Two enhancements to cognitive therapy (CT)—a broader rationale for the causes and treatment of depression, and a more intense focus on the client-therapist relationship—were evaluated in a treatment development study. The enhancements were informed by Functional Analytic Psychotherapy (FAP; R. J. Kohlenberg & Tsai, 1991), a treatment based on a behavioral analysis of the change process. FAP Enhanced Cognitive Therapy (FECT) includes 7 specific techniques that CT therapists can use to make their treatment more powerful and to address the diverse needs of clients more effectively. The results indicate that FECT produced a greater focus on the client-therapist relationship and is a promising approach for improving outcome and interpersonal functioning. It also appears that a focus during sessions on clients’ problematic cognitions about the therapist adds to efficacy.

Have you encountered clients who are resistant to the methods of cognitive therapy (CT), insisting that their feelings rule no matter what thoughts they have? Have you ever felt, while doing CT, that you would like to focus more on the client-therapist relationship? Have you ever wanted to make your treatment more intense and interpersonal, so that the therapy relationship itself is a primary vehicle for client change? In this article we describe a treatment for depression that enhances CT so that it addresses the diverse needs of clients and has wider appeal for both clients and therapists. The enhancements were informed by Functional Analytic Psychotherapy (FAP; R. J. Kohlenberg & Tsai, 1991), a treatment based on a behavioral analysis of the process of therapeutic change.

Perhaps the experience of Mr. G., a client who received both CT and FAP-enhanced CT (FECT), can best describe the qualitative difference between the two approaches. Mr. G. was a subject in our treatment development study who received standard CT. When, after the 8th session, his therapist experienced medical problems, Mr. G. switched to another therapist (co-author Chauncey Parker) who used FECT for the remaining 12 sessions. Obviously there is considerable confounding, but this client was in the unique position of being able to describe and compare his experience of both treatments. Mr. G., a 44-year-old with a long-standing history of major depression, had not responded to a variety of prior medications and psychosocial treatments. Among his presenting problems was a deep dissatisfaction in his interpersonal relationships. He felt people rejected him and he was unable to achieve closeness with others. According to Beck Depression Inventory (BDI) scores, he was no longer depressed at the end of our treatment, and reported making progress in being more intimate with his wife and children. In this excerpt from the last session, Mr. G. describes how he experienced the two types of therapy and what he learned:

There’s a lot of stuff going on in my personal life that we’ve been working on here in depression and so on, and that has led to maybe the cognitive therapy way of handling things and looking at . . . , you know, the daily activity log and then doing the thought records and analyzing thoughts and how they lead to things. So that’s over here [with the first 8 sessions of CT]. And then on this other part, which I definitely got into with you [the second 12 sessions of FECT], was in my personal relationships and how that works, on both sides, myself and the other person. And then it became how that occurred for you and me as an example of [my appearing to others as] ominous. It’s something I learned with you so that it would not persist in unintentionally coloring my relationships.

Mr. G. acknowledges the utility of standard CT, which he received directly during the first eight sessions and in a modified form during the second phase of treatment. Second, he states that during FECT, he became aware, for the first time, of an interpersonal problem involving others perceiving something ominous about him that interferes with his relationships. Third, he acknowledges that this same interpersonal problem that occurred in his daily life also occurred in the therapy session between him and his therapist. Finally, he suggests that learning to
deal with this problem with the therapist would help him in future relationships with others.

The methods and procedures of FECT are designed to produce the type of therapy experience that this client describes, capitalizing both on the strengths of CT and on the use of the therapeutic relationship as a tool for improving interpersonal relationships. During this treatment development study, we also generated strategies for training cognitive therapists to add FECT to their repertoires, and sought to provide a preliminary assessment of the efficacy of FECT compared to standard CT. In this article, we describe FECT theory and techniques and present findings from the treatment development study comparing FECT to standard CT.

**FECT**

The FECT enhancements to standard CT are intended to be user-friendly for experienced cognitive therapists, and rely upon the skills, training, forms, procedures, and methods of CT. In particular, FECT was built on the foundation of A. T. Beck, Rush, Shaw, and Emery’s (1979) widely practiced and empirically validated treatment for depression. The two major FECT enhancements to standard CT are (a) the use of an expanded rationale for the causes and treatment of depression and (b) a greater use of the client-therapist relationship as an in vivo teaching opportunity.

