest costs, (4) rationality costs, and (5) subordination costs.

The large organization of the armed forces in some sense reflected the industrial organization of the first part of the twentieth century and became its midcentury model. Civilian organizations tended to look a lot like the armed forces, with common dress and the "hurry up and wait" ambiance of the military. Sloan Wilson's 1955 novel *The Man in the Grey Flannel Suit* addressed these issues in fictional form (Wilson, 1955/2002). William H. Whyte's (1956) book *The Organization Man* picks up this theme in a more analytical way. Whyte begins:

> This book is about the organization man. If the term is vague, it is because I can think of no other way to describe the people I am talking about. They are not the workers, nor are they the white-collar people in the usual, clerk sense of the word. These people only work for The Organization. The ones I am talking

*Another example of the team effort was the Manhattan Project, the effort that made the atomic bomb.

> about belong to it as well. They are the ones of our middle class who have left home, spiritually as well as physically, to take the vows of organization life, and it is they who are the mind and soul of our great self-perpetuating institutions. Only a few are top managers or ever will be. In a system that makes such hazy terminology as "junior executive" psychologically necessary, they are of the staff as much as the line, and most are destined to live poised in a middle area that still awaits a satisfactory euphemism. But they are the dominant members of our society nonetheless. They have not joined together into a recognizable elite—our country does not stand still long enough for that—but it is from their ranks that are coming most of the first and second echelons of our leadership, and it is their values which will set the American temper.
>
> The corporation man is the most conspicuous example, but he is only one, for the Blood brother to the business trainee off to join Du Pont is the seminary student who will end up in the church hierarchy, the doctor headed for the corporate clinic, the physics PhD in a government laboratory, the intellectual on the foundation-sponsored team project, the engineering graduate in the huge drafting room at Lockheed, the young apprentice in a Wall Street law factory. (p. 3)

Whyte sees a new conformity arising from the cultural emphasis on organizational compliance. He even includes an appendix titled "How to Cheat on Personality Tests."

Sociologists were also probing the extent and impact of the *organizational culture* that seemed to be pervading America during the middle of the twentieth century. C. Wright Mills (1956) explored the new middle class as it existed within organizations in his book *White Collar*. David Reisman (with Reuel Denny and Nathan Glazer) contributed *The Lonely Crowd*. Originally published in 1950, the better known version was issued in 1955 and reissued in 2002 with a foreword by Todd Gitlin. *The Lonely Crowd*'s subtitle is *A Study of the Changing American Character*. That change is really about the *organizationalization* of American society. They introduce a stimulating theoretical construct about three dominant forces in societies and their nature and succession. First is *tradition direction*, in which a society is guided by the past. The second is *inner direction*, in which society is guided by inner personal reflection and decision. The third is *other direction*, in which societal members are constantly seeing what others think. Reisman, Glazer, and Denny argue that America in 1950 was in the third phase. Common phrases of the day, such as "Let's run this idea up the flagpole and see which way the wind is blowing" capture their idea.

The general ideas in these works from the mid-1950s was somewhat akin to that of Taylor and his principles of scientific management. For Taylor, the individual in the organization was reduced to a machine part, and all individuality was lost. For writers in the mid-1950s, the same thing happened except that individuals had been reduced to commonness through an overweening culture. Indeed, one of the editions of *The Lonely Crowd* has a picture of a herd of sheep as its cover. In 1960, Douglass McGregor reminded everyone that organizations were made up of people who needed attention and concern. *The Human Side of Enterprise* called for a humanistic approach to management. The thinkers noted earlier talked a lot about the impact of organizations; they did not actually analyze or explain much about organizations themselves. As March and Simon (1958, p. 1) note, "It is easier . . . to give examples of formal organizations than to define the term."

March and Simon's (1958) book *Organizations* really started the process of organizational analysis. Indeed, their first chapter is "Organizational Behavior," and it is followed by chapters on intra-organizational decisions, considerations of why individuals participate in organizations, and conflict within organizations, among other topics. As they say in the beginning of the first chapter, "This book is about the theory of formal organizations" (p. 1).

The Harvard sociologist Talcott Parsons (1960) offered a theory of organizations in "A Sociological Approach to the Theory of Organizations" and "Some Ingredients of a General Theory of Organizations" in *Structure and Process in Modern Society*. Parsons argued that what we think of as *an* organization—a single entity with a name and address—is actually three coupled entities, though still with a single name and address. He still kept the triangular form, however. The technostructure, one of the units in the bottom of the pyramid model, is where the actual work of the organization gets done. The middle of the organization is the managerial level, which organizes the work of the technostructure but is better viewed as its own organization linked to the bottom portion. The apex of the pyramid is the intuitional level, which connects the organization to the outside resource world. In a recent work (Tropman, 2006, pp. 26–27), I have broken the institutional structure into two parts: the top team (CEO, COO, CFO, etc.) and the governance structure (the board of directors).

In 1962, Peter Blau and Richard Scott wrote *Formal Organizations*. It continued and expanded the work of McGregor in that it looked at structural effects, or the impact that organizations have on individuals. Jeffery Pfeffer (1991, p. 1) puts it this way:

> Structural effects represent the influence of an individual's position in social space on that person because of the constraints and opportunities for interaction and social comparison that derive from the structural realities. The effects of structural positions (including network location, physical location, and one's demographic relationship to others) on job attitudes, turnover, performance, and wages illustrate the application of a structural perspective and how that perspective can enrich our understanding of phenomena typically studied from the perspective of individual attributes and dispositions. A structural perspective seeks to put the fact of social relations and organizations back into the study of organizational behavior.

1980s and 1990s

In 1982 a statistician, W. Edwards Deming, sort of backed into organizational studies, and he was never really embraced by or supported by organization thinkers, although his conclusions were very similar to theirs. Perhaps because Deming was an applied thinker, or so it seemed, aimed at improving organizational outcomes, he was not seen as a scholar. Actually, the American business community did not embrace him either. Scholars ignored him because he was not a scholar as they defined it; business leaders ignored him because his theories require a revamping of the American ideology of success and personal responsibility (although thinkers in the 1950s, such as Wilson, Whyte, and Reisman, had already established the validity of his general premises).

Deming's (1982) book *Out of the Crisis* deals with improving the quality of organizational products. Poor results are due to variation in the production process, and it was eliminating variation that stirred Deming's passions. Variation is due to two fundamental causal sets: common (structural and cultural) causes of variation and special (unique) causes of variation (things individuals do). His startling conclusion struck at the core of American values and the failure of management, two elements that assured his dismissal from the halls of American industry until it was too late. Here is what he said: "I should estimate that, in my experience, most of the possibilities for improvement add up to something like this: 94% belong to the system [common causes of variation]; 6% [belong to] special causes of variation" (p. 315). These proportions were later adjusted slightly to 85% and 15% and can be found at www.well.com/user/vamead/demingdist.html.

Deming's conclusion was too much for American business leaders, never a really thoughtful lot anyway, to accept. It was bad enough that problems were not caused by individual workers. One could no longer "fire Harry" as a solution. Even worse was that successes were also a product of the system. This was very disheartening to the executives, apparently, because it implicated the validity of their own successes. In any event, Deming's theories were adopted by the Japanese, in part because the greater degree of group orientation of Japanese culture made them more palatable. They were a huge success in Japan, and the quality of Japanese products we see today is largely a result of the combination of Deming's theory and Japanese application. As the Toyota Company displaces General Motors as the largest auto manufacturer, GM executives will have more time to contemplate the error of their own and their predecessors' ways.

Organizations have a sort of personality or style of doing their business. We all know this to be true and use that knowledge in our daily selection of organizations and agencies with which we interact. Organizations have a set of ideas, values, beliefs, attitudes, and norms that persist in them over time. This persistence came to be called organizational culture. Robert Quinn (1988) was a relatively early writer on the idea of organizational culture in his book *Beyond Rational Management*. Quinn identifies four archetypical cultures: the clan (the fraternity-type organization which privileges results), the hierarchy (the traditional machine model bureaucracy, which privileges following orders), the market (the outcome-based firm which privileges results), and the adhocracy (the "pickup game"–type firm which privileges the entrepreneurial and new type of activities). Quinn looks at the kinds of decision making that are characteristic of each, the kinds of skills needed for each, and the kinds of tensions that exist within and between each. This perspective, which has emerged as the competing values perspective, has been very popular among organizations and especially in business schools, where Professor Quinn mainly works. (Quinn is a faculty member of the Ross School of Business at the University of Michigan.)

Cultures are more permanent and long-standing elements of organizations. They take time to emerge and are hard to change. Culture is more like a *climate zone*. Organizations appear to have a climate as well, which is a more temporary, here-and-now set of smaller cultures, more like subcultures in the overall organizational culture. Of course, both cultures and climates vary locally and globally (Cooper, Cartwright, & Earley, 2001).

Henry Mintzberg (1989) returned to and adapted Parson's typology and created a five-part organization archetype. Imagine yourself looking at the end of a railroad track. There is a broad base, curving into a narrower center, which expands out again at the top. Or consider a tree with a large root system, narrow trunk, and large leafy top, almost as large as the root system. These are the essential three Parsonian parts; Mintzberg calls them technical structure (the bottom), middle line (the managerial structure), and strategic apex (the institutional structure). Then Mintzberg adds two eggs, which rest on either side of the middle line. One is the support structure and the other is the support staff. This basic shape shifts depending on the actual function of the organization. He describes four basic types: machine bureaucracy, professional organization, entrepreneurial startup, and adhocracy (for more detail, see http://ist-socrates.berkeley.edu/~fmb/articles/mintzberg/).

In the 1990s it became clear that one perspective on organizations would not suffice. A couple of frameworks were developed that provided a lens on organizations. Like a kaleidoscope the organizational stones remained the same, but the prismatics differed as you used different lenses. First issued in 1997, *Reframing Organizations* by Lee Bolman

and Terrance Deal offered a range of horizontal perspectives on organizations (Bolman & Deal, 2003). Organizational structure, human resources, politics, culture, and leadership were the frames that they suggested. Tropman and Morningstar (1988), on the other hand, introduced the idea of a vertical taxonomy in *Entrepreneurial Systems for the 1990s* (and later in Tropman's (1998b) *Managing Ideas in the Creating Organization*). This taxonomy involved five Cs: characteristics, competencies, conditions, contests, and change.

Characteristics are the personal features of the individuals within the agency, from race and gender to age and temperament. *Competencies* address the issues of what is needed to be known skill-wise in order to do the job, as well as thinking about how good the worker is at that skill. *Conditions* refer to elements of the organization itself, such as structure, culture and climate, strategy, systems, and staff. *Contests* refer to those things going on outside the agency that might affect it. *Change* is the turbulence of the internal and external environment of the agency and the velocity with which the turbulence is moving. As an example, think about a child welfare agency. From the perspective of temperament, some people can handle child protection and some cannot (*characteristics*). Then there are a set of skills that the child protection worker needs (*competencies*). Child protection agencies have a certain structure and climate, and that needs to be understood (*conditions*). There is a lot of turbulence in the child welfare *context around* issues of child safety, race matching, and so on. Finally, that turbulence is very active and swift, with changes buffeting the agency at a very fast pace (*change*). The five-C taxonomy provides a structured series of lenses that allow a look at the agency from the bottom (individual workers, employees) to the top (the external environment).

There are hundreds of books and scholarly articles on organizations available at this time. This brief overview simply sets the stage for understanding how organizations and agencies have been conceptualized.

BASIC THEORETICAL PRINCIPLES

In thinking about basic theoretical principles we move from the flow of historical development to an enumeration of fundamental agreements that scholars hold to be true about organizations. Although others would surely have variations of this list, these principles reflect my judgment about what most organizational thinkers would find commonly true and important.

Principle 1: Organizations Are Social Institutions

Organizations are one of the forms through which society organizes itself. Formal organizations have some common features. As we look at the disciplines of social science, each has its contribution to make in understanding organizations and its view of them.

Principle 2: Organizations Have a Structure

Organizations have systematic ways to portray themselves to themselves and to the world. The typical Western way to portray the structure of an organization is in an organization chart, based loosely on the medieval pyramid (Pascale & Athos, 1982). However, there are

other conceptions of organizational structure, such as the solar system (Tropman, 1998a, p. 194). One might even think about an atom, with the different departments revolving elliptically around the executive nucleus. Mintzberg (1989) also talks about different structural constellations depending on the type of organization. (I return to this point when I talk about new conceptualizations of organizations.)

Principle 3: Organizations Have Formal and Informal Systems

The organization chart and its list of policies and procedures is the official and formal face of the organization. But agencies have another face as well: That is the informal system. While the formal organization depicts *reporting relationships*, the informal organization addresses issues of *who knows whom*. Policies have an informal side as well, called practices, and the difference between what the organizations says it does and what it actually does is the called the *policy-practice gap*. More informally, the question becomes: Does the agency *walk the talk?*

Principle 4: Organizations Have a Culture

Organizations are characterized by a set of ideas to which emotions and feelings are attached; these are called values. Nonprofit human service agencies are especially noted for their values, which are often written into their organizational mission. It is very important that organizations be mission-driven, that is, that the structure and culture align with the mission and express it on a daily basis.

Agencies also have subcultures within them. For example, a finance department in a human service organization may have a subculture more like finance departments at for-profit and governmental agencies. It is a challenge to keep all subcultures aligned with the overall mission of the agency. While *culture* is a more long-standing organizational property, there is also an organizational *climate*, or a shorter term, more *seasonal* or more local version of culture (Glisson & James, 2002).

Principle 5: Organizations Have a Life Cycle

Like all systems, organizations go through phases. These conventionally are the startup phase, a new or emerging phase, a growth stage, a stable stage, and a declining or rebirth stage. They tend to follow a sigmoid curve, as one can see in Figure 16.1.

As organizations reach their peak they begin to die, a process that can take a long time. General Motors in 2006 illustrates this, as does the entire American auto industry, as well as the steel and aviation industries. Sometimes organizational death should occur; this is one of the differences between profits and nonprofits. Profit-making organizations rely on a market; if no one comes into your restaurant, you are out of business. However, for nonprofits, it is often the case that their consumers and their customers are different. Their consumers are the ones who use the services but often do not pay full price; their customers are those who provide support for the organization. It is possible that the customers remain happy while the consumers are not. Hence the agency continues to offer a service that only a few consumers want but continues to satisfy the customers. A related problem occurs when an agency goes to a local community foundation or other angel in search of help and

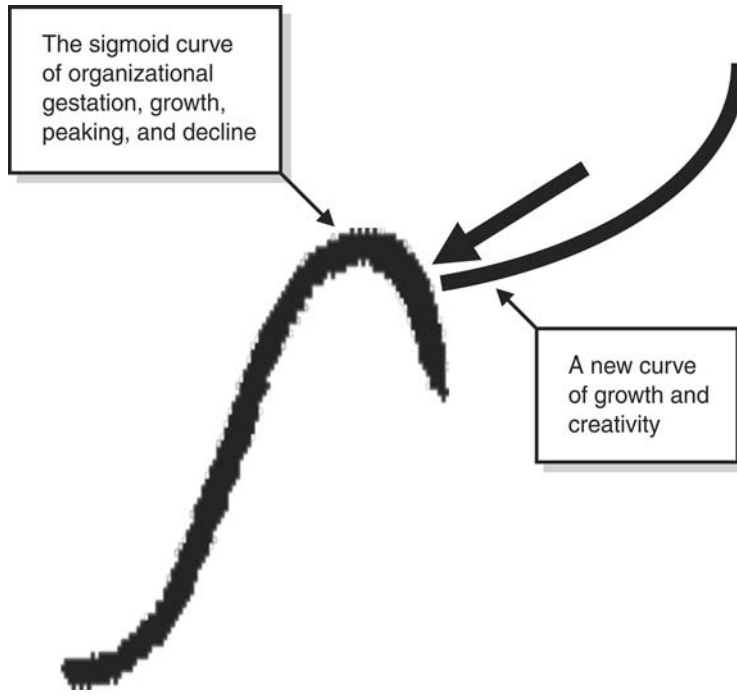


Figure 16.1 The sigmoid curve of organizational growth and decline. From "Where Are You on the Sigmoid Curve?" by Charles Handy, Fall 1994, *Directors and Boards*, p. 22. Adapted with permission.

secures a "dysfunctional rescue." Such a rescue occurs when the agency really should die, but it is resurrected for a short time, using anywhere from $10,000 to $20,000 to $100,000 (or more) of community resources to sustain a dated service that meets the values of a few but not the needs of the many.

On the other hand, it is possible, and happens with some regularity, that organizations, like people, reinvent themselves at the point when the sigmoid curve begins to turn downward. That is illustrated by the arrow at the downward slope of the curve, displayed in Figure 16.1. Perhaps the most well-known example of organizational reinvention in the nonprofit world was the National Foundation for Infantile Paralysis, started in 1938 by President Roosevelt. It provided support for victims of polio and supported research to find a polio vaccine. When a vaccine was discovered in the mid-1950s, its mission effectively ended. It took the March of Dimes as a new name, its fund-raising tagline, and continues to work on the prevention of birth defects today.

Principle 6: Organizations Require Leadership and Management

Organizations do not function automatically, any more than an orchestra performance is automatic. Good organizations, like good orchestras, require leadership (musical direction and conducting, in the case of the orchestra) and management (securing the hall, printing the tickets, printing the program, arranging for tour transportation, etc.). An organization with great management and no leadership is stale; an organization with great leadership and poor management cannot deliver its program.

Principle 7: Organizations Are of Different Focal Types

Organizations can be thought about in terms of different types of entities. Each type may have a different purpose. I have already mentioned Robert Quinn's four-fold typology: clan, hierarchy, market, and adhocracy. In social work, the human service organization is a very common, if not the most common, type. It is a people-changing organization into which individuals enter (clients, customers, consumers), within which they are processed, and from which they emerge in an improved state—for example, substance-free, better able to manage anger, having a higher quality of life.

Principle 8: Organizations Sometimes Produce the Opposite of Their Intended Goal

Some human service organizations, such as schools and prisons, are supposed to change people for the better, but actually only process people or change them for the worse. This latter result, in which prisoners are taught how to be better criminals, students actually lose knowledge in school, patients in mental hospitals become sicker, I call *organizational iatrogenesis*. It comes from the concept of iatrogenic illness, in which the patient is actually made ill by the physician or catches cold in the doctor's office. This goal subversion can characterize the entire organization or affect a subgroup within the organization.

Principle 9: Organizations Are Central to Meaning Making for Citizens in Industrial Societies

In industrial societies, most citizens spend significant amounts of time in organizations. Typically, from a structural perspective, this connection begins when school attendance for children begins and continues until the retirement of workers. Preschool children and nonworking mothers are about the only groups in modern society who do not spend much of their day in an organization. Hence, what happens within the organization during the time that most of us are there becomes very important, for good or for bad. And there is a lot of bad, as Scott Adams (1996a, 1996b) points out in *The Dilbert Principle*. and *Dogbert's Top Secret Management Handbook*. Especially problematic are workplaces that impair the dignity of the people who work there. Randy Hodson (2001) identifies four *dignity dingers* in his book *Dignity at Work* that he finds common: (1) abusive management, (2) overwork, (3) autonomy constraint, and (4) rascally coworkers. Each of these is found in the nonprofit sector, but overwork is especially common and at times played out as financially pressured executives try to get workers to work for free or for cheap. This is when the organization becomes a thief of self-esteem and positive personal meaning. The reverse is also apparently true: When organizations (and social interactions generally) are positive, we can draw great strength from them. It was this insight that led Dr. Martin Seligman to found the positive psychology movement.

ADVANCED THEORETICAL PRINCIPLES

There is so much work going on in the organizational field right now that it is hard to select things that would be considered advanced. I have selected two for discussion here which I judge to fit the advanced category.

Interorganizational Theory of Organizational Differentiation

As organizations grow they pass through stages, as I described earlier. What the proposition about growth did not describe is the structural properties that emerge as the organization moves from emergent to mature. As an open system, organizations need to fit into their environment (Scott, 2005). As they differentiate structurally, they tend to become as complex as their environments. Organizations that have complex environments need to be internally complex to address all the facets of the environment important to them. That is the first proposition. The second proposition is that the *kinds* of departments organizations tend to produce in their differentiated state tend to be ones that link substantively to vital inputs and outputs. So, for example, a child welfare agency that depends a lot on decisions made at the state capital will most likely have a lobbyist there. A people-processing organization that needs to move clients or patients out to make room for more coming in will probably have a discharge department. This idea of substantive isomorphism as a primary form of structural isomorphism is the second proposition.

