

Three "Silent Assumptions" in Cognitive-Behavioral Theory and Therapy

Abstract

Similar to the way personal, "silent" assumptions structure our practical experiences, the philosophical assumptions of cognitive-behavioral theory structure the way in which cognitive-behavioral explanations are rendered. Some cognitive-behavioral theorists have recognized the need for explicating the philosophical assumptions of cognitive-behavioral theory (e.g. Clark, Beck, & Alford, 1999). The purpose of this article is to further this work by describing three "silent" assumptions of cognitive-behavioral theory—objectivism, hedonism, and determinism. To help make these assumptions truly assumptions (rather than truisms), the problems of each assumption are identified and an alternative to each assumption is considered. This identification is a necessary step for the critical examination of theory. In the spirit of the cognitive-behavioral movement, we call for a rigorous discussion of all the silent assumptions of the theories of psychotherapy.

Three "Silent Assumptions" in Cognitive-Behavioral Theory and Therapy

Contemporary psychologists have often resisted identifying their assumptions (Rychlak, 1981; Slife & Williams, 1995). Scientists at their best are thought to be objective and thus avoid a biased, assumption-laden view of the world. Many cognitive-behavioral theorists, however, recognize the importance of assumptions, noting that assumptions—articulated or unarticulated—are not only unavoidable, but also necessary, because they provide meaning and significance to our lives. Consider Beck, Rush, Shaw, and Emery's (1979) observations in this regard: "The unarticulated rules by which the individual attempts to integrate and assign value to the raw data of experience are based on <u>fundamental assumptions</u> that shape his automatic thought patterns....In essence, these basic assumptions form a personal matrix of meaning and value, the backdrop against which everyday events acquire relevance, importance, and significance" (p. 244, emphasis added). Here Beck et al. make plain the need for assumptions in everyday living. Without them, there is no "meaning and value."

Assumptions are also necessary for our professional and scientific endeavors. Consider the above quotation again but with some editing about our professional activities. "The unarticulated rules by which [a scientist, therapist] attempts to integrate and assign value to the raw data of [science] are based on fundamental assumptions that shape his [or her findings and conclusions]....In essence, these basic assumptions form a [professional] matrix of meaning and value, the backdrop against which everyday events [data, information] acquire relevance, importance, and significance." Although we have modified Beck's quotation from the personal to the professional, Beck's work makes clear that no system of thought, whether professional or personal, can avoid making philosophical assumptions. Indeed, Beck would probably agree with Karl Jaspers (1954) when he noted that, "There is no escape from philosophy. The question is only whether [a philosophy] is good or bad, muddled or clear. Anyone who rejects philosophy is himself unconsciously practicing a philosophy" (p. 12). In this sense, many cognitive-behavioral theorists seem sensitive to the inescapability of philosophical assumptions. Indeed, this is the reason that some types of cognitive-behavioral therapy are often devoted to modifying, rather than removing, assumptions, because to remove all assumptions is to remove all "meaning and value" (Beck et al., 1979, p. 244).

The clear implication of Jasper's (and Beck's) position is that we must first identify our professional assumptions and then examine them as a discipline. Are they, as Jaspers put it, "good or bad, muddled or clear," given our subject matter (i.e., psychopathology, psychotherapy)? The problem is that this examination does not make clear how we go about examining assumptions. As we shall see, the evaluation of professional assumptions is

a unique enterprise (Maher, 1998). One cannot merely subject them to empirical test, because the logic and methods used to conduct such a test are themselves underlain with assumptions, i.e., philosophy of science (see Objectivism section below). How fair is it to evaluate one set of biases and assumptions with another set of biases and assumptions? This is not to say that empirical test does not play an important role in the examination of assumptions. It is to say that the role of empirical examination is not clear until we have identified the assumptions involved. This identification, then, is the primary purpose of the present paper.

In a chapter of the new Handbook of Psychotherapy and Behavior Change (Lambert, in press), Slife (in press) has begun this identification process by dealing very generally with the trends of psychotherapy. He identified five active assumptions, of which two, we believe, are especially relevant to cognitive-behavioral theory—objectivism and hedonism. We add one other assumption here—determinism—as another discussion point relevant to cognitive-behavioral theory. The term "cognitive-behavioral theory" typically refers to a broad spectrum of theories, such as those put forth by Beck, Ellis, Meichenbaum, and Kelly. Additionally, contemporary constructivist theories (e.g., Neimeyer & Mahoney, 1995) are often included under the cognitive-behavioral rubric. However, we narrow the focus of our analysis here to Beck's cognitive-behavioral theory and thus use the term "cognitive-behavioral theory" to refer specifically to Beck's theory (and its derivatives).

Some have identified conceptions that are comparable to objectivism and determinism as assumptions of cognitive-behavioral theory (e.g., Neimeyer & Mahoney, 1995). However, our arguments extend these conceptions considerably. In addition to adding hedonism as an assumption of cognitive-behavioral theory, we sharpen both the problems with and alternatives to all three assumptions. To make an assumption a point of view, instead of the point of view, more is required than merely listing and discussing it. Its problems must be explicated and alternatives developed, because problems and alternatives remove the truism status of traditional and familiar assumptions. That is, it is not the intent of this paper to argue for the veracity of any set of assumptions—traditional or alternative. Rather, the intent is to help the assumptions of cognitive-behavioral theory to be seen as assumptions and thus continue the dialogue begun by cognitive-behavioral theorists (e.g., Alford & Beck, 1997; Beck et al., 1979; Clark, Beck, & Alford, 1999), a dialogue that would be impossible without options to dialogue about (problems, alternatives).

We should also note at the outset that this theoretical analysis is focused on the <u>formal</u> cognitive-behavioral theories of psychopathology and psychotherapy, as described in texts and manuals, and not on the actual practice of

cognitive-behavioral therapy. Practice is not only more difficult to pin down, but also, we believe, less prone to the assumptions that ground formal explanations. This potential disparity between the formal and the informal is itself an interesting issue, but space prohibits discussing it in this paper. Our primary purpose here is to identify three major philosophical assumptions of formal cognitive-behavioral theory.