**Enhancement 1: The Expanded Rationale**

The expanded rationale is based on the behavioral view of cognition and its emphasis on historical explanations for current behavior (R. J. Kohlenberg & Tsai, 1991, chapter 5). Cognition is defined as the activity of thinking, planning, believing, and/or categorizing. Thus, cognitions, although covert, are simply behavior. This casts the often-made distinction between thoughts, feelings, and behavior, and the primacy of the cognition-behavior relationship, in a new light: The relationship between cognition and behavior becomes a Behavior X-Behavior Y relationship, that is, a sequence of two behaviors. Here, Behavior X is cognition and Behavior Y is external behavior or emotional response. This in turn accommodates a variety of possibilities as to the causal connection between cognition (Behavior X) and subsequent behavior (Behavior Y). The degree of control exerted by cognition over subsequent behavior is on a continuum and varies depending on the particular client’s history.

This view has implications for the nature of the rationale that is presented to clients in standard cognitive therapy for depression. For the purposes of this discussion, the cognitive hypothesis is represented as an A-B-C sequence in which A represents an event or stimulus, B represents cognition in response to A, and C represents the resulting behavior or emotional response (A. T. Beck, 1967, p. 322). This is illustrated in Figure 1 (a). Both CT and FECT therapists present this standard cognitive hypothesis and tell clients that their beliefs, attitudes, and thoughts about external events lead to problematic feelings and maladaptive behavior. FECT therapists, however, tell clients that other possibilities might also exist in addition to the A-B-C paradigm. For example, Figure 1 (b) represents the client who says, “I just reacted, I didn’t have any preceding thoughts or beliefs.” In this case, the FECT therapist is more accepting of the idea that there is no cognition at work. Figure 1 (c) represents yet a different client who says, “I truly believe that I do not have to be perfect, but I still feel like I have to be.” In this case, the FECT model accommodates the possibility that the client may have a “B” that does not play a role in causing the problematic “C,” even though there is a temporal sequencing that resembles the one posited in the cognitive hypothesis. That is, the FECT view is that it is possible to have a belief that precedes the problematic emotion and/or behavior but is not causally related. There are several other variations of the A-B-C paradigm that might also have been included in Figure 1. For example, A-C-B would represent a client who reacts and then has a thought. For clients whose experience matches A-B-C as shown in Figure 1 (a), FECT proposes that the methods of cognitive therapy would be maximally effective and should be used. However, for clients whose experience

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1 Technically, the term *cognition* refers to cognitive products, structures, or processes (Hollon & Kris, 1984). Due to space limitations, we have not made this distinction here, but we have shown elsewhere that our analysis is consistent with the more technical meanings of cognition (Kohlenberg & Tsai, 1991, chapter 5).
corresponds to one of the other paradigms shown in Figure 1, standard cognitive therapy might result in a client-therapy mismatch and a less effective treatment. It is also possible that multiple paradigms exist for a given client, or that paradigms change from situation to situation.

The use of the expanded rationale is illustrated in the case of a client, Mr. D. Mr. D. had a problem of getting angry too easily. He brought up an example of getting angry at other drivers at a four-way stop while driving to his appointment. He explained how the driver in front of him could have moved forward a little and allowed Mr. D. to make a right-hand turn. In this example, the therapist does a brief assessment to determine if A-B-C or an alternate paradigm should also be considered in Mr. D.'s treatment:

Mr. D.: I thought, “You idiot!”
Therapist: You remember during our discussion of the [FECT] brochure that thought sometimes precedes feelings but can also occur after. At the four-way stop, you thought, “You idiot!” Were you aware as to whether you had that thought first and then got angry, or did you get angry first and then have the thought?
Mr. D.: I got angry first.

Although the standard cognitive hypothesis states that depressogenic schemas acquired developmentally create a vulnerability to depression, the FECT expanded rationale increases the emphasis on historical factors more broadly defined, to account for the client's reactions to the world either along with or as an alternative to the A-B-C hypothesis. This is consistent with a behavioral analysis of problems, tracing causality to external sources occurring in the reinforcement history of the individual (R. J. Kohlenberg & Tsai, 1991). Although changing cognitions is often a successful therapeutic strategy, it is sometimes advantageous to take an historical view of how the problem developed. Recognizing historical antecedents that account for clients' problems and their negative cognitions gives them a way to explain their behavior to themselves that may be less blaming than cognitive explanations by themselves.

