

Improving Cognitive Therapy for Depression with Functional Analytic Psychotherapy: Theory and Case Study

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A behavioral reconceptualization of cognitive therapy is presented to illustrate that clinical behavior analysis (CBA) has much to offer traditional cognitive behavior therapy. Particular attention is given to the distinction between cognitive structures and products and the theoretical dilemma facing cognitive therapists when they attempt to devise interventions aimed at changing nonbehavioral entities. The distinction between rule-governed and contingency-shaped behavior and the implications of functional analytic psychotherapy (Kohlenberg & Tsai, 1991) are used to resolve the dilemma and to suggest methods for enhancing cognitive therapy. In a case study, a CBA-enhanced version of cognitive therapy was introduced after 7 weeks of standard cognitive treatment for a 35-year-old depressed male. The client-therapist relationship provided opportunities during the therapy session for learning new behavior called for in the behaviorally reconceptualized cognitive therapy. The enhanced treatment improved clinical efficacy and increased the client's focus on his deficits in interpersonal repertoires. Because the present case study involved only one of several enhancements suggested by CBA, the possibility of increased efficacy from a more comprehensive application is discussed.

Key words: clinical behavior analysis, cognitive therapy, case study, depression, functional analytic psychotherapy, radical behaviorism, behavior therapy

In a recent issue of this journal, Kohlenberg, Tsai, and Dougher (1993) asserted that clinical behavior analysis (CBA) has much to offer traditional cognitive behavior therapy. The broad conceptual theory underlying CBA can incorporate any therapeutic procedure (regardless of its underlying theory) and thereby provide a heretofore absent theoretical coherence. Perhaps more important, however, is the implication that CBA can transcend mere translation to suggest enhancements to the original procedures that would improve treatment efficacy.

Although often criticized by behavior analysts, cognitive therapy (CT) is widely used for depression, with most outcome studies showing empirically demonstrated efficacy (cf. Thase, 1994). Therefore, it seems worthwhile to describe the pro-

cedures of CT in behavior-analytic terms and to enhance its effectiveness via insights provided by CBA. In this paper, we will translate into behavioral terms Beck, Rush, Shaw, and Emery's (1979) CT approach to depression and use the methods of a CBA-based therapy, functional analytic psychotherapy (FAP) (Kohlenberg & Tsai, 1991) to suggest enhancements to the cognitive approach. We will then illustrate the application of the FAP-enhanced cognitive therapy to the treatment of a 35-year-old depressed male client.

COGNITIVE THERAPY

The main steps in cognitive therapy for depression are (a) providing the cognitive hypothesis as a rationale to clients, (b) training in self-monitoring, and (c) training in identifying cognitions, evaluating beliefs, and exploring underlying assumptions or schema (Beck et al., 1979). Cognitive therapists have developed a wide variety of interventions aimed at accomplishing these goals. For example, the client is usually asked to use a thought

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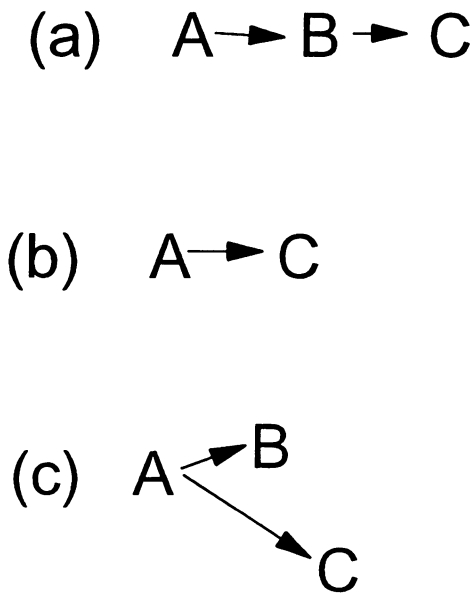


Figure 1. Paradigms showing relationships among A (antecedent event), B (belief or thinking), and C (consequent behavior or feeling): (a) thinking influences subsequent feelings and/or behavior, (b) feelings and/or behavior occur in the absence of prior thinking, (c) thinking does occur but does not influence subsequent feelings and/or behavior.

log to record problematic situations, thoughts, and emotions. After the client is proficient at this self-monitoring, he or she is then asked to use logic and empirical testing to evaluate the cognitions. Empirical testing involves trying the behavior he or she thinks won't work (e.g., trying to initiate a conversation) in order to test the validity of a cognition (e.g., "I don't initiate conversations because I am an unlikable person and will always be rejected by others"). The client is then asked to record any changes in mood and behavior.

We will give our behavioral definitions below, but would like to point out that many of the terms used by cognitive therapists in describing the above steps in treatment are already in terms of behavior (i.e., identifying, evaluating, and self-monitoring). Further, activities such as empirical testing can easily be seen as an intervention that brings client behavior in contact with natural contingencies. Putting aside for a moment the cognitive

justification for training clients to emit such behavior, it seems reasonable to suggest that clinical behavior analysts should have something useful to say about how to obtain or strengthen such behavior. Because a comprehensive description of cognitive therapy is beyond the scope of this paper, we will primarily focus on the cognitive rationale and the meaning of cognition, beliefs, and schema. The cognitive rationale (also referred to as the cognitive hypothesis) is of central interest because it not only is presented to clients but also structures the nature of the therapist's interventions.

The rationale presented to clients is the basic ABC paradigm proposed by Ellis (1962, 1970). As shown in Figure 1a, A represents external environmental events, B represents cognition, and C is the resulting emotion or action. In this paradigm, it is suggested that a person's irrational beliefs about external events lead to problematic feelings and maladaptive behavior.