Three Philosophical Assumptions in Cognitive-Behavioral Theory

Objectivism

An objectivist philosophy assumes that the world exists independently of the observer's mind. That is, the objectivist assumes that there is a world of objects that is independent of the biases and values of human subjectivity. This assumption creates the traditional subject/object split, with values, biases, and opinions "within" the subject, and an "objective" reality that is outside the subject. Objectivism is a common assumption of mainstream psychotherapy theories (see Slife, in press), including much of cognitive-behavioral theory: "Beck's cognitive theory subscribes to a dual existence involving an objective reality and a personal, subjective phenomenological reality" (Clark et al., 1999, p.61). Further, Clark et al. (1999) argue that "general laws" (p. 62) as well as "a systematic, rule governed, and replicable psychotherapy approach" (p. 62) are part of the objective, rather than subjective reality. In other words, general laws and a systematic psychotherapy approach are not merely subjective, personal theories, but objective, nonpersonal realities. Thus, the focus of much cognitive research is understanding the general laws that are part of this objective therapeutic reality.

The difficulty is that we are all subjective beings, with necessary assumptions and biases. As described, each of us has foundational assumptions that help us understand the world, an understanding that is "at best an approximate representation of experience" (Clark et al., 1999, p. 63). If our experience of reality is an approximate and biased representation, how do we come to understand objective reality? Here, an objective, bias-free method is typically thought to be required to transcend our personal assumptions (biases) about reality and evaluate reality as "it really is." In fact, many cognitive-behavioral theorists view the scientific method in this way: "Cognitive theory and therapy acknowledges that there is an independent reality that does not originate in the knower...and that general laws and meanings can be attained through reason, science, and technology" (Clark et al., 1999, p. 62 emphasis added). In other words, the scientific method, broadly conceived, is thought to circumvent (or at least reduce) our values and biases because it uses both rigorous reasoning (rationalism) and cold, hard facts (empiricism) (Slife & Williams, 1995). This method is thought to be less subjectively or personally biased, because the experimenter

controls neither the logic nor the data. In this sense, "the mark of objectivists in this research is that they believe the logic of scientific method does not favor one type of therapy over another" (Slife, in press, p. 11).

Many cognitive-behaviorists believe the scientific method is a relatively unbiased tool of investigation. A strong indicator of this belief is the search for the empirical foundations of cognitive theory (see Clark et al., 1999). Cognitive-behavioral researchers are looking for "what the data say" about cognitive theory, because scientific data are assumed to be part of the objective world, free of assumptions and biases. The emphasis on empirically supported treatments (EST) (Beck, 1976, 1993; Haaga, Dyck, & Ernst, 1991; Hollon & Beck, 1994) also evidences the cognitive-behaviorists' faith in the scientific method as a window to objective reality. In fact, some theorists affirm the objective nature of ESTs to such a degree that they propose the discipline "censor fee-for-service psychotherapy not grounded in clinical or experimental research" (Alford, 1991, p. 211). The data are assumed to show us what is truly effective in psychotherapy, without our (subjective) assumptions and biases interfering in any substantive way. Obviously, researcher biases can creep in, but the <u>logic</u> of the method is that such bias is, in principle, reducible, through systematic control, precise measurement, and public replication. We can, at least in principle, develop a "systematic, rule governed, and replicable psychotherapy approach" (Clark et al., 1999, p. 62). This, then, is the assumption of objectivism.

Problems with Objectivism

The first questions about this assumption are: Does the scientific method really work in this way? Does it provide a way for cognitive theorists and researchers to get outside (or merely reduce) the assumptions of their subjectivity, which even their own theory would postulate (see Clark et al., 1999, p. 63)? Unfortunately, many contemporary philosophers of science have answered these questions negatively. Indeed, they have argued that reason and science are grounded in unacknowledged, uninvestigated, and unproven philosophical assumptions that cannot be reduced (Bem & de Jong, 1997; Bernstein, 1983; Bohman, 1993; Curd & Cover, 1998; Feyerabend, 1975; Heelan, 1983; Kuhn, 1970; Rorty, 1979; Taylor, 1985b, Toulmin, 1972). Prior to the formulation and application of any method, investigators must make assumptions about the type of world in which the method would be useful. If their assumptions indicated the method would not be useful, for instance, they would presumably formulate and apply another method that they thought would be successful.

In the case of cognitive-behavioral theory, researchers must develop (or know of) a method that they <u>assume</u> can detect systematic, rule governed approaches to psychotherapy (following Clark et al. (1999) quotation

above) <u>before</u> the method can be used to <u>find</u> systematic, rule governed psychotherapy approaches. Although these researchers may assume that the method has been successful before (for this purpose), there can be no empirical evidence of this success because, again, one must assume the philosophy of empiricism is valid to gather such evidence. Either way, the method must be set up, each time it is used, with uninvestigated assumptions, because each new population, place, and time require fresh assumptions about the nature of the methods.

Calling methods "objective," in this respect, is like calling multiple-choice tests "objective." Assumptions and biases are already built into the structure of investigation (method or test question). The problem is that this built-in status means that these assumptions are often ignored and left unexamined. For example, any method that requires observability, such as traditional scientific method, cannot investigate that which is nonobservable and cannot be used to evaluate theories that posit phenomena that are nonobservable. Even studies that use operationalizations of the nonobservable are, at best, studies of the manifestations of the nonobservable, and not studies of the nonobservable itself.

Consider, for example, how the existential therapist, Irvin Yalom (1980), disputes the observability of the existential psychotherapy process. The traditional study of this process, in this sense, would require that it be made observable through operationalization. However, if the treatment truly involves nonobservables, then only the observed manifestations of these nonbservables could be studied. The unobservable factors, presumably crucial to the existentialist, could not be studied because the only methods available assume they cannot be studied. (Qualitative research methods, for instance, do not assume observability, though they do require an experience-ability, broadly conceived.) With objectivism, researchers must either make non-objective theories objective (i.e., fundamentally change them), or they must consider them "unscientific" (i.e., assume they are not needed in a science of psychotherapy). In either case, the experimenters have ruled out the theory and therapy, not because of empirical evidence, but because of underlying assumptions, which themselves are not grounded in empirical evidence (because of the way any method is formulated).

The corollary is that psychotherapy theories that match the assumptions of objectivist methods (e.g., epistemology, ontology, metaphysics) should be those theories that receive the most empirical support (Messer, 2001; Slife, in press). Cognitive-behavioral therapy, for example, is considered to have fundamentally the same epistemological assumptions as traditional science (i.e., a combination of empiricism and rationalism; cf. Polkinghorne, 1983; Slife & Williams, 1995). Stanley Messer (2001) observes in this regard:

It gives one pause, however, to learn that the vast majority of studies that meet the criteria set forth by the [EST] task force are cognitive-behavioral in orientation, or what can be referred to as outcome-oriented therapies (Gold, 1995)....Almost totally absent are the psychodynamic, experiential, client-centered, family, and existential therapies. (pp. 3-4)

The positive empirical evaluation of cognitive-behavioral therapy in this respect <u>could</u> be due to systematic bias rather than simply the "objective" efficacy of treatment. Although many cognitive-behavioral theorists would presumably dispute this, this possibility cannot be ruled out until its professional assumptions have been identified and examined.