The expanded rationale is expected to improve the match between client and treatment. As recently pointed out in this journal (Addis & Carpenter, 2000), clients who respond favorably to the treatment rationale in CT for depression are more likely to improve following treatment (Addis 1995/1996; Addis & Jacobson, 1996; Fennel & Teasdale, 1987; Teasdale, 1985). Addis and Carpenter hypothesize that the match between the client and the treatment rationale promotes more favorable outcome due to such factors as increased rapport, therapeutic alliance, and willingness to do homework. On the other hand, a mismatch can have deleterious effects. For example, in comparative outcome studies it is not uncommon for a percentage of clients to drop out of treatment because they feel mismatched to the assigned treatment (Addis, 1995/1996). Addis also reported that mismatches during CT for depression most often occurred because the CT rationale did not address the patient's desire to view their problems as the result of history and experience. Similarly, Castonguay, Goldfried, Wiser, Raue, and Hayes (1996) found that when therapists persisted in the application of cognitive techniques despite clients' statements that the model was not appropriate, the therapeutic alliance—and treatment outcomes—suffered. Thus, the FECT expanded rationale is expected to enhance outcome.

Enhancement 2: A Greater Use of the Client-Therapist Relationship

In FECT, the client-therapist relationship is seen as a social environment with the potential to evoke and change actual instances of the client's problematic behavior in the here and now (Follette, Naugle, & Callaghan, 1996; R. J. Kohlenberg & Tsai, 1991). For example, a client who doesn't express anger in his daily life because he assumes terrible things will happen if he does, might get angry at the therapist but not express this anger because of his assumption. In FAP terminology, the client's assumption about the therapist is referred to as Clinically Relevant Behavior (CRB), an actual here-and-now occurrence, in the therapy session, of daily life problematic thinking or behavior. According to FAP theory, there are extraordinary opportunities for significant, therapeutic change when CRBs occur and are recognized by the therapist. The therapist who notices CRB will be more likely to shape immediately, encourage, and nurture improvements in vivo (R. J. Kohlenberg & Tsai, 1991, chapter 2). Accordingly, several specific FECT techniques are designed to increase therapist awareness of CRBs. It should be noted that CRBs are real, they occur naturally during therapy, and they differ from the prompted and/or scripted within-session behaviors of role-playing, behavioral rehearsal, or social skills training (R. J. Kohlenberg, Tsai, & Dougher, 1993).

The FECT use of the client-therapist relationship as an in vivo learning opportunity is based on a well-known property of reinforcement: The closer in time and place a behavior is to its consequences, the greater will be the effect of those consequences. It follows, then, that treatment effects will be stronger if clients' problem behaviors and improvements occur during the session, as they are closest in time and place to the available reinforcement from the therapist. Rather than only talking about the client's problems, the therapist can effect positive change as behaviors occur. Goldfried (1985) described these special opportunities as "in vivo" cognitive behavioral work.
and noted that situations when these opportunities occur are “more powerful than imagined or described” situations (p. 71). The same idea is found in the widely accepted notion that in vivo exposure treatment is more powerful than in-office treatment. This FAP view of the client-therapist relationship differs both from the notion of collaboration in cognitive therapy and from therapeutic alliance (Callaghan, Naugle, & Follette, 1996; Follette et al., 1996; B. S. Kohlenberg, Yeater, & Kohlenberg, 1998). Although there are fundamental theoretical differences between FAP and psychoanalysis (see R. J. Kohlenberg & Tsai, 1991, chapter 7), the notion of CRBs as special opportunities for therapeutic change has much in common with the psychoanalytic concept of working with transference (R. J. Kohlenberg & Tsai, 1994).

The Two Main Forms of Clinically Relevant Behavior: CRB1 and CRB2

The use of the therapeutic relationship depends on the therapist’s ability to recognize the client’s problems as they occur in session. Such problematic behavior is termed CRB1. Equally important is the therapist’s ability to recognize improvements as they occur in-session. These improvements are termed CRB2.

Problematic Cognitive and Interpersonal Behaviors as CRBs

CRB1s and CRB2s (problems and improvements in the here and now) may be cognitive behavior and/or interpersonal behavior. Cognitive CRBs are in-session, actual occurrences of problematic cognition (thinking, assuming, believing, perceiving). In the example of Mr. D., the angry client, the client’s assumption that “the therapist will do something terrible if I express my anger” is a problematic in-session cognition. The occurrence of a problematic cognitive CRB provides a special opportunity for the therapist to do in vivo CT. For example, the therapist could use a thought log or empirical hypothesis-testing pertaining to the here-and-now client-therapist interaction. Cognitive CRBs are also identified as having special significance in the CT variants of Young (1990) and Safran and Segal (1990).