In our translation of cognitive therapy into behavioral terms, we wish to retain as much original meaning or intent as possible. All too often, behavior analysts use simplistic or narrow views of cognitive therapy and thereby set up a straw man that is easily criticized and dismissed. In particular, any behavior analysis of cognitive therapy should take into account the distinction between *cognitive products* and *cognitive structures* (discussed below) because the distinction is considered to be very important by cognitive therapists (Hollon & Kriss, 1984). On the other hand, we are behavior analysts who identify ourselves as contextualists (see Hayes, Hayes, & Reese, 1988), and therefore agree with Messer (1992) that when you change the context, you change the meaning. Thus, it is impossible to retain all of the original meaning when a concept is transported into another system. For example, our behavioral orientation requires that we change nonbehavioral entities (things or nouns) into behavior (processes or verbs) and reserve causal status for the effects of contingencies. These considerations notwithstanding, we will attempt to cap-

ture the intent, essence, and clinical implications of cognitive notions by considering the context for the original concept.

Cognitive Products and Cognitive Structures

A key to understanding the cognitive hypothesis lies in the meaning of B in the ABC formulation. A great deal of confusion exists in the cognitive therapy literature on this point, because the term *cognition* seems to have different meanings in the various approaches to cognitive therapy (Beidel & Turner, 1986). In an attempt to clear up this confusion, Hollon and Kriss (1984) reviewed the various interpretations of the term and used cognitive theory to specify the meaning of B (cognition). They identified three types or meanings of the term cognition—*cognitive products*, *cognitive processes*, and *cognitive structures*. Because our analysis is not affected by the additional concept of cognitive processes, we will discuss only cognitive products and structures. Cognitive products are directly accessible, conscious, private behavior, such as thoughts, self-statements, and automatic thoughts. This meaning of cognition is the commonsense meaning and seems to be used in day-to-day cognitive treatment in which the therapist tries to get the client to observe and identify dysfunctional automatic thoughts, irrational beliefs, or maladaptive self-talk. Cognitive structures (referred to as schemas in CT), on the other hand, are defined as the underlying organizational entities that play an active role in processing information. As described by Hollon and Kriss, structures operate at an unconscious level, because their content cannot be known directly and must be inferred from the products. From a behavior-analytic perspective, cognitive products appear to be behavior and cognitive structures are nonbehavioral entities. To complicate matters for the behavior-analytic translator, most cognitive therapists assert theoretically that cognitive structures are the causal factors in the ABC formulation, whereas cognitive

products (irrational thoughts, self-statements, automatic thoughts) constitute only signs or hints of the nature of one's knowledge structures. Hollon and Kriss (1984) and others (Beck, 1984; Safran, Vallis, Segal, & Shaw, 1986) suggest that any clinical interventions that change only cognitive products are merely symptomatic treatments.

Problems Caused by Structure–Product Distinction

Although necessitated by deficiencies in the original ABC hypothesis that didn't differentiate between products and structure (e.g., the fact that Cs sometimes occur in the absence of a B and that cognition was inconsistently defined; see review by Beidel & Turner, 1986), the shift in causal status from products to structures has produced a confusing state of affairs. At the same time that the causative role of cognitive products is rejected on the theoretical level, the very same cognitive therapists provide treatment manuals, clinical advice, and clinical examples that focus on changing cognitive products. For example, Beck, Emery, and Greenberg (1986) stated that the therapist "must be able to communicate clearly that anxiety is maintained by mistaken or dysfunctional appraisal of a situation (a cognitive productive)" and "gives this explanation . . . in the first session and reiterates it throughout therapy" (p. 168). In addition, Guidano and Liotti (1983) stated that the first important step in therapy occurs "when patients understand that their suffering is mediated by their own opinions (a cognitive product)" (pp. 138–142).

From a CBA view, the inconsistency between theory and practice in cognitive therapy makes sense. Because from our viewpoint, clinical interventions are always limited to the behavioral realm, such as the client's thinking, feeling, and talking (i.e., products), it is impossible to devise treatments that focus on nonbehavioral entities (i.e., structures) that cannot be directly contacted or observed by the therapist. As one cognitive researcher described it, a schema is like "the holy grail"

(Zuroff, 1992, p. 274) of cognitive psychology. Thus, it has been difficult for cognitive therapists to create interventions aimed at structures that are substantially different from those aimed at products. For example, Beck et al. (1979) stated that "the cognitive and behavioral interventions [used] to modify thoughts [products] . . . are the same as those . . . used to change hidden assumptions [structures]" (p. 252). It appears that the only way to differentiate the clinical treatment of products from structures is that the latter must first be inferred (e.g., the client must abstract or deduce the existence of the structure). Once identified, however, the same therapeutic methods used to change products are applied. Directed by theory to change a nonbehavioral entity (the schema) while restricted to working with the behavior (products) of the client, the cognitive therapist is in an untenable position. These theoretically posited difficulties in changing schemas and the tenuous link between theory and how change occurs have been termed a dilemma by Hollon and Kriss (1984, pp. 46–48). Thus, it is not surprising that the actual nuts-and-bolts practice of cognitive therapy mainly operates according to an ABC model involving products.

The wholesale application, however, of an ABC formulation involving just products to the exclusion of other possibilities leads, at times, to questionable clinical procedures. For example, clients may reject the ABC rationale by claiming they experience no conscious B that precedes the C (Figure 1b) or as shown in Figure 1c, they may report a B that is inconsistent with a C (e.g., "I intellectually accept that I don't need to be loved by everyone, but I am still devastated when I'm rejected"). as drawn in Figure 1c, it is interesting to note that the thinking (B) occurs in time before the subsequent mood or other behavior and is therefore easily mistaken as having causal or influential effects. In such cases, a cognitive therapist will usually continue to carry out an ABC treatment plan by questioning the client's logic or by pro-

posing that there are additional, unconscious cognitions to be discovered. Challenges can also be indirect, such as giving additional homework or assumption-testing assignments. Such nonacceptance of alternative paradigms is found in the cognitive therapy of Beck et al. (1979), even though these authors reject the theory implied by the simple ABC model. For example, Beck et al. suggest that clients who say that they intellectually "know" they are not worthless but who do not accept this on an emotional level (the Figure 1c paradigm) need more cognitive therapy because the dysfunctional feelings can occur only when they do not "truly believe" the rational thought (p. 302). Furthermore, a client's objecting to cognitive interventions could be desirable, or, in FAP terms, a within-session improvement in the problematic behavior. For example, if the client were seeking help with becoming more assertive or more confident in voicing his or her opinions, then objecting to the therapist's ABC theory would be an improvement that should be reinforced by the therapist's acceptance. The cognitive rationale however, could lead the therapist to be countertherapeutic by punishing the improved behavior with challenges.

