11 Behaviorism, Social Learning, and Exchange Theory

Hard Changin'
To leave the past behind
Hard Changin'
Gonna take some time
Hard changes comin' down
Hard changes
Takin' higher ground
Love always comes around
Keep tryin' 'n' tryin' . . . tryin' 'n' tryin' to change
God, it's hard to change.

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BEHAVIORISM, SOCIAL LEARNING, AND EXCHANGE THEORIES

- focus our attention on observable behavior
- analyze external factors involved in learning
- examine how cognition and emotion mediate behavior
- explain human interaction in terms of the rewards and benefits
- assist us in formulating assessment and treatment plans for individuals and groups

Behaviorism focuses on learning and the way in which behavior is shaped by its antecedent conditions and consequences. In rejecting mentalistic constructs such as mind, consciousness, and other internal processes, behaviorism stresses the importance of studying observable behavior rather than phenomena that cannot be empirically verified. Social

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learning theory developed many years later as a reaction to behaviorism's failure to account for internal processes that affect human behavior. Social learning theory posits that learned behaviors are mediated by thoughts, expectations, and emotions and stresses the importance of observational learning or modeling. Exchange theory, which evolved from behavioral psychology, functional anthropology, and utilitarian economics, seeks to explain human interactions through the dynamics of rewards and benefits. Although there are a variety of theorists writing in this tradition, rational, purposive behavior is believed to underlie all exchange.

Behaviorism

Historical Context

Behaviorism emerged in the early 1900s primarily through the work of John Watson (1924), Edward Thorndike (1931), and Ivan Pavlov (Gibbons, 1955), among others, and significantly influenced psychological thinking throughout much of the twentieth century. Although behavioral theory has experienced a decline in popularity over the past thirty years, behavioral concepts have had a substantial influence on psychology, and the principles of behavioral learning have contributed greatly to the theories and technology of human change. Additionally, radical behaviorism, social learning theory, and an amalgamation of these theories, generally called *cognitive behavioral* theory, continue to have utility in understanding human behavior (Kendall, 1993, Sheldon, 1995).

Behavioral theories may be classified in two categories: classical behaviorism, as exemplified by the work of John Watson, and neobehaviorism, as seen in the work of B. F. Skinner. Although behaviorism originally represented a shift away from nonobservable events (such as thoughts), social learning placed the internal processes of thought and perception back into behavioral formulations. Since then, a mesh of theories has created what is now termed cognitive behavioral theories, which include aspects of behavioral, neobehavioral, and cognitive conceptualizations of human behavior. The terms *behavior theory* and *learning theory* have been used interchangeably, particularly in the formative years of the development of behaviorism, with certain theorists favoring one term over the other. Social learning theory, however, has moved beyond the purely behavioral perspective and has made substantial contributions to other theoretical areas, such as theories of motivation, attribution, and social cognition.

Key Concepts

Behavioral theories are primarily interested in learning. Human beings are seen as having multiple processes of acquiring or changing behaviors. Two primary processes through which learning occurs are classical conditioning and operant conditioning. *Classical conditioning* emphasizes learning that occurs on the basis of association, when a naturally eliciting stimulus is paired with a neutral stimulus. *Operant conditioning*, in contrast, stresses the importance of reinforcement rather than association of one stimulus with another. A

newly learned behavior may be called a *conditioned response, reflex,* or *habit*. Behavior may be motivated by a drive or need and is strengthened or weakened by *reinforcement* in the form of a *reward* or punishment. In social learning theories, behavior is learned through observation or *modeling* and is then shaped by internal cognitive processes prior to performance of learned behaviors. These and other related concepts are discussed in more detail below.

Classical Behaviorism

John B. Watson is generally credited with the founding of behaviorism as a movement within psychology. Watson defined behaviorism as a natural science aimed at the prediction and control of human behavior and held that behavior could be shaped through the selection and application of appropriate stimuli. In a replication of Pavlov's earlier work on conditioned reflexes, Watson produced a conditioned reflex in an 11-month-old boy who was initially not afraid of a tame white rat (Corsini & Marsella, 1983). Watson showed that the child could be made to fear the rat by simultaneously pairing the sight of the rat with a stimulus that induced a fear response, in this case a loud noise made out of the child's sight. Thus, through *classical conditioning,* sight of the animal alone eventually elicited the same fear response as the noise (Watson, 1924).

The child came to *associate* fear of the noise with sight of the rat and, over time, the sight of the rat alone became sufficient to produce fear in the child. When responses to stimuli become connected and patterned over time through repetition, this forms a *habit,* which is a stimulus–response (S-R) set that has been conditioned. Watson saw this associational process as being reflexive in nature but did not give much credence to reinforcement as an element in habit formation. Rather, he believed that learning was a function of the immediacy of the relationship between stimulus and response. He further believed that psychopathology was the result of conditioned learning rather than internal conflicts of the id or unresolved Oedipal conflicts.

Watson carried his behavioral position to an extreme by claiming that given an opportunity to control the environment of children, he could raise children to become whatever he wished them to be. He advocated this premise in *Psychological Care of the Infant and Child* (1928), one of the first childcare books ever published. His position reflected an unadulterated behavioral perspective, which explicitly rejected the role of heredity and mentalism in determining human behavior. It also reflected a search for objective laws that govern learning in an attempt to rid psychology of subjectivism. In doing so, distinctions between humans and other species were effectively eliminated.

The stimulus-response basis of Watson's position was first developed by the Russian physiologist Ivan Pavlov, whose theory of the conditioned reflex had a profound effect on psychology (Martindale, 1988). Pavlov showed that an environmental stimulus that was not initially sufficient to produce a response could be made sufficient by pairing it with a stimulus that already elicited the response. Through repetition the neutral stimulus would come to produce the response on its own.

In his famous experiment with dogs, he placed an *unconditioned stimulus* (meat powder) on a dog's tongue. This produced an *unconditioned response* (salivation), because dogs

normally salivate in the presence of food. During *repeated trials* he paired a ringing bell with the meat powder and found that the bell alone eventually became a *conditioned stimulus* that caused a conditioned response (salivation when the bell was rung). Based on the early work of Watson and Pavlov, classical, or *respondent conditioning* (as it is alternately called), provided the theoretical and empirical basis for behavioral psychology.

In the process of his scientific study, Pavlov developed several other principles that have been applied repeatedly to many theories in this realm. Three commonly used principles are generalization, extinction, and spontaneous recovery. *Generalization* refers to the "spilling over" of the conditioned response to a stimulus that is similar, but not identical, to the conditioned stimulus. Thus, a bell with a slightly different pitch can elicit the conditioned response of salivation from the dog. *Extinction* of learning refers to a gradual decrease and eventual disappearance of a conditioned response when the conditioned and unconditioned stimuli are no longer paired. After some time, when meat powder is presented to the dog without any bell, the bell loses its ability to elicit salivation. However, if the original conditioning was given sufficient effort trials, *spontaneous recovery* of a response occurs as the conditioned reflex returns. For example, if, after extinction, the food is again paired with the bell, the dog quickly recovers the conditioned response and salivates to the bell alone.

Although Pavlov's work is not an encompassing behavioral theory, and some psychologists do not view him as a behavioral theorist, his work was tremendously influential in shaping the field of S-R psychology. In addition to his direct contribution of the conditioned reflex and its related laws, his legacy includes an emphasis on rigorous experimentation and the systematic collection of data.

A contemporary of Watson, Edward Thorndike independently proposed a theory of learning that similarly was built on the foundation of stimulus and response. He held that although human learning resulted from changes in the internal nature and behavior of people, the changes could only be known by their apparent, observable behavior. For Thorndike, behavior meant anything that humans do, "including thoughts and feelings as truly as movements . . . (with) . . . no assumptions concerning the deeper nature of any of these" (1931, p. 4). Like Watson, Thorndike eschewed an emphasis on consciousness over observable behavior and rejected introspection in data collection; any activity internal to the person could only be discerned through overt behavior and then could only be known as behavior rather than as consciousness.

Despite this stance, Thorndike was concerned with inner responses and connections as well. He noted that situations could occur wholly in the mind, such as when one emotion or idea evokes another. To explain the more sophisticated skill acquisition and problem solving in humans, he proposed the notion of learning by ideas. He believed that failure to account for these phenomena reflected overzealous behaviorism. In addition, he argued that teaching a dog to salivate at the sound of a tone failed to meet the criteria for a behavioral theory, because the stimulus and response could not truly be said to "belong" together; rather, one simply followed the other in time. Thorndike also noted that there did not seem to be any reward for the animal that would result in a strong connection between stimulus and response. He believed that Pavlov demonstrated only the prototype of learning and, while valuable in its own right, it fell short of a true learning model. In his reformulation, Thorndike emphasized the role of *consequences* that could serve to strengthen or weaken

the S-R connection. He proposed that some consequences could be "satisfyers" (a condition that may be actively sought), while others could be "annoyers" (which are actively avoided). Thus, learning could be "stamped in," or reinforced, by what Thorndike dubbed the "Law of Effect."

Thorndike's work was highly influential; his efforts to move beyond associational learning and conditioned reflexes and to account for behavioral consequences as well as highly complex cognitive processes represented a substantial leap forward for behavioral psychology. In a similar fashion, E. C. Tolman rejected Watson's extreme environmentalism and his concomitant dismissal of mentalism. Rather, he proposed that intervening variables such as expectations, purposes, and cognitions were critical factors in the S-R connection (Tolman, 1951). Many of these later formulations formed the basis for the development of both social learning theories and the neobehaviorist movement. Thorndike's ideas on the consequences of behavior predated the radical behavioral notion of reinforcement and were a central component of the seminal work of Clark Hull in the development of his social learning theory.

Neobehaviorism

Radical or *operant behaviorism* represented an evolutionary extension of the classic behavioral line of thought (Catania, 1988; Skinner, 1974, 1988a, 1988b, 1988c, 1988d; Thyer, 1988). Maddi (1980) has suggested that radical behaviorism, which finds its contemporary expression in the work of B. F. Skinner, is derived more from Watson than from Pavlov. He noted that "what makes radical behaviorism radical is the unwillingness to make assumptions about the existence and importance of drives" and the position that "even the minimally mentalistic concept of habit is unnecessary for understanding" (p. 596).

B. F. Skinner   Concerned with misconceptions about the behaviorist position, Harvard University research psychologist B. F. Skinner attempted to lay a clear foundation for analytic behaviorism. He acknowledged the role of innate endowment in behavioral development in an attempt to counter the claim that behaviorism disregards genetic determinism. Drawing on Darwin and other evolutionists, Skinner held that people are shaped by natural selection, a process through which individual characteristics are favored, or selected, in interaction with the environment. He posited that the drive to survive is a primary motivator and, through evolution, the characteristics that lead to success in the person-environment interaction are favored over those that are less successful. One relationship between behavior and environment concerns reflexes, historically taken to refer to physiological processes such as breathing. For Skinner, however, a reflex was only descriptive of behavior, not a causal explanation, and he believed that person-environment relations were too complex to be understood in reflexive terms.

Skinner believed the conditioned S-R response to be the simplest example of learned behavior, noting that people have evolved the capacity to make connections between environmental stimuli and behavior, drawing on reinforcement as a means of maintaining the behavior over time. In line with the S-R theorists, he held that the process of respondent

conditioning was clearly linked to conditioned stimuli and he concurred with the idea that some behaviors are learned this way.

However, he argued that a different strategy, that of *operant conditioning*, was necessary for people to deal effectively with new environments. In contrast to respondent conditioning, which focuses on the antecedents of behavior, operant conditioning is concerned with the consequences of behavior, what happens *after* the behavior occurs. In line with Thorndike's Law of Effect, he proposed that "Behavior is shaped and maintained by its consequences" (Skinner, 1965, 1972, p. 16). Things such as food, water, sexual contact, and escape from harm are crucial to survival and any behavior that brings these things about has survival value. These environmental factors may be said to be a consequence of the behavior rather than antecedent to it, and behavior with a survival consequence is likely to be repeated. Thus, the behavior is *strengthened by its consequence* and the consequence itself is the *reinforcer* for the behavior. For example, when a hungry person acts in a manner that brings about food, the behavior is reinforced by the food and is thus more likely to be repeated. In sum, when behavior results in a consequence that is reinforcing, it is more likely to occur again. Because *operants* do not depend on an antecedent stimulus, they are be said to be emitted rather than elicited. The term *operant behavior* indicates that people operate on their environment to produce desired consequences (Corsini & Marsella, 1983).