Organizational Environments

Organizations are social actors. Early structural theories tended to look at the organization structure as a result of what it *did* in terms of products produced. *Optimal* was defined in relationship to those products. As cultural perspectives developed (which might include informal systems of interaction within the organization), one could think of organizations as being organized by the relationships among the internal and external stakeholders and their values and dispositions. Scott (1992, pp. 132–133) talks about technical (product-related) environments and institutional (structural- and cultural-related) environments.

Scott (1992) does not view these environments as alternatives, but as dimensions to which organizations might have stronger or weaker connections. His useful table gives some examples (p. 133; Table 16.1).

Table 16.1 Technical and Institutional Environments with Illustrative Organizations

		Institutional Environments	
		Stronger	Weaker
Technical environments	Stronger	Utilities Banks General hospitals	General manufacturing
		Pharmaceuticals	
	Weaker	Mental health clinics Schools Legal agencies Churches	Restaurants Health clubs Child care

Source: Organizations: Rational, Natural, and Open Systems, third edition (p. 133), by W. R. Scott, 1992, Englewood Cliffs, NJ: Prentice Hall. Reprinted with permission.

However, the interorganizational theory of differentiation looks at the environment of the organization as critical to the forms it assumes. Organizations are *shape shifters*, adapting to what the environment demands or rewards. This approach to institutional linkage, however, portrays the organization as a thoughtless respondent to the external (beyond the organization's skin) elements, as the structural approach did in terms of internal variables (within the organization's skin). New institutional theory posits an important advance—that the organization is a minded actor—which has two important implications. One is that the organization selects which elements of the environment to which it responds: There is choice. Of course, the organization may make bad choices, but the *environment* is a mélange of stimuli, competing and contradictory ones, but response requires the painful necessity of choice. Second, the organization may seek to influence the environment, or at least the relevant environment. Social advocacy and lobbying is a quick example. The environment is not only multicentric, it is being influenced (Elbach & Sutton, 1992). Scott (2001, p. 179) recognizes that "organizations are affected, even penetrated, by their environments, but are also capable of responding to these influence attempts creatively and strategically." (See also Scott's discussion of technical and institutional environments.)

Issues of Organizational Effectiveness

Organizations strive to be efficient (doing things right) and effective (doing the right thing). Those organizations that do both are usually well known as exemplars of their genre (see the list from Peter Vaill that follows) and are considered exceptional organizations. I think the word "exceptional" is important here because it speaks to the point that most organizations do not achieve this status. Some may do things right, but not be doing them on the right things; others are doing the right thing (common among nonprofits) but have managerial issues that mean they are not doing things right. Nonprofit organizations often overly rely on doing good, while failing to understand that they need to do things right (efficiency) and be doing the right things (effectiveness). I like this distinction between efficiency and effectiveness and feel it is very helpful in organizational analysis, yet most organizational analysts do not use it, tending to lump together efficiency, effectiveness, and success (to be mentioned in a moment). Scott (1992, chap. 13) devotes a chapter to the issue of effectiveness (while managing to avoid actually defining effectiveness). He explores three important concepts: the criteria offered to measure effectiveness, the measurement approaches used to examine the effectiveness question, and the variety of explanations that have been given for "differential effectiveness." The criteria issue is especially difficult for operating organizations. In a famous article titled "On the Folly of Rewarding A While Hoping for B," Steve Kerr (1995) points to many of the faulty measurements that organizations use to measure effectiveness. Three strike me as central to this discussion (these are my adaptations of Kerr's):

1. *Face time* is the time on the job when others see you, especially bosses. It bears no relationship to what you actually accomplish; rather, it presents the *face* or illusion of accomplishment. Employees who spend a lot of time at work are often thought to be very productive, when in fact they are often not productive. How to actually measure accomplishment is one of the issues in presenteeism and outputs.

2. *Presenteeism* is the on-the-job version of absenteeism. When one is absent, one is not contributing to the agency. Presenteeism is being at your desk but still not working. Sometimes ill workers come to work and cannot function; at other times people give themselves a raise by working less. Presenteeism in effect measures work by being there.
3. *Outputs versus outcomes* is also related to the concepts just mentioned. In the human service field, outputs might be assessed by number of interviews, number of sessions attended, number of meetings attended, and things of that sort. The questions not asked are Did the clients get better? Did the sessions and meetings have or add value, or were they just putting in the time (presenteeism)? Increasingly agencies are being asked for outcomes—actual results for clients—rather than measures of activity.

Kerr (1995) talks about causes as well. He lists four reasons that organizations become "fouled up":

1. (Over)Fascination with an "objective criterion."
2. Overemphasis on highly visible behaviors.
3. Hypocrisy.
4. Overemphasis on morality or equity rather than efficiency. (This would be Scott's "institutional environment.")

It is worth noting that Kerr's original article was published in 1975! In 1995, the Academy of Management asked for an update, and at the same time polled its readership to assess the article's current relevance. Readers overwhelmingly argued that all the things Kerr pointed to still exist. That would have to mean that the bad practices were taught to an *entirely new generation of managers*. Looking at it more than 10 years after the reprint, I can say that the piece still has relevance and bite.

Linear versus Juxtaposed Concepts of Success and Excellence

One might want to ratchet up the discussion of organizational effectiveness to one of "organizational success." Success in America is often thought of in terms of more and bigger than the counterpart. Individuals in organizations as well as organizations themselves struggle with ways to define success, and becoming larger—a "bigger Mac"—seems to be a frequent choice.

To expand on the issue of linear versus juxtaposed success, others think of success in more multifaceted ways. In their article in the *Harvard Business Review*, Laura Nash and Howard Stevenson (2004) provide a multifaceted approach involving four variables: happiness, legacy, significance, and achievement. They were looking at individuals, but if one were to alter their first variable slightly to *a great place to work*, then an organization might be satisfied as well with possessing these four elements, even if it is a small agency. But at least two of these areas remain problematic: *great place to work* and *achievement*. Two organizational arenas provide an approach to understanding them.

The first variable, what is a *great place to work*, has been analyzed in some detail by the Gallup organization. Using results from 2 million interviews, Buckingham and Coffman (1999, p. 28) list 12 variables in their book *First Break All the Rules* that, if present, create an organization that employees enjoy working for or, using human resources jargon, is "a workplace of choice":

Base Camp [What do I get?]

1. Do I know what is expected of me at work?
2. Do I have the materials and equipment I need to do my work right?
3. At work, do I have the opportunity to do what I do best every day?

Mid Camp [What do I give? Do I belong here?]

4. In the last seven days, have I received recognition or praise for doing good work?
5. Does my supervisor, or someone at work, seem to care about me as a person?
6. Is there someone at work who encourages my development?
7. At work, do my opinions seem to count?

The Summit [Can we all grow?]

8. Does the mission/purpose of my company make me feel my job is important?
9. Are my coworkers committed to doing quality work?
10. Do I have a best friend at work?
11. In the last six months, has someone at work talked to me about my progress?
12. This last year, have I had the opportunity to grow?

There are multiple measures of achievement, yet it is still an elusive concept for organizations. Peter Vaill (1982) in his article "The Purposing of High Performing Systems" suggests eight measures of achievements. He continues exploring the concept in his book *Management as a Performing Art*. Again, the multifaceted, rather than the linear, approach seems to make more sense:

1. They are performing excellently against known external standards.
2. They are performing excellently against what is assumed to be their potential level of performance.
3. They are performing excellently against where they were at some previous point in time.
4. They have been judged by informed observers to be doing substantially better qualitatively than other comparable systems.
5. They are doing what they do with significantly less [*sic*] resources than it is assumed they needed to do what they do.
6. They are perceived as exemplars of the way they do whatever they do and thus become a source of inspiration to others.
7. They are perceived to fulfill at a high level the ideals for the culture within which they exist.
8. They are the only organizations that have been able to do what they do at all, even though it might not seem that what they do is a difficult or mysterious thing. (p. 25)

To these I would add:

9. They provide values in products and services, and add value to the system.
10. They accomplish these tasks without exploiting workers or the environment.

The Problems of Organization Superperformance and Malperformance

When one talks about organizational outcomes, a couple of assumptions seem to be present. One is that the outcomes are generally positive ones, and another one is that they fall in the normal or average range. But what if the organizational outcomes are awful, such as patients getting sick in hospitals, and explosions and chemical spills? How can we understand these activities? And what about organizations that really have no room for mistakes, such as air traffic control towers, nuclear power plant operators, nuclear submarines, scientists handling biohazardous material? The first problem was addressed by Charles Perrow (1984) in his book *Normal Accidents*. The second problem was addressed by Karl Weick (1995). And Marais, Dulac, and Leveson (2004) provide an excellent overview. Bierly and Spender (1995, p. 1) have a very good summary of the issues here:

> Perrow defined as "high risk" those organizations that combine complexity and tight coupling with the potential for catastrophic failure. He concluded that accidents are "normal" for such organizations because their managers face irreconcilable structural paradoxes. Centralization, the method of dealing with the tight coupling, must be combined with delegation, the method of dealing with the complexity. Weick, researching the complex and tightly coupled systems found in air traffic control and carrier flight-deck operations, saw these problems differently. He argued that strong organizational cultures provide a centralized and focused cognitive system within which delegated and loosely coupled systems can function effectively. High risk organizations thereby become transformed into high reliability organizations (HROs).

Organizations Can Enhance or Exhaust the Human System

As organizations go about their work, they do that work through staff. Overworking staff can cause burnout and human exhaustion. Sometimes it is a hard-driving boss. Sometimes it is overcommitment to work on the part of the employee. A good work-life balance is essential to sustained employee productivity, and organizations are slow to recognize this. Some do, as Sue Shellenbarger (2006, p. D1) points out in her *Wall Street Journal* article "Companies Retool Time-Off Policies to Prevent Burnout, Reward Performance." Those who are concerned for this group are checking on employees who never take vacations to help prevent the buildup of stress to the point it becomes strain. Social support for employees is one of the most important elements in preventing burnout. Some of that support comes from other employees, of course, but the agency needs to do its part in showing concern as well.

Burnout has another source, though, which is also important to mention. Agencies are full of ambitious people who want to give service and get ahead. Sometimes that ambition translates into social undermining, in which colleagues (if that is the appropriate term for these people) advance their career by undermining yours. Being undermined by those with whom you work is a very strange experience because one simply does not expect it and therefore it takes longer to recognize.

Sometimes agencies themselves participate in this undermining. They engage in a process of social exploitation, or getting employees to work for below-market wages. This typically means that wages are low to begin with ("We simply do not have the resources . . ."), and then employees are encouraged, or guilt-tripped, into working extra hours for the same low pay. No wonder they feel used and soon burn out (see Maslach, 2003; Maslach, Jackson, & Leiter, 1996).

Positive Organizational Scholarship

As I mentioned in Principle 9, organizations are major locales where meaning is made for people in the modern world. In many ways it replaced the village as a central place where one interacts with others. As Buckingham and Coffman (1999) have pointed out, organizations can be great places to work and locations where the human spirit can be uplifted and the agency members flourish. This perspective is also one developed by the Positive Organizational Scholarship (POS) movement started at the University of Michigan (www.bus.umich.edu/Positive/). The mission of POS is as follows: "The Center for Positive Organizational Scholarship is a community of scholars devoted to energizing and transforming organizations through research on the theory and practice of positive organizing and leadership."

What does "positive" mean in this context? The Center does work in areas such as compassion, organizational virtuousness, positive emotions, positive identity and experiencing a reflected best self, positive leadership, positive social capital, resilience, and thriving. This approach builds out from and focuses the positive psychology insights in an organizational venue. It is hopeful and inspiriting. That said, its existence in some sense recognizes that organizations (a) are a long way from expressing these positive values, (b) need help in getting there, and (c) can, on their own, do serious damage. It is this last point that deserves special mention.

Sick Organizations

If Positive Organizational Scholarship is the sunny side of organizational studies, then looking at *sick organizations* is the dark side. Sick organizations are those that actively harm the physical and mental health of employees and others with whom they come in contact (spouses and partners of employees, for example). If the POS folks are right and organizations can be structured to be uplifting and enhancing, the reverse must also be true. Manfred Kets Devries and Danny Miller (1984) talk about how organizations can have a deleterious impact in their book *The Neurotic Organization*. Kets Devries is an organizational specialist and a psychoanalyst; therefore, his characterizations of organizations take a clinical approach. They define five dysfunctional types of organizational styles. The first is the paranoid style, characterized by suspicion about everything. The second is the rigid and dogmatic agency, which shows a compulsive style. The third is an organization that has a dramatic style; it needs constant reassurance and seeks to wow the external world with its efforts and actions. Fourth is the schizoid style, which is emotionally detached and socially isolated. Finally, there is the depressive style, characterized by a low sense of pride, an emphasis on the past, lots of talk about organizational death, indecision and risk aversion, and apathetic and inadequate leadership. (From my personal observations, I see

far too many social work organizations as depressive in Kets Devries and Miller's terms. There is constant weeping and wailing about the lack of resources, the lack of appreciation, the fact that they are always in peril.)

RECENT THEORETICAL DEVELOPMENTS

The distinction between *advanced* and *recent* is crisp in organizational studies and not as crisp as it might be in other fields. Some of the advanced items just discussed are recent, and the items in this section might be described as advanced. However, each is important regardless of their classification here.

Emotion Work in the Workplace

In the 1980s the University of California at Berkeley sociologist Arlie Russell Hochschild (1983) became interested in an aspect of organizations that had never been studied: the flow of feelings and emotions within the workplace. As a way to look into this issue she attended flight attendant school, an investigation that produced a book called *The Managed Heart*. She looked at the flight attendants' job as essentially the management of feelings, though nothing like this was mentioned in the job description. She was one of the first people to develop the analytical field called *emotion work*; it has since become a very important area of organization study, extending worldwide (see www.psychologie.uni-frankfurt.de/Abteil/ABO/forschung/emoarbeit_e.htm).

Previous work had looked at the results of poor emotional management at work, certainly one of the causes of burnout. But Hochschild was a true pioneer in articulating the ongoing issue of emotion work in the workplace and the gendered assignment of emotion management work. (To no one's surprise, it has mostly been assigned to or accepted by women.) To me, emotion work is a large part of social work, and it is a surprise, and a disappointment, that social work has not connected more to the field of emotion work, where it could contribute as well as learn.

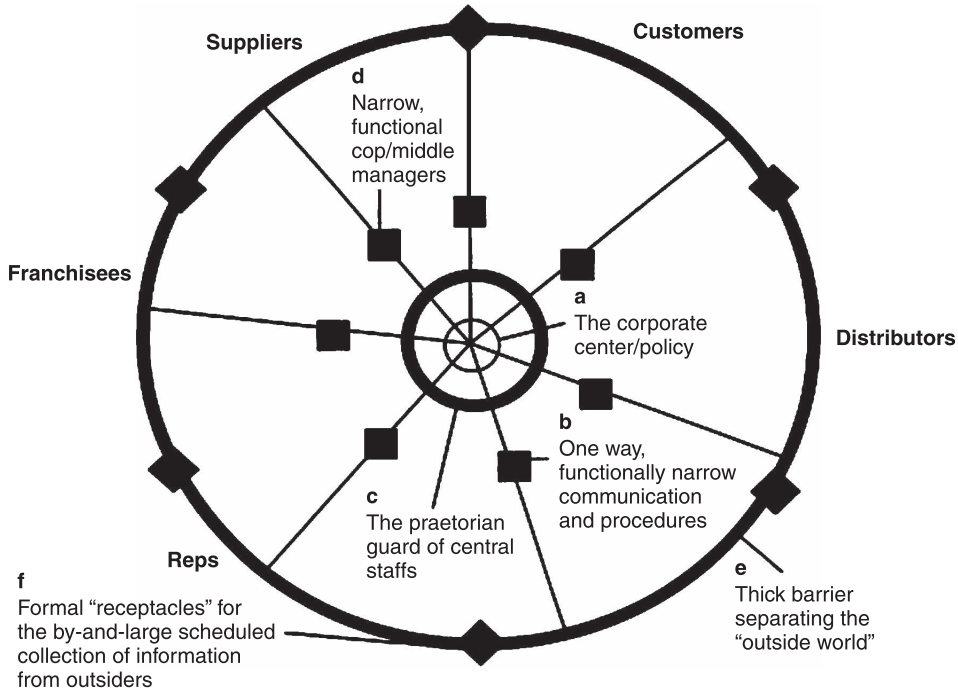
The development of emotion work led to the idea of the emotion quotient, a concept that has become part of the public discourse. Nancy Gibbs (1995) of *Time* puts it this way:

> The phrase "emotional intelligence" was coined by Yale psychologist Peter Salovey and the University of New Hampshire's John Mayer 5 years ago to describe qualities like understanding one's own feelings, empathy for the feelings of others and "the regulation of emotion in a way that enhances living." Their notion is about to bound into the national conversation, handily shortened to EQ, thanks to a new book, Emotional Intelligence (Bantam, 1995) by Daniel Goleman. Goleman, a Harvard psychology PhD and a New York Times science writer with a gift for making even the chewiest scientific theories digestible to lay readers, has brought together a decade's worth of behavioral research into how the mind processes feelings. His goal, he announces on the cover, is to redefine what it means to be smart. His thesis: when it comes to predicting people's success, brainpower as measured by IQ and standardized achievement tests may actually matter less than the qualities of mind once thought of as "character" before the word began to sound quaint.

New Approaches to Imagining Organizations

For most of the twentieth century the historical powers of the pyramid form of organization, and its connection to and reflection of the hierarchical structure, was a pervasive intellectual point of departure for thinking about organizations. In the past 25 years, additional and exciting ways to think about the organization have emerged. Tom Peters (1988) contrasts the "inflexible mass producer of the past" with the "flexible, porous, fleet-of-foot organization of the future." The second rendering is especially interesting, but even in portraying the older organization he uses a circle instead of a pyramid. See Figures 16.2 and 16.3.

Around this same time I introduced the concept of *the organizational circle*. It offers a conceptualization of an organization like a solar system or an atom. Levels are gone, replaced by orbits. This approach has some significant differences from the pyramid model.



The Inflexible, Rule-determined, Mass Producer of the Past: All Persons Know Their Place

Start with (a), the corporate center/policy. This is the traditional, invisible, impersonal, generally out-of-touch corporate hub. The tininess of the circle representing the corporate center suggests both tightness and narrowness of scope; communication to the outside world (in or beyond the firm's official boundary) is usually via formal declaration—the policy manual or the multivolume plan, by and large determined on high—and communicated via the chain of command (i.e., downward). Within this tiny circle lie the "brains of the organization." It is here, almost exclusively, that the long-term thinking, planning, and peering into the future take place.

Figure 16.2 What have things been like? Tom Peters tell us. *Source:* "Restoring American Competitiveness: Looking for New Models of Organizations," by Tom Peters, 1988, *Academy of Management Executives, 2*(2), pp. 103–107. Reprinted with permission.