The need for more flexible models is also demonstrated by the tendency for cognitive therapists (as well as others) to persist in their approach even though the client is not progressing (Kendall, Kipnis, & Otto-Salaj, 1992). Given the complexity of human behavior, the exclusion of coexistent, noncognitive explanations as demanded by the ABC model seems to be unreasonable. But, as pointed out earlier, the cognitive solution to the problem (positing nonbehavioral entities) seems to produce more problems than it solves.

We believe that CBA can help to resolve the apparent inconsistency in CT theory and practice while at the same time capturing the clinical utility of differentiating products from structures. In the following sections we will describe FAP, give our behavioral view of CT, discuss how to resolve CT's theoretical dilemma, suggest ways to enhance CT interven-

tions, and illustrate FAP-enhanced CT with a case study.

FUNCTIONAL ANALYTIC PSYCHOTHERAPY

As practicing clinicians, we noticed that some of our clients being treated with conventional behavior therapy techniques showed dramatic and pervasive improvements that far exceeded the goals of treatment. In these cases, we also observed that the client-therapist relationship was particularly intense. We used radical behavioral concepts (a) to account theoretically for such effects, and (b) to delineate the steps therapists can take to facilitate intense and curative relationships. The result is a radical behaviorally informed treatment, FAP, that focuses on maximizing the therapeutic benefits of using the evocative and reinforcing aspects of the client-therapist relationship.

In a nutshell, the FAP view is that the client-therapist relationship is a social environment that has the potential to evoke and change actual instances of the client's problematic behavior. For example, a client who lacks adequate repertoires for forming close relationships might also have similar problems in forming a close client-therapist relationship. In FAP terminology, the client's problems that also occur in the session with the therapist are clinically relevant behavior (CRB). CRB are actual occurrences of the problematic behavior during a session and are not equivalent to the within-session behavior brought about by role playing, behavioral rehearsal, or social skills training. As elaborated by Kohlenberg et al. (1993), maximal therapeutic benefit and generalization to daily life occurs when these occurrences are real interactions, and comparable benefits are not expected with role playing, behavioral rehearsal, or social skills training. In FAP, the occurrence of CRB is viewed as an important opportunity for producing significant therapeutic change. Goldfried (1985) described these special opportunities as in vivo behavioral work, which is known to be "more powerful than imag-

ined or described ones" (p. 71). As a means of explicating FAP and its application to cognitive therapy, we will briefly describe the concepts of within-session contingencies and the evocative environment.

Within-Session Contingencies

A well-known aspect of reinforcement is that the closer in time and place the behavior is to its consequences, the greater will be the effect of those consequences. It follows, then, that treatment effects will be stronger if a client's problem behavior and improvements occur during the session, where they are closest in time and place to the available reinforcement. For example, if a female client states that she has difficulty trusting others, the therapy will be much more powerful if her distrust actually manifests itself in the therapeutic relationship where it is reacted to immediately by the therapist, as opposed to talking about incidents that occurred between sessions. Thus, from this viewpoint, significant therapeutic change results from the contingencies that occur during the therapy session within the client-therapist relationship. In many ways, the FAP approach parallels that of traditional applied behavior analysis where the client's problematic behavior (e.g., head banging, incorrect object naming) is directly observed and is subject to consequences by the behavior analyst.

In FAP, we also emphasize the distinction between natural and contrived reinforcement (Ferster, 1967; Skinner, 1982). Natural reinforcers are typical and reliable in the natural environment, whereas contrived ones generally are not. For example, giving a child candy for putting on his coat is contrived, whereas being chilled for being coatless is natural. Similarly, fining a client a nickel for not making eye contact is contrived, whereas the spontaneous wandering of the therapist's attention when the client is looking away is natural.

Unfortunately, the deliberate use of natural reinforcers can become contrived or phony and the reinforcers may lose

their effectiveness (Ferster, 1972). This problem was alluded to by Wachtel (1977), who observed that behavior therapists were often overly exuberant in their use of praise, thereby diminishing its effectiveness. Furthermore, deliberate use of consequences can be viewed as manipulative or aversive by clients and can induce efforts to reduce or alter therapeutic change efforts—what Skinner (1953) referred to as “countercontrol.”

The use of reinforcement in psychotherapy thus presents a major dilemma to the behavior analyst. On the one hand, natural reinforcement that is contingent on the target behavior is a primary change agent available in the therapeutic situation. On the other hand, if the therapist attempts to purposely use the extant natural reinforcers, they may lose their effectiveness and evoke countercontrol. The dilemma is obviated, however, when the therapy is structured so that the genuine reactions of the therapist to client behavior naturally reinforce improvements as they happen. More specifically, because the dominant aspect of psychotherapy is interactional, the immediate natural reinforcement of client improvements is most likely when the client-therapist relationship naturally evokes the client's presenting problems. For example, an intense and emotional therapist-client relationship may evoke withdrawal in a client seeking help for intimacy problems. If so, the necessary precondition has been met, and a sensitive and genuine therapist may naturally reinforce improvements as they occur.