The consequences of a response leads either to a strengthening or a weakening of that response. Consequences that increase the likelihood of the response are called *reinforcers*, while consequences that result in a decrease are called *punishers*. It should be noted that punishment is not the same as negative reinforcement because both positive and negative reinforcement leads to a strengthened response. A positive reinforcer is a specific consequence (such as food, money, or praise) that is *added* to the environment. A negative reinforcer is a consequence (such as shutting off a loud alarm clock or getting out of the rain by opening an umbrella) that is *removed from* the environment. In other words, to increase the likelihood that a behavior occurs again, *negative reinforcement* involves the removal of an aversive *stimulus*. In contrast, punishment is the application of an aversive *consequence* (such as a slap in the face) or the removal of a positive reinforcer (such as withholding television privileges) that is added to the environment to weaken the response.

Skinner identified two types of reinforcers for humans; primary reinforcers and secondary (or conditioned) reinforcers. *Primary reinforcers* are unconditioned stimuli like food, water, and warmth that do not require learning to be effective reinforcers. *Secondary reinforcers* are learned and developed through pairing with primary reinforcers. Such secondary reinforcers as money, attention, approval, and affection are extremely important in shaping human behavior. *Aversive stimuli*, like those applied in punishment, are also important, and when people learn to avoid an aversive stimulus, it is called *avoidance learning*.

Skinner also demonstrated the effect of various reinforcement schedules on the strength of a learned response. Responses can be reinforced either continuously or intermittently. In *continuous reinforcement*, reinforcement is delivered after every correct response. *Intermittent schedules* can be based on intervals or ratios and can be fixed or variable. In fixed *interval schedules*, a specific interval of time is identified (for example, one minute), and the first correct response after that interval is reinforced. *Variable interval schedules* vary the amount of time between rewards for correct responses (for example,

from a few seconds to a few minutes) and have been found to produce learning that takes longer to extinguish than that which has been acquired through either continuous or fixed schedules of reinforcement. *Fixed ratio schedules* establish a specific frequency of reinforcement (for example, every fifth correct response), whereas *variable ratio schedules* vary the frequency of rewards. Skinner also devised other complex reinforcement schedules to study their effect on learning. His rigorous research has shown that each of these different schedules has a different effect on the strength, maintenance, and weakening of the response through extinction.

Skinner's primary contribution to behaviorism was to reduce its dependency on antecedent conditions in explaining human behavior. Additionally, his emphasis on rigorous investigation through experimental analysis lent considerable credibility to his theory. Skinner's work was not, however, without considerable controversy. While acknowledging the importance of higher mental processes in determining behavior, he appeared to disregard the importance of cognition in learning of behavior. For Skinner, reasoning and logic were behaviors like any others that could be understood in terms of the schedules of reinforcement through which they were learned. Although this position may seem to be simplistic, Skinner argued that all behavior could be understood in the same way.

In his rather creative novel entitled *Walden Two* (1948/1976), he described a fictional utopian culture based on behavioral principles, termed "behavioral engineering," that were applied to behavior change and child rearing. Although Skinner did not believe in formal developmental stages, he did propose specific phases of environmental manipulation that corresponded to learning for different age levels. Essentially, he proposed that in the earliest years, a child's needs should be quickly and completely fulfilled. Through behavioral engineering, the demands associated with normal life are then gradually introduced at a rate by which the child can master them. This type of controlled operant conditioning, he argued, would strengthen positive emotions such as love and joy, which he believed were critical to producing optimal development that would promote happiness and well-being (Skinner, 1948/1976; Thomas, 1985). However, due to his assertion that all behavior could be changed through such engineering, Skinner's work has received limited acceptance in mainstream psychology. Figure 11.1 illustrates the key concepts of Skinner's radical behaviorism.

Social Learning Theory

Social learning theory is the school of behavioral thought that has best combined internal and external processes. Drawing on the work of Pavlov, Watson, Thorndike, and others, Clark Hull (1943) proposed a theory of behavioral learning that influenced the development of the more formal social learning theories of Miller and Dollard (1941) and Bandura and Walters (1963). Adopting and adapting Thorndike's Law of Effect, Hull was primarily concerned with overt behavioral responses and conditions that serve as reinforcers. In addition, he posited that we can infer the existence of intervening variables such as ideas and emotions (and other internal processes that are not directly observable), as long as they are directly tied to observable input and output. For example, we can directly observe desired changes in a person's performance, but we must infer that learning (an internal cognitive process) has taken place (Hilgard & Bower, 1966).
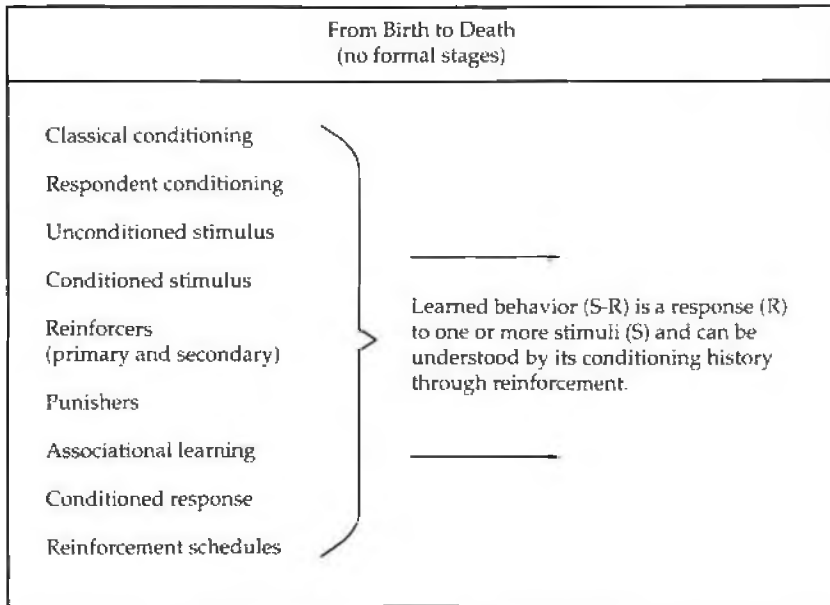
Life Span Continuum

FIGURE 11.1. Key concepts in radical behaviorism.

The postulation of intervening variables based on internal processes led to a new behavioral formulation—one based on S-O-R rather than S-R. According to Hilgard and Bower (1966), "the stimulus (S) affects the organism (O), and what happens as a consequence, the response (R), depends upon O as well as upon S" (p. 147).

In contrast to classical or radical S-R behaviorism, social learning theory is rooted in the S-O-R formulation and places its emphasis on social and cognitive factors that contribute to behavior. According to Thomas (1985), social learning theory offers a synthesis of cognitive psychology and principles of behavior modification in addition to an analysis of social influence on development.

John Dollard and Neal Miller

Yale University psychologists John Dollard and Neal Miller were influenced by Hull but took issue with his apparent failure to account for the social context in which the laws of learning are exercised. Dollard and Miller noted that "To understand thoroughly any item of human behavior . . . one must know the psychological principles involved in its learning and the social conditions under which this learning took place. It is not enough to know either principles or conditions of learning; in order to predict behavior both must be known" (1941, p. 1).

For Dollard and Miller, four fundamental factors that influenced learning were drives, cues, responses, and rewards. *Drives* are central to behavior and our basic motivation stems from our need to reduce either innate or learned drives. They proposed that

primary drives such as hunger and thirst are innate, while secondary drives such as guilt or anger are learned. Because secondary drives are learned, they can be extinguished, whereas primary drives can only be satiated. They believed that *fear* and *anxiety* were two of the strongest acquired drives and represented the societal reflection of pain; pain becomes satisfied through its expression as anxiety. Further, they proposed that acquired drives not only represent a conditioned response but also are capable of motivating new forms of behavior (Dollard & Miller, 1950). Drive reduction, according to Dollard and Miller, is the most important form of behavioral reinforcement (Ewen, 1988).

Because drive itself does not suggest the direction of the response, stimulus cues assist in focusing the behavioral response. For example, a person who is hungry (the drive) may go in quest of food by searching for a restaurant (the cue). A *cue* is an environmental stimulus that serves as a signal when a response is rewarded or not rewarded. The connection between *cues* and *responses* are strengthened when the response is *rewarded* either by drive reduction or through socially acquired rewards. When a response is not rewarded, it tends toward extinction, and another response is attempted. The process repeats until a response is rewarded and a connection is established between stimulus and response. On subsequent occasions, there is a tendency to repeat responses that have previously been rewarded.

Central to their social learning theory, and moving towards the S-O-R formulation, Dollard and Miller proposed that the higher mental processes of foresight, language, and reasoning are important factors that determine the individual's ability to engage in adaptive learning. Foresight suggests an ability to formulate a response, not on the basis of the immediacy of a stimulus, but rather on the knowledge of what is likely to happen in the future. Thus, people are able to anticipate environmental events and adjust their responses accordingly. Responses are strengthened when there is a correspondence between actual and anticipated events and when the response results in drive reduction.

They also stressed the role of language, not only as a product of social learning but also as a form of *self-speech* essential to the acquisition of reasoning. *Reasoning* is a type of self-speech that refers to the ability to make necessary connections among discrete stimuli, creating complexes of learning in which drives, cues, responses, and rewards are logically related in a patterned learning sequence. Responses are determined by both the anticipation of future stimuli and the ability to reason to select the most efficacious response.

Dollard and Miller were among the first to address the role of imitation and modeling in learning. Noting that imitation was central to psychological theory and, in particular, to reinforcement theories of social learning, they proposed three mechanisms that they believed to account for most forms of imitation. The first is *same behavior*, which denotes that any two people may respond in the same manner to the same stimulus. This does not necessarily imply any true imitation because the responses of the two people may be entirely independent of each other. Second is *copying*, in which a person learns to model his or her behavior on that of another. The central learning component in copying is the development of knowledge that the copied behavior is the same and that it is within the bounds of social acceptability to engage in copying. However, Dollard and Miller did not believe that either of these imitative forms warranted detailed analysis. Rather, it was the third form of imitation, that of *matched-dependent behavior*, which they found to be central to social life. Matched-dependent imitation occurs when a person attempts to match the

behavior of someone else by depending on cues provided by the other person. For example, a physician may suggest lifestyle changes to a patient that will result in better health. The physician's superior knowledge of medicine and health-related issues strengthens the cue value of these suggestions (language stimuli) related to lifestyle changes. The patient, then, tries to follow the suggestions (response demands) by depending on the language cues to determine an appropriate response. Dollard and Miller held that matched-dependent behavior usually involves imitation of a person who holds a status superior position.

In their later writings they attempted to recast Freudian concepts into behavioral terms, using the term "unconscious conflict" as a core concept. They proposed that unconscious conflict acquired in childhood could become a source of problems in adult life and account for growth patterns in childhood. Grounded in Freudian theory, they proposed four stressful childhood phases that may contribute to unconscious conflict through pathogenic learning: being fed as an infant (on demand or on a schedule, or not being fed properly at all), learning toilet habits and hygienic orientation, learning to manage aggressive impulses and anger, and learning to control sexual expression. However, in contrast to Freud who posited intrapsychic structures and energies as causal, Dollard and Miller viewed neurotic conflict originating in childhood as a form of *learned behavior* that is taught by parents.