The angry client example involved both cognitive and interpersonal CRBs. Interpersonal CRBs are actual in-session problematic interpersonal behavior. One CRB1 may have been that the client did not express his angry feelings toward the therapist. The therapist could have encouraged or prompted the client to express his anger instead of employing the in vivo cognitive intervention (e.g., the thought log) if such expression is conceptualized as a CRB2, or improvement in client behavior. This points up the importance of generating a clear case conceptualization from the outset and updating it as treatment progresses. (Case conceptualization is outlined below.)

Generalization From Treatment to Daily Life

As therapy progresses, clients display more CRB2s (improvements in session). As discussed in R. J. Kohlenberg and Tsai (1991), generalization of improvements from the client-therapist interaction to daily life is expected to occur naturally but can be augmented by offering interpretations that compare within-session interactions to daily life. For example, the therapist might say, “Your belief that I will do something terrible to you if you criticize the therapy seems to resemble the belief you have about others in your life.” Successful within-session hypothesis testing and consequent mood improvement would similarly be related to uses in daily life. Standard CT homework assignments can be built from this in vivo work. For example, the therapist may say, “Now that you have found that your belief—that I will respond poorly to you if you express your feelings directly to me—is inaccurate, do you think a good homework assignment would be to check out that belief with your wife?”

Putting the Enhancements Into Practice:
Seven Specific Techniques

Treatment occurs simultaneously on two levels. At the first level, FECT therapists conduct A. T. Beck and colleagues’ (1979) CT for depression. Beck’s CT consists of a 20-session structure and specific procedures such as (a) defining and setting goals, (b) structuring the session (setting and following an agenda; eliciting feedback from the client at the end of the session), (c) presenting a rationale, and (d) using cognitive-behavioral strategies and techniques. The FECT therapist, however, uses the expanded rationale rather than the standard CT rationale. This requires the flexibility to drop the A-B-C hypothesis if it does not match the client’s experience and/or if the client is not progressing.

The second level of therapy is perhaps the most important. At the same time that the above technical procedures are used, FECT therapists are observing the client-therapist interaction and looking for the client’s daily life problems and dysfunctional thoughts actually occurring in the here and now, within the context of the client-therapist relationship. The following seven techniques highlight the FECT approach and help the therapist to work on both levels.

1. Setting the Scene Early

The FECT interest in history and observation of in vivo client behavior is established early. Either before treatment begins or during the first session of FECT, clients are given the following assignment: “Write an outline, a time chart, or an autobiography of the main events, during circumstances, highlights, turning points, and relationships that have shaped who you are as a person, from your birth to the present time.” The assignment
indicates to the client that the therapist is interested in history. At another level, it gives the therapist an opportunity to observe how the client deals with this task (e.g., procrastinates, gives sparse information, completes volumes of writings, assertively refuses to do it) and helps generate hypotheses about potential CRBs that might appear in therapy. Both the historical information and the hypothesized CRBs enter into the formulation of an initial case conceptualization as described below.

2. Present the Expanded Rationale and Elicit Feedback

Underscoring FECT's inclusion of CT, the therapist presents a treatment rationale to the client in the form of two brochures, the Beck Institute's "Coping With Depression" (A. T. Beck & Greenberg, 1995) and the FECT brochure (R. J. Kohlenberg & Tsai, 1997). "Coping With Depression" presents the cognitive hypothesis, a preliminary outline of types of thinking errors depressed people commonly make, and a brief overview of the direction of treatment. The FECT brochure acknowledges the A-B-C hypothesis and the value of learning new ways to think. It also allows for the possibility that the A-B-C paradigm might not always match the particular client's experience and discusses alternative paradigms. For example, the brochure states,

The focus of your therapy will depend on the causes of your problems. Thus, along with cognitive therapy, your treatment might also include: exploring your strengths and seeing the best of who you are; grieving your losses, contacting your feelings, especially those that are difficult for you to experience; developing relationship skills; developing mindfulness, acceptance and an observing self; gaining a sense of mastery in your life.

The FECT brochure emphasizes focusing on the here and now and using the client-therapist relationship to learn new patterns of behavior. A more detailed description of the FECT rationale can be found in R. J. Kohlenberg and Tsai (2000). A description of the form's six columns follows.