The Evocative Environment: Functional Similarity

Although it may seem that therapy sessions do not resemble the natural milieu, the occurrence of daily life problems in the session is evidence for its functional similarity to daily life. That is, rather than looking at formal physical characteristics in order to determine if therapy and daily life environments are similar, the environments are compared on the basis of the behavior they evoke. If they evoke the same behavior, then they are func-

tionally similar. From a behavioral viewpoint, all similarities are functional in nature and reflect the history of the individual who experiences the similarity. Thus, the client who acts toward the therapist in the same problematic way that he or she does in daily life is experiencing therapy in the same way that daily life is experienced. For example, a man whose presenting problem is hostility in close relationships would show that the therapy context is functionally similar to his daily environment if he becomes hostile toward the therapist as their relationship develops. Further, if this client experiences within-session contingencies that strengthen nonhostile ways to relate to his therapist, the same functional similarity would mediate generalization of improvements to daily life.

The notion of functional similarity points to the possibility that a client's daily life dysfunctional cognitions (as behaviorally defined below) and maladaptive patterns of behavior that are the focus of traditional cognitive behavioral treatment could be changed in the context of the client-therapist relationship and generalize to daily life. With certain notable exceptions (Goldfried, 1985; Jacobson, 1989; Linehan, 1993; Safran, 1990), however, cognitive behavior therapists traditionally have not attended to the therapeutic relationship. FAP provides a theoretical rationale for enhancing traditional cognitive behavioral treatment by attending to within-session occurrences of the behavior of interest and its contingencies.

CBA CONCEPTUALIZATION OF COGNITIVE THERAPY

On a descriptive level, Skinner's (1974) distinction between rule-governed behavior and contingency-shaped behavior seems to capture much of what is meant by the product-structure distinction. For example, Skinner contrasts rule-governed and contingency-shaped behavior as deliberation versus impulse, contrived versus natural, intellect versus emotion, logic versus intuition, conscious versus unconscious, surface versus depth, and

truth versus belief. These contrasts bear an uncanny resemblance to the distinctions used by cognitive therapists to compare products and structures (Hollon & Kriss, 1984).

This rule-governed versus contingency-shaped distinction retains the clinical usefulness of the product versus structure distinction, but avoids the problems of the original ABC cognitive hypothesis. In our revision of the ABC paradigm, B is conscious (in the behavioral sense of awareness) verbal behavior such as thinking, believing, choosing, reasoning, categorizing, labeling, and self-talking of which the client is aware. In behavioral terms, B is private verbal behavior that can serve as a rule. Depending on whether following rules (issued by self or others) has been reinforced, the B may or may not affect subsequent acting and feeling. The ABC formulation shown in Figure 1a represents the case in which B does have rule-governing properties and does influence C. Pure contingency-shaped behavior is represented by AC (Figure 1b). In this instance, the client has problems but doesn't consciously think, plan, or attribute beforehand. Finally, Figure 1c shows the case in which both B and C are evoked by the same condition, are correlated, and have no influence on each other. That is, the person says something to himself or herself and also acts—both are evoked by the same context but do not influence each other. In this latter case, C is contingency shaped and is directly evoked by A. Of course, many other possibilities are also accommodated by this model. For example, an ACB sequence would cover those instances in which the person becomes depressed and then says to himself "I must be an awful person." The ACB sequence is consistent with Klein's (1974) conception of depression in which the depressed patient's negative self-concept, helplessness, and self-blame are best viewed as an effect rather than a cause of the condition. In other words, the client first feels depressed and then has the negative cognitions.

In other words, within the FAP framework, the degree of control exerted by

thinking over clinical symptoms is on a continuum. Cognition (as products) can play either a major, minor, or no role in the client's problems. Correspondingly, cognitive therapy methods will be of varying effectiveness with different clients depending on the role that cognitive products has in the clinical problem. At one end of the continuum, the client's problem is primarily rule governed, and treatment would be aimed at changing self-statements, beliefs, and attitudes using cognitive therapy techniques. At the other end of the continuum, the symptom has been shaped purely by contingencies. In this case, therapeutic interventions involving contingencies would be most appropriate.

Although it is possible for a client with a deeper, unconscious contingency-shaped problem to improve when exposed to ABC cognitive procedures, less favorable outcomes are possible. This is especially true for clients who grew up in dysfunctional families where they were abused, neglected, negated, or otherwise punished for expressing their feelings. Children who are repeatedly told, either directly or indirectly, that "there's no reason for you to feel or think that way" mistrust their feelings and are unsure of who they are. Suggesting to such clients that their beliefs are dysfunctional or irrational can replay the contingencies associated with the invalidation and alienation they experienced while growing up.

The CBA view presented above seems to resolve the confusion and theoretical inconsistencies of CT. In addition, translation of the cognitive hypothesis into behavioral terms leads to suggestions for improving the efficacy of CT. First and most important, those procedures known by behavior analysts to produce behavior change can also be used to change cognition. Using the primary rationale of FAP, this means that problematic cognitions occurring here and now in the therapeutic session offer particularly important opportunities for therapeutic improvement. In the case of a problem on the rule-governed side of the continuum, treatment would be most effective if the rule and rule following are actually evoked

in the context of the therapeutic relationship. To illustrate, a client who doesn't express anger in his daily life because he assumes terrible things will happen might get angry at the therapist and not express his anger, because he assumes the therapist will do something terrible. Using standard cognitive methods, the client can learn to observe his own thinking, gather evidence, rethink, and emit new behavior (express anger) during the session. All of these procedures would be expected to be more effective because they are evoked and immediately reinforced. Similarly, if the problem is primarily on the opposite end of the continuum and no thinking or assuming occurs, it seems that the best opportunity to change behavior occurs in the session involving contingent reactions of the therapist (this is the primary focus of FAP; see Kohlenberg & Tsai, 1991). Another enhancement suggested by CBA is a broadening of the rationale presented to the client to include all the possibilities represented in Figure 1. This rationale would accommodate clients who experience their thinking as having an influence over subsequent problematic behavior as well as those clients who do not experience prior thinking. This broadened rationale also accommodates a wide range of interventions ranging from the methods of traditional cognitive therapy to emotional acceptance (Cordova & Kohlenberg, in press; Dougher, in press; Hayes, 1987), which attempts to alter the status of rule governance in the client's problems.