Consistent with their behavioral reinterpretation of Freud, Miller and Dollard also postulated that aggressive behavior is a function of experiencing frustration; this is known today as the *frustration-aggression hypothesis*. They suggested that the expression of either aggressive or passive behavior is learned behavior stemming from unresolved anger, fear, or frustration experienced in infancy and early childhood. The need to reduce internal distress caused by these feelings leads the child to stop thinking about the events and issues that elicit such feelings. This is not problematic when it is done consciously. However, when thoughts are unconsciously repressed they may lead to neurotic symptoms because they are not accessible and, thus, cannot lead to satisfactory resolution of the conflict. Despite this lack of resolution, Dollard and Miller (1950) pointed out that repression in itself is reinforcing, in that it reduces the fear drive.

In their reformulation of psychodynamic theory, Dollard and Miller rejected the metaphysical, abstract Freudian concepts relating to the id-ego-superego structure of the mind. Instead, they proposed that guilt is the result of unlabeled fear responses that became connected to childhood stimuli. When these stimuli recur in later years, the conditioned response (fear) is likewise elicited. Like all conditioned responses, fear can also be generalized to other stimuli that are similar but not identical. They also posited that unconscious repression in infancy and early childhood is due to the child's inability to use language. They proposed that the child's inability to label early conflicts automatically relegates it to the unconscious because, "What was not verbalized at the time cannot well be reported later" (Dollard & Miller, 1950, p. 136; Ewen, 1988). Although their reconceptualization of abstract Freudian concepts into behavioral concepts was widely praised, they never published further in this area. Further extension of their ideas, however, has led to methodological breakthroughs and application by others (Wachtel, 1977; Wolpe & Lazarus, 1966).

In sum, Dollard and Miller drew upon a range of previous theoretical work in developing a behavioral social learning model. Although most of their work represents a classic S-R paradigm, their unique contribution rests in their attempt to synthesize behaviorism and psychoanalysis in behavioral terms and their earlier propositions about social learning

(Ewen, 1988). Consistent with earlier behaviorists, their emphasis on empirical rigor in the development of the tenets of social learning reinforced the strong scientific tradition within behavioral psychology.

Albert Bandura and Social Cognitive Learning

In an early work with Richard Walters, Stanford University psychologist Albert Bandura (1963) took issue with previous learning theories because they relied on a limited number of explanatory principles and were generally derived from animal studies or studies involving one person. The neglect of complex social factors left theorists unable to fully account for the way in which novel social responses are learned. In contrast to Miller and Dollard, Bandura and Walters took exception to any reliance on psychodynamic principles, none of which had been subjected to rigorous scientific analysis. In addition, they were concerned with the emphasis within psychology that attempted to distinguish between normal and deviant development. Such distinctions, they argued, were based on value judgments and were of little theoretical significance. In behavioral theory, undesirable, nonnormative behavior represents a learned behavioral coping mechanism rather than a symptom of psychopathology and, thus, is best addressed through a systematic program of *behavior modification*. Based on principles of operant conditioning, consequences are manipulated so that desirable behavior is reinforced and, if necessary, undesirable behavior is punished. Thomas (1985) has noted that social learning theory "discourages the application of . . . psychiatric labels" due to its assertion that both prosocial and deviant behavior can be explained by the same set of learning principles (p. 410).

At the core of Bandura's social learning theory is a view of human behavior that shares in common many of the core assumptions underlying George Herbert Mead's symbolic interactionism and Jean Piaget's work on cognitive development: the belief that behavior is based on the interaction between internal and external influences and an appreciation of the role of symbolization in cognition. Bandura (1977, p. 11–12) proposed that, "people are neither entirely determined by internal causes nor environmental stimuli, but psychological functioning is accounted for by a reciprocal interaction of personal and environmental determinants." This *reciprocal determinism* allows us to control our thoughts and our environments, which, in turn, affects what we do. In contrast to most behaviorally based theorists, he assigned a central role to internal factors such as expectations and thoughts.

In an extension of behaviorism, Bandura and Walters proposed that the central process in social learning was that of *imitation*. They held that "new responses may be learned or the characteristics of existing response hierarchies may be changed as a function of observing the behavior of others and its response consequences without the observer's performing any overt responses himself or receiving any direct reinforcement during the acquisition period" (1963, p. 47). This differs from Miller and Dollard's position in that the actual performance of behavior is not necessary for learning to occur, nor is it necessary for the response to be immediately rewarded. Instead, a person may learn a particular response through *observation* of a *model*. They proposed that after a response has been acquired, social forces begin to influence the learning process by shaping performance.

Bandura and Walters drew on research evidence to suggest three distinct effects of exposure to a model, each of which increases the observer's matching behaviors. First, a

modeling effect may result in the transmission of a precisely *imitative response* pattern from model to observer. Here the matched response is novel to the observer, one not previously in the person's behavioral repertoire. They concluded that novel responses to a model are learned almost instantly and in their entirety rather than gradually.

Evidence for this has been found in studies on the acquisition of aggressive responses by children (Bandura, 1986b). In a series of experiments to compare the effects of aggressive and nonaggressive adult models on the aggressive behavior of preschool children, children were exposed to films of either a model who behaved aggressively toward an inflated doll or to a model who sat quietly and ignored the doll and other objects in the room. Children who viewed aggressive models displayed more imitative aggressive responses when compared to either the nonaggressive model or control group. Additionally, the experiments showed that filmed human aggression was as effective as a live model.

Second, the processes of *inhibitory* or *disinhibitory* effects may strengthen or weaken a previously learned response. That is, the model's behavior may suggest whether a previously learned response needs to be tempered. Here the response may not be precisely matched to that of a model but is rather an approximation of the model's behavior. Bandura and Walters cited studies showing that exposure to a cartoon character behaving aggressively resulted in an increase in children's aggression when compared to exposure to a neutral character.

Third, they found that observing a model might prompt a *previously acquired response*. Bandura and Walters noted that "An obvious eliciting effect may be observed in cases in which an adult, who has lost the idioms and pronunciation of the local dialect of the district in which he was raised, returns for a visit to his home. The original speech and pronunciation patterns, which would take a stranger years to acquire, may be quickly reinstated" (1963, p. 79). This is similar to Pavlov's earlier principle of spontaneous recovery, but the initial learning occurs through an observational process of modeling rather than through stimulus pairing.

In later work, Bandura (1977) further stressed the notion that social learning does not depend solely on trial-and-error testing under conditions of reward. Instead, learning occurs as a cognitive process, the symbolic representation of complex human behaviors developed from verbal information and observation of a model. Bandura noted that "from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. Because people can learn from example what to do, at least in approximate form, before performing any behavior, they are spared needless errors" (1977, p. 22). Thus, a *cognitive mediational process* allows for *vicarious learning* and corrections in behavioral learning before a behavior is actually performed.

In his most recent book, *Social Foundations of Thought and Action,* Bandura (1986a) offered greater detail and fuller explanation for his theory and specified additional cognitive mediational processes. He prefaced the text with an explanation that he would prefer the theory to be called *Social Cognitive Theory* to emphasize that learning is not a model of conditioning, but of " . . . knowledge acquisition through cognitive processing of information" (p. xii).

In delineating the cognitive and social factors that may affect the process of learning by observation, Bandura categorized the elements of this process into four process domains

(1986a, p. 51): attention, retention, production, and motivation. For modeling to take place, the child must first *pay attention* to the relevant stimuli and screen out those that are not important to learning the observed behavior. Second, the process of *retention* is necessary so that the child can remember—either semantically or through visual imagination—the observed behavior. Bandura noted that young children imitate gestures and sounds immediately, whereas older children are better able to store symbols for later recall and reproduction. Consistent with Piaget and Mead, Bandura recognized the importance of language development in the child's ability to store and recall symbolic referents (Bandura, 1977). In this regard, he saw memory permanence as being a critical factor, because memories can fade, become vague, or disappear with time (Bandura, 1969). Memory techniques such as rehearsal, which involves review or practice, may aid the child in retention of observed behaviors. Third, the child must be able to produce the observed behavior. This involves getting the feel of behavioral enactment through repetition and correction, organizing each subskill into a response pattern that can be replicated. Muscular development is especially important in that the child's motor development must be advanced enough to imitate the observed behavior. Finally, *motivation* is necessary to sustain the efforts of these processes. In contrast to Skinner, Bandura believed that reward alone was not sufficient to produce motivation for continued imitation. Instead, he proposed that the child must value the anticipated consequences, rather than simply experience them. Thus, consequences help to regulate the child's behavior by making it possible to predict behavioral consequences and thus select the behaviors to be performed. Importantly, Bandura stressed that the child can learn which behaviors yields the greatest rewards either by observing others or by actually engaging in the behavior.

In early experimental studies, Bandura found that children are most likely to imitate models whom they regard as prestigious, who receive social recognition and monetary rewards, or who are perceived as similar to themselves and are those of their same gender (Bandura & Walters, 1963). Conversely, they tend not to imitate models who are punished for their actions (Thomas, 1985).

Bandura also proposed that *perceived self-efficacy*, an individual's subjective "conceptions of personal efficacy" is an important factor in regulating behavior. Particularly important are issues of confidence and self-doubt and the way in which they affect our actions. In essence, his research found that people who judge themselves as capable are likely to undertake tasks and challenges that they believe they can perform; they also avoid challenges that they perceive to be beyond their abilities. Self-efficacious people are also more likely to persist in the face of adversity. Bandura, however, did not see self-efficacy as a unitary concept and he believed that self-efficacy varies in different areas. Thus, a person can have high self-efficacy in, say, sports, but low self-efficacy in social situations. The concept of self-efficacy has been incorporated into empowerment theories, as we discussed in Chapter 4.

Bandura also noted that people regulate their behavior based on both external standards set by others as well as standards that they set for themselves. As people develop standards for themselves, they strive to meet these standards. In doing so, they are rewarded with *self-reinforcement* when these standards are met and are punished by self-imposed feelings such as guilt when self-standards are not met. Thus, to a large extent, behavior becomes self-governed and self-regulated. Although Bandura did not separate development

into specific stages, he believed that as people progress toward maturity in cognitive and social growth, they gain increasing self-control over their behavior through self-reinforcement. They also become more able to shape their external environment in ways that they find self-rewarding (Maddi, 1980). In his later work he also offered more theoretical structure for other cognitive processes such as the automatization of thoughts. These later efforts added more elaborate cognitive aspects to an already socially based conceptualization of human behavior and function.

Bandura (1982a) also recognized that random, chance events could significantly alter a person's life course. For example, chance encounters with previously unknown people can provide new opportunities to be drawn into highly profitable businesses and associations or, conversely, into illicit activities that can lead to detrimental consequences. Although self-efficacy may be an important factor in helping people avoid getting deeply ensconced in bad situations, Bandura noted that "the most important determinants of life paths often arise through the most trivial of circumstances" (1982a, p. 749). Figure 11.2 illustrates key concepts in social learning theory.

Bandura and his colleagues moved social learning theory beyond the paradigmatic stimulus–response model, while at the same time they retained its most critical and salient features. The incorporation of cognitive processes as important factors that mediate learning was an affirmation of self-reflective thought and reasoning as key aspects of human development. Additionally, the fundamental rejection of psychodynamic theory, with its emphasis on abnormal behavior, represented a significant break in the development of

Life Span Continuum
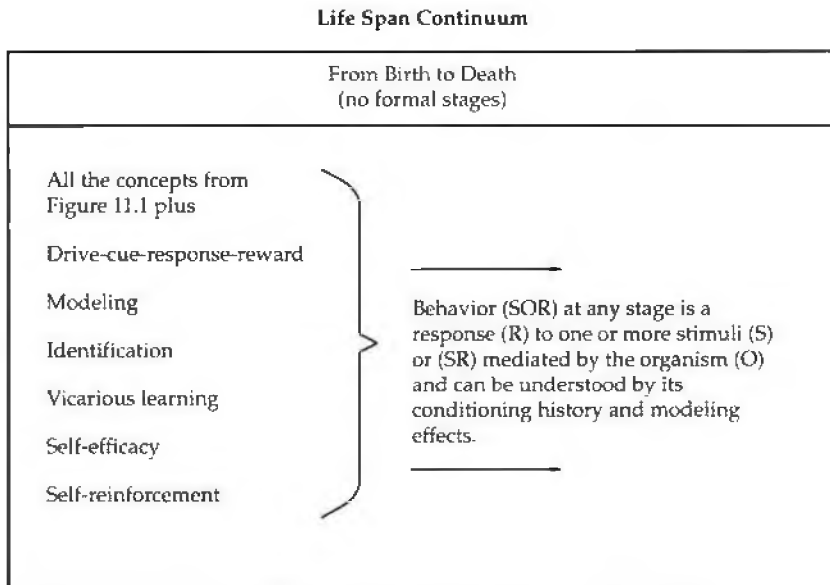
FIGURE 11.2. Key concepts in social learning.

personality theory. As a result of these efforts, social learning theory became established as a productive theoretical area in its own right, making significant contributions to further development and refinement of social psychological thinking as well as to the development of helping strategies.