An Alternative to Objectivism

Would an alternative to objectivism mean the end of the science of psychotherapy? We would contend that it does not, though it would mean an end to simple, step-by-step approaches to science. That is, the "silent assumptions" of any method would need to be evaluated in light of the investigative questions being asked. Several researchers, in this regard, have offered a position known as methodological pluralism as an alternative to objectivism (Bergin & Garfield, 1994, p. 828; Roth, 1987; Slife & Gantt, 1999). The methodological pluralist recognizes that all methods of science—quantitative and qualitative—have implicit, necessary assumptions. In other words, the pluralist suggests that no method can bridge the gap (if there is one) between the subjective and objective because all data are inherently assumption-laden—inherently "subjective" to some degree (e.g., objective multiplechoice tests).

But does the assumption-ladenness of methods mean that a true understanding of the world is not possible? Perhaps surprisingly, it is the <u>pluralist</u> who answers "no" to this question. Assumptions <u>are</u> inescapable, so pluralist researchers do not try to eliminate, suspend, or reduce them. However, they are open to assumptions and biases (methodological or theoretical) that make the most sense of the phenomena under investigation. Although phenomena cannot be understood (or even perceived) without assumptions, this does not mean that assumptions control the phenomena (or our perceptions). Assumptions and phenomena <u>jointly</u> influence our perceptions, allowing us to search for the assumptions that best fit the influence of the phenomena under investigation.

Both quantitative and qualitative methods are useful to the pluralist in this regard. Quantitative research is useful particularly when its assumptions are taken into account. Qualitative methods are useful to the pluralist because qualitative researchers often deliberately attempt to explicate and test any built-in assumptions through the

process of investigation (Banister, Burman, Parker, Taylor, & Tindall, 1994; Crabtree & Miller, 1992; Denzin & Lincoln, 2000; Gilgun, Daly, & Handle, 1992; Patton, 1990). However, we need to identify assumptions to examine them empirically—quantitative or qualitative. This examination is, after all, the hallmark of science. Science is about examination and investigation in <u>all</u> its forms. Scientists do not have to stop with quantitative examination, especially when, as cognitive-behavioral theorists note, "silent" assumptions are involved.

Hedonism

The term "hedonism" usually has a pejorative connotation. Nevertheless, this second assumption, when understood broadly, is surprisingly pervasive among psychotherapy theories, including cognitive-behaviorism (Slife, in press). Specifically, hedonism is the assumption that all living things seek to maximize pleasure and self-benefit, and minimize pain and suffering. More broadly, hedonism is also an ethical assumption, implying that well-being, happiness, or self-benefit is the chief good in life (cf. Merriam-Webster's Dictionary, 1998). Hedonism is usually considered a law or principle of nature, including human nature, and a by-product of evolution. That is, it is the nature of human beings to be ultimately motivated to seek self-benefit, survival of the self, and thus adaptation. If a species moved consistently toward pain and suffering, and did not adapt to its changing environment, its survival would be considered in jeopardy. As Beck (1999b) puts it, "self-protection, as well as self-promotion, is crucial to our survival" (p. 6). Moreover, these self-protective characteristics are "discernable throughout the animal kingdom and [are] apparently embedded in our genes" (Beck, 1999b, p. 6; see also Beck, Emery, & Greenberg, 1985).

Although humans may occasionally move toward pain and endure suffering, they do this ultimately (if they are normal) for the growth and benefit of the self. In this view, any suffering that does not lead to some sort of growth or benefit to the self is harmful and abnormal, and thus should be removed (Burns, 1980).

Hedonism's involvement in evolution makes it quite pervasive in cognitive-behavioral theory and therapy. The human ability to process information, for example, is considered to have evolved primarily to meet the needs of the individual (Clark et al., 1999, p. 68; see also Alford & Beck, 1997, p. 24-30, Beck, 1999a, Beck, Freeman, & Associates, 1990, p. 24-27, and Pretzer & Beck, 1996, p. 44).

"Two orientations are represented in the information processing system....The first orientation, the primitive or primal level, consists of schemas and modes involved in meeting the immediate and more basic requirements that are crucial to the survival of the organism....The second orientation within the

information processing system is concerned with productive activities that increase vital resources for the individual" (Clark et al., 1999, p. 67-68).

Our information processing system is naturally oriented towards construing the world in a way that ensures we promote, protect, and preserve ourselves, and thus is hedonistic in nature. Moreover, the initial significance or meaning of an event stems from its relation to the self (Beck, 1985; Beck, 1999a). Significance stems from whether or not that event threatens our survival or increases our resources. Beck (1999b) even explains the meaning of interpersonal relationships in this way, suggesting that if we did not invest in our protection and promotion, "we would not seek the pleasures we gain from intimate relations, friendships, and affiliation with groups" (p. 6; see also Beck, 1999a).

This hedonistic assumption about information processing has often led cognitive theorists to construe depression as a paradox: depressed individuals often understand the world in ways that reduce their possibility for gain, which contradicts their hedonistic nature (Beck, 1967; Beck, 1976). Cognitive theory often accounts for this paradox by arguing that depressed individuals understand the world in maladaptive, non-natural ways. Because information processing systems evolved to aid the survival of the individual, it follows that cognitive processing "that promotes the major goals of the organism—survival, growth, reproduction, maintenance, [and] mastery"—is adaptive and natural (Beck et al., 1985, p. 13). In fact, being adaptive (and doing what is hedonistic) is often equated with being "realistic" and "rational" (Alford & Beck, 1997, p. 17). That is, to be realistic or rational is ultimately to promote our hedonistic goals—"survival, growth, reproduction, maintenance, [and] mastery" (Beck et al., 1985, p. 13). In contrast, any cognitive processing that reduces the possibilities for survival and gain is "maladaptive" and goes against our "natural" (hedonistic) instinct to protect and promote the self. Thus, maladaptive behaviors appear paradoxical because much of cognitive-behavioral theory is underlain with the assumption of hedonism.

Indeed, Clark et al. (1999), speaking about "disordered (maladaptive) conditions such as depression," (p. 68) suggest that depression is maladaptive because "the representation of the self, world, and future is one of reduced possibilities for gain; the cognitive 'loss' interpretation reduces perceived possibilities (strategies) for obtaining commodities necessary for survival and thriving" (p. 68). In fact, depression is thought to be so maladaptive as to have "no...positive function whatsoever" except "the growth you experience when you recover

from it" (Burns, 1980, p. 232). Suffering and depression, then, are to be removed, as much as possible, except as they might prevent greater suffering and depression.