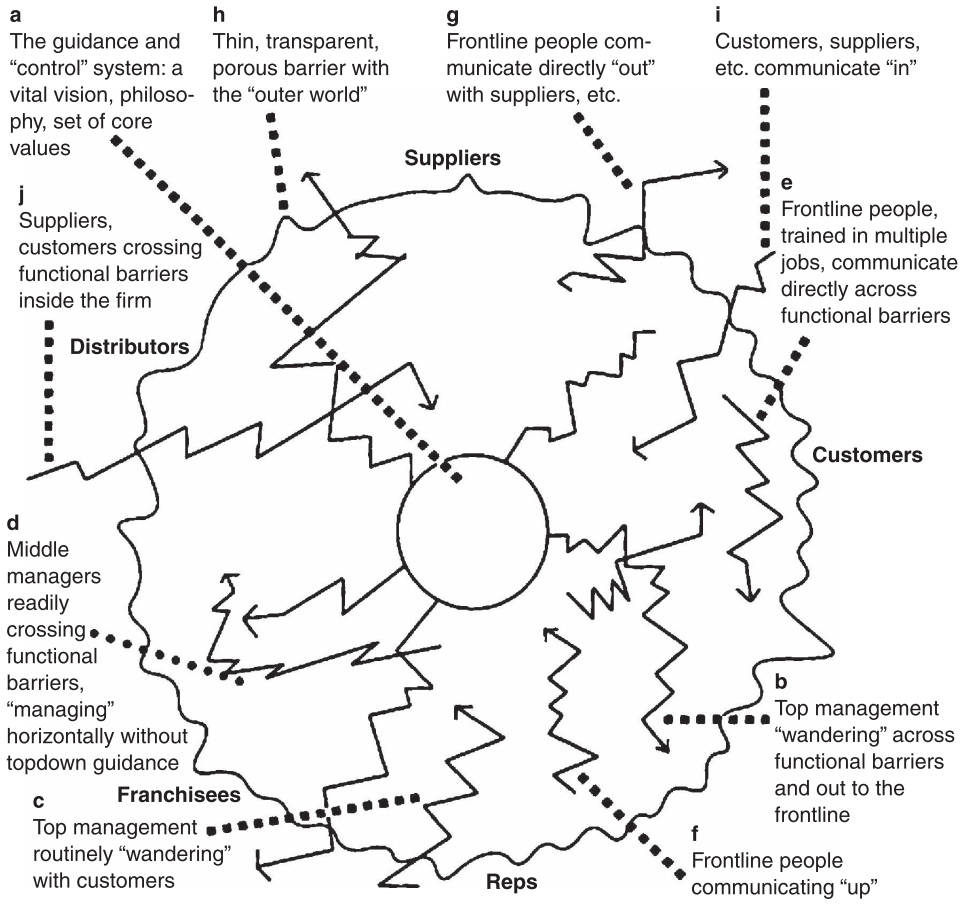


Figure 16.3 So what's new? Tom Peters again. ***Source:*** **"Restoring American Competitiveness: Looking for New Models of Organizations," by Tom Peters, 1988,** ***Academy of Management Executives, 2*****(2), pp. 103–107. Reprinted with permission.**

For one thing, the idea of orbits suggests dynamism rather than stasis of organizational position of the subunits. For another, the core, or the executive top team, becomes central to rather than above the parts and elements of the organization. Third, organizational subunits are both close and far from the core, especially given an increased ellipsis of their orbit.

Organizational Kaleidoscopes: Disciplinary Perspectives

One way to think about organizations is as a set of stones that we look at through a kaleidoscope. Each turn of the kaleidoscope gives a different view of the same set of stones. Gareth Morgan (1998) gives an exciting array of ways to look at the organization in his book *Images of Organization*. Among those he discusses are the organization as an organism, a brain, and a hologram, to mention a few perspectives. Each view privileges

different elements and aspects of the agency, and the full range gives a rich tapestry of understanding.

Disciplinary perspectives have also been important. Each discipline focuses on different organizational aspects.

Anthropology

For anthropology, culture is a central lens. During the 1980s the phrase *organizational culture* was coined in two separate books: Deal and Kennedy's (1982) *Corporate Cultures* and Peters and Waterman's (1982) *In Search of Excellence*. Anthropologists were not heavily involved in early organizational culture research, which comes as a surprise because culture and human behavior is what anthropologists thrive on. Organizational theorists were investigating the different layers of organizations during this time. Anthropologists used different measures, such as ethnographic research and case illustrations, to investigate subcultures and other nested sets of networks.

As time progressed into the 1990s, anthropologists were involved in more research, applying their study of "culture" to "organizational culture." Organizational culture looks at an organization as if it were a culture in order to contextualize and understand organizational behavior. (It is useful to note here that, for anthropologists, "culture" includes *both* ideas, values, beliefs, norms, and attitudes *and* artifacts or structure. For sociologists, culture usually includes only the former set and not artifacts and structure.) At this point it was thought that organizational culture was being researched to investigate the differences between American and Japanese businesses. Today, anthropologists use other techniques to help improve on organizational theory. Using anthropological techniques, Dennis Weidman (2001) has helped to explain how Florida International University doubled in size despite Hurricane Andrew and continued state budget cuts. He looked at the university as an organization and created a strategic plan to "organize information, symbols, and people that influence the allocations of resources and facilitate change in direction consistent with the goals of the university." A critical component of this investigation was to look at how external forces influenced the organization (relating back to Selznick and the TVA).

Economics

The economic view of organizations as *the firm* was as a rational economic actor seeking to maximize profits. The following theories help explain the economic relation to organizations, according to Zey (2001, p. 12751):

- *Rational choice theory* (RCT) is used when it is necessary to link the change in actions of individuals with change in characteristics of the organization.
- *Organizational theory* (OT) explains how individual actions articulate with structure.

Agency and transactional theories of the firm fall under the RCT frame of thought, and Weber's capitalist frame of thinking falls under the OT.

There are two approaches to organizational economics: (1) transactional cost economics and (2) agency theory. The first looks at the different transactions both internal and external to the organization. These transactions include those "between owners and managers, managers and subordinates, suppliers and producers, sellers and buyers" (Hodge, Anthony, &

Gales, 1996, p. 23). Agency theory investigates the different interests between the owners and the workers. The owners want to maximize their profits, while the workers want to minimize their efforts.

Transactional cost economics was coined by Oliver Williamson (1975) in *Markets and Hierarchies*. It was established to help answer the question "Why are some exchanges done within an organization's boundaries, while others take place across boundaries?" (Davis, 2006, p. 485). This is important because complications in transactions might be less costly for an organization than complications between partners directly involved with the organization's investments and profits.

Case Example

Organizational Economists versus Organizational Theorists in Incentives

The organizational economist investigates the details about the organization's incentive systems. The organizational theorist investigates the social context of organizational incentives, which include "critical problems in culture, network structure, framing," and so on (Kaplan & Henderson, 2005, p. 509). The two work separately from one another; however, if they coordinated their efforts, more could be accomplished.

Political Science

This discipline looks at the organization as an arena in which and through which power is exercised. One of its important insights is that power in organizations, over time, tends to be concentrated in the hands of a few. This is called "the Iron Law of Oligarchy." It was developed by Robert Michels in the early part of the century. (A recent translation of his book *Political Parties* is Michels, 1962.) Voss and Sherman (2000) make a similar point. They argue that organizations have a tendency to fall into oligarchy leadership patterns and tend to have conservative goals. In oligarchic leadership, the distance between staff and leaders increases, which allows leaders' interests to prevail. And goals become more conservative as leaders view the survival of the organization and increased (short-term) profit as most important.

Another important concept is the circulation of elites, developed by Vilfredo Pareto (1848–1923, as cited in Coser, 1977, pp. 395–396). This idea suggests that change in power is often the replacement of one elite for another, with the masses playing a distant role, if any. The concept is captured in the parable of the lions and the fox, which illustrates the different methodologies that are required for gaining and maintaining power. Some discontented lions are looking at a regime of wily and corrupt foxes. The lions are brutal and direct, and they attack the foxes, destroy them with their greater strength, and assume power. Their skills of brutality and strength begin to wear down, and they employ some wily foxes to help them. Over time the foxes replace the lions as the core of power, and other, dissident lions begin to flourish outside the inner circle. You know what happens next!

Psychology

Psychological perspectives come from industrial and organizational psychology, as well as from the discipline as a whole. Organizational psychology is used to investigate the relationship between the person and the organization, including attachments and commitment to the organization. It is also used to look at the program evaluation of nonprofits' strategic planning (McDavid & Hawthorn, 2006).

Psychologists tend to view the organization from the perspective of the drama of men and women. What is their temperament, their *emotion quotient*, their communication style? Organizations tend to be viewed as packages of individual characteristics. Issues often involve using those individual characteristics to build big performing groups. During the 1990s, the top 10 topics in organizational psychology were the following, according to Katzell and Austin (1992):

1. Future of organizations (culture, climate, productivity, workforce, etc.).
2. Training.
3. Organizational culture.
4. Work teams and their effectiveness.
5. Motivation: theory and practice.
6. Competitive organizations.
7. Conflict resolution.
8. Changing technology, challenges.
9. Power and leadership.
10. Development of managerial talents.

Sociology

"Organizational theory is the branch of sociology that studies organizations as distinct units in society" (Davis, 2006, p. 484), also known as "the System." The sociological perspective on organizational theory looks at the structures of organizations, the linkages between organizations, and how they intertwine over time. Early research on organizations examined how hierarchies work, the structure; however, as time progressed and research matured, more information was gathered on how the organization works in its environment and as a part of society.

Executive Derailment and Calamity

One of the elements that has characterized organizations recently is the problem of executive acting-out. The names Enron, Qualcom, and Health South bring to mind executive teams who lie, cheat, and steal the organization's resources for personal enrichment. The case of Jack Abramoff (www.slate.com/id/2116389/), the lobbyist who allegedly bilked Indian tribes and peddled influence in Washington, DC, illustrates that government hanky-panky goes on as well. And the nonprofit sector appears to have its proportional share of over-the-top executives. The United Way scandal in the early 1990s is one example (Glasser, 1994), but there are others (Tropman & Shaefer, 2004; Tropman, Zhu, & Shaefer, 2004). Tropman

Table 16.2 The Calamity Staircase: Showing the Ramifications of Executive Malfeasance

Steps	Precipitating Event	Predisposing Events and Signature/Symptomatic Elements
1. Periderailment	Negative publicity and ancillary job loss (a board seat, for example)	Public problems, investigations, "smoldering" issues that bring unwanted attention, conflicts of interest that invite attention, behavior that invites public negative comment
2. Derailment	Publicly losing your job	"Resignation," "retirement," "to pursue other interests," "to spend more time with family," let go, reorganized out, "time for a change"
3. Flameout	Losing your job, bringing others with you, causing significant collateral damage, legal issues (indictments, lawbreaking)	Specific problems that go well beyond you that are commented on in the press, mention of others' involvements, mention of actual or potential negative sequelae
4. Calamity	Publicly losing your job, bringing others with you, causing significant organizational collapse	Bankruptcy, layoffs, pension fund collapse
5. Supercalamity	Publicly losing your job, bringing others with you, causing significant organizational collapse, negatively impacting industry/sector/nation	Huge publicity, multisector consequences

Source: The Crow and the Cheese: From Derailment to Calamity in the Executive Suite, by J. Tropman, Zhu, and Shaefer, March 2004, paper presented at the International Applied Business Research Conference, San Juan, Puerto Rico. Reprinted with permission.

et al. developed a calamity staircase to look at the ramifications of executive malfeasance (see Table 16.2).

The precipitating causes of these problems seem to lie in the nexus between the internal controls of the executive and the external controls of other parts of the organizational structure and (in the case of nonprofits and public companies) the board of directors.

Many organizations, such as the Catholic hierarchy, Andersen Accounting, and the U.S. military (Abu Ghraib prison) seem to have calamities that extend over time and place. Although organizations often characterize these problems as "a few bad apples," we would do well to recall Deming's injunction (and the sociologists' perspective) that the organizational system as a whole produces results both good and bad.

Organizational Decision Making

Organizations run on three fuels: money, people, and ideas. Some organizations and thinkers emphasize one over the other (the economists, for example, tend to emphasize money in the form of costs and profits), but most thinkers agree that each is necessary if an organization is to be successful. If we look at that statement a bit more closely, though, we see that it is not just the presence of money, people, and ideas that is important: It is

their application, orchestration, and integration that make all the difference. That, in turn, means that underlying each of those variables—a building block, as it were—is the process of organizational decision making. Good decisions make organizations successful; great decisions make organizations exceptional; rotten decisions cause organizations to fail. A close look at decision making and the quality of those decisions is vital to understanding organizational operations. One new view is that decisions can be looked at as if they were a business product (which they are). One can ask not only about how decisions are made, but also about their quality (Tropman, 2002).

Although the field of *making good decisions* is new, the field of *looking at bad decisions* is much better developed. Bad decisions, it seems, result from bad decision processes (no surprise to Mr. Deming). I will mention four very well-known bad decision processes as examples of what can go wrong. Perhaps the most well known is the idea of groupthink, developed by Irving Janis (1983). In groupthink one of two problems can occur: Either the group is so cohesive that no one wants to bring bad news, or the group succumbs to an intimidating boss. Something similar to that occurs in the Abilene Paradox, developed by Jerry Harvey (1974). There, because of a lack of decision clarification, everyone winds up doing something that no one wanted to do.

The concept of defensive routines, what we would call organizational denial, develops in organizations. Certain topics are not discussed, and their nondiscussability is not discussed either. Chris Argyris (1985) developed this idea in connection with his exploration of organizational learning. He wondered how organizations learn. While that question is still under investigation, Argyris did introduce the idea of single- and double-loop learning. Single-loop learning is like a thermostat; it gets set and operates at that setting regardless. It is a bit like Robert Merton's (1958) concept of means ritualism. It does not question if the setting is right. Double-loop learning, on the other hand, questions the setting as well as operating the furnace. Double-loop learning is necessary if organizations are to improve and develop.

Another way to think about decision avoidance is to set a high threshold of trouble before one makes a decision. This almost always leads to reactivity because one is deciding too late in the process to be very effective. Tichy and Devanna (1986) discuss this as the concept of the boiled frog syndrome. They explain that if you place a frog in cold water and then slowly heat the water, the frog will not notice and will boil to death. In organizational decision making this is called the "just noticeable difference syndrome": Small differences do not hit the threshold, so nothing is done. And the organization dies.

Diversity and Organizations

Issues of diversity are of vital importance to organizations. As globalization increases, organizations are becoming more and more diverse in all possible ways—in ethnicity, nationality, age, color, and gender, to name a few of the more popular dimensions. This diversity does not always (or even frequently) extend throughout the organization; however, in North American as well as European organizations, the leadership is very likely to come from the White male group. Indeed, with respect to minorities, "the higher, the fewer" might be a sensible proposition. Increasing diversity is generally thought to be a good thing not only because it is the right thing to do (which many social work agencies think) but also because it increases connectivity with the organization's customers, clients, and consumers.

Organizations tend to reproduce the top team through cloning (Kanter, 1993, in *Men and Women of the Corporation*, calls this process "homosocial reproduction"). This process means that leaders of organizations prefer to select leaders like themselves, which accounts in part for the great persistence of White male leadership. And women, even executive women, still earn about 75% to 80% of their male counterpart's compensation.

RELEVANCE TO SOCIAL WORK PRACTICE

Organizations—we call them agencies—are obviously important to social work because it is through them that much of social work practice goes on. If they are run well, workers are satisfied and can do good work. If they are run poorly, good work is not done, and accomplishment of the mission of the organization becomes impaired. Thomas Holland's (1995, p. 1787) writing in the *Encyclopedia of Social Work* provides an excellent overview of "organizations [as a] context for service delivery" and provides a brief history of perspectives on social service organizations.

Agencies are human service organizations. They are generally organized to help others, though they are not the only organizations with that goal. Churches, law firms, and hospitals are among the others who also have helping aims. Generally, though far from always, human service organizations provide help to those who have difficulty helping themselves at some point—often people marginalized by society in one or many ways. It is important to keep in mind that American society is ambivalent about the process of helping in general, and helping the poor in particular. This ambivalence places social work agencies in a subdominant position, one of suspected appreciation, as it were. In the book *Do Americans Hate the Poor?* I raise the issue of poorhate and speculate on some of its implications (Tropman, 1998a).

Either contributing to this situation or reflecting it, or both, is the fact that most of the helpers are women. Helping is thus a gendered process, which no doubt further complicates the issue. Within the helping system, there are always more needs than resources, and that means that the organizations need to have some kind of internal allocating system: Some get more of their needs met than others do. This process, however, is not unique to social agencies. All organizations have an excess of needs over resources and need to find ways to make the books balance (Tropman & Shaefer, 2006).

To be run well and to be effective and efficient, agencies must be managed and led well (see Principle 6). Although probably no one would disagree with this assertion, it does raise two issues for the field. One is whether management is generic or specific. That is, do social work managers need to *be* social workers (and what kind of social workers) to carry out a social work mission? This question actually applies in the form of "Does one have to be one to run one?" across all forms of organization. The consensus seems to be that there are indeed common elements of management and leadership that run across all settings and organizations, but that *product knowledge* is also required.

In social work we have approached this question with something of a split personality. On the one hand, we like to think that social work agencies should be led and managed by social workers; they have the in-depth product knowledge to actualize the mission. That said, we have not, on the other hand, done very much to train those who become executive leaders in the generic parts of the executive leadership task. The problem with this approach

is that someone who is a good player might not make a good coach; someone who is a good cook may not make a good chef. There has been some attention to the process of managerial education. In 1947, Elwood Street, the executive director of the Greater Bridgeport and Stratford (Connecticut) Community Chest and Council, wrote a book called *A Handbook for Social Agency Administration*. In the same year Margaret Clark and Briseis Teall (1947) wrote *The Executive Director on the Job.* Peter Drucker (1990) wrote *Managing the Non-Profit*, emphasizing the importance of mission-driven management and leadership.

In 1991, Edwards and Yankey produced a compilation titled *Skills for Effective Human Services Management*. Then, David Austin (1995) wrote an excellent "Management Overview" in the *Encyclopedia of Social Work.* And in 1998, Edwards, Yankey, and Altpeter edited *Skills for Effective Management of Nonprofit Organizations.* Currently Edwards and Yankey (2006) have an updated version titled *Effectively Managing Nonprofit Organizations*. However, management programs in schools of social work are generally small. (The University of Michigan is one exception.) A plethora of "centers for nonprofit management" are springing up all over the country, including some national centers, like Compass Point (www.compasspoint.org), the Tides Center (www.tidescenter.org/index_tc.cfm), and the Fieldstone Alliance (formerly part of the Amherst H. Wilder Foundation; www.fieldstonealliance.org), which is a testimony to the fact that the profession of social work has dropped the training ball when it comes to management education, both within MSW curricula and afterward.

There is even an organization of assistance organizations (and others interested in issues of nonprofit management), the Nonprofit Alliance (www.allianceonline.org).

OVERALL SOCIAL WORK DEMOGRAPHICS

How many social workers are there, and where do they work? That number is hard to come by because there are different ways of determining a "social worker." There are, of course, the degrees—master's of social work and bachelor's of social work In 2004, in terms of this training, there were 442 accredited bachelor's of social work programs (BSW) and 168 master's of social work (MSW) programs (Bureau of Labor Statistics, 2007). But there are also state licensing requirements, which use the term "social worker," that are job related rather than education related.

From the perspective of recent history, June Hopps and Pauline Collins (1995, p. 2275) reported that in 1991 there were 630,000 workers who were called social workers, and 75% of them were employed. Of these, 24% reported working in private for-profit enterprises (though it is not clear whether this means private practice or corporate employment). They also report that the profession was 77% female. That figure rose to 81% in 2004, as compared to a 51% female proportion in the U.S. labor force (Center for Health Workforce Studies & NASW Center for Workforce Studies, 2006). It is clear that the social work profession is highly organizationalized, so what happens in organizations is of vital concern not only to the clients but also to the employees. Further, with such a big proportion of women in the profession, the possibility of gender-based exploitation of those women is a constant threat.