For example, the theory of *learned helplessness* developed by Seligman and his colleagues (Abramson, Seligman, & Teasdale, 1978; Hiroto & Seligman, 1975; Seligman, 1975) represented an application of social learning theory to a specific area of human functioning. Seligman was intrigued by the experience of helplessness and its relationship to clinical problems. Drawing on a large body of experimental data, Seligman proposed a theory that integrated the motivational, cognitive, and emotional deficits that resulted from helplessness.

The core of the theory holds that when people are faced with outcomes over which they have no control, despite their efforts, they develop a sense of helplessness. For Seligman this represented an extension of social learning theory, because people learn to become helpless when their efforts to control the outcome of given events meet with continued lack of success.

Seligman's theory of learned helplessness extended the behavioral tradition of drawing on research data derived from experimental studies. This theory also gained increased acceptance as an explanatory model for some forms of clinical depression. This raises interesting questions regarding the extent to which socially oppressive conditions such as racism or sexism may lead to learned helplessness, which may then lead to clinical depression.

Additionally, a conglomeration of theoretical approaches, now subsumed under the label "cognitive behavioral," has been derived from the work of Bandura and the theorists preceding and following him. This term is now used to describe a variety of current counseling methods and educational practices as well as some innovative corporate personnel policies.

Exchange Theory

Historical Context

Exchange theory evolved from behavioral psychology, functional anthropology, and utilitarian economics as an attempt to explain human interactions through the dynamics of rewards and benefits. The origin of exchange as an economic process is generally attributed to Adam Smith whose eighteenth-century work, *The Wealth of Nations*, suggested that a nation's resources are enhanced when market forces function competitively without the interference of government. He believed self-interest to be a driving economic force and that competition could rein in what might otherwise be unbridled greed. Unhindered, the "invisible hand" of the competitive free market could best regulate the ebb and flow of exchange to the mutual benefit of all participants. Sir James George Frazer was the first theorist to explicitly formulate a theory based on exchange. He posited that "social exchange processes derive from the economic motives of individuals in society. Once they become stable, other institutions emerge from them. These emergent institutions can then be used to explain the existence of other phenomena in society" (cited in Ekeh, 1974). This position led to the view that social exchange could be exploited for power and status.

Anthropologist Bronislaw Malinowski was the first to differentiate between social and economic exchange. In his formulation, social behavior is motivated by basic psychological needs rather than by purely economic ones. In contrast, anthropologist Claude Levi-Strauss saw exchange as a social process that was symbolic, normative, and dynamic. Although both theorists were concerned with the relationship between the individual and society, Levi-Strauss was most concerned with the structural integration of larger society (Abraham, 1988; Ekeh, 1974). This combination of economic, functionalist, and behavioral orientations has yielded different applications of exchange theory.

Social exchange was further developed and refined by behavioral sociologist George Homans (1974). Describing himself as an "ultimate psychological reductionist," Homans based his theory on animal models of operant conditioning rather than on symbolic human behavior. His propositions can be summarized as follows: (1) actions increase with rewards and decrease with punishment or absence of rewards; (2) actions are based on the perception of greater rewards; and (3) anger or pleasure result from the unexpected withholding or granting of rewards. Human behavior also involves "distributive justice," the idea that rewards and costs should be distributed fairly; the perception of being at an unfair disadvantage leads to anger. Homans based most of his propositions on the dyad (a group of two), although he believed that these principles were applicable to larger groups as well.

Using basic principles similar to Homans's, sociologist Peter Blau rejected Homans's reductionism and expanded exchange theory to include interactions with larger social systems. He also added consideration of power and social integration, and attempted to find a niche for it in systems theory, conflict theory, and symbolic interactionism.

Sociologist Richard Emerson and his frequent collaborator, Karen Cook, further expanded upon Homans's and Blau's works by developing an exchange analysis of networks and social structures based on a more structured, mathematical approach (Cook & Emerson, 1978). Emerson argued, however, that exchange theory is "not a theory at all. It is a frame of reference within which many theories—some micro and some macro—can speak to one another . . ." (1976, p. 336). This is similar to the position that has been advanced about systems theory.

Key Concepts

According to Abraham (1988), exchange theory applies not only to the process of social exchange, "but also all other social relationships namely cooperation, competition, conflict and coercion" (p. 169). Its emphasis on purposive, goal-oriented human behavior covers many theoretical bases. At the heart of exchange is the notion of *profits*. Profits can consist of *benefits* (or *rewards*) less *costs* (or *punishments*). Rewards may be material (economic) or symbolic (such as attention, advice, or status). They are generally defined as things that either have value or bring satisfaction and gratification to the individual (Thibaut & Kelley, 1959, p. 12). Not surprisingly, it is sometimes difficult to predict what, specifically, will serve as a reward, because value may be different from one person to the next.

Costs can be considered in two ways—as *punishments* or as *rewards foregone* because a competing alternative was chosen (Nye, 1982, p. 15). Punishments may be physical or emotional and can be administered through the withholding of rewards. In both economic and social exchange, profits accrue when the rewards outweigh cost. *Satiation* or *diminished marginal utility* occurs when a reward has been received repeatedly and its

ability to motivate becomes diminished. Conversely, *scarcity* (the less available something is), increases the value of the reward. *Power* is obtained by possessing a skill that is scarce or highly coveted. For example, within a dyad a person has power over another to the extent that one is dependent on the other for a specific outcome. Similarly, the *principle of least interest* suggests that the person who is less eager to preserve the relationship is the one to dominate it. This concept can be used to analyze dominance in the dating relationship, but it also has widespread application to other dyads and larger groups.

The *norm of reciprocity* refers to the expectation that if one receives a reward, the favor will be returned in some way, such as in the exchange of gifts. In contrast to Homans's concept of reciprocity, which assumed that people give something solely for the expectation of receiving something in return, sociologist Alvin Gouldner (1960) expanded his formulation of reciprocity to include the idea that people should not only help those who help them but avoid hurting them as well. Gouldner believed that reciprocity serves to maintain and stabilize the interaction, keeps the threat of power differentials in check, and has applications to larger groups. Sociologist Marcel Mauss recognized that:

> . . . *social exchange processes yield for the larger society a moral code of behavior which acquires an independent existence outside the social exchange situation and which informs all social, economic, and political interpersonal relationships in society (cited in Ekeh, 1974, p. 58).*

The morality of social exchange helps to define and regulate exchange processes. This, combined with the norm of reciprocity, is seen as mediating people's natural tendency to act in their own self-interest. The rule of *distributive justice* is based on the idea that rewards should be proportional to their costs, and profits proportional to their investments (Simpson, 1972, p. 5). Investments can be either *achieved* or *ascribed*. Those that are achieved are earned on the basis of past activities or contributions, while ascribed investments are bestowed upon individuals or groups on the basis of some characteristic such as race or gender. This concept has been used in exchange theory to explain why males, on the average, are paid more than females for the same type of work, or why Whites typically receive higher wages than do Blacks or Hispanics. Although the investments of each may be the same, one group's investment is valued more highly because of its ascribed qualities. Clearly, not every person enters the exchange on equal footing.

The term *status* refers to the relative rank of individuals, and *status congruence* refers to the preference for participants to be of the same status. Because one's "worth" might be diminished by interacting with lower-status people, exchange between people of ranks is discouraged and status congruence is maintained when people of the same level interact; this pairing is believed to be the most comfortable exchange for all parties. Theorists disagree about the extent to which exchanges are consciously evaluated. Most conclude that humans operate with a mix of conscious and unconscious calculations in responding to events or situations.

Thibaut and Kelley (1959) detailed the role of norms in ensuring the smooth functioning of daily exchanges. Cultural norms exist to guide people in their various roles, just as society's rules or laws function to regulate behavior. For example, in romantic and working relationships, people quickly learn or develop norms for carrying out specific household responsibilities or complying with workplace policies. Such normative structure

allows people to know what is expected of them and, in turn, they come to trust that the exchange system will yield what they expect. Norms or laws are effective at regulating behavior as long as the people see them as being beneficial to the self-interests of most members of the group or society. In contrast, people may violate norms and laws if they come to believe that there is no benefit in following them. These actions, and their fit within exchange premises, are discussed later in the chapter.

Summarizing concepts based on the theories of Homans, Blau, Gouldner, Emerson, and others, Nye (1982, pp. 20–21) listed twelve theoretical propositions that are useful in understanding the essence of exchange:

1. Individuals choose those alternatives from which they expect the most profit.
2. Costs being equal, they choose alternatives from which they anticipate the greatest rewards.
3. Rewards being equal, they choose alternatives from which they anticipate the fewest costs.
4. Immediate outcomes being equal, they choose those alternatives that promise better long-term outcomes.
5. Long-term outcomes being perceived as equal, they choose alternatives providing better immediate outcomes.
6. Costs and other rewards being equal, individuals choose the alternatives that supply or can be expected to supply the most social approval (or those that promise the least social disapproval).
7. Costs and other rewards being equal, individuals choose statuses and relationships that provide the most autonomy.
8. Other rewards and costs equal, individuals choose alternatives characterized by the least ambiguity in terms of expected future events and outcomes.
9. Other costs and rewards equal, they choose alternatives that offer the most security for them.
10. Other rewards and costs equal, they choose to associate with, marry, and form other relationships with those whose values and opinions generally are in agreement with their own and reject or avoid those with whom they chronically disagree.
11. Other rewards and costs equal, they are more likely to associate with, marry, and form other relationships with their equals, than those above or below them. (Equality here is viewed as the sum of abilities, performances, characteristics, and statuses that determine one's desirability in the social marketplace.)
12. In industrial societies, other costs and rewards equal, individuals choose alternatives that promise the greatest financial gains for the least financial expenditures.

These basic principles apply not only to individuals but also to groups and larger organizations. Although Homans and other theorists focused primarily on dyadic exchange, others believe that interaction cannot be studied or analyzed apart from the larger social structure. Accordingly, some have focused on exchange in small groups (including the family), while others have been concerned with exchange between complex social structures and focused on the link between micro and macro structures (Abraham, 1988; Ritzer, 1992).

The Dynamics of Exchange, Conformity, and Deviance

In an attempt to understand ". . . how social life becomes organized into increasingly complex structures of associations . . ." Peter Blau extended exchange theory beyond the individual and dyadic level and focused on the process of exchange in groups (Blau, 1964, p. 2). He theorized a sequence that leads from personal exchange to social structure and eventually to social change. His formulation encompassed four stages in which (1) exchange transactions between people lead to . . . (2) differentiation of status and power, which leads to . . . (3) legitimation and organization, which lead to . . . (4) opposition and change (Ritzer, 1992, p. 271).

This reformulation and extension of exchange theory points to the fact that "social interaction exists first in groups" (Ritzer, 1992, p. 271). Groups, then, must offer sufficient rewards to attract people and make them feel accepted. In turn, the relationship between the individual and group is solidified when the expected rewards are received. This process of exchange generates social and psychological bonds between the people who keep count of benefits that are given, due, and received. For those who cannot engage in equal exchange, a form of debt is incurred in which they are relegated to lower status. Conversely, those who possess resources that others need are accorded higher status. The greater and more consistent a person or group's ability to meet others' needs, the greater the power accrued.