Some cognitive-behavioral therapists (e.g. Burns, 1980) would hold that the goal of cognitive-behavioral therapy is not the removal of all distress, only excessive pain and distress. However, even this distinction is grounded in the assumption of hedonism. The distinction between the excessive pain of depression and "healthy sadness," according to Burns (1980), is that depression results from distorted thoughts that ultimately result in selfdefeat. In contrast, "healthy sadness" is appropriate because it creates emotions which "will enhance your humanity and add depth to the meaning of your life. In this way you gain from your loss" (p. 232, emphasis in original). Therefore, the criterion for what is excessive is whether the emotional reaction increases self-growth, selfenhancement, or self-thriving—in short, whether it provides a benefit to the self.

Problems with Hedonism

Traditionally, problems with hedonism have centered on its lack of altruism. That is, if hedonism is our ultimate motive (benefit of the self), then people cannot ultimately hold an altruistic motive, where we put the benefit of others before the benefit of ourselves. The issue is: are others (ultimately) a means to our self-benefit ends (hedonism) or is the benefit of others the ultimate end in itself, with us as the means (altruism)? Hedonists have responded to this criticism by noting that hedonistic motives do not prevent "altruistic" behaviors, even if they prevent altruistic motives in this ultimate sense. It is frequently in the best interest of the person to help others. Consequently, hedonism does not preclude altruism in the behavioral sense. Indeed, as mentioned, most altruistic behaviors are explained as ultimately hedonistic—ultimately for the benefit of the person performing them, even in cognitive behavioral therapy. Consider Burns' (1980) discussion of the "Sticking to Your Guns Technique" (p. 218-222). Burns tells of a woman whose brother has "take[n] advantage of her in a variety of ways" (p. 219). The woman claims that she gives in to her brother's demands out of love. However, Burns explains (through the assumption of hedonism) that her actions are not based on love for her brother; she gives in to him to avoid feeling her own pain of guilt (p. 219). In other words, she may appear to be "sacrificing" for her brother, but she really is acting in her own self-interest—to avoid the pain of guilt.

To overcome the guilt, Burns prescribes a dose of tough love. The woman is to "stick to her guns" and not give into her brother's demands. Burns believes that this tough love will, in the long run, help the woman's brother. However, his main reason for prescribing tough love is to help remove the woman's pain of guilt. The motivation

for giving in to her brother's demands and for "sticking to her guns" is the same in both instances: the client's selfinterest (p. 222). In neither case, however—at least from an altruist's perspective—did she behave toward her brother with altruistic motives, because her brother was, in both instances, a means to her personal end. Some altruists would argue that a true love for her brother would require her treating him as the end. However, such love would only seem adaptive to the cognitive behavioral theorist if it resulted in self-benefit. True love for the altruist, on the other hand, requires this love regardless of the consequences. From the hedonistic view, this is not possible, because no (normal) action can be taken without self-gain as the ultimate motive, however conscious this motive may be.

Unfortunately, when we consider that therapists themselves must also have this ultimately hedonistic motive (i.e., hedonism is our human nature), therapists cannot themselves have truly altruistic motives. Clients must (ultimately) be the means to the selfish ends of their therapists. Although it is true that most therapists receive monetary gain for their services, our ethical code expects therapists to act in their clients' best interests irrespective of their own benefit (APA Code of Ethics, 1992). However, from the hedonism of a cognitive-behavioral perspective, therapists who do not consider their own benefit first are behaving in a maladaptive way. Again, this perspective does not preclude therapists from adaptively sacrificing for their clients, if their sacrifice provides benefits for themselves in the long run. However, it does preclude therapists from acting in the interest of their clients when that act does not benefit the therapists (i.e., increases their chances at survival and thriving). In fact, therapists would be acting in a maladaptive manner, much like depressed individuals, because they would not ultimately be concerned with their own benefit.

An Alternative to Hedonism

It is our suspicion that many therapists would resist the claim that all normal behavior is ultimately grounded in self-interest and that truly altruistic motives are maladaptive. That is, we suspect many therapists, whatever their theoretical leaning, experience themselves, at least at times, helping their clients without concern for their own benefit and not feeling dysfunctional in doing so. In this sense, then, the assumption of altruism provides an alternative to the assumption of hedonism. Altruism involves an ultimate concern or motive for the other. This is not to say that all concerns and motives would necessarily be for the sake of the other, just that all concerns and motives <u>could</u> be for the sake of the other (Slife, in press).

Beck (1999b), in fact, has acknowledged the need for altruistic motivations to counter egoistic (hedonistic) motivations at times. The difficulty is that he often discusses altruism in hedonistic terms. For example, Beck (1999b) argues that the altruistic person "gets gratification from subordinating his own interests to the needs of other people," (p. 244), thinks that altruism "makes me a better person," (p. 245), and believes that "the altruistic act is its own reward" (p. 246). From Beck's perspective, altruism involves the pursuit of gratification, self-growth, and rewards. In contrast, altruism in our alternative sense suggests that we can (and should) enter into relationships solely for the sake of the other. This is not to say that benefits cannot ensue from altruistic motives, but altruistic motives prevent those benefits from being the objects of pursuit (Slife, in press; Yalom, 1980).

What would a thoroughly altruistic alternative to therapy be like? First, adopting altruistic assumptions implies important changes in many of the cognitive-behavioral definitions of disorder and maladaptation. Indeed, the altruist specifically rejects the cognitive theorist's assertion that behaviors resulting in reduced possibilities for survival and thriving are maladaptive (e.g., Clark et al., 1999). From an altruistic perspective, it is likely that acting for the sake of the community, rather than self-benefit, is the most "adaptive," particularly for the community. The epitome of health would not be the absence of obstructions to survival and thriving, but, instead, the absence of selfish motivations that obstruct the development of altruistic relationships, whether therapeutic or social (Levinas, 1989; Slife, in press).

Altruism would also cast the purpose of pain and suffering in a different light (Slife, in press). Pain and suffering might be the consequence of altruism, so their avoidance would not necessarily be a high priority. Indeed, from the altruist perspective, it is possible for someone to experience constant pain, suffering, and even depression and live a healthy life. This means that depression could, as Burns (1980) put it, have "no adaptive or positive function whatever" (Burns, 1980, p. 232), but it could also mean that depression has a meaning and purpose of its own (Neimeyer, 1995; Yalom, 1980). That is, although such meaning could never be pursued (as a self-benefit), it might only ensue with deeply held altruistic motives and might only be available through depression. Therapy would thus involve discussing the potential meaning of clients' suffering, without automatically removing that suffering, because continued pain may be required for deeper meaning (Slife, in press). Again, from the approach of an altruist, one cannot invite such pain to pursue such meaning (hedonism); one can only find such meaning through the pain of true self-sacrifice.