CASE STUDY

The opportunity for a limited test of enhancing CT with FAP occurred during the treatment of EK, a depressed 35-year-old male seen at the University of Washington Psychology Clinic. When applying for treatment, EK specifically requested cognitive therapy. He reported that the CT rationale appealed to him based on his reading about the approach, and because previous treatments had not been successful. He also tried to follow the instructions of a self-help book on CT for depression, but felt he lacked the moti-

vation to do it on his own. Our plan was to begin treatment with standard CT, and if progress stalled, to switch to an FAP-informed enhancement. The enhancement consisted of (a) viewing within-session instances of problematic moods and thinking according to the behavioral model presented earlier, and (b) using these within-session instances as opportunities for obtaining the behavior changes that constitute cognitive therapy. We presented the ABC version of the cognitive hypothesis at the beginning of treatment. At Session 8, when we began our enhanced CT, we used the same ABC rationale and explained to the client that should the opportunity present itself, the therapist would use the client-therapist relationship as a laboratory for exploring the ABC hypothesis.

The therapist was an advanced graduate student who had never done CT or FAP but had studied them in academic graduate courses. The therapist had two supervisors: one was an experienced FAP therapist (the first author); the other supervisor in the early phase of treatment was a highly qualified cognitive therapist who had served as clinical director and CT supervisor on a federally funded clinical outcome study of depression. Treatment sessions occurred weekly, except for occasional interruptions due to holidays and illness. The client understood that treatment was time limited and was scheduled to be 4 months long. There were 13 treatment sessions over a 17-week period and two follow-up sessions at 1-month intervals following the end of treatment.

EK, never married and unemployed, sought therapy for depression, fluctuations in appetite, and lack of sleep. He complained about going to bed too late, eating fattening foods, not exercising, having difficulties in setting priorities, getting motivated to find work, and making decisions. EK said he had been depressed since age 4 and realized it at age 12, when he first experienced recurrent suicidal ideation (there were no suicide attempts). He reported that his depression was exacerbated by losing his job a year ago and by finding out 4 years ago

that he is gay. He had been in group and individual psychotherapy for the past 7 years with five different therapists (durations varied between 3 months and 2 years). After an unsuccessful trial of Prozac®, he had been taking Zoloft® for the last 3 months prior to his therapy. He was uncertain as to whether or not the medication had helped.

The first eight sessions were conducted according to Beck et al.'s manual (1979), and as described below, FAP was added in the eighth session and used thereafter. In order to assess whether FAP was in fact applied during the later portion of treatment, the transcripts of each session were examined for the presence of a focus on the therapeutic interaction (CRBs). CRBs were focused on during only one of the first seven sessions (in Session 1), whereas there was a CRB focus during six of the seven sessions after FAP was introduced.

Following the recommendations in Cordova and Koerner's (1993) paper on the CBA of psychotherapy data, we collected several different types of data, each of which appeals to different audiences. First, all of the sessions were audiotaped and transcribed; these tapes and transcripts are considered to be data consistent with Cordova and Koerner's views. Second, Beck Depression Inventories (BDI) were given at the beginning of each session. Third, a Minnesota Multiphasic Personality Inventory (MMPI) was given at the beginning and end of treatment. Fourth, there were EK's written reports in the form of thought logs. As part of the CT treatment, EK was asked to fill out thought logs during the weeks between sessions. The log was a written record of problematic events consisting of situations (the environmental event), thoughts, and moods. After the situation, thoughts, and mood were recorded, EK was asked to evaluate the thoughts (e.g., were they rational or supported by evidence) and whether or not this reevaluation resulted in an improvement in mood and/or more productive behavior. The reevaluation and any effects were also to be recorded on the log. The thought log was introduced in the fourth session.

The final type of data presented here are the therapist's reports about what she saw as being important in EK's treatment.

As shown in Figure 2, EK showed a reduction in the BDI over the first five treatment sessions. As described by EK in Session 4, "I think I'm feeling better," and he reported that he was doing better in terms of sleeping, eating, and exercising. In the fifth treatment session (Week 6 in Figure 2), EK reported feeling stuck in that he seemed unable to go beyond his initial behavior changes involving exercising, sleeping, and eating. This was particularly true for those situations that called for EK to express his feelings and to make requests of others in confrontational situations. To no avail, the therapist had been urging EK to test his assumptions in the real world by letting others know what he felt or wanted, and thereby gather evidence to confirm or disconfirm the assumption (a CT technique). Thus, although there were some gains and an understanding of the cognitive hypothesis, EK was not changing these types of interpersonal behavior in daily life.

As illustrated in the transcribed material below, the FAP-enhanced interventions initiated in Session 8 (Week 10 in Figure 2) focused on EK's clinically relevant behaviors—avoidance of confronting others, discussing negative feelings, and directly letting others know what he wanted—in relation to the therapist. The therapist had brought up the topic of EK's concerns about not wanting to upset her by not doing his homework assignment.

T: Now I may or may not be [upset], I don't know. But why would you care?

C: Um, well, I guess I consider it a reflection on me, a negative reflection on me. I mean, suppose you were talking to your supervisor about this and he said "OK, by the next time I meet with you I want you to have read these articles and considered these possibilities." And then you get there and you didn't do it. Now you can't tell me you don't care what his reaction's going to be. Well, you can. Would you care?

T: Yeah.

C: OK, well, there you go.

T: Yeah, and I know why I care. So I'm trying to get you to tell me why you care.

C: (laughs) Oh, I see, I see.