Power, status, norms, and the drive for social approval are important factors in the development of mutually profitable exchanges; they are also central to conformity and group survival. Members must rely on relatively predictable patterns of interaction within their ranks to continue as a unit. Group norms and the individual desire for social approval help ensure conformity among group members and this, in turn, reinforces group cohesion and survival.

Families are a variant of the small group but warrant special consideration within to exchange theory. Transactions may occur among all members within the family as well as between the family and others in the community and society at large. As a segment of larger societal systems, the family interfaces with other individuals such as neighbors, friends, and employers, and formal institutions of society such as the church, schools, and government. Survival of the family depends on its ability to successfully bargain with the structures around it. Table 11.1 summarizes the application of exchange theory to different levels of social system analysis.

Exchange and Power

One basic thesis in exchange theory (at both the micro and macro levels) is that uneven exchange leads to power of one party over another. People with less valued resources are at a power-inferior position, just as those with highly valued resources are at a power-superior position (see Table 11.1).

A classic paper by French and Raven (1968) provided examples of power that are based on resources that people can exercise over others. They classified these as: (1) *coercive power*; (2) *legitimate power*; (3) *reward power*; (4) *expert power*; and (5) *referent power* (Table 11.2).

The sources of coercive power involve either possessing instruments of violence or holding a role that can deprive others of their livelihood. The sources of expert power are

TABLE 11.1.   Exchange Theory—Levels of System Analysis

Level of Analysis	Exchange between
Interpersonal	Persons: by norm of reciprocity, by cost-benefit criteria, by material exchange, by rules of distributive justice. (Outcome: Either uneven exchange, leading to power of one over another, or even exchange, leading to balance)
Within small groups Within families	Group members: by norm of reciprocity, by cost-benefit criteria, by material exchange, by symbolic exchange, by rules of distributive justice. (Outcome: Either uneven exchange, leading to power of one over another, or even exchange, leading to balance)
Between small groups	Groups: by norm or reciprocity, by cost-benefit criteria, by material exchange, by symbolic exchange, by rules of distributive justice. (Outcome: Either uneven exchange, leading to power of one another, or even exchange, leading to balance)
Between various	Symbolic groups: By norm of reciprocity, by cost-benefit ethnic and other criteria, by material exchange, by symbolic exchange, by groups within a nation rules of distributive justice, by ability to maneuver in the marketplace. (Outcome: Either uneven exchange, leading to power of one group over another, or even exchange, leading to balance)
Between nations and	Nations: By norm of reciprocity, by cost-benefit criteria, by other macro-level material exchange, by symbolic exchange, by rules of structures, by distributive justice, by ability to maneuver in the marketplace. (Outcome: Either uneven exchange, leading to power of one group over another, or even exchange, leading to balance)

TABLE 11.2.   French and Raven's Types of Power and Their Sources

Types of Power	Ability	Sources
Coercive	Ability to commit violence Ability to deprive from means of livelihood	Possession of instruments of violence Occupancy of role that permits depriving another from means of livelihood (overlaps with reward and legitimate power)
Reward	Ability to give or withhold material reward Ability to give or withhold symbolic reward	Possession of money, property, etc. Possession of attributes like sexual or interpersonal attractiveness
Expert	Ability to inform	Possession of information or knowledge
Legitimate	Ability to prescribe behavior	Occupancy of role from which it is possible to prescribe behavior
Referent	Ability to command another's respect and identification	Possession of a charismatic personality

possession of material objects (such as money) or symbolic ones (sex, affection, desirability of company). The sources of legitimate power involve incumbency in a role (teacher, judge, priest, etc.), while the source of referent power is a charismatic personality.

In an equal exchange matrix between persons, groups, families, and larger systems, the possession of resources must be balanced on both sides. In a balanced matrix, power does not develop. On the other hand, in unbalanced transactions, those with more resources develop power over those who have less. From a meso level, exchange theory helps answer questions about how power is realized and expanded through the disproportionate allocation of resources.

Exchange and the Economic Market

The economic *market* is important when examining exchange in macro-level structures. In contrast to Adam Smith's "invisible hand," Atherton (1990) identified appropriate roles that government may take without improperly confining the free market system. He noted that in contemporary society some do not have the means to successfully enter and compete in the market system. The commodities or abilities they possess are not valuable (or valued) enough to be exchanged for goods, services, or other advantages. Atherton suggested that when such disadvantages threaten a group's health or safety, the intervention of the government is needed to offer equality of opportunity. Although many exchange theorists would view this as unreasonable intervention on the part of the government, Atherton found it to be consistent with the state's responsibility to protect people; he argued that this does not stifle the free market system but ultimately allows it to function.

Principles of exchange have retained a macro-economic focus in the field of cultural anthropology as well. Economic anthropologists have studied bands, tribes, states, and societies to understand and compare various exchange systems. Kottack (1994) has noted that in contrast to tribal societies that have multicentric exchange systems, contemporary nations have reduced or eliminated different spheres of exchange due to participation in an international economy. When more than one sphere is involved in exchange (for example, food necessary for subsistence in exchange for items of status), there is increased opportunity for unequal exchange. Studies of this type also sensitize us to the fact that in some cultures people (especially female marriage partners) are used as "items" of exchange (Bohannan, 1955; Plattner, 1989).

An extension of macro-level exchange theory can be seen in the growing popularity of both network theory and rational choice theory. Derived from behaviorism, exchange theory and rational choice theory, *network theory* attempts to describe the interactive pattern of ties that link individuals to larger collective structures in society. Similar to exchange theory, networks can be micro (dyads) or macro (collective groups of individuals) in their focus. As previously noted, Emerson and Cook's exchange theory is based on their empirically based study of exchange network structures.

Rational choice theory, derived primarily from the field of economics, shares many of the same assumptions about human behavior that underlie behavioral and exchange theories. People are seen as rational, self-interested actors who seek to maximize their profit through rational thought and action. Although this theory has not been utilized as a major perspective for social work, it has received some recent attention in sociology, primarily as an attempt to build models describing what people do when they act rationally in a specific

situation. Further discussion of network theory and rational choice theory can be found in Ritzer (1992) and Craib (1992).

As a more recent outgrowth of exchange theory and rational choice theory, *social capital theory* conceptualizes social relationships as resources that can be used in beneficial exchange to accomplish goals and facilitate collective action. Although many of the concepts used in social capital theory can be attributed to other writers, Coleman (1988, 1990) defined social capital as being a necessary resource for rational choice. Social capital refers to resources available to people by virtue of their membership in a social network and includes nonmaterial (i.e., social) forms of capital such as trust, norms, and networks that are built through obligations, expectations, and trustworthiness (Belanger, 2003). This theory is gaining popularity in social work, and a fuller discussion of the theory can be found in Putnam (2000).

Finally, one must recognize that excessive use of power and privilege in economic exchange may result in rebellion by those who are oppressed. Exchange theory points out that some basic standard of security and satiation is necessary to avoid this and maintain existing power relations. Figure 11.3 illustrates the key concepts in exchange theory.

Contemporary Issues

Although behavioral and social learning theories have never received wide acceptance as comprehensive models of human development, practice methods derived from these theory bases have become increasingly popular. With current trends in managed care, there is less time in treatment available, even for those who are insured. Consequently, there has been increased use of behavioral and cognitive behavioral methods, which are typically brief in application and directed toward the amelioration of specific problems. The tenets of careful empirical evaluation coupled with the clarity of behavioral theories are becoming more popular as the need for cost accountability and service efficiency increases. Currently, behavioral, social learning, and cognitive behavioral methods are used for a variety of conditions including addiction, aggression, depression, anxiety, as well as classroom behavior management. Additionally, methods of reward and incentive based on behavioral principles are being used in the industrial sector. Companies nationwide have begun to experiment with profit sharing and other innovative reward systems and, thus, behavioral, social learning, and cognitive behavioral techniques have found application in diverse settings.

One clear trend in the twenty-first century is that clinical practitioners are more frequently utilizing evidence-based knowledge for the assessment and treatment planning of the people they serve. Behavioral and cognitive-behavioral interventions, as well as those based on other empirically evaluated social learning theories, are well represented among those treatments that are proved to be evidence based. The move toward evidence-based practice can also be seen in the emerging literature in the field (Bilson, 2004; Briggs & Rzepnicki, 2004; Corcoran, 2000; Gambrill, 1999; Howard, McMillan, & Pollio, 2003; Roberts, & Yeager, 2004; Thyer, 2002). According to Cournoyer (2004) several of the trends responsible for moving social work in the direction of evidence-based practice include legislative mandates for accountability, malpractice lawsuits, and court decisions that have held professionals legally responsible for service outcomes.
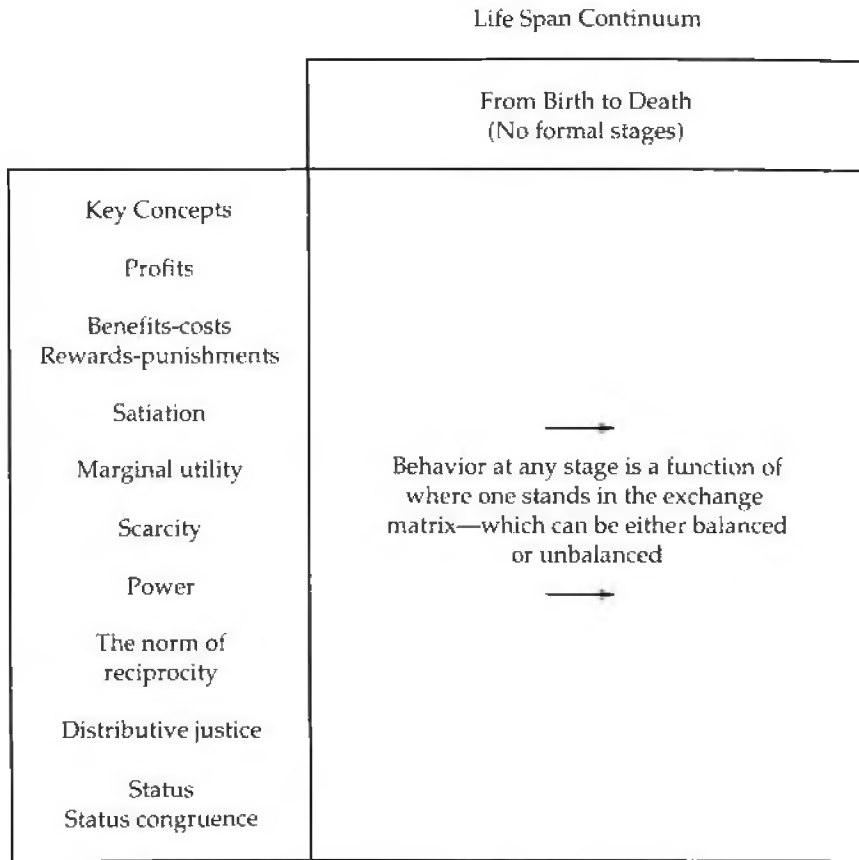
Life Span Continuum

	From Birth to Death (No formal stages)
Key Concepts Profits Benefits-costs Rewards-punishments Satiation Marginal utility Scarcity Power The norm of reciprocity Distributive justice Status Status congruence	Behavior at any stage is a function of where one stands in the exchange matrix—which can be either balanced or unbalanced

FIGURE 11.3. Key concepts in exchange theory.

Application to Social Work Practice

Behavioral and social learning theories have received less attention than psychological stage theories in social work formulations of human behavior. Instead, they have been well received in the practice literature. Thyer and Hudson (1987) reported that behavioral social work has "rapidly become an important and influential perspective" of intervention (p. 1). In addition, effectiveness research has examined more behavioral and cognitive behavioral approaches than any other (MacDonald, Sheldon, & Gillespie, 1992), and these forms of treatment are reported to be empirically effective (Fischer & Gochros, 1975; Sheldon, 1995). Currently, behavioral approaches are not often clearly labeled as such in social work settings, despite the fact that they are widely used. The use of rewards or incentives in an explicit attempt to change behavior is derived from behavioral theory. Brian Sheldon's recent text on cognitive-behavioral therapy (1995) is currently used in schools of social work around the United States and Great Britain.