Altruism would also require changes in the goals of many cognitive therapies. Currently, the goals of many cognitive therapies are to increase the client's possibilities of survival and thriving by removing emotional distress and modifying maladaptive assumptions (Beck et al., 1979; Burns, 1980; Clark et al., 1999). However, truly altruistic therapists would not facilitate their clients to obtain benefits for themselves, but would facilitate their clients to seek ways of benefiting others (Slife, in press). For example, an altruistic therapist would not advocate that clients "stick to their guns" because it is in their own self-interest. If they advocated this technique at all, it would be with the aim of serving another. An altruistic intervention would be considered successful if clients sacrificed their own self-interests for the sake of the other and helped others to do the same. As Slife (in press) notes, outcomes would be more focused "on how the individual serves society rather than how society serves the individual, even if suffering and depression were the individual outcome" (p. 52-53, emphasis added). Consider the woman whose brother was taking advantage of her. Successful therapy would facilitate her serving her brother and thus helping him to serve others, even if that outcome still meant individual guilt. These types of outcomes may be perceived as extreme or even strange to some, but the altruist views such perceptions as a mark of the pervasiveness of hedonism.

Determinism

Determinism may seem an unlikely assumption of cognitive-behavioral theory, given cognitive theory's discussion of a client's active participation in therapy. Indeed, Clark et al. (1999) assert that a distinguishing feature of cognitive theory is its assumption that the processes that control behavior are within the control of the person. However, this assertion leaves open the question of the nature of that personal control. That is, is the person's "control" itself controlled (determined) by past experiences and genetic mechanisms? It is our contention that much of the formalized cognitive-behavioral theory precludes agency—the ability to do (or think) otherwise—as we will attempt to show.

A deterministic framework can often be recognized by its explanations. For example, in Skinnerian behaviorism behaviors are explained as the consequence of previous learning history (Slife, Yanchar, & Williams, 1999). That is, the past (even a stimulus is the immediate past) is the explanation of, and thus is responsible for, behaviors in the present. A pedophile's deviant behavior, for example, is not an act of an agent that could have acted otherwise, but is, instead, a necessary result of that pedophile's learning history. In addition to the environment, some behaviorists have discussed the role of genetic factors in behavior. However, they are the first to admit that

this role does not prevent determinism. In fact, an unchangeable genetic structure implies that change (e.g., learning) must be determined by a changeable environment. Thus, the past (learning history, stimuli) is not only a necessary condition but also a sufficient condition for changes (e.g., responses) that occur in the present (Slife et al., 1999). The past is responsible for whatever changes occur in the present because aspects of the present or future have not been specified as providing unique contributions. In this sense, any theoretical framework that considers the past to be sufficient for explaining the present is essentially deterministic.

Do cognitive theorists consider the past a sufficient condition for changes in the present? Are they deterministic in this sense? It is true that cognitive-behavioral theorists hold that "the meaning a person attaches to a situation, or the way an event is structured (or constructed) by a person, theoretically determines how that person will feel and behave" (Alford & Beck, 1997, p. 23). This tenet is not in itself deterministic because the person appears to be a controlling agent in the cognitive meaning or structure employed. However, a cognitive theorist's explanation of the origins of that meaning is often deterministic. For example, Alford and Beck (1997) note that "cognitive, affective, and motivational processes are determined by the idiosyncratic structures, or schemas, that constitute the basic elements of personality" (p. 25-26; see also Beck et al. 1990). Further, "cognitive theory and therapy acknowledges that there is an independent reality...[that] is the basis of the cognitive constructions that determine affect and behavior" (Clark et al., 1999, p. 62). The upshot is that all cognition, affect, motivation, meaning, structure, and personality "are controlled by genetically and environmentally determined processes or structures, termed 'schemas'" (Alford & Beck, 1997, p. 29, emphasis added; see also p. 43). In effect, at least regarding formal theories and explanations, all that we are at any moment in time is the combination of our environmental experience and our genetic structure (Beck, 1964, 1967, 1999a).

The process by which these environmentally and genetically determined schemas become active is also deterministic. Schematic processing is not an act of a purposeful agent—at least not ultimately; it is the result of environmental events impinging on the schemata. Alford and Beck (1997), discussing schematic processing, note that "existing belief structures or schemas are activated by environmental circumstances. Schematic (meaning) processing, whether conscious or unconscious, generates an interpretation. The specific interpretation leads to affect, which is followed by specific behavior, which in turn modifies the original situation" (p. 19, emphasis added; see also Clark et al., 1999, p. 66-67). Behavior, then, is the result of a cause-and-effect chain begun and activated by events of the environment.

Likewise, although behavior may affect the environment, and by doing so change future environmental influences, these changes are not ultimately the product of an intentional agentic act, but are ultimately produced by a behavior that was brought about by processes activated by the environment. Clark et al. (1999) define this activation as "the process of matching situation or stimulus input features to schemas and modes thereby increasing their prominence within the information processing system" (p. 97). Further, "schemas and modes that are a good match to the stimulus input features will be primed and highly activated" (p. 97; see also Alford & Beck, 1997, p. 43 and Beck, 1996, p.12). As we can see from these quotations, the environmental stimuli or circumstances are responsible for behavior—if the stimuli do not match the schema content, the schema remains dormant and the cause-and-effect chain described by Alford and Beck does not occur. If, as formal cognitive theorizing suggests, schematic processing is central to human experience and schematic processing is a function of activation by the environment, then environmental influences control human experience.

We anticipate that some cognitivists may resist this analysis of cognitive theory, because they may not wish to be deterministic. Indeed, we see evidence of agentic beliefs in the way many cognitivists conduct therapy. Still, as we stated at the outset, our focus is the formal descriptions of cognitive theory, where agency does not seem to be included. Even "reciprocal determinism" and "top-down processing" as described in the literature, does not allow for agency. Consider Clark et al.'s (1999) description of reciprocal determinism:

...cognitive theory does not assume the meaning structures develop solely as a result of transactions with the environment. Instead, the model assumes that some genetic or biological propensity or prototype for meaning structures exists within the developing human organism. This rudimentary structure, then, constitutes the framework on which experience shapes the development of the cognitive organization. As can be seen in this proposition, the cognitive model readily acknowledges that the person-environment relationship can be described in terms of reciprocal determinism. (p. 65 emphasis added; see also Beck, 1996, p. 11)

This person-environment relationship is reciprocal in the sense that the environment does not simply etch meaning onto a tabula rasa. Each person's genetics or biology (which is outside the person's control) shapes the way in which the environment directs the development of meaning. However, this person-environment relationship is not reciprocal in the sense that people agentically or freely affect environmental influences, because determined genetic structures interact with determined environmental influences. Consequently, a person is not a self-initiator or an agent, but is merely the nexus of environmental and genetic forces.