Government workforce figures show fewer numbers, but they are looking at employed persons (Bureau of Labor Statistics, 2007):

> Social workers held about 562,000 jobs in 2004. About 9 out of 10 jobs were in health care and social assistance industries, as well as State and local government agencies, primarily in departments of health and human services. Although most social workers are employed in cities or suburbs, some work in rural areas. The following tabulation shows 2004 employment by type of social worker:

Child, family, and school social workers	272,000
Mental health and substance abuse social workers	116,000
Medical and public health social workers	110,000
Social workers, all other	64,000

That same report looks at earnings of social workers in different settings. The following figures provide the most recent data:

> Median annual earnings of child, family, and school social workers were $34,820 in May 2004. The middle 50 percent earned between $27,840 and $45,140. The lowest 10 percent earned less than $23,130, and the top 10 percent earned more than $57,860. Median annual earnings in the industries employing the largest numbers of child, family, and school social workers in May 2004 were:

Elementary and secondary schools	$44,300
Local government	40,620
State government	35,070
Individual and family services	30,680
Other residential care facilities	30,550

> Median annual earnings of medical and public health social workers were $40,080 in May 2004. The middle 50 percent earned between $31,620 and $50,080. The lowest 10 percent earned less than $25,390, and the top 10 percent earned more than $58,740. Median annual earnings in the industries employing the largest numbers of medical and public health social workers in May 2004 were:

General medical and surgical hospitals	$44,920
Home health care services	42,710
Local government	39,390
Nursing care facilities	35,680
Individual and family services	32,100

> Median annual earnings of mental health and substance abuse social workers were $33,920 in May 2004. The middle 50 percent earned between $26,730 and $43,430. The lowest 10 percent earned less than $21,590, and the top 10 percent earned more than $54,180. Median annual earnings in the industries employing the largest numbers of mental health and substance abuse social workers in May 2004 were:

Psychiatric and substance abuse hospitals	$36,170
Local government	35,720
Outpatient care centers	33,220
Individual and family services	32,810
Residential mental retardation, mental health and substance abuse facilities	29,110

Median annual earnings of social workers, all other were $39,440 in May 2004. The middle 50 percent earned between $30,350 and $51,530. The lowest 10 percent earned less than $24,080, and the top 10 percent earned more than $62,720. Median annual earnings in the industries employing the largest numbers of social workers, all other in May 2004 were:

Local government	$42,570
State government	40,940
Individual and family services	32,280

The median incomes of social workers ($34,820, $40,080, $33,920, and $39,440) yields a group median of $34,370 (dividing the two middle numbers by 2). That is extraordinarily close to the 2004 per capita income of $33,072 (Bureau of Economic Analysis, 2007). It is 3.9% above the per capita income in fact. The per capita income in 2006 was $36,629. Without question, gender plays a role here. In 2004, male median income was $40,798; the female median was $31,223 (DeNavas-Walt, Proctor, & Lee, 2005). For professional people (women), with a high proportion of advanced degrees, this is a problem.

Nonprofit Sector

Another way to look at the social work organizational field is to look at the nonprofit sector as a sector. Of course, one needs to understand that there are many nonprofits that do not perform social services.

What is going on in the nonprofit social service sector? Some facts and figures may help us orient ourselves. Of course, nonprofits are not the only place that social workers work, as we shall see in a moment. There is the public sector and the corporate sector. But at least let's start here.

According to Independent Sector (2001) there were 1.9 million nonprofit organizations in the United States in 2006. Their total 2004 revenue was about $1 trillion, not counting an additional $266.3 billion in charitable contributions (2005 data). Nonprofit organizations employ 9.4 million persons, not counting an additional 5 million or so volunteers.

Independent Sector (2007) also points out that the majority of nonprofit organizations utilize volunteerism along with paid employment to keep their organizations afloat. If someone is asked to volunteer, more than half the time he or she will agree to volunteer. Women are more likely than men to volunteer. In 2002, 44% of adults in the United States reported that they volunteer their time. Almost 60% of teenagers volunteer 3.5 hours a week. In 2000, a total of 15.5 billion hours were clocked in the United States by volunteers, which, when calculated with the 2000 average hourly volunteer value of $15.68, totals $239 billion worth of work. In 2006, that number is up to $18.77.

Finally, the nonprofit sector is notorious for being primarily a female-driven sector. However, when it comes to leadership positions, women continue to earn significantly less than their male counterparts. In addition, females are more likely to lead the smaller organizations (GuideStar, 2004).

There is a growing trend in the sector in how to address the recipients of agency services. Whether a person is referred to as a client, a customer, or a consumer, every sector of the nonprofit sector serves some form of individuals, groups, families, or parts of

families. Another component to consider is whether the client is receiving agency services voluntarily or involuntarily.

Trends in the Nonprofit Social Service Sector

There are a number of trends within the nonprofit social service sector, and indeed within the nonprofit sector at large, that are currently under way and will have an impact on the delivery of services.

Confounding of Services among the Three Sectors

In times past, there was a clearer distinction (though not completely crisp) among public services, private social services, and corporate services. Now, in most areas, services are provided by each of the three sectors. Consider child care, for example. There are public, private, and corporate offerings. The same is true in the aging field and in substance abuse and corrections. It is therefore less clear what organizational location does what.

Nonprofit organizations and social services generally have two sets of customers. One set includes those who use and pay for the service. The other set includes customers who have supplementary entities that pay their bill. Thus the agency needs to respond both to the user of the service and also to the payer of the service. A possible problem is that agencies become overly responsive to the payers, much like your body shop becomes overly responsive to your auto insurer rather than to you.

Lack of Taxonomy

The nonprofit sector does not have an accepted taxonomy for services. This lacuna is long-standing and very harmful for the sector as a whole, because we really do not know, without a study each time, how much of what kinds of services is currently being offered. For example, if one asks how much child care is going on at any point in time, the large number of definitions of child care range from basic care to educationally enriched. This means that the question cannot really be answered. Further, communication among child care providers and customers or consumers often becomes garbled as the differences in definitions and expectations become apparent. Even mental health services are a hodgepodge of this service package and that service package. In the clinical area, the *Diagnostic and Statistical Manual of Mental Disorders* serves this function. We are now at *DSM-IV-TR* (with the fifth edition in development), and, as problematic as some find the categories and as the categories themselves might be, it is a very useful system for organizing and communicating.

User Nomenclature

Historically those who used social work services were called clients, a term also used by other professions, such as the law. But in recent years some have felt that the term is disempowering, and other terms, such as consumer and customer, are coming into vogue. Different terms have different implications, and the move away from *client* is thought to be an empowering one for any person.

The Name of the Top Job Is Changing

Similar changes are occurring at the executive level. The historical name for the top job was *executive director*, improved from *executive secretary*, which was more popular in the

early years of the twentieth century. Now, however, there is a terminological escalation of that title, with phrases like *chief professional officer*, *chief executive officer*, and *president* becoming very common. The title of *chairperson* is still used for the head of the board of directors, but change is also occurring at this level. There is a movement away from the more phlegmatic term *member* to the more corporate term *director*.

Big Change Coming in Executiveship Cadre as Boomers Retire

The largest number of executives of nonprofit human services agencies are in the baby boomer generation, and many will be retiring within the next several years. This generational shift creates issues of sustainability for the sector. As the Annie E. Casey Foundation (n.d.) puts it:

> Transitions are becoming increasingly frequent. A Foundation study conducted in 2000 with 130 of its community-based grantees found that 85% of executives will likely leave their positions by 2007. Similar surveys, including a recent arts leadership study, suggest that this is representative of a larger generational shift in the sector's leadership predicted in the coming decade. (www.aecf.org/initiatives/leadership/programs/capacity.htm)

The Staying Problem

Of course, if leaving is a problem in many instances, staying is as well. Many executives stay too long, and in each case the problems tend to be heartbreaking. One category of these overstayers is the founders. These are the individuals who founded the organization and often ran it before the first executive was hired. Their time has passed, but the gratification they get out of their legacy encourages them to destroy it. Another problematic category is the ill or sick executive, who, because of medical problems, cannot do his or her work yet cannot seem to work out with the board a suitable exit strategy. A third category is long stayers who have retired in place. Each of these, and others, threatens the sector as well.

The Development of the Idea of Core Competencies

In the midst of all these issues of management and structure, with organizations coming on the scene at a rapid rate, are questions about what the core elements of an organization actually are. Tropman and Lucas (2006) adapted some of that work in Alderfer's (1969) existence, relatedness, and growth model. A design is presented in Figure 16.4. This work incorporates the work of Blumenthal (2003) and organizes it in a sensible way. This taxonomic approach begins to bring together the elements of organizational capacity in ways that clarify and sequence the elements of capacity.

At the bottom of the figure are elements that Tropman and Lucas (2006) culled from the capacity literature which form the base of the elements organizations need to have if they are to achieve functionality. These nine elements fall into two categories, leadership and management, which can be considered a package of one, executive leadership, though there are obviously components and levels within each. On the organizational side, agencies need a functioning governance system, the ability to deliver programs and support that program delivery, a supportive culture that recognizes and reflects the diversity of its clientele, and



Figure 16.4 The competency pyramid: Existence/relatedness/growth

the ability to change and to connect to the community. Accomplishing satisfactory levels of these elements allows for the *existence* of the organization. Deficiencies threaten its sustainability.

According to Barbara Blumenthal (2003), most of the capacity-building suggestions are anecdotal and have no empirical basis. In her own work involving interviewing 100 grantees and grantmakers in capacity-building programs, she concluded that organizational cultures that support the following practices will be most effective: (a) a belief that performance matters; (b) management by fact (goals and measures); (c) open discussion as the norm (no defensive routines, no groupthink); (d) data-based problem solving; (e) organizational learning that produces proactive change; (f) a requirement to prove effectiveness; (g) a focus on the future, especially financially; and (h) willingness to make tough decisions. If an organization has a culture that supports and reflects these practices, it will likely go beyond *existence* to *relatedness*.

For an organization to grow, however, it needs to go even further. It needs to be constantly infused with a sense of mission (mission-directed); it needs to be outcomes-oriented (as opposed to outputs-oriented, a reflection of Blumenthal's "performance matters" piece); it needs to be nimble (entrepreneurial, adaptable), yet it needs to be sustainable enough that it is not wobbly.

Uses in Assessment and Intervention

How might organization theory (or organizational theories) be useful in assessment? There are several ways.

Understanding That Organizational Structure and Culture Matters for Individual Clients

While it may seem obvious, organizational theory establishes the importance of organizations—good ones and bad ones—in our lives. A supportive and fun work environment can affect the home sphere. Perhaps more important for a counseling profession, negative organizational environments can also do that. Problems in the workplace such as lack of dignity, abusive bosses, and problematic coworkers are not always (if ever!) parts of the job one can leave at the plant or office.

Assessing Workers' Personal Fit

Looking to a more macro perspective, organizational theory can help us understand the organizations where we work to decide, ourselves, if there is a fit between us and our workplace. Using the Buckingham and Coffman (1999) list of 12 points for an excellent organization, one can do a bit of personal assessment and, as appropriate, begin to make plans to work elsewhere. Frequently, because of the *organizationalized* nature of our socialization, we are inclined to think that the organization is right and our feelings about being, say, exploited are wrong or self-serving. Suppose, for example, someone says to you, as they said to me when I was considering a job at another university, "You don't get rich at this college; you get enriched!" Is that a place one really wants to work? I think not.

Assessing Human Service Organizations

Apart from the personal fit to one's own employment, organizational social workers (consultants, staff of management assistance organizations) can use elements of organizational theory to diagnose or assess the areas of weakness in their organization and assist the organization in fixing them. These assessments will be informed not only by the core competency triangle mentioned before, but also by the stages of organizational development. The competency package will look different for an emerging organization as opposed to one that is more mature. Such an assessment can include staff assays, executive assays, and governance assays, as well as touching base with stakeholders (payers, users, and others).

Working with the Executive and Executive Team

Executive coaching is a new area for social work (Caspi, 2005). Elements involve working with the executive to see the degree of fit between his or her skills and desires and the level of organizational development. Some executives are best at startup, others at mature organizations; still others like to catch the wave at the apex of the sigmoid curve and assist in agency reinvention; others change as the organization needs them to change. Coaching may also involve developing a career path for the executive and assisting that executive in organizing, attending to, and achieving personal and professional growth.

Developing Education and Training for Project Managers, Managerial Supervisors, Middle Managers, and Executives

As noted, there is a great need for more education and training for the executive leaders currently in place and those in the pipeline. More training is needed, and social workers can organize, market, and deliver such training to their peers.

Assisting in Efforts at Organizational Change

Agencies, as social institutions, often need to change but fail to recognize that need. The "boiled frog syndrome" lurks over each of us. Organizational change agents—consultants often, but sometimes those already employed by the agency—can assist the organization in facing its issues and becoming better. The middle of the competency pyramid—establishing a culture and a structure of performance, outcomes, candor, and accountability—is as hard for organizations as for individual clients. This is another area where social work can be of service. Sometimes the changes are evolutionary, sometimes revolutionary; sometimes they are transformational, sometimes transactional; sometimes invention is required, sometimes innovation, sometimes it is change of the system, sometimes it is change in the system. Regardless, social workers, guided by organizational theory, can help facilitate the change.

EVIDENCE-BASED FOUNDATIONS

The concept of evidenced-based practice is an excellent one for organizational theory to address. At the theoretical level, there is much agreement among scholars on the general principles outlined here. At the application level, however, Blumenthal's (2003) caution—that much of the best practice material is anecdotal—stands as a cautionary note. There is not much that organizational theory and its derived propositions and suggestions can say for sure is right to do. The most comprehensive work, and work that I consider strongly evidence-based, is the 2 million interviews done over a 2-year period in *First Break All the Rules* by Buckingham and Coffman (1999); that seems about as well founded as one is going to get. In my opinion its format—a popular book—has led it to be viewed with less than acceptance by some in the academic community. But the evidence is there, and the authors have a methodological discussion at the end of the book. I believe one can take those principles as reliable and valid and begin to look at one's own organization in light of them.

Still, there is less hard evidence than any of us would like. There are questions the work to date suggests we keep thinking about. The following are ones I consider to be very important:

- Mountain Man versus Wagon Train: How can we weight the role of the individual versus the role of the system?
- How can organizations become more self-reflective?
- How can human service organizations care for clients and care for staff? Does use of money for staff care take money away from clients?
- How do human service organizations know if they are accomplishing anything?
- Why are human service organizations so far behind in technology and human resources practices?

CRITIQUES OF THIS APPROACH

Organizational theory is not an approach, like a therapeutic or psychological technique. Rather, it is a hawser: a bundle of strands of ideas, perspectives, suggestions, and proposals that come from interviews, focus groups, systematic thought, and experiential mining viewed from a number of different perspectives (anthropology, political science, sociology, psychology, economics, decision science, etc.). From my point of view, organizational theory needs to be used, but with judgment and prudence. One does not reject organization theory and propositions (or parts of it) because it does not meet an arbitrary standard (recall that there are type 1 *and* type 2 errors), nor does one accept something in a book by a famous CEO without reflection and contemplation.

CONCLUSION

Organizations are a triumph of somewhat intelligent design. They serve noble and ignoble social purposes. They do things individuals cannot because of their longevity, their reach, and their multifaceted membership. But they are also deeply flawed. There are no standards today for being on a board of directors. One has to go through more training to get a life-saving patch on one's swimsuit than to be on a profit or nonprofit board. There are no professional standards for managers and CEOs, including ethical ones. Each board works on its own, making and remaking its own errors and those of other organizations. There is very little accountability for middle and senior managers. Imagine if those women and men were subjected to the same numerical scrutiny as, for example, a quarterback on a football team. The color guy in sports announcing is chock full of every conceivable nanobit of information about the sports figures in the game he or she is announcing. Managers and executives enjoy freedom from such numerical scrutiny. This means that errors in executive appointments can contain many more error terms than picking your draft choice; and of course, errors are made even so. Although organizations have a greater social impact than sports, in aggregate, they escape the scrutiny that sports require. The next big task of organizational theory is to take a deep dive into the societal impact of organizational actions to help us understand who is a star player and who is a social loafer.

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Chapter 17

A CRITIQUE OF STAGE THEORIES OF HUMAN DEVELOPMENT

Martha Pelaez, Jacob L. Gewirtz, and Stephen E. Wong

Developmental psychologists have attempted to understand the processes of change, growth, and function in human development. Theories of development stemming from Freud's (1940/1964) psychosexual model, Erikson's (1963) psychosocial model, Piaget's (1970) cognitive model, and Kohlberg's (1963) theory of moral reasoning all viewed development as comprising a series of discontinuous stages. For instance, Freud viewed human development as a sequential process of libidinal progression. Erikson expanded on Freud's approach to include the role of socialization and environment in human development. Jean Piaget's four-stage development theory of cognitive processes describes development as a discontinuous and monotonic process. Also using a stage model, Lawrence Kohlberg explored moral development as a cognitive process that matures over time.

These traditional theories differ from a behavior-analytic approach in that they define development as moving through fixed stages rather than in terms of the dynamic interaction between individuals and their environment. These long-established developmental theories have characterized development as growth, be it physical, psychosocial, cognitive, or moral, through age-specific stages. However, even though the stages may tell us what children are "likely to do" and at "approximately what developmental level or age," they do not tell us "how or why the children are able to do it." This indicates that the process is largely unknown to mainstream developmental theories (Schlinger, 1992, p. 36).

A stage is a construct that places the individual in a particular sequential frame. Several stages are said to occur during the life span of the individual from conception through death. While the concept of stages and structures in developmental psychology can help the organization of data and exchanges between researchers, it serves only to describe the "sequence of change" instead of "explaining the processes and mechanisms" responsible for stage progression or change (Gewirtz & Pelaez-Nogueras, 1992, p. 1416). On the other hand, the behavior-analytic approach provides some theoretical uniformity of development and offers a better position to interpret the behavioral changes that involve development (Schlinger, 1992). Behavior-analytic viewpoints differ from those of most developmental theorists on how the process of development occurs.

In this chapter, we examine from a behavior-analytic approach developmental issues such as using age as a construct for development, maturation, structure versus function, description versus explanation, and reification. We also discuss theoretical implications and practical applications of behavior analysis relevant to social services and social work practitioners.

THEORETICAL FOUNDATIONS OF BEHAVIOR ANALYSIS

Age and Time as Variables

Development is most commonly defined in the scientific community as a progressive, observable, and age-specific behavior change over time (Gewirtz & Pelaez-Nogueras, 1996; Schlinger, 2002). However, even though behavior change usually occurs with increasing age, age is not a determining factor in behavior change (Baer, 1970; Rosales-Ruiz & Baer, 1997). Gewirtz (1969) has made the case that *age* is a pure index only of the passage of time in the physical world, during which time there operate the process variables directly involved in development.

Mainstream developmental theorists, however, have studied development by assigning time, in the units of years of age, as a measure that explains behavior (e.g., Gesell, 1933). *Time* is a concept that is definable and should be treated at its most simple level, but not used as a causal variable to explain psychological events (Pelaez, 2002). Undeniably, the passage of time affects each individual across the life span, and the concept of time is used in all disciplines. As an illustration, consider sports science, for which time is a significant variable. Time in seconds is the key to winning contests and is an important measure of increased or improved physical ability; however, it does not explain to any extent *why* a runner's time might have improved. Hence, time is not appropriate to use as a variable to explain a behavior change, in this case increased physical ability. Variables that would influence the runners' physical ability include strengthening muscles, improving diet, increasing cardiovascular endurance, and refining technique and focus. Each or all of these may be effective in shortening the length of time it takes to run a distance. The measure of this improvement would include a comparison of the runner's time in seconds before and after training. However, running time only gauges a runner's performance and does not explain how the runner achieved better results.

Using similar faulty reasoning, some developmental psychologists have attempted to use temporal variables, such as age, points in a sequence, or presumed stages, as an explanation for the elaboration of behavior. Behavior changes are as diverse as each individual and can be catalogued to some degree by the unit of age. Although age is useful to organize the differences in behaviors of individuals over a scale of years, it is an empty variable in regard to explaining behavior, just as seconds cannot be used to explain the improvement of the runner (Baer, 1970; Gewirtz, 1969). Time also reflects the cumulative effect of unknown variables and processes as time affords experience and exposure to stimuli that in turn influence the advent of changes termed "maturation."

Maturation

Maturation typically refers to the physical and behavioral change suspected of being due to biological growth. This process naturally occurs in every organism, but at different rates. When a short-term change in behavior cannot be credited to learning or to some short-term performance operation, such as environmental contingencies, it is often classified residually as due to maturation. Gewirtz (1978, p. 115) has defined the term maturation in two behavior-change contexts. He explains that "a topographically-complete behavior" can suddenly appear in a child's repertoire, either "with or without an identified stimulus

basis," or that "a primitive approximation of a response" can suddenly appear in a child's repertoire, "with or without an identified stimulus that with monitored practice or simply the passage of time approaches the final topographic form of the response" (p. 115). In sum, maturation is not assumed due to biological factors alone. The impact of environmental stimuli should be taken into account for behavior changes.