In contrast, exchange theory has received little attention in social work. One important and frequently overlooked contribution is in the realm of situational assessments. A useful framework for viewing the motivations of individuals and groups, exchange theory can aid social workers in their understanding of individual and collective behavior and assist them in anticipating resistance to change. Further, the exchange perspective on status and power differences can also offer a meso-level framework for understanding and assessing dysfunctional behavior and nonconformity. In addition, exchange offers an alternative perspective on deviance and the way in which environmental forces might lead to or react to such behavior.

Definition of the Helping Situation

Behavioral and social learning theories, when used in most social work settings, lead to a "problem" definition of the situation. This theoretical orientation, even in its basic definition of the client, starts with the notion that the social worker is facing a person with a *behavior problem*, which needs to be solved. Behavioral approaches may also lead to a definition of *deviance* if the social worker is in a criminal justice setting. In such cases it is the client's *deviant behavior* that is the focus of change efforts. Although an illness definition does not stem from behavioral theory, cognitive and behavioral methods are frequently used in the treatment of certain psychiatric disorders. This is especially true when the focus of change is faulty cognition (as in depression) or the elimination of problematic behaviors.

Exchange theories lead to similar definitions of the helping situation. Of primary importance is the exchange orientation. When the exchange matrix breaks down, it may be defined as a *problem*, *deviance*, or a *crisis*. In each of these cases, the helper is expected to offer services and, in turn, receive some form of payment. Flowcharts 11.1, 11.2, and 11.3 demonstrate applications of behavioral, social learning, and exchange theories derived from these definitions.

Assessment, Practice Strategies, and Methods

Assessment is one of the hallmarks of application of behavioral theory. Currently, and increasingly, assessment measures that are psychometrically sound and valid are in demand for many types of problems. One evidence of this is the success of Fischer and Corcoran's (1994) two-volume text, *Measures for Clinical Practice*, which contains over 320 instruments used to measure a variety of behaviors, thoughts, feelings, and symptoms. Most assessment tools in use today are based on the measurement of behaviors and cognitive factors that include thoughts and feelings.

Behavioral, social learning, and cognitive behavioral methods cover a vast array of strategies used in practice. These include contingency contracting, positive reinforcement, negative reinforcement, punishment, modeling for clients, social skills training, assertiveness training, cognitive restructuring for depression and other problems, and exposure therapy for anxiety. Some specific techniques include relapse prevention (used for substance abuse, sexual aggression, violent aggression, and other behaviors) and biofeedback techniques (used for stress and anxiety). In addition, many institutional settings use some form of token economy through which residents earn privileges based on behavioral principles.
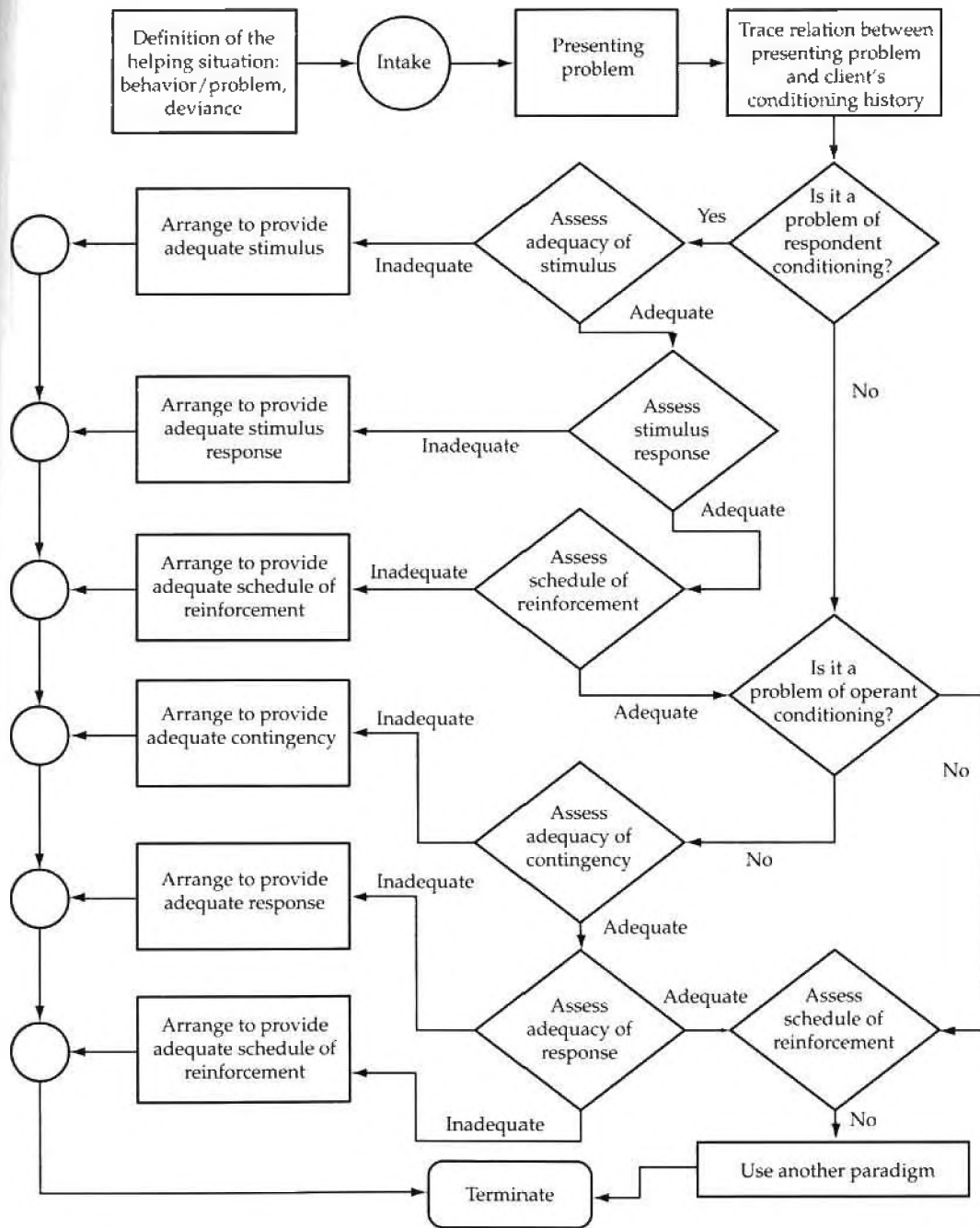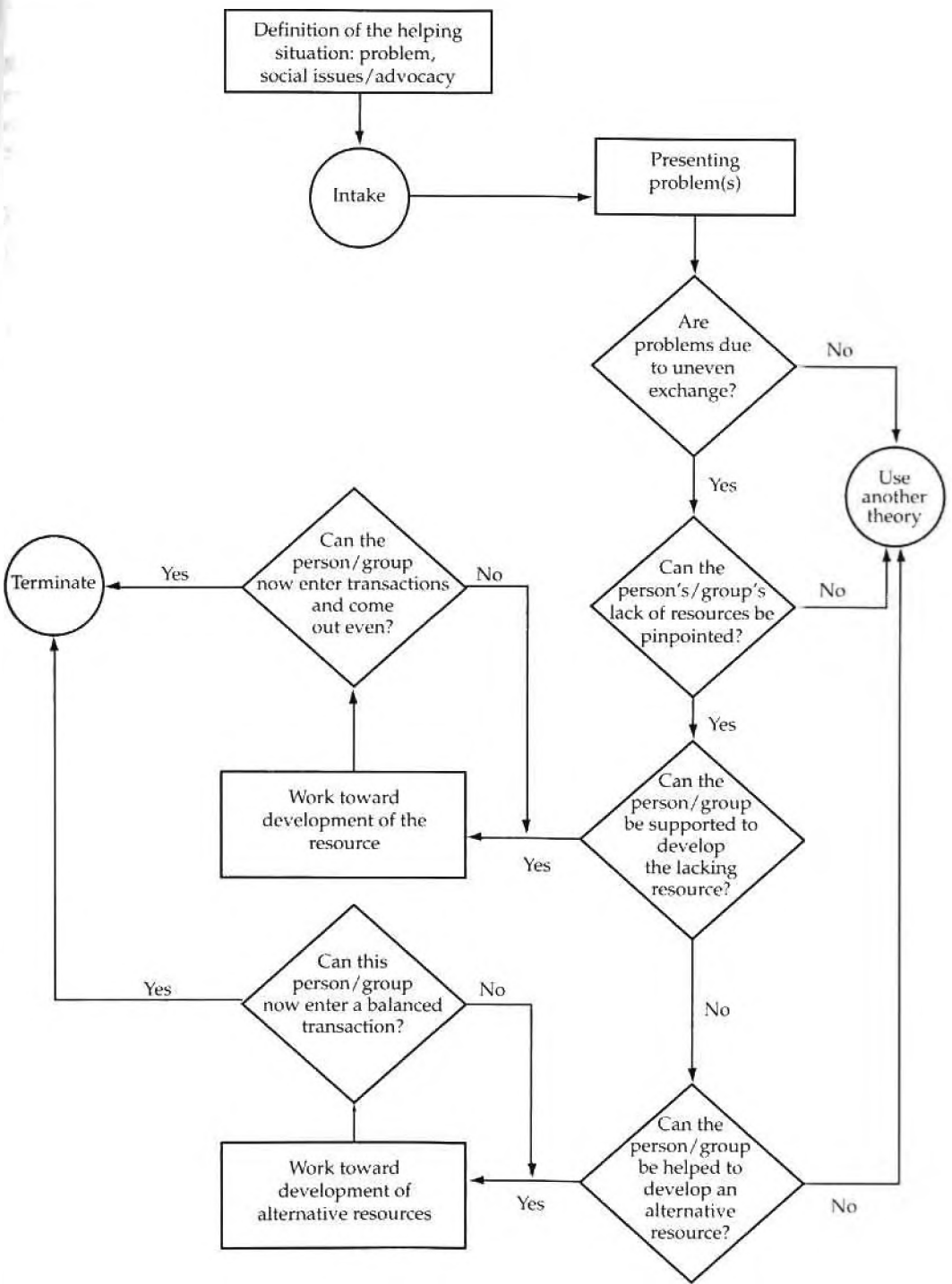
FLOWCHART 11.1. Application of radical behaviorism.