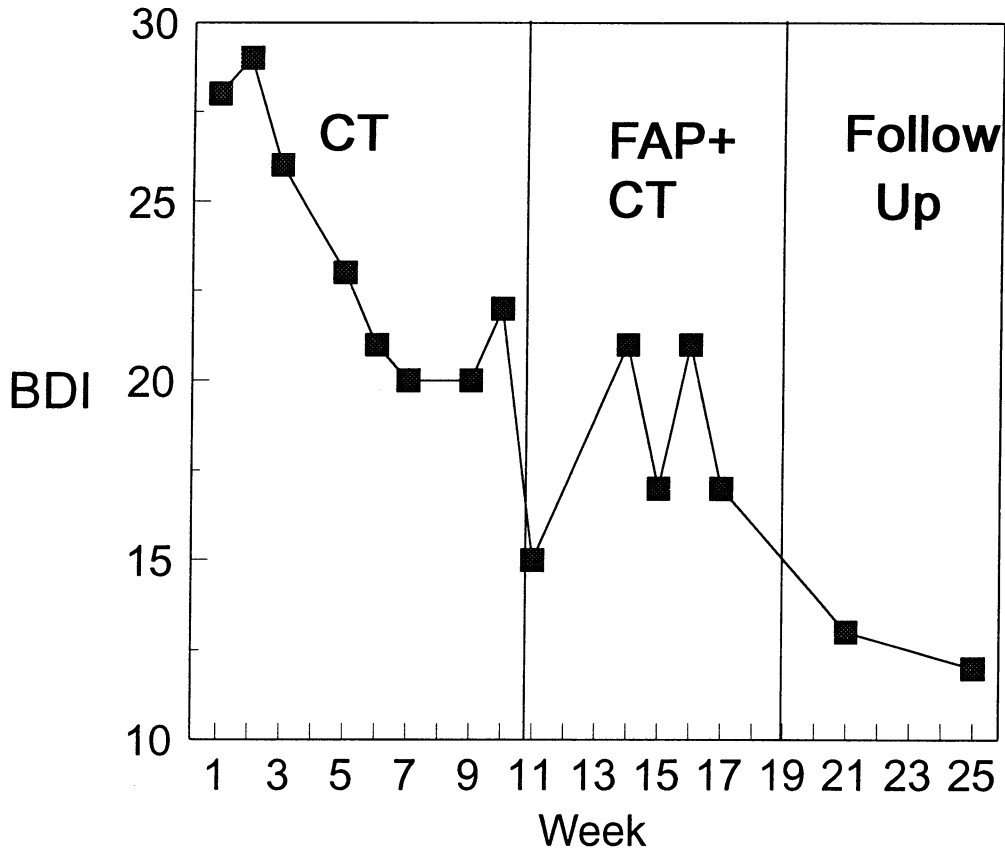


Figure 2. Beck depression inventory scores obtained at the beginning of each of the 13 treatment and two follow-up sessions during standard cognitive therapy (CT), FAP-enhanced cognitive therapy treatment (FAP + CT), and follow-up that occurred over a 25-week period.

T: I get the sense that you're uncomfortable talking about this.

C: Yeah, well, I feel kind of stupid.

T: Let's talk about that. You feel stupid, talking about it?

C: Well, I . . .

T: What I'd like to do is use this (holds up thought log) to talk about what's happening here.

At that point the therapeutic interaction focused on the identifying negative automatic thoughts occurring at that moment and how he felt and acted in relation to the therapist. Thus, EK was given experience in self-observation and the recording of the self-observations in the thought log. He also gained experience in hypothesis testing, examining evidence for and against his distorted thoughts, and the substituting of more reality-oriented interpretations. For example, consistent with the evidence-gathering technique of

CT, EK was encouraged to directly ask the therapist for more information about her being upset or viewing EK as stupid.

Two other FAP-type interactions occurred in that session. Both concerned EK's avoidance of having and expressing feelings, particularly negative ones about the therapist (for a behavior-analytic view of the value of having and expressing feelings, see Kohlenberg & Tsai, 1991, chap. 4). In each instance, a within-session thought log was used at the moment the problematic thinking and other behavior were occurring. As called for on the thought log, EK rated his mood after each of these interactions, and reported that he felt less anxious, stupid, childlike, or depressed. Illustrated in the following transcribed material from the latter part of the session are (a) the therapist giving her client the FAP rationale for focusing

on the therapist–client relationship during therapy, and (b) EK indicating that the FAP-type CT interventions were useful in that he actually experienced success with the CT procedures and felt motivated to use these on his own in daily life.

T: . . . to figure out what it is about what's going on between us, that's helping you do that. [therapist is discussing the value of bringing up negative feelings and asking others for what he wants.]

C: Umm hmm.

T: . . . it's gonna be a key to it, and to figure it out, talking about feelings . . .

C: Mmm hmm.

T: . . . and what you feel here, how you feel about me, how I feel about you, be becomes kind of the key to the whole thing.

C: Mmm hmm.

T: . . . and for you that's a situation that causes a lot of anxiety and uncomfortableness. It's also similar to what you might do with Barry [EK's roommate], when you talk to Barry [expressing negative feelings and asking for what EK would like], if you decide to do it . . .

C: Hmm.

T: . . . you're going to be talking about feelings.

C: Mmm hmm.

T: . . . and my guess is that a lot of similar feelings are gonna creep up with him, you're gonna feel embarrassed, foolish, um, you're gonna feel fearful, you'll probably feel a little bit perturbed, you're probably a little angry at him, I would guess, um . . .

C: Well, uh, the situation, at least kind of pisses me off. Um, I don't know if that's at him or myself but it makes me mad that I feel this way.

T: Umm hmm. So, in doing what we just did [just prior to this transcribed interaction, the therapist prompted, encouraged, and blocked the avoidance of EK bringing up and discussing negative feelings about the therapist], it's kind of like, um, I'm setting you up in a way . . .

C: Mmm hmm.

T: . . . to experience what you might experience on the outside would when you get into a confrontational situation, talking about feeling stuff . . .

C: Umm hmm.

T: . . . and, um . . . I did it wanting for you to feel that, so we could process it and do it with this, because, um, you, um, it may have given you some information, something to walk away with and say, "Hey, I came through it, and um, maybe it wasn't that bad, maybe I can do this in the future with someone else." But then also, I think I was gonna give us some information, about um, ways to keep you moving . . .