Nature/Nurture as a False Dichotomy

Is human development a result of biological forces, environmental factors, or both? Traditional theorists have treated the nature/nurture debate as an either/or. The reason nature/nurture is a false dichotomy is that, from the moment of conception, both genetic inheritance and interactions with the environment are important causal factors in the individual's development (Novak & Pelaez, 2004). Modern behavior scientists believe that both biological and environmental influences are multilinear and interrelated (Morris, 1992; Pelaez-Nogueras, 1996); no genetic material can become an organism without interacting with its particular environment. According to Pelaez-Nogueras and Gewirtz (1997), attempting to analyze the contribution of one without the other is nearly impossible and often meaningless. When the nature/nurture issue is recognized as a false dichotomy, both viewpoints need to be assimilated into any theory or method of study. This would eliminate *both* the use of age as the sole framework for explaining observed behaviors and the compulsory categorization of behaviors according to a purported developmental stage.

Description and Explanation

The practice of using description as an explanation is another aspect of stage theories that needs further clarification. Description and explanation are two goals of science and of developmental psychology. Unfortunately, they are often confused because virtually all explanations are descriptions but not all descriptions are explanations (Pelaez, 2002). Descriptions tell us what is there, whereas explanations elaborate why it is there (Bergman, 1957, cited in Reese, 1999). Description delineates or gives an account of. And as Marr (2003, p. 183), has stated, "Careful description is, of course, essential to satisfactory explanation. . . . What constitutes a description or an explanation is, however, at the heart of the controversies that [yet] range among those calling themselves 'behaviorist.' "

Circular explanation is an issue that needs to be addressed when discussing human behavior. It is often used to label a specific behavior without providing a cause-and-effect relationship clarification. For example, a child who is experiencing sleeping and eating difficulties, loss of interest, tiredness, problems with concentration, and extended feelings of sadness is labeled "depressed." Recognizing symptoms associated with depression describes the disorder. It does not explain it, however. If someone were to ask, "Why is this child having problems sleeping or eating?" or "Why is this child always tired and having problems concentrating?" it would make no sense to answer, "Because the child is depressed." This is tautological practice and a good example of circular reasoning. Moreover, invoking the label offers no new information and provides no explanation; it is merely shorthand and a redundant description *of* the problem behaviors. A number of developmental psychologists attempt to explain behavior through observing and identifying the key

characteristics of the behavior. Circular explanation is devoid of scientifically supported findings and relies entirely on the description of the phenomenon as a substitute for any independent true explanation of the behavior.

Those who focus on the development of hypothetical structures miss some of the observable behavioral phenomena that are of importance in development. They might explain an individual's helpless behavior as due to a dependent personality. This might refer to chronic and frequent dependent behavior. Although this label or description is often useful to know the history of the individual, it does not truly *explain the "dependent" behavior outcomes*. Also, one cannot say that a person acts helpless or dependent because he or she has a "dependent personality" and claim to have illuminated the causes of the behavior. These pseudo-explanations do not lead to better prediction or control of the behaviors or mental capabilities being studied, and they usually invoke inferred, internal processes as causal factors, proposing hypotheses that are difficult to confirm or disprove with empirical research.

Reification

Reification is another objectionable practice in which stage theorists often engage. Behavior analysts object to this usage because it can only obscure the true explanations of behavior and complicate the analysis. For instance, typically, reification occurs when a verb is replaced with a corresponding noun. This practice results in treating a hypothetical construct as a real cause of the behavior change. When locating the causes of behavior "inside the child" we begin to "describe the child," *and not the environment,* as the "originator of his or her actions." For example, after contact with environmental stimulation, the child is often said to have "sensed," "perceived," "remembered," or "judged," as if these verbs referred to real "observable actions" (Novak & Pelaez, 2004; Schlinger, 1992). Taking this even further, "thinking" gets reified as "thought," "remembering" gets reified as "memories," which in turn become "representations" that are said to be stored and retrieved (Novak & Pelaez, 2004). But none of these phenomena can be directly observed or tied to their referents in the external world that presumably contributed to their existence. These representational words need to be put into tangible observable behaviors that can allow for measurement. Unfortunately, many mainstream developmentalists use such common but imprecise wording when explaining child development.

Stage theorists, such as Piaget, fell into the verbal trap of reification with their cognitive explanations of development. For example, 24-month-old infants behave a certain way toward objects under a wide range of conditions of their absence. Piaget termed these observed behavior-environment interactions "object permanence." Consequently, when infants are finally able to behave appropriately with respect to objects that are out of sight, it is said that they can do so because they now possess the concept of object permanence or the mental capacity to represent objects. Object permanence, which began as the name for certain observed stimulus-response relations, has become a thing (a structure or process) located inside the child that is said to be responsible for the observed behavior (see Schlinger, 1992). Though many psychologists have recognized the limitations associated with reification, there has been little done to diminish such practices.

Function versus Structure

Some theorists study development by focusing on the structure of the behavior (e.g., psycholinguistics), and others focus on its function (e.g., behavior analysis of verbal behavior). Although both approaches are valid and can provide complete and adequate explanation (Novak & Pelaez, 2004, p. 36), they represent two opposing ways to understand human development. Structural approaches such as Chomsky's (1968) theory of language reference verbal behavior indirectly, through implied activities of the mind, appealing to devices that are neither directly observable nor measurable. Skinner's (1957) analysis of language, on the other hand, is pragmatic and focuses on observable verbal behavior and on functional aspects of language. Other classic examples of unobservable constructs are Freud's ego, superego, and id; Piaget's cognitive structures, schemata, and rules; and the information-processing model's input, storage, and retrieval systems of executive-controlled processes. The misuse of these hypothetical constructs as actual processes tends to obscure the more central, underlying processes and mechanisms responsible for behavior change and learning (Gewirtz & Pelaez-Nogueras, 1996; Pelaez-Nogueras & Gewirtz, 1997).

The functional approach to behavioral development, on the other hand, uses stimulus-response methodology as an effective way directly to modify and measure behavior change. A functional behavioral-analytic approach assumes that "stimulus conditions can be manipulated" over the course of a person's life to "produce various outcomes" (Gewirtz, 1978). Events that have functional relations to behavior create an efficient approach for optimizing behavioral development.

BEHAVIORAL CUSPS

Conceptual Framework

Experimental research guided by the principles of behavior analysis shows that the notion of behavior cusps is a very important element in predicting and controlling human behavior. The concept of *cusps* was introduced by Rosales-Ruiz and Baer (1997) to describe changes in person-environment interactions that allow access to novel contingencies, which further influence an individual's repertoire (for extended discussion, see Bosch & Fuqua, 2001; Bosch & Hixson, 2004). A cusp marks a time when the expansion of the child's repertoire is likely to become explosive, and when the deliberate management of the child's behavior becomes pragmatically different from what it was before.

In less systematic terms, a developmental cusp is a special instance of change; whether it is a change in behavior, skill, ability, discrimination, perception, affect, or motivation, it is crucial to what should or can come next in development. A cusp is a change that is often difficult, tedious, subtle, or otherwise problematic to accomplish. If change is not made, little or no further development is possible, but once it is made, a significant set of subsequent changes suddenly become easy or otherwise highly probable. This may in turn bring the developing organism into contact with other cusps crucial to more, and possibly more complex, and more refined development in thereby steadily expanding, more interactive realms (Bijou & Ribes, 1996; Rosales-Ruiz & Baer, 1997).

The definition of cusp must be expanded; the concept of cusp always depends on the phrase "If that is of importance . . ." In biology, importance is related to functions that improve prospects for survival. In development, the survival value of a behavior or skill is less clear, so importance is very often socially determined. A cusp may open new environments for a child, and we may view what those new environments will produce as being important; but if we inquire, we often find that other people do not. As an example to explain the concept of cusps, Rosales-Ruiz and Baer (1997) use infants' crawling. Acquiring this new skill allows the child to get to the toys and family members more easily and shapes the child's further behavior. Reading is another example of behavioral cusp; it unlocks new pathways to a number of other developments. Ability to read and follow directions allows the person to access the Internet, purchase a ticket to an exotic destination, learn about a new culture, and so forth (Novak & Pelaez, 2004). Learning to cross the street is also an illustration of access to new environments and contingencies. Street crossing may allow access to the mall, the movie theater, or other new areas, thus opening environments that may support further behavioral changes. However, street crossing also exposes the child to the risk of injury or death in traffic and gives the child the ability to run away from home, so some adults might view this as an unimportant (undesirable) behavior to teach.

Organization of Cusps

Clearly, developmental cusps can be organized on at least two continua: (1) the difficulty of accomplishing the cusp and (2) the scope, magnitude, and value of the behavior changes and new opportunities that getting by the cusp enables. Both have obvious significance for development. Easy cusps are more likely to be achieved than difficult ones, and thus the changes they enable are more likely to occur; cusps that enable many wide-ranging subsequent behavior changes of great use in the person's environment will be seen as more developmentally significant than cusps that enable few, highly similar changes of little use.

Thus, the time and difficulty of getting by a cusp have little relation to the scope and value of what it enables; quick, easy cusps can have large consequences, and long, difficult cusps can have small ones. All these parameters depend on context, and much of what is meant by context consists of what other cusps the person has passed. Sequence, both necessary and merely societal, can be essential to this concept of development, but it is the cusps that need to be analyzed first. As cusps are understood we would have a better understanding of when their sequences will also occur (Bijou & Ribes, 1996, p. 54).

Metaphorically speaking, cusps are often behavioral steps in an orderly path. Perhaps more typically, they are like the branches of a tree: They stem from an earlier branch or trunk, and new branches may stem from them, where their structure and the surrounding environment allow for it. But their final order, size, and number of branches are not predetermined.

Sensitive Periods versus Cusps

Contrasting with behavior cusps is the notion of *sensitive* or *critical periods*. The concept of critical and sensitive periods has often been invoked to justify age-related learning, training, or intervention (e.g., Bornstein, 1989). A critical period refers to a time span in the individual's early life during which the capacity to acquire certain behavior systems

is assumed irreversibly lost if relevant experience (i.e., stimulation) is not provided. It has been assumed that, during critical and sensitive periods, relatively large or rapidly occurring behavioral effects can be produced by less environmental stimulation or fewer stimuli than would be required to produce such effects in other time segments. These time segments are often specified imprecisely ("around 6 months") or broadly ("the last quarter of the first year").

Any age-defined concept is limited in utility to the extent that it ignores the underlying processes. Research must focus on process, which requires a detailed analysis of the sequence of environment-organism interactions that lead to the developmental milestone. Once the processes through which cumulative experience affects behavior systems are examined, age-linked critical and sensitive periods lose even the modest precision their time limits suggest. Specifications of conditions that either prevent the acquisition of a behavior system or give it the appearance of irreversibility further impeach the utility of a critical-period concept. For instance, if the acquisition of incompatible responses is the factor preventing or impeding the acquisition of a particular behavior system (e.g., walking), then, in principle, techniques could be devised to eliminate these incompatible responses from the individual's repertoire (e.g., crawling). In this case, the sensitive period for a unique time span of heightened or maximum susceptibility to particular environmental influences is similarly of questionable utility.

The individual is changing constantly due to experience and organismic factors, and therefore the capacity to learn varies throughout his/her life span (Pelaez-Nogueras, 1996). Further, even within a narrow segment of the life span, "the probability of learning at any moment may vary greatly as a function of diverse contextual-setting conditions" (Gewirtz, 1978, p. 13). The range of functional stimuli experienced often determines the characteristics of a child's response systems. An analysis of changes in the controlling environment may explain more about the child's development than an analysis focused only on the child's readiness. A behavior analysis of development would examine the origins and changes in reinforcing stimuli as functions of the roles they play in behavior of the child in different contexts. In this analysis, examining the sequences of experiences and the role of reinforcing contingencies for that child is critical.

Typical versus Atypical Development

Cusps with their significant and far-reaching implications for further development can also be viewed as negative and undesirable. Reaching the age when an adolescent will face introduction to an addiction such as drugs or gambling is an example of a cusp about which most parents could be apprehensive and would not welcome. Inappropriate behaviors are those that have a negative impact on welfare, learning, and performance. For example, teaching a child to ask another person for an object that is out of reach may replace the inappropriate behavior of pointing at the object and crying. Chewing food with one's mouth closed may be a cusp in certain social circles but may fail to qualify as a cusp with less socially refined friends or when eating alone.

For children labeled "normal," many cusps are achieved and surmounted through their ordinary events in life. The children called "deviant" are often enough called this because they have not gone through some cusps crucial to what we call normalcy in their everyday experience. Thus, normal children get through cusps by extensive, intense teaching (often

via modeling, imitation, and spoken language), aided by various skills acquired through prior cusps that make them more skillful and better at self-teaching (e.g., self-regulation). Less fortunate, less endowed, and less well-taught children do not go through these cusps and become targets of diagnostic mislabeling (e.g., developmentally handicapped).

Antisocial behavior in elementary school children and their inability to follow directions and establish meaningful relationships with peers contribute to academic failure, peer rejection, and delinquency. Understanding the consequences of such a behavior is important, but what is crucial to understand is *how* this undesirable repertoire is learned.

Negative reinforcement of parents' behavior (e.g., giving in to avoid child's aversive nagging) often maintains the child's antisocial behavior. Also, inconsistent or harsh parental discipline, misplaced contingencies, and failure to monitor children's behavior are the key variables explaining how antisocial behavior is often shaped by parents. The child's antisocial repertoire results from learning (Patterson, Debaryshe, & Ramsey, 1989). Teaching parents how to reinforce appropriate behavior while ignoring or punishing the misbehavior (i.e., using effective discipline strategies and changing their reaction to a child's antisocial behavior) often works very effectively. The child's antisocial behavior as well as other forms of problem behavior may be the direct result of a caregiver's misplaced reinforcing contingencies (e.g., attention).

There are several reasons that early experience during childhood may influence significantly the development of behavior patterns later in life. Some structural systems (underlying behavior systems) appear to require stimulus input to become functional. For example, consider that a physically developed eye may not be functional until it has been exposed to light. In a similar way, many other behavior systems of the organism depend directly on the previous acquisition of component systems. More specifically, a child must be able to hold a pencil or other writing implement and draw straight and curved lines before he or she can learn to print letters. In addition, certain later behavior systems would appear to be more effectively established when supported by behavior systems that are usually learned early in life and that can subsequently become the element of diverse response complexes and sequences, including those directed at people.

All these later behavior systems are often maintained by the same stimuli that maintained the earlier acquired responses, and, on this basis, behavior systems acquired early in life may become pervasive and may appear permanent and irreversible. Nevertheless, these systems would extinguish if the conditions and environmental consequences maintaining the behaviors were removed or eliminated. Thus, the strength of these behavior systems is often due not to their supposed irreversibility, but rather to the locking-in of the behavior of the environment with the child's behavior, so that from earliest acquisition onward the maintaining contingencies might not even appear to the untrained observer to be operating. Further, in this locking-in process, the appearance of irreversibility of some behavior systems could be due to the transfer of stimulus control from the initial sets of stimuli maintaining the response to a different set that, to the untrained observer, similarly might not appear to be operating. For example, a young person's appropriate grooming and dressing is initially established by verbal prompting, social reinforcement, and corrective feedback from the youth's parents. Later, however, it is maintained by the youth's appreciation of his or her own neat appearance and rare compliments from others, environmental stimuli that would be barely perceptible by an observer (Gewirtz, 1978).

BEHAVIOR-ANALYTIC APPROACH TO HUMAN DEVELOPMENT

A Practical Methodology

Much of the existing research in the field of psychology suggests that environmental stimuli affect behavior. This is reasonable because one of the distinguishing characteristics of living organisms is that they are all sentient beings. Further clarifying the relationship between environment and behavior, behavioral-analytic theory defines development as progressive changes in behavior shaped by consequences. These behaviors in turn combine and build on each other to become hierarchically organized (Pelaez-Nogueras & Gewirtz, 1997). Some people incorrectly believe that behavior analysis sees all behavior as respondent in nature, and therefore "automatic" and not influenced by its impact on the environment.

Behavior analysis differs from most psychological accounts of behavior. Assumed processes that involve stages and follow a linear, structural framework, lack "physical natural science realm" that includes "electrons, atoms, magnetism, cells, and so forth" (Sloane, 1992). Behavior analysis replaces mental entities and hypothetical phrasing with real-world interactions between a behavior and its environment. Once a social worker can observe and explain the behavioral changes under observation, then the practicality of our studying human behavior in the social environment can be understood and applied. However, many standard human behavior and the social environment (HBSE) textbooks still do not incorporate behavior analysis into their theory chapters. One rare exception can be found in Thyer (1992).

Developmental psychology tends to omit the significant empirical and theoretical contributions of behavior analysis to the scientific understanding of child behavior. This sizable literature includes, but is not limited to, notable work done by Donald M. Baer, Sidney W. Bijou, Jacob L. Gewirtz, Lewis P. Lipsitt, Martha Pelaez, and Carolyn Rovee-Collier and their respective colleagues. At the very least, this omission does a disservice to social workers studying HBSE by narrowing their understanding of valuable empirical and theoretical analyses of behavioral development across the life span (Gewirtz & Pelaez-Nogueras, 1992, 1993; Novak & Pelaez, 2002; Pelaez-Nogueras, 1996; Schlinger, 1992).

Behavior analysis is both a methodology for studying human development in the social environment and a proven technology for increasing intellectual abilities and teaching useful skills. Rather than trying to track the chronology of normal development, behavior-analytic researchers analyze how adaptive behaviors in various domains (e.g., socialization, language, academics, self-care) are learned. Behavior analysts define each behavior of interest in observable terms, investigate how these behaviors differentiate according to situational demands and connect to form complex performances, and examine how these responses are acquired under natural conditions. Frequently, behavior analysts design instructional procedures using antecedent stimuli (e.g., verbal instructions, modeling, manual guidance) to prompt the behavior and consequent stimuli (e.g., attention, verbal praise, access to desired activities) to positively reinforce and strengthen the behavior. To teach complex behavior chains (e.g., uttering a sentence, getting dressed), behaviors are taught one at a time and linked together in their proper sequence. After the first behavior is taught, the second behavior is prompted and reinforced to occur immediately following the first behavior; after the second behavior is taught, the third behavior is prompted and reinforced to occur

immediately after the second behavior. This process is continued until the entire behavior chain is assembled.

The effectiveness of these sorts of procedures is evaluated individually with each person studied, and instructional methods are revised and refined as needed until the educational goal is met or the person reaches an optimal level of performance. This methodology has been shown to be efficacious in teaching clients a wide range of sensory, cognitive, and motor skills regardless of their age and presumed developmental level and, more important, despite their prior history of exhibiting severe developmental disabilities. Thus, behavior analysis offers hope to clients whose development is delayed or halted, the very cases that most need social services and professional assistance. The applications of behavior analysis have been extensive (Iwata et al., 1997; Neef et al., 2004), so we give only a brief overview of one of these areas: language acquisition.

As discussed later in this chapter, language acquisition is crucial for social and intellectual growth, and it may be a primary behavior cusp (Novak & Pelaez, 2004). Behavior-analytic research has helped to clarify the distinction between two forms of communicative behavior: receptive language (e.g., pointing to the appropriate object after hearing its name) and productive language (e.g., correctly naming an object that has been presented). These two verbal repertoires may exist separately, develop at different rates, and require distinct instructional procedures (Guess, 1969; Guess, Sailor, Rutherford, & Baer, 1968).

The two previously mentioned studies also investigated parts of speech, in particular, use of the plural morpheme (e.g., cat/cats). After they had taught their client, a 10-year-old girl who met criteria for a diagnosis of severe mental retardation, multiple exemplars of the plural form, the client displayed generalized plural usage; that is, she used the correct plural form for words that were not included in the training sessions (e.g., said "cows" although the words "cow" and "cows" were not previously presented; Guess, 1969). Thus, early behavioral research has analyzed both the structure and function of language, and has done so in ways that can be applied to effective language instruction. These results have been replicated with other clients and expanded to teach more socially pragmatic language skills, such as question asking (Frisch & Schumaker, 1974; Haring, Roger, Lee, Breen, & Gaylord-Ross, 1986; Taylor & Harris, 1995; Twardosz & Baer, 1973; Williams, Pérez-González, & Vogt, 2003).