©1998, S. P. Robbins, P. Chatterjee, & E. R. Canda
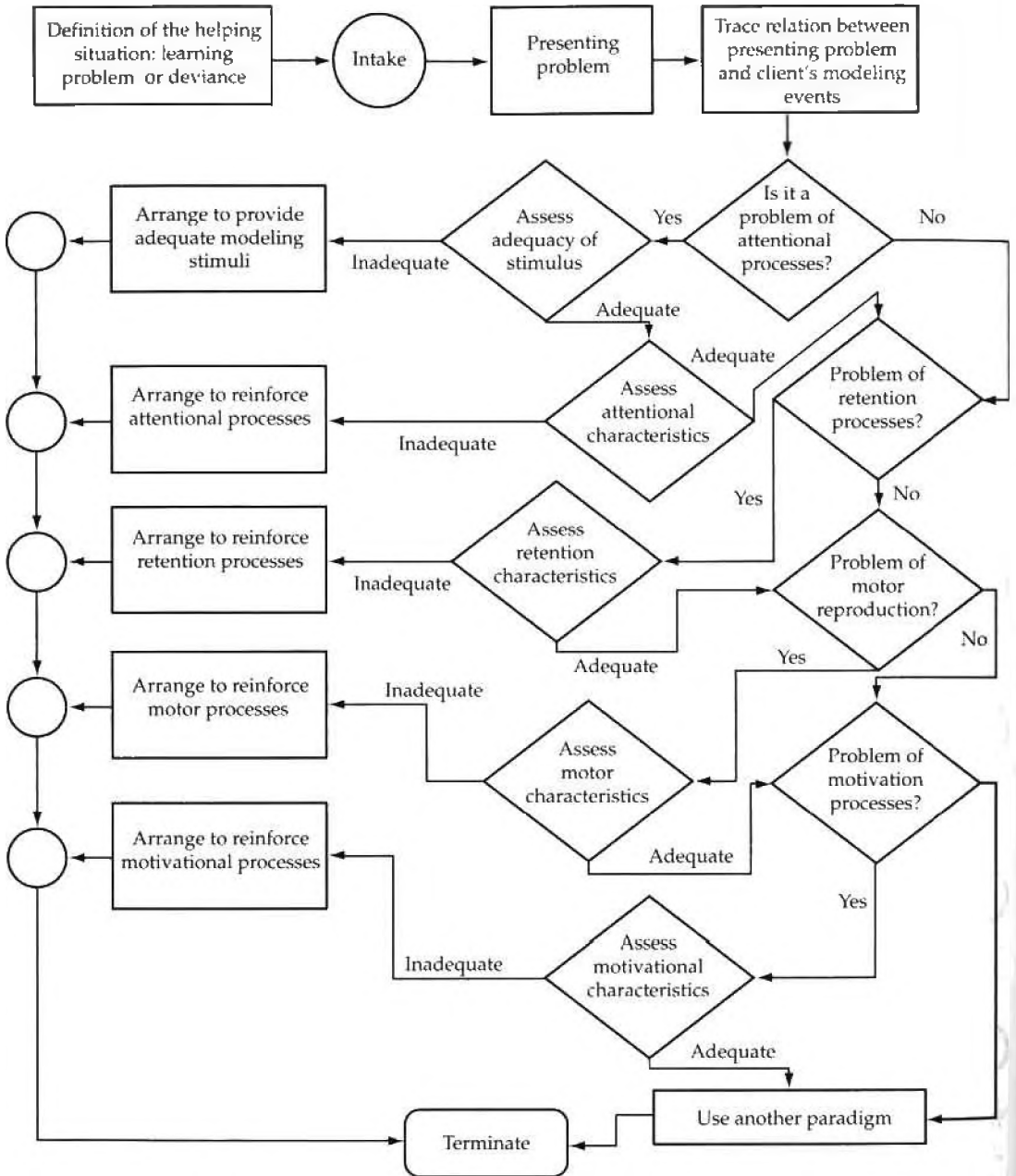
FLOWCHART 11.2. Application of social learning theory.

FLOWCHART 11.3. One possible road map of empowerment by applying exchange theory.

Although rarely used, exchange theories lend themselves to practice application at all systems levels. They are especially appropriate for assessment of power imbalances between persons and groups involved in exchange. All practice strategies and methods derived from exchange theory are based on meso-level assessment, despite the size of the systems involved.

Game theory is based on a special kind of exchange that was proposed for use in the behavioral sciences by psychoanalyst Eric Berne in the *Games People Play* (Kadushin, 1968, p. 23). It originally received attention in the social work literature for its application in various situations. Shulman (1968) offered a number of examples in his work with mildly retarded youth. Kadushin (1968) looked at the use of gamesmanship in supervisory situations. Exchange theory adds an important dimension of analysis with its focus on interaction between and among people and groups. Table 11.3 illustrates a variety of settings and applications of behaviorism, social learning, and exchange theories.

Critical Analysis

Biological, Psychological, and Spiritual Factors

In the behavioral theories, biology has been a point of contention and has received less attention than environmental factors. Although Pavlov studied biological reflexes and responses, Watson, in contrast, utterly rejected the causal role of heredity. Skinner argued that genetic endowment was an important consideration but studied observable behavior instead. Bandura (1986a) focused primarily on experiential learning as the shaping force behind human behavior but respected biology's impact on one's ability to learn and to be affected by cognitive and social processes. At best, internal factors such as neurophysiological processes, cognition, and emotions are seen as "molar behavior" by behaviorists and social learning theorists. Molar behaviors are internal processes that are acknowledged as being intervening variables but are not the focus of study. Although the issue of inclusion of biological factors has not received much attention among behaviorists on a theoretical level, contemporary research on brain functioning and neurophysiology is now becoming an important area of inquiry for a holistic understanding of the mind–body connection. Recently, techniques such as biofeedback (which explicitly involve biological aspects of human behavior) have been included in the cognitive behavioral realm (Sheldon, 1995).

Psychological variables are narrowly defined in classical and radical behaviorism and are confined to analysis of observable behavior. Social learning theory expands the psychological realm with its focus on cognition and emotions as mediators of behavior. Exchange theories are more narrowly focused on the dynamics of interpersonal exchange.

Spiritual factors are rarely considered to be relevant to behavioral and exchange theories. Because subjective spiritual feelings and thoughts cannot be observed directly, behaviorism, social learning, and social exchange theories would consider them as relevant only to the extent that they provide a reward or exchange that reinforces behavior. Religious institutions and belief systems can also provide important context for reinforcement and punishment. In radical behaviorism, mind, consciousness, and soul are considered to be

TABLE 11.3. Applications of Behavioral and Exchange Theories in Various Settings

Type of Agency	Type of Presenting Problems	Type of Program	Definition of the Helping Situation	Type of Behavior Modification
Child guidance centers	Antisocial behavior of children	Direct service to children and their families	Behavior problem Learning problem Deviance	Change from problem behavior to socially acceptable behavior
Family service centers	Antisocial behavior of children or family members	Direct service to families	Behavior problem Learning problem	Change from problem behavior to socially acceptable behavior
Shelters for abused women and children	Antisocial behavior of abusers	Direct service to the abused women and children	Behavior problem Deviance Social issues	Define abusers as deviant, the abused as problem, and their interaction as a social issue
Halfway houses and correctional settings	Asocial and antisocial behavior of inmates	Direct service to inmates	Behavior problem Deviance	Change from deviant to acceptable behavior—develop social control
Mental health centers and settings	Asocial and antisocial behavior of patients	Direct service to patients	Sick Behavior problem Learning problem	Change from illness behavior to wellness behavior
Human services departments of public welfare agencies	Abusive or victimizing behavior by family members	Direct service to families	Sick Behavior problem Deviance Social issues	Define abusers as deviant, the abused as problem, and their interaction as a social issue
Community centers	Asocial and antisocial behavior of community groups	Direct service to communities and community organizations	Behavior problem Deviance	Change from problem behavior to socially acceptable behavior

(continued)

TABLE 11.3.   (continued)

Type of Agency	Type of Presenting Problems	Type of Program	Definition of the Helping Situation	Type of Behavior Modification
Community centers	Powerlessness of given community groups	Community organization with community groups	Social issues	Develop reward, expert, and legitimate power and their market in community groups
Advocacy groups	Powerlessness of given community groups	Community organization with community groups	Social issues	Develop reward, expert, and legitimate power and their market in community groups
Social planning agencies	Powerlessness of given community groups	Community planning with diverse groups for equal opportunity	Problem Social issues	Develop reward, expert, and legitimate power and their market in community groups

unmeasurable and therefore impossible to study. Even existential values, such as freedom and dignity, are considered to be less relevant, since behavior is determined by observable environmental conditions (Skinner, 1972). Not surprisingly, many theorists consider behaviorism to be dehumanizing.

Social, Cultural, and Economic Forces

Although behavioral theories focus on factors external to the individual, they have been essentially devoid of considerations of culture, social status, economic status, or other macro-level factors. In its infancy, behavioral theory was derived from animal studies and later expanded to describe human behavior. In practice it has been applied universally to nearly everyone, regardless of cultural, social, and economic differences. Likewise, social learning theories largely ignore many of the macro forces that shape peoples' lives. Instead, they place their emphasis on the interpersonal process of modeling, which retains a distinctly meso-level focus and restricted notion of the social environment.

It is somewhat ironic that a theoretical base so focused on environmental causes of behavior has failed to address salient environmental factors that lie outside of their definitions of a reward structures. Thus, environment, in behavioral and social learning theories, refers only to external factors that provide reinforcement or punishment or opportunities for modeling behavior.

Exchange theory deals more directly with social, cultural, and economic forces within the framework of exchange. One must recognize, however, that the framework of exchange is largely based on interpersonal interaction, even when it is applied to structural features of society and social change. Thus, social, cultural, and economic forces are only important to the extent that they motivate or regulate the behavior of individuals or groups in the exchange matrix. Further, exchange theory maintains capitalistic and ego-centered assumptions about profit-based motivation for individual behavior and social control. These assumptions have been criticized by conflict, empowerment, and deep ecology theorists.

Relevance to Individuals, Groups, Families, Organizations, Institutions, and Communities

Behavioral, social learning, and cognitive behavioral approaches have been applied primarily to individuals. In social work, these methods, as reported in the effectiveness literature, are also frequently applied to families and groups (Sheldon, 1995). Organizations and institutions using reward programs and incentives are also using behavioral techniques, even if they are not labeled as such. However, even when used at an institutional level, the focus remains on changing individual behavior.

In contrast, exchange theories focus on the full array of social systems, from individuals, groups, families, and organizations to larger social systems. Interactions, which are the focus of exchange theory, do not take place within a vacuum and therefore, the larger context is also considered. The environmental context attaches value to items of exchange and regulates transactions through norms.

Although all exchange theorists emphasize interaction, emphasis varies from theorist to theorist. Some emphasize the dyad and the behavioral principles that underlie exchange. Others emphasize larger social structures such as networks and societies and the social processes that govern exchange. Most exchange theorists focus on the norms and patterns that govern these interactions. Despite this breadth in scope, exchange theory involves meso-level analysis.

Consistency with Social Work Values and Ethics

The idea that environment plays a role in the creation of individual problems is consistent with social work's history of working with oppressed populations. Additionally, the focus on behavior rather than the person may assist us in gaining an empathic understanding of clients who exhibit undesirable behaviors. One must recognize that the use of punishment sometimes stems from behavioral theory, although very few behaviorists consider use of aversive stimulation. The use of punishment and negative reinforcement is unethical for social workers if procedures using positive reinforcers can accomplish the same objectives. Additionally, many social workers see behavioral and cognitive approaches as mechanistic, leaving little room for client choice or empowerment. However, because they are so powerful, behavioral methods are often used as an explicit form of social control. Sheldon (1995), however, illustrated that this sort of control is not necessarily the aim, nor the conceptual framework, behind the applications of these theories.

Optimal health and well-being can be seen as the goal of behavioral and social learning approaches when taken from a social work perspective. However, applications of these theories are frequently linked to identification of problem behaviors. Alcoholism and aggression, for example, are typically viewed from a problem orientation rather than from an optimal health orientation. Although behavioral theories are not typically associated with empowerment, they can easily fit within an individual empowerment framework if there is no coercion involved in their application and clients are the primary definers of treatment goals and strategies. Social learning theory's emphasis on self-reinforcement and self-efficacy are consistent with empowerment theory.

However, another potential problem lies in the fact that issues related to diversity have been largely ignored within behavioral and social learning theories. The lack of attention to factors such as race, ethnicity, gender, sexual orientation, and social class, for example, is apparent not only on a theoretical level but also in its practice application. The reductionism and determinism that this engenders is problematic for all behavioral, cognitive behavioral, and social learning approaches.

Although the principles of exchange theories do not directly address human diversity, several implications can be drawn from the underlying assumptions of the theory. As a meso-level theory that rests heavily on the order paradigm, exchange theories ignore the mechanisms that preserve inequality. Accordingly, women, the aged, handicapped, people of color, gay and lesbian people, and other disenfranchised populations may be seen as relatively "valueless" in the economic sphere. As noted earlier in this chapter, the rule of distributive justice fosters a view that ascribed qualities (i.e., race, gender) are a fair (or just) basis upon which to devalue "investments." Because "worth" in the market is based on ascribed characteristics, some people are automatically devalued and given lower status in the exchange process. Downward mobility for those without power is seen simply as a result of uneven exchange.

In addition, the "invisible hand" of Adam Smith easily lends itself to blaming the victim. The assumption that participants in a competitive free market system mutually benefit, puts the burden of responsibility on those who do not. This is analogous, on the macro level, to third-world countries whose "underdevelopment" is blamed on its citizens, rather than on neocolonialist policies that exploit their resources for the capitalist gain of wealthy and powerful nations. Although these theories may be used for empowerment at the interpersonal level due to their focus on power imbalances, it is unlikely that they have broad application to macro-level practice and social change due to their inherently conservative nature.