C: Mmm hmm.

T: . . . so that's why I wanted to go through with it [discussing negative feelings about the therapist].

C: Mmm. Well I do feel better now than fifteen minutes ago.

T: Yeah, you were pretty uncomfortable. I appreciate you hanging in there with me.

C: Yeah, mostly I just wanted to leave.

T: Yeah? Well, what did you feel about the session today? I need some feedback.

C: Umm . . . well this last part [the FAP interventions] I guess, was pretty good because we did this thing and it actually seemed to work, um, so that right there gives me some motivation to do it on my own, 'cause it's worked twice now [in the session with the therapist], at least twice, um . . . but it was sort of a strange dynamic today, um, I was feeling pretty uncomfortable . . .

In the session immediately following the initiation of FAP-enhanced CT, the BDI was at its lowest level thus far, and EK reported that he finally was able to talk to his roommate Barry about his negative feelings concerning his behavior.

A general increase occurred in EK's identification of interpersonal problems both in sessions and in daily life during the FAP-enhancement part of treatment. An analysis of the number of social versus nonsocial situations that EK identified as being problematic on the thought records completed between sessions is shown in Figure 3. Fifteen situations listed in the 6 weeks of thought records turned in after Session 8 were compared to the 15 situations described on the thought records prior to Session 8. Each situation was classified as to whether or not the problem explicitly involved a social interaction. For example, a situation described as "ate two pizzas" was classified as nonsocial, whereas "Joe called and complained about the [contractor] quote I gave him" was classified as social. As shown in Figure 3, EK identified and worked on more problematic interpersonal situations after FAP was introduced. Our interpretation is that the FAP focus on the client–therapist relationship provided an opportunity during the session to build in EK's observation of interpersonal situations, and thus increased his daily life awareness of interpersonal factors. As a result of this awareness, it is also likely that he noticed more interpersonal factors as problems to be solved. These findings are consistent with an absence of interpersonal problems among EK's presenting problems, and suggests that the FAP interventions increased EK's self-observation of interpersonal problems. The importance of interpersonal factors in depres-

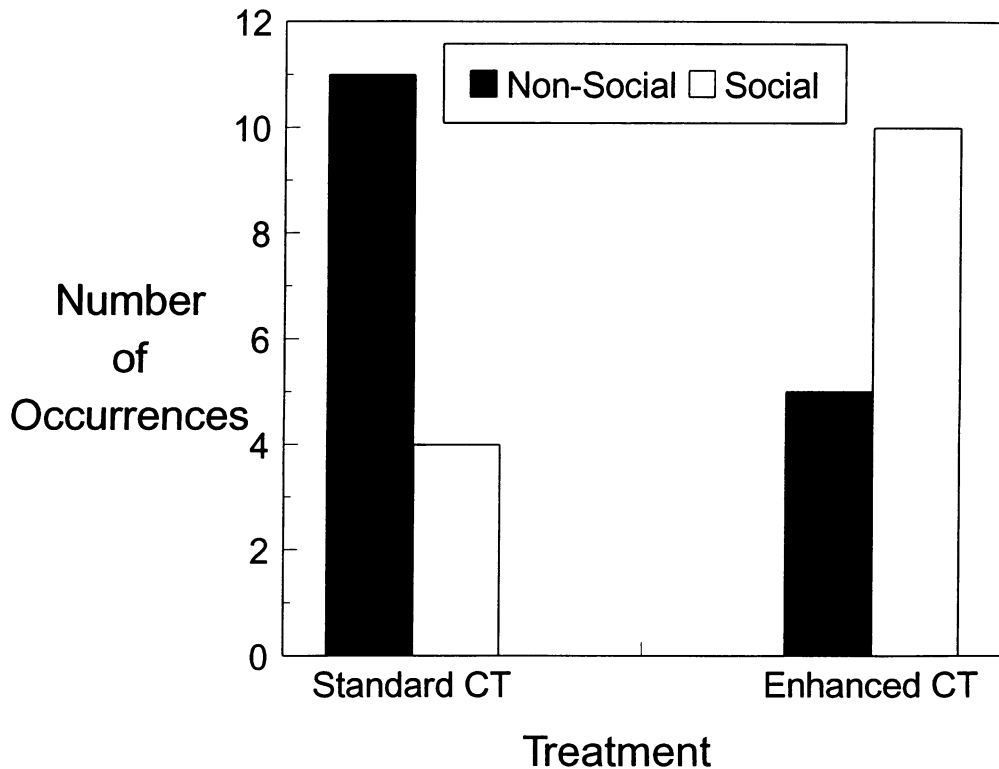


Figure 3. The number of occurrences of problematic situations listed on EK's thought records showing both those involving and not involving social interactions during standard and enhanced cognitive therapy.

sion was underscored by the selection of an interpersonal treatment (Klerman, Weissman, Rounsaville, & Chevron, 1984) as one of the two psychological therapies that were evaluated in a large-scale clinical outcome study on depression (Shea et al., 1992).

After Session 9 (Week 11), EK took a 2-week hiatus from treatment because he had to visit his father who had become seriously ill. His father's illness, his subsequent visit to his childhood home, and the increased family contact were all severe psychosocial stressors for EK. Despite these stressors, when he returned to his FAP-enhanced cognitive therapy, his BDI scores during this phase were lower on the average than in the CT-only phase of treatment.

The pretreatment MMPI and the one given at the first follow-up session (Week 21 in Figure 2) are shown in Figure 4. The MMPI scales indicate a general re-

duction in severity in the clinical scales, although Scales 2 (depression) and 7 (psychasthenia-anxiety) were still slightly elevated. In the final weeks of treatment, EK decided to take the risk of going into business for himself, and at 3 months following termination he had become gainfully self-employed. At the end of therapy, he had a new recognition of the importance of interpersonal relationships and the development of social repertoires.