Incidental Teaching and Language

Another line of behavioral research has examined techniques for promoting language acquisition that can be readily integrated into the client's daily routine. One of these procedures, incidental teaching, utilizes regular daily encounters in which verbal behavior might have heightened instrumental value, such as the start of playtime, when a child needs adult assistance in getting a particular toy (Hart & Risley, 1968, 1975). The types of verbal prompts or questions made prior to delivery of the desired item (e.g., "What do you want?" or "What do you want it for?") and the terminal behavior required from the child (e.g., simple nouns, compound sentences) will determine what words the child learns and subsequently exhibits in these situations. Although these procedures were originally evaluated with children from low-income, African American families, they have also proven effective in teaching receptive object labels (e.g., "Give me the _____ [bread or apple]") and expressive use of prepositions (e.g., "It is _____ [under or inside] the box") to children with

autism and severely delayed language (McGee, Krantz, Mason, & McClannahan, 1983; McGee, Krantz, & McClannahan, 1985).

In sum, all of the successful applied research was based on the application of learning principles and the examination of social and environmental stimuli that could be manipulated to further students' linguistic and intellectual development. The students' chronological age, developmental age, and presumed developmental stage were de-emphasized in favor of searching for procedures that were effective in raising their current abilities. The pragmatism of and positive results obtained with behavior-analytic approaches are factors that encourage us to recommend them to social workers and other human service professionals interested in promoting human development.

Beyond Learning

The focus of the behavior-analytic approach has been termed merely "learning," not "development by those who favor age-correlated mainstream approaches (Gewirtz & Pelaez-Nogueras, 1996). On the contrary, behavior analysis offers many substantial criteria for providing scientifically sound theories on development. These criteria include accuracy, clarity, predictability, practicality, internal consistency, parsimony, testability, productivity, and self-satisfaction (Novak & Pelaez, 2004). Behavior analysis is applicable to many areas of life that involve observing relations between behavioral and environmental events (Schlinger, 1992).

The behavior analysis approach allows for prediction and control of human behavior. Its standards for research are closely related to those of the natural sciences of biology, physics, and chemistry and are applied in medicine and engineering. Because behavior-analytic theory fulfills the criteria of good scientific theories Schlinger (1992) posits that it may be able to offer more plausible interpretations of behavioral phenomena than most other traditional psychological theories. This has ramifications for professionals who design and apply social service programs. Their notions about human behavior and human development, which undergird their general models and individual practices, should be based on the best available scientific evidence. Because there is always room for improvement, it is imperative to openly discuss what theories have been used in the past and what theories should be used in the future. Behavior analysis is one such discipline to explore for improvement of existing programs.

APPLICATION TO SOCIAL WORK AND HOME AND FAMILY INTERVENTIONS

Instead of viewing human development as the unfolding of a series of predetermined stages, one can focus on elements of the social and physical environment that can stimulate the developing child's abilities and potential. This outward-directed approach seeks to identify and rearrange events that can either promote or hinder human development and is more readily applicable by human service professions such as social work. An example of work that isolates socioenvironmental variables in human development is the longitudinal research of Hart and Risley (1995).

Over a period spanning 2 years, Hart and Risley's team observed 42 families in their homes for 1 hour every month, recording the interactions between 1- and 3-year-old children and their parents. Thirteen of the families were upper socioeconomic status (SES), 23 were middle or lower SES, and 6 families were receiving welfare benefits. The families differed significantly in the quantity of language used in the home, as well as the type of feedback that they gave when the children attempted to explore the world around them.

Strikingly, it was shown that the upper SES ("professional") parents addressed considerably more words to their children than the middle or lower SES ("working-class") parents, and the middle or lower SES parents addressed substantially more words to their children than did the parents receiving welfare benefits. By the time the child was only 3 years old, these differential rates of verbal interaction were projected to result in the cumulative number of words addressed to children of the three SES groups differing by *tens of millions* of words. Words are used to distinguish between objects, to note variations in their qualities, and to convey abstract and complex relationships; the three groups of families showed significant variation in their use of these symbols that are the tools for such intellectual activity.

The three groups of families also differed greatly in the way parents responded to their children's efforts to interact with their surrounding environment. The professional parents were more than twice as likely as working-class parents and more than *4 times* as likely as welfare parents to give encouragement to their children (saying "good" or listening to child's statements), that is, to be a source of positive reinforcement. Conversely, parents receiving welfare benefits were twice as likely as professional parents and working-class parents to discourage their children (saying "stop" or "shut up"), that is, to be a source of aversive consequences, or punishment. The cumulative effect of such early childhood experiences is foreseeable: Children of parents receiving welfare have less exposure to language and its ability to help make fine-grained distinctions or abstractions; they receive less confirmation that they are "good" or worthwhile individuals; and they get less urging to explore and learn about the world around them. Correlated with these variations in parent-child interaction patterns found by Hart and Risley (1995) was a very large difference in children's cumulative vocabulary. Because vocabulary size is associated with measures of intelligence and academic performance, from the beginning children from disadvantaged homes are on a developmental path with a trajectory for lower lifetime achievement.

Because Hart and Risley (1995) investigated socioenvironmental factors that were related to human development rather than hypothesized internal stages, they were able to recommend an early intervention program that could remediate the lower levels of stimulation observed in the welfare families of their study. This program was the Milwaukee Project, which enrolled infants from 6 to 8 weeks old in out-of-home, full-day child care, babies whose mothers who scored 75 or below on IQ tests. The mothers later received intensive in-home parent training, remedial education classes, and vocational training. Parent training included one-on-one coaching of parents in their homes to improve daily interactions in ways compatible with the parents' lifestyles. Results of the study showed that "children in the Milwaukee Project, unlike children from comparable families not enrolled in the project and unlike children in other less time-consuming intervention programs, were equal to the national average in accomplishments at age 8" (p. 206). Thus, by providing parents with educational and vocational opportunities and intensive parent training to modify parent-child interactions within the home, children of at-risk families could achieve normative levels

of performance by their early school years. By focusing on aspects of children's social and physical environment, behavioral researchers have been able to identify key factors related to children's intellectual development and to make specific recommendations for its betterment.

Behavior Analysis for Effective Intervention

Operant theory is particularly important in evidence-based social work practice because it is one of the few theories used in social work that is firmly based on empirical research. The principal tenet of operant theory is that individuals learn from the consequences of their behavior, with behavior being defined as everything the person does, including overt behavior as well as private events such as thoughts and feelings. Consequences are classified in terms of the behavior changes that follow them.

In its application to human problems, operant theory provides both assessment and intervention strategies for work with individuals, families, groups, communities, and organizations. The primary mode of assessment is analysis of contingencies apparently controlling behaviors of interest. An effort is made to determine connections between antecedents of a behavior, the behavior itself, and its consequences. Through such analysis of behavior and its antecedents and consequences, referred to as functional or contingency analysis, the social worker can "form [a] hypothesis about contingencies" maintaining problem behaviors and "seek to alter these contingencies" (Reid, 2004, p. 56).

Applications of operant theory in clinical practice have generated many approaches to producing behavior change. The most commonly used methods in clinical work are positive reinforcement, self-reinforcement, and contingency management. Operant theory also plays an important part in methods that use other learning principles (Baer & Rosales-Ruiz, 2003). For example, in social skills training, modeling is combined with reinforcement of desired behaviors by the trainer as well as by others in the client's environment.

Operant theory has enriched social work with an empirically based and testable approach to understanding and changing social problems at all levels of practice and has become part of a point of view and burgeoning technology that is remaking direct practice in social work (see Thyer, 1983, 1987, 1992; Thyer & Myers, 1997, 2000).

At a more specific level, operant theory and derivative methods have contributed several important concepts and principles to the core knowledge of the profession. The notion that positive reinforcement can be a powerful means of change is perhaps the most obvious addition. Social workers have become aware that reinforcers can take various forms and that they not only can foster desirable behavior but also can inadvertently maintain unwanted behavior. Social workers have also learned about the limitations of punishment as a means of change. More importantly, growing numbers of social workers have begun to apply contingency management methods (Baer & Rosales-Ruiz, 2003).

The contribution of operant theory to work with selected problems and populations can be demonstrated by the following methods that have been used, which show the breadth and variety of the contribution. Conduct disorders and emotional problems in adolescents have been treated with a point reinforcement system; alcoholism and addiction have been treated successfully by using contingency contracting between client and family members with reinforcement of alternative behavior; and school underachievement and classroom problem behavior have been treated with identification of antecedents,

self-monitoring of performance, self-administered reinforcement, parental reinforcement of academic performance through point systems, social skills training, and teacher use of contingency management (e.g., token economies, response cost, and time-out procedures). These are just a few of the areas that have utilized operant principles in practical applications.

These developments in basic and applied research and in theory building are laying the groundwork for new developments in operant methodologies and interventions. If operant theory moves in the directions suggested in this chapter, it should increasingly form links with other fields of activity, including experimental cognitive psychology, behavioral pharmacology, physiological psychology, and brain research. Eventually, one hopes for the development of a unified theory of behavior that would join together operant and respondent conditioning, cognitive-emotional phenomena, and biological processes. As Reid (2004, p. 56) has stated, "Although social work practice has been enriched by operant approaches as they have evolved, more is possible and more is certainly needed in a profession whose interventions are often no match for the problems they aim to resolve."

CONCLUSION

The evolution of behavior analysis into the HBSE curriculum will be of great utility for social workers. Avoiding theories and methods that do not have empirical support and that depend on hypothetical mental states to account for human development will encourage more precise and systematic scientific inquiry, which in turn should lead to a steady accumulation of well-grounded information on human development. Interventions based on this empirical foundation should be more effective and have more durable outcomes. As the awareness of the science of behavior analysis increases, interventions in the social service sector will also evolve.

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Chapter 18

THE POTENTIALLY HARMFUL EFFECTS OF THEORY IN SOCIAL WORK

Bruce A. Thyer

From my earliest training in the human services, beginning in community college and continuing through my doctoral studies, I was taught the value of theory. Specifically, I was inculcated with the belief that the major purpose of scientific research is the development of what can be called theory, more specifically "deductive" theory, which is "an attempt to increase human understanding by providing explanations of why certain things occur" (Burr, 1973, p. 3). In earlier publications, I reviewed a number of similar definitions of deductive theory found in various social work texts (Thyer, 2001a, 2001b), and I distinguished deductive theory from related constructs, such as models for practice (e.g., task-centered), perspectives on practice (e.g., an ecosystems perspective), one's philosophical assumptions (realism versus constructivism), and one's statistical assumptions or choice of research methodologies. I am aware that other people hold more expanded, or perhaps weaker, views of what constitutes a theory (e.g., it is simply a guess or prediction), so to make it clear from the onset, I am referring only to conceptual attempts to explain the causes (e.g., etiologies) of psychosocial problems and the mechanisms of actions of psychosocial treatments.

The field of social work purports to highly prize the development of theory that provides both logically supported and empirically based explanations of the causes of social problems and of the presumptive mechanisms of action of psychosocial interventions. A theory's initial propositions supposedly lead to testable hypotheses capable of being supported or rejected via empirical analysis of various types: descriptive analyses, correlational studies, quasi-experiments, true experiments, meta-analyses, and systematic reviews. Social work research was to take these leads from theory, to develop some means of testing these derived hypotheses, and through either a series of corroborating or disconfirming investigations derive general conclusions regarding that theory's level of empirical support and, ideally, its congruence with nature's realities. This view of the role of theory is similar to the stance advocated by Ernest Greenwood in his seminal article appearing in a 1955 issue of the *Social Service Review:* "Research, to be scientific, must proceed from a body of

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theory and feed back into that theory; its goal always is to test and to expand scientific theory" (p. 22). This view is also supported by the policies and practices of our major professional organizations, such as the Council on Social Work Education, the Group for the Advancement of Doctoral Education in Social Work, the National Association of Social Workers, as well as in major social work textbooks (cf. Thyer, 2001a).

Ironically, there is little discussion in our disciplinary literature of the potentially harmful effects of theory in social work research and practice, and this concluding chapter attempts to correct this conspicuous omission. One of the few comments dealing with this topic is by Gambrill (1983, p. 235):

> Problems in causal analysis arise when social workers do not use theories when they would be helpful and *when they do use theories in areas in which they are inappropriate*. Both actions result in erroneous conclusions and failure to attain outcomes desired by clients. (emphasis added)

Plionis (2004) authored *Teaching Students How to Avoid Errors in Theory Application*, in which she outlined and discussed some common problems encountered in applying theory to social work practice. Similarly, Shaw and Compton (2003, p. 192), in *Theory, Like Mist on Spectacles, Obscures Vision*, noted, "While theory is helpful in focusing evaluator's attention and facilitating investigation, it also excludes evidence that does not fit within its framework." Much earlier, Meyer (1973, p. 86) critiqued the proliferation of practice models (which she linked to theory development) in social work and similarly observed:

> The selling of those models has tended to lead each of us to the brink of *premature closure*. As long as we "do" our special model we will have no need of the other fellow's. Moreover, the more we work at our models and the more refinement we achieve in honing techniques and educating adherents, the greater our investment becomes in our invention. (emphasis in original)

However, such critical analyses are rare and only scratch the surface of this important matter.

In an earlier article (Thyer, 2001a), I commented that I have seen doctoral students forced to insert inappropriate or tangential theories in their dissertations because their faculty advisors judged that dissertations simply needed to have some sort of theoretical discussion, no matter how seemingly gratuitous. This is a fairly benign example of how theory can have deleterious consequences. In the remainder of this chapter, I would like to review some more serious consequences of using bad theory in social work in an effort to help us become more discriminating in our incorporation of theory into social work education about human behavior and its development across the life span, our use of theory in practice, and to guide and inform our research efforts.

SOME HARMFUL EFFECTS OF BAD THEORY

Teaching Bad Theory Wastes Time in Education and Training

The current accreditation standards of the Council on Social Work Education (CSWE; 2003, p. 33) state that one foundation program objective is to have students "use theoretical

frameworks *supported by empirical evidence* to understand individual development and behavior across the life span and the interactions among individuals and between individuals and families, groups, organizations and communities" (emphasis added).

On the face of it, this seems like a reasonable standard, and one consistent with a discipline trying to ground itself in the hallmarks of the traditional professions. The *Educational Policy and Accreditation Standards* further state, "The master's program has a concentration curriculum that includes (a) concentration objectives, (b), a conceptual framework built around relevant theories," and some other features (CSWE, 2003, p. 37). This standard is reiterated several places further on in the benchmarks section. Clearly, it is required by CSWE that accredited BSW and MSW programs educate students in the use of theoretical frameworks. Unfortunately, the stipulation that such frameworks be those "supported by empirical evidence" is often honored more in the breach than in reality, in our textbooks and course syllabi. A review of such books reveals sometimes extensive content on stage theories such as those of Sigmund Freud, Erik Erikson, Jean Piaget, Lawrence Kohlberg, and Carol Gilligan, approaches to understanding human development that, to put it kindly, have not been well supported by empirical evidence and in some cases seem to have been largely refuted. Apart from general theories of human development, there is a plethora of highly specialized theories, sometimes originating in a broader framework but sometimes of novel origin, addressing social work practice in circumscribed problem areas, for example, alcohol abuse, depression, trauma, family violence, or with particular populations, for example, juvenile delinquents, the very young, the very old, and people of color. These too can be given undo attention in our curriculum and often with a disregard for the empirical research (or lack thereof) addressing them.

In time, this cascades into our professional journals, our conferences, and our continuing education offerings. Students and practitioners are faced with a sometimes indigestible mass of theories, models, perspectives, frameworks, and lenses, many of which contradict each other, unified often only by their lack of supportive research. For example, a recent issue of the *Journal of Social Work Education* contains an article extolling the value of the Myers-Briggs Type Indicator (MBTI), as an assessment tool for use with social work students (Moore, Dettlaff, & Dietz, 2004). The MBTI is based on the theory of personality of Carl Jung, and there are a number of references to its use with social work students over the years. Unfortunately, the theory underlying the MBTI is either weakly supported or reasonably refuted, and the validity of the instrument itself is seriously open to question (cf. Hunsley, Lee, & Wood, 2003). And this has been known for years (Druckman & Bjork, 1991; Pittenger, 1993)! How many thousands of students complete this invalid assessment instrument each year? How many erroneous decisions regarding students based on MBTI results are made by faculty and supervisors annually?

Moore et al. (2004) recommended that field instructors and other faculty get training in using and interpreting the MBTI. In my opinion this is a squandering of precious in-service and continuing education resources. In recent years, I have similarly seen continuing education offerings approved for social workers to learn about past-life regression psychotherapy, how to heal clients using invisible energy forces unknown and undetectable to science, to use yoga, to prescribe herbal therapies, to help clients by structuring their eye movements and creating mandalas. How far we have come from our historic role of working with clients at all levels to effect change in their life circumstances and focusing on the interactions within and among families, groups, communities, and organizations!

And if the empirical support of various approaches to social work practice with individuals remains fairly thin in many areas, how much more attenuated are the solid research findings that can be taught to students relating to practice with families, groups, organizations, and communities? It would be a very interesting exercise indeed to analyze to what extent the theories we teach about families, groups, and larger systems are supported by empirical research.

Teaching Bad Theory Detracts from Time Spent Teaching Evidence-Based Content

The social work curriculum and the amount of time devoted to an individual course are finite elements. One can provide only so much content in the context of any given course, or throughout an entire MSW program. To the extent that time and energy are devoted to reviewing unsupported social work theory, or theory that is known to be incorrect, there is that much less time and energy available to providing coverage on what the CSWE really mandates, that is, teaching frameworks supported by empirical research. Replacement of speculative or erroneous theoretical content with theories reasonably well supported by empirical research seems unlikely until the CSWE begins to take seriously its own standard regarding the evidentiary foundations of theoretical frameworks, which is mentioned only in the education policy portion of the accreditation standards, not in the later actual accreditation benchmarks. For example, Accreditation Standard M2.0.1 mandates only the provision of "a conceptual framework built on relevant theories" (CSWE, 2003, p. 47) used in evaluating candidacy or the accreditation review itself, not providing coverage on empirically supported theories. Any general education policy that lacks the teeth of operationally defined accreditation benchmarks is one that will be slow to be adopted, if at all. The result has been described by Rehr, Showers, Rosenberg, and Blumenfield (1998, p. 89): "So many theories exist that little guidance is given to practice." Carol Meyer (1973, p. 88) had a similar observation: "In our field, we are theoretical hoarders; we do not seem ever to clear out the attic, but instead we keep adding new items, hoping that they will somehow fit in with the old."

Let us be honest here. We cannot possibly do a good job at teaching all relevant theories to our social work students, be they in our bachelor's, master's, or doctoral programs. Therefore, each program, indeed, every instructor, is faced with making an important choice: What theoretical frameworks shall I cover in my classes? Sometimes we take the path of least resistance and teach those theories that happen to be covered in our assigned textbooks and consider that we have done a satisfactory job if we get good course evaluations. We are content if our students do well on the standardized multiple-choice tests the publishers provide us with in the instructor's manual accompanying the assigned textbook.

I am advocating here, and have elsewhere, that the scientific foundations supporting a given theory should be an important consideration in such choices about what we teach, and this is congruent with current CSWE education policy, although not apparently enforced with any degree of regularity. To the extent that we persist in teaching the outdated, the unfounded, and (the worst case) the false, we have less room to provide instruction for the contemporary, the empirically investigated, and the reasonably well validated. And for all of us this is not a good thing.

In a number of social work programs I am familiar with, advanced practice classes are often little more than something akin to the sociological study of a problem or client group. For instance. a class titled Social Work Practice with Substance Abusers is often laden with content, readings, and discussion about the descriptive features of various drugs and of the people most prone to abuse them, the correlates and antecedents of substance abuse, its costs, theoretical causes, and consequences. Almost dismissed on the agenda is attention to evidence-based approaches to actually help individuals stop abusing drugs, of which much is considerably now known. Similarly, a course titled Social Work Practice with the Elderly is likely to be overburdened with theories of aging and descriptive features of senior citizens and their most pressing problems and to present little on empirically supported ways of helping the elderly maintain or regain health and independence or to cope effectively with specific physical or behavioral problems.

In part, our preoccupation with theoretical importance at the expense of evidence-based interventions may be the result of the heavy emphasis laid on theory in our profession. It may also be due to the unfamiliarity among some of the professoriate with the latest advances being made in effective practices in so many areas in the human services.