Philosophical Underpinnings

The early classical theories of behaviorism assume that behavior is a response to environmental stimuli and that the relationship between stimulus and response is governed by a defined set of constant rules. This suggests that people are subject to the vicissitudes of their circumstances and appears to negate the importance of will or freedom of choice in human behavior. The later classical theories of behaviorism continue the assumption of stimulus-response but make efforts to account for the role of higher mental processes and changing

organismic conditions. Thus, there is a strong suggestion that people both act upon and are acted upon by their environment. Social learning theories assume people to be active interpreters of the environment and assume that, while subject to environmental demands, people are capable of acting in accordance with their wants and desires. Radical behaviorism transcends earlier behaviorist assumptions of stimulus-response, adding operant conditioning as a codeterminant process and assumes that people are subject more to the reward and punishment power of behavioral consequences than to the demands of antecedent stimuli.

Behavioral theories try to be nonjudgmental in nature, neither proposing nor denying a place for morality. Thus, they avoid making explicit assumptions on the basic nature of people. However, this nonjudgmentalism belies the fact that behavioral theories use mechanistic and animal analogies for understanding human behavior and believe human nature to be largely environmentally determined. These theories accept deviant behavior as knowable in behavioral terms but do not judge the behavior itself. This lack of analysis and critique of power and oppression ignores the reality of power relations involved in the definition of acceptable behaviors. Social learning theories, on the other hand, assume that behavior develops from complex cognitive processes applied to real events in the social and physical world. There is ample room for errors in judgment, which may lead to the development of behaviors that lie outside social custom and norm. Although there are no assumptions concerning the basic nature of people, a role is accorded for morality and social judgment.

As exchange theories stem from diverse fields of inquiry, the philosophical assumptions that underlie each reflect this diversity. A fundamental assumption of these exchange theories is that through the consideration of costs and benefits, people seek to profit in their exchanges with others (Abraham, 1988). In addition, exchange theories are based on the viewpoint that humans are actors, not reactors. This presumes rationality on the part of the individual and the ability to calculate behavior and respond accordingly. Most exchange theories are utilitarian in focus and may be termed Hobbesian in their view of human behavior. A central assumption is that self-interest is a primary motivating force and that reason is basic to human nature.

The philosophical assumptions that underlie Homans's work are based on the order paradigm that assumes equilibrium and harmony. This equilibrium was found, however, in the principles of exchange rather than in larger society (Perdue, 1986). Blau, on the other hand, tried to integrate functionalism with dialectic conflict theory and symbolic interaction. Accordingly, the philosophical assumptions underlying his notion of exchange include the contradictory forces assumed in the Marxian dialectic and the symbolic nature of behavior (Abraham, 1988).

Theorists who emphasize the symbolic nature of behavior focus on normative behavior shared by those in a value system. Rather than being merely repetitive, symbolic behavior can create new ways of behaving based on the meaning that we give to events and actions. Homans, to the contrary, believed that conditioned behavior was sufficient to explain exchange and *all* of human interaction. Finally, exchange theories make no presumptions about the individual's moral character but view actions based on exchange as reasonable and expectable responses to the need to survive and accommodate the surrounding environment.

Methodological Issues and Empirical Support

Behaviorism and social learning theory are based on the positivist paradigm and include a foundation of rigorous experimentation, typically under highly controlled laboratory conditions. Data are quantitative in nature and often collected through novel means, such as the Skinner box, developed for the purposes of behavioral experiments. Much behavioral research is based on single subject design in which baseline rates of an individual's behavior are established, an independent variable is introduced, and subsequent behavioral changes are measured. In essence, the subject is used as his or her own control, thus eliminating many uncontrolled variables potentially present in designs using experimental and control groups (Corsini & Marsella, 1983). The use of single subjects, however, limits generalizability of the findings. Numerous experimental studies have supported behavioral theory and its diverse applications (Fischer & Gochros, 1975; Hudson & MacDonald, 1986). Maddi (1980) has suggested that "within its own set of assumptions, radical behaviorism has assumed considerable empirical support" (p. 601). In particular he notes that there is a large body of research that supports the differential effects of varied reinforcement schedules on learned behavior.

However, research supporting radical behaviorism as well as its theoretical bases has been criticized on several fronts. First, its environmental determinism denies the importance of cognition, emotions, and other causes. Experimental studies that deliberately restrict environmental variables are not likely to be widely generalizable to real world situations for humans. Thus, the theory has been criticized for being overly simplistic and unrealistically parsimonious (Chomsky, 1967; Ewen, 1988; Thomas, 1985).

In addition, some central behavioral concepts are either not clearly defined or based on circular reasoning. For example, a reinforcer is defined as anything that strengthens a response and the resulting increased rate of response is what proves that it is a reinforcer (Ewen, 1988). Further, anxiety has been defined as both a primary and secondary drive. Maddi (1980) has noted that the scales used to measure anxiety often go beyond behavioral predictions that stem from the concept of anxiety as a primary drive. Many anxiety studies have attempted to relate anxiety scores to other performance scores, resulting in R-R correlations, with no attempt to tie responses to antecedent stimuli as proposed by S-R laws.

Thomas (1985) has also raised important questions about distinctions between punishment and reinforcement, asking "Is withholding a reward a kind of punishment?" (p. 394). Further, radical behaviorism has been criticized for its inability to address species-specific behaviors, due to its reliance on animal studies and its failure to recognize the importance of human symbolization and complex forms of human behavior. These issues have yet to be adequately addressed.

Bandura's social learning theory has received less methodological criticism, particularly due to its explicit acknowledgment of internal processes that impact behavior and its use of human subjects (rather than animals) in research. In addition, it has received a great deal of empirical support, especially in studies that examine modeling, observational learning, and self-reinforcement and self-control (Corsini & Marsella, 1983). However, Maddi (1980) pointed out that some behaviorists would view the emphasis on subjective cognitive processes as being less than fully scientific due to the inability to measure thoughts and ideas directly. Methods used by social learning theorists, such as oral and written verbal

reports, do not directly measure the processes themselves but, rather, the behaviors that result from such processes. Further, as self-report data, they introduce a factor of subjectivity into the scientific method. Although this issue should not be dismissed, some believe that the combination of subjective and objective data actually constitutes a methodological strength rather a weakness. One additional problem cited with both social learning and behavioral theory is that they fail to account for individual differences.

The propositions set forth by exchange theorists also reflect a positivistic approach and readily lend themselves to mathematical models and rigorous deductive systems. Emerson (1972) developed a formalized model in which covariance among concepts is precisely defined and represented by symbolic notation. On the other hand, exchange can also reflect a phenomenological outlook, with people viewed as acting in idiosyncratic ways in response to rewards and punishments on which they place value and meaning. Thus, exchange theories embrace both positivism and constructivism.

Early theorists, such as Blau and Homans, were stronger on semantics than methodology. Homans's concepts were not well defined, and this led to subsequent charges of tautological thinking. Blau "does not state a formal set of propositions and is not interested in developing the higher-order axioms of a deductive theoretic system; he only aims to offer a theoretical 'prolegomenon,' or a conceptual sketch" (Abraham, 1988, p. 155).

Homans's theory has been widely criticized for his rigid behavioral reductionism that ignores cognitive factors, or internal mental process. In addition, Talcott Parsons argued that despite his claims, Homans failed to show how behavioral psychology explains large-scale systems (Perdue, 1986). Ekeh (1974) has criticized him for ignoring norms and values and for focusing on dyadic rather than large scale exchange. Blau's attempt to integrate different sociological perspectives has fallen short as well. Ekeh (1974) maintained that Blau's formulation is individualistic with a reductionistic emphasis on economic needs to explain social structures. In contrast, Ritzer (1992) contended that Blau's societal level exchange theory is "no longer identifiable as a behavioristic orientation" (p. 446). In fact, behavioral sociologists have argued that exchange has become a metaphor for interaction (Perdue, 1986).

In Emerson's formalization of exchange, he strengthened the positivistic approach with precise definitions of propositions that are stated in terms of covariance. In focusing his theory away from the motivation of individual actors, he avoided Homans's problems of tautology (Abraham, 1988). Due to its clearly positivistic approach, exchange theory has received a good deal of empirical validation, particularly in its application to social networks. Further, empirically based network analysis has been credited with introducing units larger than dyads into the exchange formulation (Abrahamson, 1990).

With these issues duly noted, exchange has become an important orientation in micro-sociology. And, as Abraham pointed out, "It has enriched the methodology of various theories of the middle range" (1988, p. 169).

In general, behavioral theories are extremely good at prediction when it is possible to control the relevant environmental determinants of behavior. Predictive power is weakened in the presence of complex environmental factors that contain a large number of random elements. Skinner's radical behaviorism is likewise predictive under highly controlled conditions, as when schedules of operant reinforcement are under experimental control. Bandura's social learning theory is also good at prediction when research is confined to the

specific elements of social learning covered by the theory. Similarly, when confined to rigorous experimental design of social networks, exchange theory is good at prediction.

However, as general theories of human behavior, both behavioral and exchange theories are generally better at explanation than prediction and are better at a probabilistic than deterministic level. Behavioral theories best explain behavior at an individual level while exchange theories are better suited for explaining properties of dyads and larger groups. However, the ability to predict future responses, even in a probabilistic sense, is somewhat limited, due to the wide variability of motivators. Even deviant cases may be explained by attributing behaviors to previously unrecognized rewards or costs. One salient criticism of exchange theories is that they are not useful for predicting individual behavior. Likewise, behavioral theories have limited utility for predicting group or organizational behavior.

Summary

Classical behaviorism has long given way to its radical form and is not widely used in contemporary social work practice. However, some of its fundamental tenets have been incorporated into other mainstream intervention strategies. Behaviorism has generally been subsumed under the rubric of cognitive behavioral practice and theory, and much of the work that is labeled as behavioral is actually cognitive-behavioral in character. The appeal of behaviorism, however, rests on its explicit simplicity, the ease with which its basic principles may be applied, and its clear effectiveness for impacting certain behaviors. Thus, behavioral practice may be found in settings that provide the means to control the environment in very concrete ways and in which fundamental behavioral change is the stated practice goal.

Social learning theories have gained widespread acceptance within social work and allied mental health disciplines. The appeal of social learning is threefold. First, many of the principles of social learning lend themselves readily to application in a helping context. Second, social learning theory has been shown to have a high degree of validity in understanding human learning. Thus, the principles of social learning theory are found in most comparative approaches to human development. Third, the fundamental tenets of social learning theory may be usefully applied to theoretical development in other areas. Thus, social learning has become, for example, a partial basis for the development of other sociobehavioral theories such as attribution theory and theories of motivation. In addition, social learning theory frees people from the environmental determinism imposed by radical behaviorism.

Exchange theory analyzes dynamic processes in terms drawn from behavioral psychology and utilitarian economics as well as functional anthropology and, to a lesser extent, dialectical sociology. Thus, it incorporates a variety of theoretical perspectives, allowing for widespread applications and "offers something for everyone" (Abraham, 1988, p. 169).

Exchange theories offer a useful meso-level framework through which we can view dyads and small groups as well as large scale social systems. In doing so, they address much of the micro–macro continuum necessary for social work practice. Unfortunately, similar to other meso-level theories, they ignore the reality of rigidly stratified societies, and this conservative bias weakens its utility for practice. Although the behavioral reductionism of Homans fosters a mechanistic view of individuals, the symbolic interactionist

stance of Blau should appeal to those with a more phenomenological orientation. With these limitations duly noted, the strength of exchange theories is in their scope, which makes them applicable to a wide range of populations in a variety of settings.

Finally, both social learning and exchange theories are based on the viewpoint that humans are actors, not reactors. This presumption of rationality and foresight on the part of the individual, and the ability to calculate behavior and respond accordingly, will likely hold a particular appeal for social work practice.