Because the application of FAP to CT requires the natural occurrence of client-therapist interactions to serve as the focus of the intervention, an important question concerns the prevalence of such opportunities. If these rarely occur, then FAP-enhanced CT will have limited applicability. Psychoanalysts claim it always occurs in the form of transference, whereas behavior therapists rarely acknowledge the occurrence or significance

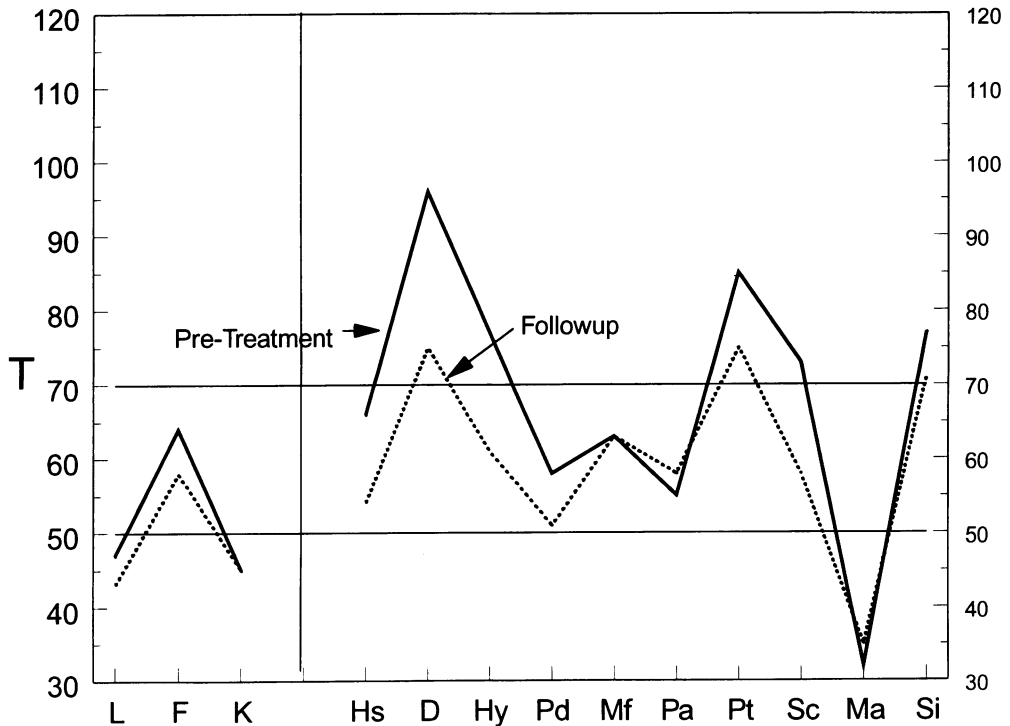


Figure 4. MMPI profiles obtained before treatment began and at the 4-week follow-up.

of client-therapist relationship factors (Kohlenberg, Tsai, & Kohlenberg, in press). There are no systematic data bearing on the prevalence of CRB, but in our experience they seem to be ubiquitous. During the standard CT portion of EK's treatment (the first seven sessions), there were numerous indications of within-session occurrences of relevant behavior. For example, the following transcript is from the first session during a discussion of EK's hesitation about committing to the therapy because it was time limited:

C: Oh yeah, cause I don't like to invest in something I don't think is going to work, which is another thing that keeps me from doing things, is I have this tendency to think, just about things in general, "Well, it's not gonna work out anyway, so why try." Like, I'm not going to be able to find a job I like anyway, so why look for one. Or this relationship probably won't work out so why continue it.

The next example is from the sixth session when EK told the therapist he has been smoking.

C: I wasn't going to tell you but I thought I should.
T: Why weren't you going to tell me?
C: Well, I'm kind of ashamed.

Both examples are situations that suggest the presence of automatic thoughts and dysfunctional beliefs during the session that are the focus of CT. Because we were limiting our interventions during the early part of the treatment to standard CT, the therapist did not focus on the within-session aspects of these comments.

As one final source of information about this case, the therapist made the following comments about the treatment.

(FAP) intensifies the therapy, puts a color and richness on it. EK said in his last follow-up session that in previous therapy he'd sit and talk till he was "blue in the face" about what was happening on the outside, and he never got anywhere nor did he believe therapy had much to offer until this experience. EK said himself that when you bring it into the session and actually talk about what's happening then and now, then it becomes very real. I think it makes the

automatic thoughts and rational responses more tangible, less abstract, because you are talking about something happening in the moment.

The other thing that comes to mind is that an in-session focus on the relationship blocks avoidance. In particular, it urges the client to actually put his automatic thoughts to the test. One hang up with EK was that he'd come up with good rational responses and we'd come up with ways to actually test his automatic thoughts, but it required him doing a test on his own outside of the session. This was very hard for him to actually do. But [after introducing FAP] in session, I could set it up to kind of force him into putting his hypothesis to the test with me. This was a much more powerful learning experience than simply coming up with a rational response and leaving it at that.

It should also be pointed out that the enhancement used in this case basically retained the ABC cognitive rationale. The use of the client-therapist relationship as an opportunity for behavior change during the therapy session was only one of many possible enhancements suggested by CBA. A more comprehensive rationale would have emphasized the importance of verbal processes such as rule governance and stimulus equivalence, as well as contingencies of reinforcement, in planning therapeutic interventions. It seems reasonable to suggest that a more comprehensive rationale might have been even more effective.

Although it appears that this circumscribed application of FAP-enhanced CT was effective, case studies such as the one presented above are limited in reducing threats to internal validity. For example, it is possible that the initial CT treatment reduced the depression and thus was responsible for all subsequent positive treatment effects. It is also possible that the therapist, aware of the significance of the FAP addition, could have been more enthusiastic during the enhanced treatment, and thus influenced outcome. Because there is no control for the passage of time in this case study, it is also possible that the results reflect the tendency for depressions to remit over time. In any event, the results appear to be promising, and add some support to the possibility that CBA can deliver on its promise as an integrative theory that enhances efficacy.

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