Investigating Bad Theory Wastes Researchers' Time and Resources

Like the classroom instructor, the social work researcher has a finite amount of time to which to devote to investigating psychosocial phenomena. The time spent thinking about, reading, and designing studies on spurious or invalid theory, much less conducting them, could be considered a waste of the investigator's time. Factor in the analysis of data, writing up for publication, and sending it in for peer review, and one is faced with the fact that any given investigation is a tremendous investment in the career of a researcher. Now I am not advocating for anything like a ban on investigating certain topics or theories. Far from it. I too support the freedom within the academy that permits us to pursue a range of topics without oversight from on high (except perhaps with the exception of our university human subjects review committee) for the purposes of expanding knowledge. I am urging a little bit of critical thinking and discrimination in choosing topics to research, because the consequences of choosing something trivial or investigating a fallacious theory can be great. Of course, one cannot always be sure, in advance, which theoretical frameworks will ultimately prove to be the most valid or congruent with nature or useful in practice. But to give an example, based on related existing theory, logic, internal inconsistencies, and related factors, I was reasonably sure that the theory underlying the novel technique of eye movement desensitization and reprocessing (EMDR) was incorrect when it initially erupted on the scene. Nevertheless, I had a colleague who had been trained in the approach, and she wanted to conduct an outcome study of EMDR using a novel client population. Despite my personal reservations, we worked together on this empirical adventure and found EMDR to be essentially equivalent to a placebo treatment, not at all capable of producing any of the miracle cures touted by its advocates. I thought this project was well designed, and it was eventually published, but the experience was far less satisfying to me as a practitioner, academic, and social scientist than one grounded on a more solid theory and more likely to lead to some advance in our knowledge about helping clients. It is both tempting and perhaps easier to gravitate toward the novel, unusual, or (apparently) dramatically successful approaches to practice, rather than to investigate the outcomes and

processes of widely used social work interventions whose mechanisms and effectiveness remain murky (which is all too often the case).

Currently we find professional books and journals providing coverage on numerous discredited theoretical frameworks and practices, such as transactional analysis, neurolinguistic programming, sensory integration, recovering repressed memories, facilitated communication, and thought field therapy. This last bogus treatment was taught during the summer of 2006 as a clinical MSW elective in one of the more highly respected social work programs in the United States! We flirt with the faddish, being quick to embrace and write about, for example, vague notions of quantum and chaos theories as having applications to social work practice. The reality is that quantum (e.g., the behavior of subatomic particles) phenomena have no applications or extensions to the macro world in which we all live, and the apparent similarities (e.g., we can inadvertently change someone's behavior by observing them) are metaphorical at best (Stenger, 1997) and actually have nothing to do with quantum theory. I suspect that very few of my social work colleagues can follow the complex mathematics that undergird quantum or chaos theory. I certainly can't.

Are these the theoretical roads we wish students and practitioners to travel? Our disastrous embrace of watered-down and vague principles of general systems theory and its derivatives, such as the ecosystems perspective, has sidetracked the profession for years. It provides a Potemkin patina of theoretical rationale for just about anything one chooses to do in practice. In my judgment, Wakefield's (1996a, 1996b) incisive critiques dealt a devastating blow to the scientific credibility of these approaches, but systems theory remains a revered orientation in social work education, although one of precious little heuristic value in terms of generating empirical research or specific interventions (Gallant & Thyer, 1999).

Basing Practice on Bad Theory Can Result in Ineffective or Harmful Practices

On April 18, 2000, a 10-year-old girl by the name of Candace Newmaker, accompanied by her adoptive mother, walked into the home of a woman named Connell Watkins, a social worker with an MSW from a CSWE-accredited program. With three other adult therapy assistants, Candace was tightly wrapped head to toe in a blue flannel blanket, curled into a fetal position, and placed under four large pillows. The four adults then pushed against her to simulate birth contractions, and Candace was urged, via yelling and being hit by the therapists, to emerge from this cloth cocoon and be reborn. Altogether, the four adults weighed over 670 pounds. Candace began to complain that she could not breathe. She cried. She finally said, in a pitiful voice, "Okay, I am dying. I am sorry." The therapists shouted back, "You want to die, okay then, die. Go ahead and die right now!" When, after about an hour, Candace was unwrapped, she had been silent and unresponsive for some minutes. She was unconscious and not breathing. She had soiled herself with vomit and feces. This entire procedure was captured on videotape. Candace died the next day from this suffocation. The adoptive mother had been present and urged her daughter to be reborn during this therapy session, having paid about $7,000 for Candace to be treated in a 2-week intensive session of therapy. The social worker was charged with child abuse leading to death and is now serving a prison sentence (Crowder & Lowe, 2000).

What happened here? Well, it is called "rebirthing therapy" and is based on a theory of human behavior that asserts that one's current emotional problems are caused in part

by the trauma one experienced during birth. Resolution of one's current problems can therefore be attained by experiencing a more successful rebirthing experience via this simulated exercise. There is very little empirical support for this theory, and no sound research to suggest that rebirthing techniques are genuinely helpful in resolving emotional problems. This case tragically illustrates how a bad theory can promote injurious social work treatments. Sometimes bad theory can lead to decidedly harmful interventions, and sometimes to more benign treatments, which at the very least, waste the time and money of social work clients and perhaps detour them from obtaining legitimately effective care.

There are many such tragic illustrations of how bad theory can promote bad practice. For example, Bruno Bettelheim's theory that autism was caused in part by emotionally distant caregivers, the so-called "refrigerator mother," led to the intervention of removing children from their biological homes and placing them in institutional care, sometimes for many years. Psychoanalytic theories of the etiology of homosexuality led to the decades-long stigmatization of gay and lesbian individuals as mentally ill and to their being referred for therapy to change their sexual orientation. More recently, practitioners using religiously derived theories continue efforts to "convert" gays and lesbians into heterosexuals using faith and psychotherapy (Spitzer, 2003), despite numerous position statements by major professional associations against such "reparative therapies." Relatedly, religiously derived theories about the role of parents led a few states to pass laws prohibiting gay or lesbian couples from adopting children, to the detriment of children thus deprived of a possibly advantageous permanent home. My point is that all theory is not good theory, and sometimes it is very bad indeed.

Some voices in our profession claim that the accuracy or truthfulness of the theories used in social work is either unimportant or simply impossible to determine. For example, Morris (1997, p. 76) asserted, "Our role as students of theory is not to decide which theories are correct or which are obsolete." The radical skeptics claim that no certain knowledge is obtainable via scientific inquiry, whereas others assert that all potential scientific methodologies are of equal value in uncovering truth. These views are, in my opinion, intellectual dead ends, and ultimately of great harm to the profession.

Theory Can Place Intellectual Blinders on Practitioners and Researchers

Just as adoption of a good theory can help a practitioner or researcher make sense of a given psychosocial phenomenon, sometimes adherence to a bad theory places intellectual blinders on a professional, so that everything is viewed as consistent with a particular perspective. Contravening evidence can be ignored or discounted and the congruent instances seen as an ever-mounting accumulation of solid evidence in support of one's favored perspective. This can in turn compromise our ability to see or hear what clients really bring to us, or lead researchers astray. Martin Bloom (1965, p. 12) mentioned this many years ago, noting:

> Usually, worker's preferences are expressed at the very onset of the case, and clients begin to show just those symptoms that preferred theory requires. In other words, this preferential approach leads to theory selection that may be a long, false lead.

Nisbett and Ross (1980) wrote extensively about this confirmation bias, or availability heuristic, in everyday judgments under uncertainty, and the results have application to the

decisions made by researchers as well as practitioners. They specifically noted, "People have little appreciation for strategies of disconfirmation of theories and often persist in adhering to a theory when the number of exceptions to the theory exceeds the number of confirmations" (p. 16).

The difficulties of objectively surveying large numbers of research studies and drawing legitimate conclusions from these aggregated studies are well known. Even efforts to minimize subjective judgments in this process, replacing narrative reviews of complex literature with sophisticated strategies such as meta-analyses, have been criticized as remaining subject to bias on the part of the researchers (Wilson, 1985). Theory, especially bad theory, can lead researchers astray.

Christie (2003, p. 26) surveyed 138 program evaluators active with Healthy Start programs throughout California and found that "a very small percentage of Healthy Start evaluators reported using an explicit theoretical approach to guide their work," only about 1 in 10. In a survey of the usefulness of various reading topics potentially consulted by practitioners and clinical researchers from the discipline of psychology, it was found that both groups rated "theoretical orientations" as the least valuable (Beutler, Williams, Wakefield, & Entwistle, 1995), relative to reading about psychological interventions or topics such as the therapeutic alliance. This suggests that, as a practical matter, grounding evaluation in formal theory is not an essential requirement. It may well be useful to do this, but it appears that program outcome studies can be and are being undertaken lacking such foundation. The distinguished psychotherapy researcher Alan Kazdin (2001, p. 59) provides some related observations on the current state of affairs in the context of an article arguing for *more* theoretically based research:

> There is little in the way of theory that underlies current therapies for children and adolescents. We are in an odd position of having no clear understanding of therapeutic change, no clear set of studies that advance our understanding of why treatment works, and scores of outcome studies that are at the same time wonderfully but also crassly empirical.

The seminal evaluation methodologist Michael Scriven (1998) has also addressed this topic, by describing what he deemed "black box," "grey box," and "clear box" evaluation studies. In the first type virtually nothing can be determined about how change occurs, although outcomes can be ascertained. In the gray box evaluation, there is some knowledge available about change mechanisms, and in clear box studies, both outcomes and change processes are well established. In Scriven's words:

> One may have no Theory of X but be able to see how it produces its effects . . . as in the classic case of aspirin, one may have no theory of how it works to produce its effects, but nevertheless be able to predict its effects and even its side effects—because we found out what they were from direct experimentation. That does not require a theory. (p. 60)

Although arriving at clear box evaluations is a desirable goal for both social scientists and practitioners, this does not reduce the value of black box appraisals, simply determining outcomes, in the absence of a theory of the mechanisms of change. Such studies may be an important preliminary to gray box and clear box evaluations, or as valuable one-time studies in their own right.

Legitimate Research Aimed at Testing Theory May Degenerate into Attempting to Prove That a Given Theory Is True

According to the idealized standards of scientific inquiry, the researcher strives to be an objective investigator whose goal is to validly determine whether his or her data corroborate or refute the specific hypotheses derived from a given theory. Over time, presumably, an accumulation of well-designed refutations of a theory's propositions (e.g., a failure to reject the null hypothesis) leads to an eventual determination that a particular theory, or at least significant aspects of a particular theory, are unsupported and may be considered false. Having reasonably excluded certain explanations from the domain of plausible theories, a field then moves on to test others. Slowly, by excluding likely explanations or theories, one begins to narrow in on an increasingly more circumscribed set of theories that have not yet be falsified and presumably contain more truthful accounts. This approach has been called "falsificationism," or strong inference (see Platt, 1964, for a lucid account of this process), and has been widely written about by Karl Popper, among others.

While complete objectivity is unlikely to occur among human beings, by subscribing to the tenets of mainstream science one has some level of control over bias and subjectivity, which is indeed the whole point of employing scientific methodology. This is not a perfect system for uncovering knowledge, but it seems to be the best approach developed so far. However, it is often the case that researchers embark upon a given study, not in an effort to dispassionately examine the merits of their hypotheses, but to garner evidence that will serve to support the hypotheses or, more broadly, to try to show that a given theory or part thereof is true. This is particularly prone to happen among doctoral students, who in many instances have been taught, perhaps implicitly, that a failure to find predicted results represents a failure of their dissertation project or reflects poorly on their research skills. It also seems likely to occur in situations in which program evaluations are undertaken by individuals with a vested interest in promoting the social service program under investigation or among researchers who have received significant external funding.

One current example I have heard about occurred recently when child welfare researchers gathered together to discuss evaluating the practice effectiveness of BSWs versus child welfare workers holding non–social work degrees. Rather than framing the role of the research as being to see which educational background yields better child welfare workers, some stakeholders asserted that the function of the research is to "prove that BSWs make better child welfare workers"—in other words, to support an a priori conclusion, rather than find the "true" facts. This is a terrible distortion of the scientific method. Frankly, it can be difficult to get excited over a failure to reject the null hypothesis (e.g., finding out that a novel treatment is no better than an existing one), just as it can be disappointing when your results come out as bravely predicted by the given theory. It is much more fun to reject the null hypothesis in favor of some proposition or in support of a novel program of social care, compared to, say, no intervention or to treatment as usual.

For a variety of reasons, philosophical and practical, it is very difficult in social work research to prove that a given theory is true (justificationism), but perhaps somewhat more possible to demonstrate that it is false (falsificationism). Both approaches have inherent problems. It may well be that a given result was predicted by Theory X and the outcomes seen as supportive of Theory X. But it is often true that many other theories would have predicted a similar result from one's study, so that the results can be seen as corroborative

not only of Theory X but of Theories Y, Z, and others. It is very difficult to design a study capable of yielding results that corroborate Theory X and not other rival explanations. It is also true that most studies, even those designed with the utmost rigor, possess significant methodological flaws of such magnitude as to cause critics to claim that no meaningful conclusions may be drawn. Examples include the Fort Bragg Study on child mental health services and the Collaborative Depression Treatment Study, both funded by the NIMH, among others.

However, the approach of falsificationism also has its philosophical and methodological uncertainties. Such studies are also likely to possess methodological limitations that will cause the advocates of Theory X to claim that the null result apparently falsifying Theory X was due to factors. Such factors may involve the use of poorly chosen dependent variables or the inappropriate application of the independent variable. Many psychotherapy outcome studies with null results have been attributed, after the fact, to inadequately trained therapists, demand characteristics, poor or absent supervision, or a failure to provide sufficiently prolonged or intense treatment. Another response to negative outcome studies is to develop post hoc revisions of the original theory being tested so that the study results are seen as strengthening, rather than falsifying, the theory.

Greenwald, Pratkanis, Leippe, and Baumgardner (1986), in their paper "Under What Conditions Does Theory Obstruct Research Progress?" address this by noting the tendency of investigators to engage in *theory-confirming* research as opposed to the more legitimate approach they call *theory-centered* inquiry. These authors review how adherence to a particular theory leads researchers in the field of social psychology to undertake a series of theory-confirming studies about a particular phenomenon, the end result of which was to delay legitimate (and presumably more accurate) advances in theoretical knowledge about this phenomenon. As they see it:

> Both Popper and Kuhn maintain that theory testing is the central pole around which scientific activity revolves. In contrast, our analysis suggests that theory should not play so pivotal a role. The researcher who sets out to test a theory is likely to become ego-involved with a theoretical prediction, to select procedures that will lead eventually to prediction-confirming data, and thereby, to produce avoidably overgeneralized conclusions. (p. 223)

These authors bluntly concluded:

> Under what conditions does theory obstruct research progress? Theory obstructs research progress when testing theory is taken as the central goal of research, if (as often happens) the researcher has more faith in the correctness of the theory than in the suitability of the procedures that were used to test it. . . . Theory obstructs research progress when the researcher is an ego-involved advocate of the theory and may be willing to persevere indefinitely in the face of prediction-disconfirming results. (p. 226)

Attempts to confirm that a theory is true, what Gambrill (1999) and others have labeled justificationism, contorts scientific methods. It does science no service to undertake, say, an evaluation of a multimillion-dollar social work program with the aim of showing that it "works." Evaluators, like researchers in general, should be expected to adhere to a commitment to finding out the actual outcomes and to reporting them honestly. This is not simply pie-in-the-sky idealism. The *Guiding Principles for Evaluators* published by the American Evaluation Association (AEA; 2007, D.3) asserts, "Because justified negative

or critical conclusions from an evaluation must be explicitly stated, evaluations sometimes produce results that harm client or stakeholder interests." This can be a difficult standard to cling to in the face of powerful stakeholders who have vested interests in promoting a particular program of social service or in fostering the credibility of a given theory. Although I am not aware of anyone who openly advocates the converse, hiding undesirable findings, I am sure that it does sometimes happen in the social services, tantamount to what has happened in the pharmaceutical and tobacco industries.

Theory Can Promote the Rise of Authority Figures and of Cult-like Phenomena

Henry Adams (1984; the late psychologist, not the novelist) wrote about this in his little gem of an article titled "The Pernicious Effects of Theoretical Orientations in Clinical Psychology." Adams (please forgive the dated male-centered language) observed:

> Theoretical orientations are instigated by a great man or men who have developed a comprehensive theory of the nature of man ... whose controversial ideas elicit criticism and frequently emotional behavior on the part of persons representing the "establishment." This opposition is associated with the recruitment of disciples to spread the "message." If the ideas are controversial, unusual, or threatening, then they often become the object of public attention. Like fashions, these movements often become "fads." (p. 90)

Adams mentions Sigmund Freud, B. F. Skinner, and Carl Rogers as examples of individuals who were seen as authority figures in their respective fields. We often see new journals, training institutes, clinics, web sites and blogs, specialized societies, and foundations established to promote these authorities and their ideas. Although such practices are not necessarily antithetical to good science, the interests of self-promotion and financial gain are very real influences that can distort the objective pursuit of truth. Adams likened professional psychology to a collection of cults centered around revered authority figures, as opposed to being a system of applied clinical science.

For me, warning signs that one is dealing with cult-like interventions include the following:

- Claims that cures are complete or surefire.
- Words or phrases such as "amazing," "never dreamed of," "unique," and "special."
- Belittlement of other approaches.
- The complaint that the advocates of the new approach are being excluded or ignored by the "establishment" or the "mainstream."
- Portrayal of the establishment as too set in its ways to accept anything new, or as protecting its interests against new ideas.
- Invoking mysterious forces unknown to science as responsible for change.
- Vagueness or secrecy about methods or training.
- Charging exorbitant fees for training or supervision in the new approach.
- A reliance on anecdotal claims as evidence of effectiveness.
- A reluctance to subject the new intervention to independent, rigorous evaluation.
- Lack of a clear linkage to credible theory.

Discretion prevents me from giving illustrations of contemporary human service professionals whose practices contain some of these elements, but it is possible that a reader can come up with his or her own examples of such.

Theory Can Promote Division between Researchers and Practitioners

There have been a number of studies evaluating the content of research published in social work and other disciplinary journals, and it seems clear that a majority of social work articles are not reports of empirical research, and the minority of studies that are empirical do not usually address those issues of highest concern to practitioners, namely, evaluations of methods of social work assessment and outcome studies on social work practice. In fact, only about 3% of our field's journal articles report the results of well-designed outcome studies (Rosen, Proctor, & Staudt, 1999), while a far greater proportion are designed to test some aspect of a theory, which may have only ambiguous or spurious applications to practice. This schism between the interests of researchers and those of practitioners has long been with us. For example, Greenwood (1955) noted:

> The history of the relations between social science and social work practice, by and large, has been one of estrangement. (p. 20)
>
> In his efforts to develop theory, the social scientist need not be, and very often is not, concerned with its applicability. He subordinates the requirements of utility to that of theoretical significance. (p. 22)
>
> The social scientist's prime aim is the accurate *description* of the social world, control is a secondary end. The practitioner's chief end is the effective *control* of that world, and to this all knowledge is subjugated. (p. 25, emphasis in original)
>
> Even if social work practitioners were thoroughly conversant with the very best in social science theory, the knowledge would not be directly usable by them. The theoretical formulations of the social sciences are too abstract in form to be directly applicable to problems of practice. (p. 29)

Similar comments have been made by others in our field:

> Small wonder that practitioners have such little use for formal theory. (Bloom, 1965, p. 19)
>
> To try and build a social work house on the shifting sands of social science theory is asking for trouble. (Stevenson, 1971, p. 226)
>
> In our midst we have our abstract theorists who intimidate those very social workers who should be actively involved in research. (Meyer, 1973, p. 96)

Practitioners in turn criticize the disconnect between our disciplinary research output and social work practice (Cheers, 1978), and social work researchers lament the relative ignorance of practitioners in terms of research knowledge and of their use of empirical evidence in making practice decisions. In a survey of over 1,700 professionally trained British social workers, Sheldon and Chilvers (2004) found that fewer than 5% could recall having read a randomized controlled trial and fewer than 4% could explain what is meant by statistical significance. This is apparently not a new problem. As Greenwood (1955,

p. 29) noted 50 years ago, "The plain truth is that social work practitioners are unable to understand the language of social science."