Problems with Determinism

Perhaps the most obvious problem with the assumption of determinism is that it obviates much of what presumably sets cognitive-behavioral theory and therapy apart from other theories, such as behaviorism (see Clark et al. 1999). Indeed, in terms of formal explanations, the environment enjoys just as much causal primacy in cognitive theory as it does in behaviorism. The "values, intentions, and meanings" (Clark et al., 1999, p. 56), putatively central to cognitive therapy, are products of the environment and thus are simply relays of environmental causes to resultant behaviors. In this sense, cognition is essentially just another link in the behavioristic, deterministic chain. However, this is not the distinction we seem to hear cognitive theorists making. Instead, we seem to hear cognitive theorists positing values, intentions, and meanings that are directed by an intentional agent, not merely a naturenurture interaction, with neither nature nor nurture under the agent's control.

Because cognitive-behavioral theory affords such causal status to the environment, it follows that the fundamental processes involved in cognitive therapy are essentially a manipulation of the environment. Clark et al. (1999) explicitly point this out:

...the threshold of activation that characterizes schemas and modes is modified by environmental exigencies. Different information from the environment may activate competing or compensatory schemas that will then deactivate or counter the dysfunctional hypervalent schemas. This is the fundamental process that underlies cognitive therapy. The cognitive therapist purposefully provides competing information and experiences that activate compensatory schemas, and this process deactivates hypervalent dysfunctional schemas. (p. 67, emphases added).

At this formal level, cognitive-behavioral therapy is virtually indistinguishable from behavioral therapy and behaviorism, which has been shown to be deterministic (Rychlak, 1981; Slife et al., 1999). Furthermore, this formal theory denies the cognitive theorists' notion that clients are actively participating in therapy. Instead, clients are passive, but sophisticated, objects to be "activated" or "deactivated" by new or different environmental exigencies. As Bergin (1997) notes, therapy, in this sense, construes clients and their problems as "objects...to be acted upon by therapeutic interventions...designed by experts" (p. 83)—psychotherapy becomes a technical enterprise. Indeed, as Woolfolk (1988) argues, "if mental life is conceptualized as a set of relatively static, environmentally implanted

cognitive structures, then cognitive restructuring becomes the analog of reprogramming a Turing device and psychotherapy is reduced to a technical task" (p. 182).

Perhaps the most common criticism levied at determinism is that it prevents meaning. If humans lack agency (i.e., the ability to do otherwise), then they cannot be capable of meaning, purpose, or responsibility. Rocks rolling down mountains and tornadoes destroying buildings are not typically thought of as meaningfully or purposefully (i.e., agentically) doing so—they lack the ability to do otherwise. If a rock were suddenly to roll to the right and kill someone, we would not say "bad rock." We would not hold the rock responsible as we would a criminal, because the rock could not have "behaved" otherwise. Likewise, persons with borderline personalities cannot behave otherwise in cognitive-behavioral theory if this disorder is considered to arise "from a skewed distribution of the adaptive strategies in the genetic endowment or from adverse experiences that impinge on the individual in such a way as to produce hypertrophy of some strategies and atrophy of others" (Beck, 1999a, p. 428 emphases added). The criminal and the "borderline" cannot be judged, in court for example, because they are no more responsible than the rock. Genes and the environment determine the behaviors of people, much like material structure and the environment (e.g., wind, water, gravity) determine the "behaviors" of rocks. .

The problems of determinism have led some cognitive theorists to attempt to "add-on" an agentic capacity to their already deterministic theories. These theorists acknowledge that although behaviors and cognition are controlled by external variables, there are times when humans, rather than the environment, take on causal status (e.g., Alford & Beck, 1997, p. 42). For example, Beck (1996) posits a conscious control system that allows for the formation of "conscious intentions" (p. 7) and operates at the level of metacognition, independent of lower-levels of cognition (i.e., schemas and modes; p. 12). Presumably, because this system is beyond cognition, it can operate independently of the determined lower-levels.

The problem is that add-on frameworks ultimately prove unsatisfactory for several reasons. First, it is unclear how conscious control systems, such as Beck's (1996), become independent of genetic and environmental dependence, especially when all cognitive abilities are produced by genetic and environmental determinants (see determinism section above; cf. Slife, 1987). If such as system is dependent, then it, like other cognitive abilities, is determined. On the other hand, if this control system (or agency) is truly independent of external causes, then the agent lacks any grounds upon which to act. For example, a control system must be independent of schemas, because the environment activates schematic processing. Moreover, this system cannot be a schema itself because schemas

are environmentally and genetically determined. However, schemas are the "meaning-making structures" (Clark et al., 1999, p. 65) and thus a control system in cognitive therapy must be independent of meaning (i.e., groundless). In this sense, any acts of an agent, since groundless, become merely random action or chance—meaningless (Taylor, 1985a; Williams, 1992). Of course, conscious control systems could also be dependent to some degree on external causes and independent to some degree of them. The difficulty is, the degree to which the control system is dependent on external causes is the degree to which it is determined, and the degree to which the control system is independent of external causes is the degree to which it is random or meaningless. No agency is effected. As Slife and Williams (1995) note, "the most that a combination of [dependence and independence] would produce is some form of determined randomness" (p. 123).

An Alternative to Determinism

These problems have led several theorists and philosophers to advocate a thorough-going (non-add-on) agentic (teleological) understanding of human nature (e.g. Howard 1985; Howard & Conway, 1986; Rychlak, 1988; Williams, 1992, 2001). This understanding implies that humans initiate and are the undetermined agents of their own thoughts and behaviors, giving them some responsibility for their thoughts and behaviors. This agency also allows them to be praised and blamed, because how ever they behave (or think), they could have behaved or thought otherwise. Truly purposeful behavior, in this sense, is possible.

Traditional social science criticisms of this alternative have centered primarily on two questions regarding the "unscientific" status of agency. First, how scientifically predictable would humans be with agency? As described, an agency that is independent of the person's past or environment, and thus is unrelated to anything observable, is unpredictable in principle (i.e. random, capricious). Second, how is it possible for humans to be exempt from the laws of nature? At the very least, humans have bodies that are governed by the laws of physics and the principles of biology.