One proposed solution to this problem has been for practitioners to become "more scientific," more literate in the methods of social science, more scientifically discriminating in their adoption of theories, and to undertake systematic evaluations of their own practice, using small-scale nomothetic and single-system research designs. This approach has been called "empirical clinical practice" and has been widely written about in the social work literature for several decades. The ultimate success of this approach remains to be seen, although it has had some clear merits, and, in my opinion, has had a positive impact on the profession. However, the obvious parallel effort is to encourage social work researchers to become more "applied" in their work, to write more simply, and to focus on issues more relevant to social work; these suggestions have received much less attention. The work of Robert Schilling (1997) in establishing the Social Intervention Group at the Columbia University School of Social Work is a fine example of another problem-focused approach to undertaking intervention research in agency settings, with modest budgets and without a complex research infrastructure. Another step in this process is to encourage doctoral students to undertake outcome studies as their dissertation topic (see Harrison & Thyer, 1988).

All too often, it seems that doctoral students opt for dissertation research that consists of asking one or more groups of individuals (sometimes college students, sometimes social work clients, usually some form of convenience sample of unknown representativeness) to complete one or more survey instruments in an effort to test some hypothesis derived from some theory. Also increasingly common is the practice of having doctoral students obtain access to some source of secondary data, perhaps a national survey study, perhaps data collected in one's state, or perhaps data from a faculty member, and conduct a secondary analysis of these data originally gathered by someone else. I am not disputing the usefulness of conducting such secondary analyses, but I very much regret that doctoral students miss the opportunity to design a study from the ground up, involving the evaluation of their own practice or of an existing social work program, selecting outcome measures, prospectively testing novel hypotheses, getting involved in the nitty-gritty of field research with real live clients wrestling with serious problems. To undertake such a study under the careful mentorship of a major professor, guided by a supervisory committee, in the context of earning the research PhD is literally a once-in-a-lifetime opportunity which, once lost, cannot be re-created.

The psychologist Ron Blount (Blount, Bunke, & Zaff, 2000, p. 81) has written about the analogous situation in clinical psychology training:

> In many graduate programs, a lack of theory building or theory testing for a thesis or dissertation often brings negative comments by some of the voting faculty members on committees. The threat of failure is enough to assure that most clinical students will attempt to design their study around theory development or testing. An additional reason for the preponderance of explicative research in graduate programs is the need for the student to finish the study in a short period of time. The existence of large data banks, which may have already been collected, promotes the student's design of time-efficient studies using those data.

Blount et al. argue for the value of what they call "treatment research" (basically, outcome studies) as opposed to the far more prevalent "explicative" or theory-testing research found

in clinical psychology. Similar calls can now be widely found within the social work literature.

The point here is to suggest that social workers refocus our research endeavors into more applied investigations since, as suggested by Holosko and Leslie (1998), client-centered empirical research is one of the characteristics that define a given study as *social work* (and not social science) research. Across the nation, in every state and in virtually every community, there currently exist social service programs that are attempting to serve numerous clients with complex problems, even as we speak. Many millions of dollars of taxpayers' money, as well as substantial support from the private sector, go into the provision of welfare programs, various prevention efforts, substance abuse treatment services, mental health care, child abuse and neglect prevention, foster care and adoption services, the alleviation of homelessness, the promotion of health care, and more. Each and every one of these programs, from Big Brothers and Big Sisters, Habitat for Humanity, and Alcoholics Anonymous, to wrap-around services for emotionally disturbed youth and hospice care, is crying out for talented social work researchers to undertake well-designed studies of the long-term outcomes of such interventions. Undertaking such program evaluations would be a far more practical and useful undertaking for both doctoral students and established faculty researchers than most of what passes for serious scientific research in our field.

In some cases, but not all, these existing social service programs are genuinely grounded in some form of social science theory, and a well-designed outcome study may have potential implications for the validity or falsity of the theories that these programs may be based on. In some cases, a genuine social science theory is conspicuously absent from the conceptual foundations of a particular program and the daily awareness of the practitioners implementing these programs. The true litmus test for this is to review a given program's mission statement and founding documents to see if reference to social science theory is present. After this, simply ask the practitioners who are daily providing services something like "Can you tell me what theory your program is based on?" or "Can you give me a theoretical explanation as to why you do things this way here?" In many cases, you will fail to find any conceptual foundation in a formal theory, and practitioners will respond with a blank stare, a quizzical look, or a rueful smile, as they acknowledge the absence of formal theory guiding their actions. Researchers have actually gone to agencies and asked practitioners these types of questions, and found that a substantial proportion of them seem to be working relatively free from the benefits or disadvantages of formal theory. This is not something to be lamented—it is reality, and although grounding a program in formal theory may have its advantages, these have yet to be well established. In the meantime, we should acknowledge that often our social work services are not based on theory (and most certainly not empirical research), but are sometimes derived from religious convictions, tradition, history, authority, supervisory preferences, educational backgrounds, the whims of funding agencies, or the influence of persuasive politicians. It is no service to deductive theory to claim that a given theory is actually in operation, hidden, so to speak, only that the program's founders and current service providers are unaware of it. Theory, for it to be worthy of the name, must be something held in conscious awareness, explicit, and must provide guidance for many of one's daily actions undertaken in the name of intervention.

There are many examples of interventions based on theory and that translate propositions from that theory into practice. Psychoanalysis, Azrin's Job-Finding Club, the Community Reinforcement Approach to Alcohol and Drug Abuse, systematic desensitization, Alcoholics Anonymous, cognitive therapy for depression, Lovaas's early intensive behavior therapy for autistic youth, exposure therapy and response prevention for certain of the anxiety disorders, and feminist psychoeducational work for the victims of domestic violence are all examples of theory-based interventions. This is not to say that the theories undergirding these interventions are correct—it is obvious that in many cases they are not.

Alcoholics Anonymous is based on the medical theory that alcoholics suffer from a biologically based allergic-like reaction to alcohol and that ingesting alcohol triggers an almost irresistible lifelong craving for more alcohol. This theory, at least, has several virtues. It is eminently testable. In fact, double-blind studies involving giving alcoholics ethanol surreptitiously have rejected this theory rather convincingly. The etiological theory of AA has also led to clear applications to treatment, namely, the recommendation of complete abstinence. The effectiveness of AA as a treatment for alcoholism remains unclear (MacKillop, Lisman, Weinstein, & Rosenbaum, 2003), but the AA 12-Step program has the virtues of transparency and replicability. It is possible that in time AA will demonstrate that it is indeed a highly effective treatment for those who drink too much. This would not be the first time that an effective treatment emerged from an incorrect etiological theory. Programs like AA and others mentioned earlier do illustrate how theory can inform practice. However, the extensive focus we give to testing explicit theory in our research does a disservice to practitioners who do not need to know if a theory is true or false, but who need to know, with objective data, if the clients they are serving are getting better. We in the academy need to lend our talents more to answering the questions of greatest concern to practitioners, not those derived from theories we are curious about.

WHERE CAN WE GO FROM HERE?

What Are Alternatives to Basing Education, Practice, and Research Primarily on Theory?

Among a large segment of the community of professional social workers, our educational curricula, practice interventions, and choice of research projects are primarily guided by formal theory. As reviewed in this chapter, this can sometimes pose problems, especially if the theory is a bad theory. What are some alternatives to a theory-based profession?

I am very much in favor of one model that had its origins at the University of Chicago School of Social Service Administration through the pioneering work of Professor William Reid, Ann Shyne, and Laura Epstein, which came to be known as task-centered practice (TCP). As originally conceived, TCP was not wedded to any particular psychosocial theory. As described by the authors, "We have drawn upon a range of theories and practices. We have been guided by the findings of research, when such were available or obtainable, and by our clinical experience, when empirical evidence was lacking" (Reid & Epstein, 1972, p. 1). This of course is remarkably congruent with the tenets of contemporary evidence-based practice. Reid also wrote, "A different mode of developing social work technology is

needed. *Instead of an esoteric theory*, the starting point in the process would be the specific types of problems and theories relevant to them" (Reid, 1977, p. 377, emphasis added).

A precursor to this view can be found in the work of Loeb (1959, p. 15): "Although therapeutics should be derivable from theory, it may be appropriate at this point to work at effecting change and to capture as much evidence as possible of what occurs, without primary preoccupation with theory." Echoes of these views can be readily found in related fields, such as psychology:

> The continued prominence of theoretical-orientation classification belies a breakdown in its applicability to contemporary psychology. Psychotherapy remains a stronghold. However, with internal and external forces endorsing particular approaches, theoretically based practices will be forced to yield to evidence-based ones. (Smith, 1999, p. 269)

Task-centered practice was not explicitly based by its founders on any particular social science theory, either of general human functioning or specific problems, and it was not wedded to any particular approach to intervention (e.g., individual practice, group work, family therapy). Over time, Reid and his colleagues undertook and published a marvelous series of randomized controlled studies of TCP, in the context of a widening array of clients and problems, and the development of a model more specific to TCP was undertaken. However, many of the central practices of TCP can be parsimoniously explained by their overlap with social learning theory and behavioral interventions, something that Gambrill (1994) contended was seriously underplayed or unrecognized by Reid. Nevertheless, regardless of what the true theoretical frameworks undergirding TCP are, the model is an apparently useful one, as defined by its ability to be applied by professional social workers to effectively alleviate pressing human problems. In time, Reid (2000) developed *The Task Planner*, a textbook designed to provide human service professionals with what are, in effect, modest practice guidelines to help apply TCP to a wide array of common psychosocial problems. In general, I support a problem-focused approach to social work education, practice, and research whereby professionals choose selected issues of societal or interpersonal importance and relate their training, practice, or investigations to those issues, drawing on relevant scientific research studies as well as sound theory, professional values, ethical standards, and client preferences.

Alternatives in Social Work Education

Consistent with CSWE educational policy, I do believe that the theoretical content provided in our professional programs should be primarily those reasonably well supported by empirical research, and we should leave to a well-deserved rest and as historical footnotes those that fail to meet this standard. This would not be an easy task. It would be akin to the rigorous purging of the medical school curriculum engendered by the Flexner (1910) report nearly 100 years ago (his influential study documenting the lack of an empirical foundation in medical education, and his suggested replacement of quack theories and practices with those more firmly supported in science). We are notoriously reluctant to critique the validity of one another's theories, as this sort of behavior violates a "gentlemen's agreement" within the academy to leave each other alone to pursue our own interests. As an example, David

Howe (1980, p. 319) wrote a nice article titled "Inflated States and Empty Theories in Social Work," in which he noted:

> Social work has rarely discarded any of its "theories," leaving them to accumulate in books and courses, swelling of what is taken to be the occupation's knowledge base, giving an impression of development whereas all that may be happening is the steady accumulation of unrelated relics.

In general, Howe contended that our preoccupation with theory was in part an effort to acquire one of the features of supposedly professional and scientific professions—in other words, our "theoretical knowledge," which

> furnished social work with its credentials and provided observers with a yardstick by which to judge the occupation's activities. The integration of the profession's theories into expert practice has become one of the main criteria by which we are told we might recognise the competent social worker. (p. 321)

This might be good for the professionalization and prestige of the field of social work, but such opportunistic reasons hardly make for the genuine integration of social science theory into our education, practice, and research.

Closer to home than Howe's article written 28 years ago, during a CSWE conference in Atlanta I attended I had occasion during a public question-and-answer session to ask the distinguished social work educator Werner Boehm, "Dr. Boehm, are there any theories of social work practice which you do *not* recommend should be taught to students?" With a rueful smile, he acknowledged his reluctance to cite any specific ones, implying that this would be too conflictual to "get into." Perhaps he was right to take this approach.

In any event, I hope to see the day when social work classes titled, say, Social Work Practice: Psychodynamic Approaches or Behavioral Social Work are gradually expunged from the curriculum and replaced with problem-oriented courses, titled, say, Social Work Practice in the Field of Substance Abuse or Social Work Practice in the Field of Child Abuse and Neglect, wherein the faculty would provide some empirically supported theoretical content, but where the majority of instruction would involve learning to provide evidence-based interventions related to that class's topic. Evidence-based practice guidelines, of which there are a growing number, could also play an important role in social work education. And field placements, in part, could be selected on their basis to reinforce this didactic training. Some small steps are being taken in this direction, such as at Washington University, which has adopted evidence-based practice as its program's conceptual framework (Edmond, Rochman, Megivern, Howard, & Williams, 2006; Howard, McMillan, & Pollio, 2003).

History teaches that practice methods can be effectively taught without a foundation of valid theory. For example, one of the earliest known psychosocial treatments subjected to experimental outcomes research, systematic desensitization (SD), was based on the theory called reciprocal inhibition, and students of SD spent a fair amount of time learning this. However, it gradually emerged in the 1960s and early 1970s that the mechanism of action for the success of SD was *not* reciprocal inhibition. Therefore, of what value was this theoretical training? Perhaps it made some sort of heuristic sense and provided the therapist with a line of plausible patter he or she could deliver to the client, maximizing, perhaps, the placebo power of this treatment. But few of us would be comfortable recommending that

contemporary students be knowingly taught a theory now known to be false as a component of training in practice skills. It is interesting to note that SD seemed then (and still seems) to work pretty well, even though it was based on a theory that ultimately proved to be invalid. This illustrates the less than intimate connection that may exist between interventions and theories.

More recently, in the early 1990s, teaching the techniques of EMDR was prefaced by fairly extensive exegesis into the presumptive theoretical mechanisms of actions of how saccadic eye movements affected the brain's neurophysiology, and the proper sequencing and timing of such back-and-forth eye movements was held to be absolutely crucial to obtaining a cure. We now know that the purported benefits of EMDR have absolutely no bearing on one's eye movements, and that all the time and writing devoted to this theory was also meaningless patter.

Similarly, many evidence-based practice guidelines can be adhered to by individuals lacking a genuine theoretical (much less factual) understanding on the part of the practitioner of the treatment's purported mechanisms of action. Please note that I am *not* suggesting that this is a desirable state of affairs. I am merely asserting that this can sometimes happen. If the end results are social workers who can genuinely help clients, my concern that they be able to provide a theoretical rationale for their actions is far less pressing. Remember also that the converse position has been dominant for many years in social work—we have spent more energy ensuring competence in "theory" than we did in empirically based practice skills. And for the most part this has not been wise.

Alternatives in Social Work Practice and Research

Recommendations similar to those outlined earlier have been around for many years in social work. For example:

> Although therapeutics should be derivable from theory, it may be appropriate at this point to work at effecting change and to capture as much evidence as possible of what occurs, without primary preoccupation with theory. (Loeb, 1959, p. 15)

> The idea that casework needs a superordinate theory or theories is no longer tenable. The knowledge base of future practice will likely consist of a variety of empirically demonstrated propositions from different perspectives, tied together by at least one major thread, that is, their utilization leads to success in helping clients. (Fischer, 1972, p. 108)

The rise of empirically based treatment manuals and practice guidelines has shown that very specific and highly detailed psychosocial interventions can be taught to human service professionals, who can then apply them in practice and obtain positive results with clients (cf. LeCroy, 1994). These manuals more often than not focus on what to do in certain circumstances and can be pretty thin in terms of communicating theory related to a problem's etiology or the proposed mechanisms of change the intervention is based on. To the extent that such evidence-based treatment manuals and practice guidelines can be used to train practitioners who can effectively help clients, this is a good thing for the profession. I also freely admit that developing valid etiological theories for the psychosocial problems of concern to social workers is a very important undertaking and should be a focus of our attention. But we need not wait upon the emergence of such theories to develop and

test specific social work interventions. Indeed, for every conceivable problem there already exists interventions, and investigating these is also a good thing for social workers to undertake.

Sometimes a given field of practice is so undeveloped that exploring theoretical formulations and proposing tests of these is seen as premature. For example, in the September 2004 issue of *Social Service Review*, Krisberg critiqued a recent book on juvenile delinquency as follows:

> The editors of this book asked the invited authors to put forward theoretical formulations on the causes of juvenile delinquency and to propose bold hypotheses that could be tested empirically. In this, the editors assumed that much is known about patterns of juvenile delinquency behavior and that the most pressing scientific task is theory construction. I am not certain where the editors got these assumptions. The world of juvenile misconduct is so varied and nuanced that it is difficult to imagine that "we know enough." (p. 521)

In critiquing a typology of juvenile delinquency, the author claims, "Such a distinction is not sufficient for theory building or for planning intervention strategies" (p. 521).

Thus, despite the tenets of science, whereby ideally research is guided by theory, I believe that there are occasions when legitimate research can and should be undertaken without being guided by theory. I believe that this happens far more often than we recognize, in part because we sometimes apply a gratuitous veneer of theory, sometimes before, but sometimes after, we write up our work. Practice too is, more often than we recognize, not guided by formal deductive social science theory. As noted by Gottesfeld and Pharis (1977, p. 13):

> Early social workers—those bold or foolish men and women who chose to wrestle with these problems—*had no convenient theories to help them plan their activities*. . . . Americans who would help their fellow man had no legislation and *little helping theory* to rely on. (emphasis in original)

Jay Haley (1963, p. 214), a pioneer in the field of marital therapy, said, "Marital therapy has not developed because of theory; it appears that people were struggling to find a theory to fit practice." What was true in the early days of formal social work still holds today. A review of 252 empirical studies on psychotherapy published in the *Journal of Consulting and Clinical Psychology* found a 2-decades-long decline in theory-guided research and a rise in pragmatic, clinically oriented studies. By the 1980s, only about 31% of the psychotherapy studies had a theoretical rationale (Omer & Dar, 1992). It may well be that to have an explicit theoretical rationale is more the exception than the rule in psychotherapy research.

And as in practice, so too do we find analogous situations in research:

> Modern theorists of science—Popper, Hanson, Polanyi, Kuhn, and Feyerabend included—have exaggerated the role of comprehensive theory in scientific advance and made experimental evidence seem almost irrelevant. Instead, exploratory experimentation *unguided by formal theory*, and unexpected experimental discoveries tangential to whatever theory motivated the research, have repeatedly been the source of great scientific advances, providing the stubborn, dependable, replicable puzzles that have justified theoretical advances at solution. (Cook & Campbell, 1979, p. 24, emphasis added)

Social work education and research, as you might begin to suspect, is something that I hope to see become more applied and outcome-oriented, with a greater proportion of

program evaluation and other forms of outcome studies being represented in our professional literature. When training BSW and MSW students to be consumers of research, we could use more examples of services research for them to read, to critique, and to teach them how to use contemporary sources of information, such as the web sites of the Campbell Collaboration and the Cochrane Collaboration, as sources of current information on evidence-based practices. Learning to read and critique a randomized controlled trial or even a systematic review is a professional skill that will have lifelong value (Holosko, 2006).

CONCLUSION

I began this chapter by stating my respect for good theory that is used to guide well-crafted research, in a recursive process that yields closer approximations to nature's truths about the reality of social problems, and of the mechanisms of action of psychosocial interventions. This is how I was trained as a professional social worker, and this is how, to a large extent, I have guided my own research agenda over the past 25 years. Personally, I believe that the tenets of contemporary social learning theory, involving an amalgam of respondent, operant, and observational learning, have much to contribute to both social work research and practice. A substantial proportion of my empirical research has indeed been guided by social learning theory, as have many of the interventions I have investigated. I have also written extensively on the theoretical contributions of social learning theory to social work across the spectrum of practice, from one-to-one therapy to group work, community practice, and the design and analysis of social policy on a national level. By no means should I be considered to be antitheory.

At the same time, I have described how our discipline's preoccupation with theory, much of it bad theory, has exerted a deleterious effect on social work education, practice, and research. I have gone so far as to state, "There is nothing as harmful as a bad theory" (Thyer, 2004, p. 141). While there is much in our social work literature extolling the virtues of theory, there is very little commentary on how the incorporation of bad theory, or the giving of superficial attention to theory, instead of genuinely integrating theoretical concepts into research projects from their conception can have harmful consequences. I hope that my attention to these latter consequences of the use of bad theory in social work education, practice, and research are taken in the constructive manner in which they are intended: not as a call for the abolishment of theory, or its repudiation, but for a more informed and critical appraisal and selection of theories constituting the edifice of professional social work. At the same time, I believe that the education of professional social workers and the choice of interventions used by practitioners can and should be more evidence-based and less theoretically driven.

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