The general response of agentic theorists to these criticisms is that they are based on an understanding of humans and science which is taken from the natural sciences (i.e., a naturalistic philosophy of science; see Slife, in press for an in-depth treatment of naturalism). The criteria used to evaluate the scientific status of agency are the same as those used in chemistry, physics, and biology (e.g., establishing causal relations between variables). This naturalistic philosophy of science is often taken for granted as the criteria for evaluating scientific explanations rather than a philosophy for evaluating scientific explanations. Indeed, naturalism has become so ingrained in

science that evaluating constructs, such as agency and altruism, in terms of naturalistic criteria is almost automatic. As we have described, however, this automaticity should be examined, and any such examination requires that alternatives, such as agency, not be rejected out of hand or evaluated in terms of the very philosophy to which it is meant to be an alternative.

This general response provides an answer, then, to the first question regarding the unpredictability of agency (above). One of the problems with the philosophy of naturalism is that it confounds predictability with determinism. That is, naturalism assumes that natural events are not only patterned (and predictable) but also governed (and determined) by the laws of nature. This confound is often operative in cognitive-behavioral theory. Although many cognitive theorists argue that we actively construct the world, they posit an objective reality that consists of "general laws" and "is the basis of the cognitive constructions that determine affect and behavior" (Clark et al., 1999, p. 62). In other words, our constructions are not only predictable patterns but also governed by objective reality and laws. Once those laws are discovered, presumably a systematic psychotherapy (psychotechnology) could be constructed in accordance with those laws.

The problem is that predictability does not require governance and thus determinism; predictability only requires a consistency of pattern, which agentic theorists typically affirm (Howard, 1985; Howard & Conway, 1986; Rychlak, 1988; Williams, 1992). Indeed, common sense notions of agency assume predictability. If, for example, someone chooses to pursue a college degree, then we expect a whole host of predictable behaviors and choices to follow, including certain courses taken and classes attended. In fact, this is the function of psychological assessment, from this agentic perspective: it reveals our fundamental desires or goals (our will) as well as previous patterns of decisions, and thus behaviors. Unpredictability, in this sense, is not a logical implication of agency, nor does any advocate of agency assume unpredictability (cf. Howard, 1985; Rychlak, 1988).

Agentic predictability also provides an answer to the second question (above) regarding the exemption of humans from the laws of nature. If the issue of determinism is separated from the issue of pattern (and predictability), then it is appropriate to ask what scientists truly observe. Interestingly, Hume (1888) taught us long ago that no one really observes determinism and causation: all that scientists truly observe is events. Scientists have been taught that certain experimental designs allow them to infer causation, but what is often overlooked is that this is still an inference (see Rychlak, 1988). Natural laws are themselves inferred from the events observed, becoming the inferred controllers and thus determiners of the events. The fact is, however, these lawful controls are never

literally observed. The law of gravity, for instance, is never itself observed; it is only inferred. Agency, in this sense, is merely another type of inference, another way to interpret the events of nature. Granted, it is difficult to interpret gravity in agentic terms. Most would agree that naturalism is more plausible in the case of gravity events. Still, many would agree that agency is a plausible interpretation of the events of humans, especially in view of the problems of determinism (above). The point is that both interpretations—determinism and agency—should be considered when making sense of data, because neither interpretation is observed.

Conclusion

Do the assumptions, problems, and alternatives presented here mean that cognitive-behavioral theorists should abandon these three "silent assumptions?" At this point, we believe that this question cannot be answered. From our perspective, we have only just begun the rigorous discussion and investigation necessary to make such a decision. The mere presence of problems and alternatives for the assumptions of objectivism, hedonism, and determinism means very little, because all assumptions, even the alternatives described here, have their problems and their alternatives. Therefore, the advantages and disadvantages of all the assumptive candidates will need to be examined and explored before an answer to this question is even attempted. Our purpose here was twofold: to note the broad outlines and importance of this project—particularly for a theory that makes assumptions its therapeutic business—and to take the first step in this project by identifying some of the issues that need examination.

References

Alford, B. A. (1991). Integration of scientific criteria into the psychotherapy integration movement. <u>Journal</u> of Behavior Therapy and Experimental Psychiatry, 22, 211-216.

Alford, B. A., & Beck, A. T. (1997). The integrative power of cognitive therapy. New York: Guilford Press.

American Psychological Association. (1992). Ethical principles of psychologists and code of conduct. American Psychologist, 47, 1597-1611.

Banister, P., Burman, E., Parker, I., Taylor, M., & Tindall, C. (1994). Qualitative methods in psychology: A research guide. Philadelphia, PA: Open University Press.

Beck, A. T. (1964). Thinking and depression: 2. Theory and therapy. Archives of General Psychiatry, 10, 561-571.

Beck, A. T. (1967). Depression: Causes and treatment. Philadelphia, PA: University of Philadelphia Press.

Beck, A. T. (1976). Cognitive therapy of the emotional disorders. New York: New American Library.

Beck, A. T. (1985). Cognitive therapy. In H.I. Kaplan & B. J. Saddock (Eds.), Comprehensive textbook of psychiatry/ IV (4th ed.) (Vol. 2, pp. 1432-1438). Baltimore, MD: Williams & Wilkins.

Beck, A. T. (1993). Cognitive therapy: Past, present, and future. Journal of Consulting and Clinical Psychology, 61, 194-198.

Beck, A. T. (1996). Beyond belief: A theory of modes, personality, and psychopathology. In P. M. Salkovskis (Ed.), Frontiers of cognitive therapy (pp.1-25). New York: Guilford Press.

Beck, A. T. (1999a). Cognitive aspects of personality disorders and their relation to syndromal disorders: A psychoevolutionary approach. In C. Cloninger (Ed.), Personality and psychopathology (pp. 411-429). Washington, DC: American Psychiatric Press.

Beck, A. T. (1999b). Prisoners of hate: The cognitive basis of anger, hostility, and violence. New York: HarperCollins.

Beck, A. T., Emery, G., & Greenberg, R. L. (1985). Anxiety disorders and phobias: A cognitive perspective. New York: Basic Books.

Beck, A. T., Freeman, A., & Associates. (1990). Cognitive therapy of personality disorders. New York: Guilford Press.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). Cognitive therapy of depression. New York: Guilford Press.

Bem, S., & de Jong, H. L. (1997). Theoretical issues in psychology: An introduction. London: Sage Publications.

Bergin, A. E. (1997). Neglect of the therapist and human dimensions of change: A commentary. Clinical Psychology: Science and Practice, 4, 83-89.

Bergin, A. E., & Garfield, S. L. (1994). Overview, trends, and future issues. In S. L. Garfield & A. E. Bergin (Eds.) Handbook of psychotherapy and behavior change (4th ed., pp. 821-830). New York: Wiley.

Bernstein, R. J. (1983). Beyond objectivism and relativism: Science, hermeneutics, and praxis. Philadelphia, PA: University of Pennsylvania Press.

Bohman, J. (1993). New philosophy of science. Cambridge, MA: MIT Press.

Burns, D. D. (1980). Feeling good: The new mood therapy. New York: Avon.

Clark, D. A., Beck, A. T., & Alford, B. A. (1999). Scientific foundations of cognitive theory and therapy of depression. New York: John Wiley and Sons.

Crabtree, B. F., & Miller, W. L. (1992). Doing qualitative research. Newbury Park, CA: Sage.

Curd, M., & Cover, J. A. (1998). Philosophy of science: The central issues. New York: W. W. Norton & Company.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). Handbook of qualitative methods. Thousand Oaks, CA: Sage.

Feyerabend, P. (1975). Against method. London: Verso.

Gilgun, J. F., Daly, K., & Handel, G. (Eds.). (1992). Qualitative methods in family research. Newbury Park, CA: Sage.

Gold, J. R. (1995). The place of process-oriented psychotherapies in an outcome-oriented psychology and society. Applied and Preventive Psychology, 4, 61-74.

Haaga, D. A. F., Dyck, M. J., & Ernst, D. (1991). Empirical status of cognitive theory of depression. Psychological Bulletin, 110, 215-236.

Heelan, P. A. (1983). Space-perception and the philosophy of science. Berkeley, CA: University of California Press.

Hollon, S. D., & Beck, A. T. (1994). Cognitive and cognitive-behavioral therapies. In S. L. Garfield & A. E. Bergin (Eds.), Handbook of psychotherapy and behavior change (4th ed., pp. 428-466). New York; Wiley. Howard, G. S. (1985). Dare we develop a human science? Notre Dame, IN: Academic Publications Howard, G. S., & Conway, C. G. (1986). Can there be an empirical science of volitional action? American Psychologist, 41, 1241-1251.

Hume, D. (1888). A treatise of human nature. (L. A. Selby-Bigge edition). Oxford: Clarendon.

Jaspers, K. (1954). Way to wisdom: An introduction to philosophy. New Haven, CN: Yale University Press.

Kuhn, T. S. (1970). The structure of scientific revolutions (2nd edition). Chicago: The University of Chicago Press.

Lambert, M. (Ed.) (in press). Handbook of psychotherapy and behavior change (5th ed.) New York: Wiley. Levinas, E. (1987). Time and the other. (R. A. Cohen, Trans.). Pittsburgh, PA: Duquesne University Press. Maher, A. R. (1998). How can philosophy contribute to the advancement of psychotherapy? An

introduction. Clinical Psychology: Science and Practice, 5, 229-232.

Merriam-Webster collegiate dictionary. (1998). Springfield, MA: Merriam-Webster.

Messer, S. (2001). Empirically supported treatments: What's a nonbehaviorist to do? In B. D. Slife, R. N. Williams, & S. Barlow (Eds.), Critical issues in pychotherapy: Translating new ideas into practice (pp. 3-19). Thousand Oaks, CA: Sage Publications.

Neimeyer, R. A. (1995). Constructivist psychotherapies: Features, foundations, and future directions. In R. A. Neimeyer & M. J. Mahoney (Eds.), Constructivism in psychotherapy (pp. 11-38). Washington, DC: American Psychological Association.

Neimeyer, R. A., & Mahoney, M. J. (Eds.) (1995). Constructivism in psychotherapy. Washington, DC: American Psychological Association.

Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA: Sage. Polkinghorne, D. (1983). Methodology for the human sciences. Albany, NY: SUNY press.

Pretzer, J. L., & Beck, A. T. (1996). A cognitive theory of personality disorders. In J. F. Clarkin (Ed.), Major theories of personality disorder (pp. 36-105). New York: Guilford Press.

Rorty, R. (1979). Philosophy and the mirror of nature. Princeton, NJ: Princeton University Press.

- Roth, P. A. (1987). Meaning and method in the social sciences: A case for methodological pluralism. Ithaca, NY: Cornell University Press.
- Rychlak, J. F. (1981). Introduction to personality and psychotherapy: A theory-construction approach (2nd ed.). Boston: Houghton Mifflin.
- Rychlak, J. F. (1988). The psychology of rigorous humanism (2nd ed.). New York: New York University Press.
- Slife, B. D. (1987). Can cognitive psychology account for metacognitive functions of mind? The Journal of Mind and Behavior, 8, 195-208.
- Slife, B. D. (in press). Theoretical challenges to therapy practice and research: The constraint of naturalism. In M. Lambert (Ed.). Handbook of psychotherapy and behavior change (5th ed.). New York: Wiley.
- Slife, B. D., & Gantt, E. (1999). Methodological pluralism: A framework for psychotherapy research. Journal of Clinical Psychology, 55, 1453-1465.
- Slife, B. D., & Williams, R. N. (1995). What's behind the research?: Discovering hidden assumptions in the behavioral sciences. Thousand Oaks, CA: Sage Publications.
- Slife, B. D., Yanchar, S. C., & Williams, B. (1999). Conceptions of determinism in radical behaviorism: A taxonomy. Behavior and Philosophy, 27, 75-96.
- Taylor, C. (1985a). Human agency and language: Philosophical papers. 1. New York: Cambridge University Press.
- Taylor, C. (1985b). Philosophy and the human sciences: Philosophical papers. 2. New York: Cambridge University Press.
 - Toulmin, S. (1972). Human understanding. Princeton, NJ: Princeton University Press.
 - Williams, R. N. (1992). The human context of agency. American Psychologist, 47, 752-760.
- Williams, R. N. (2001). On being for the Other: Freedom as investiture. In E. E. Gantt & R. N. Williams (Eds.), Psychology-for-the-Other: Levinas, ethics, and the practice of psychology. Pittsburgh, PA: Duquesne University Press.
- Woolfolk, R. L. (1988). The self is cognitive behavior therapy. In D. B. Fishman, F. Rotgers, & C. M. Franks (Eds.), Paradigms in behavior therapy: Present and promise (pp. 168-184). New York: Springer.
 - Yalom, I. (1980). Existential psychotherapy. New York: Basic Books.