3. Use Case Conceptualization as an Aid to Detecting CRB

In FECT, case conceptualization is the sine qua non of therapeutic work. It is in fact a functional analysis of relevant client behaviors (thinking and feeling in addition to physical and verbal events). As discussed in R. J. Kohlenberg and Tsai (2000), FECT case conceptualization serves three purposes. First, it generates an account of how the client's history resulted in the current daily life problems. It includes an explanation of how current problem behaviors were adaptive at the time they were acquired, and sets the scene for the client to learn new ways of behaving. Second, it identifies possible cognitive phenomena that might be related to current problems. Third, and most importantly, FECT case conceptualization identifies and predicts how clinically relevant behavior—daily life problems (including dysfunctional thinking; CRB1) and improvements (CRB2)—might occur during the session within the client-therapist relationship. Hence, the case conceptualization helps therapists notice CRBs as they occur and to use these opportunities to shape and reinforce improvements in vivo.

The FECT case conceptualization form is a working document to help maintain a focus on the goals of therapy and increase therapist detection of in-session problematic thinking and behavior and their improvements. The form is filled out as soon as there is enough information. Sometimes it is filled out jointly with the client—at the very least, it is presented to the client for feedback, and modified throughout the course of therapy as more information is gathered. A more detailed description of this form and its application can be found in R. J. Kohlenberg and Tsai (2000). A description of the form's six columns follows.

Daily life problems. These are the client's complaints. For example, Mr. G. complained of a lack of close relationships and rejection by others.

Relevant history. History refers to childhood and significant events over the life span, or more recent experiences that account for the thinking, actions, and meaning that may be implicated in daily life problems. The purpose of this column is to generate an explanation of how the current problems were learned and how they were adaptive at the time they were acquired. Historical interpretations set the scene for the client to learn new ways of behaving. For example, Mr. G. reported a family environment that severely punished warmth and vulnerability.

Corresponding in-session problems (interpersonal/behavioral CRBs). It was hypothesized that Mr. G. would act in ways.
that would interfere with forming a close relationship with the therapist. It was in this context that Mr. G.‘s “omnious” style of interacting was identified by the therapist. This style emerged when the therapist was open and expressed warmth toward Mr. G.

Corresponding cognitive concepts (cognitive CRBs: automatic thoughts, core beliefs, underlying assumptions). Mr. G. had the core belief that he was defective.

Daily life goals. Mr. G.‘s goals were to be less depressed and to have more intimacy in his relationships.

In-session goals (CRB2s). These are improvements in the client-therapist relationship. Mr. G., for example, demonstrated improvement by being vulnerable when he said, “I don’t want to appear ominous now,” after the therapist told him that he cared about and liked Mr. G. The therapist acknowledged the improvement and confirmed that their relationship had been strengthened because of Mr. G.‘s CRB2. Hypothesizing in advance on the case conceptualization form about CRB2s that might occur helps the therapist to be prepared for their emergence and to be in a better position to nurture and shape the improved interpersonal behavior if and when it does happen.

4. Notice CRBs: Both Problems and Improvements

Based on the case conceptualization, FECT therapists hypothesize about and look for specific CRBs. A few of the most common domains follow.

Cognitive CRBs. Important cognitive CRBs can be identified by examining the client’s core beliefs, which are identified in the course of standard CT. Core beliefs can be translated into cognitive CRBs, and this will facilitate the therapist’s awareness of their potential. Table 1 presents several core beliefs identified by J. S. Beck (1995), along with corresponding CRBs that can be anticipated from them.

Intimacy CRBs. At the beginning of therapy, FECT therapists tell their clients that when they can express their thoughts, feelings, and desires in an authentic, caring, and assertive way, they will be more likely to find joy in life and to be less depressed. The therapy relationship provides a unique opportunity to build these skills because the therapist can offer the client something that no one else can in the same way: perceptions of who the client is, ways in which the client is special, and ways in which the client impacts the therapist. Throughout therapy, emphasis is placed on the client being able to express what is difficult for him or her to express to the therapist. Questionnaires given to the client at the beginning, middle, and end of therapy (see Table 2 for sample questions) encourage the client to say what is generally difficult to say, whether they be criticisms, fears, longings, or appreciation. FECT therapists model intimacy skills for clients by expressing caring, expressing feelings, telling clients what they see as their strengths, talking about concerns in a way that validates them, and making requests

<table>
<thead>
<tr>
<th>Core Issue</th>
<th>Anticipated CRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td>Feels this way, even with therapist.</td>
</tr>
<tr>
<td>Defective</td>
<td>As seen by therapist.</td>
</tr>
<tr>
<td>Different</td>
<td>As seen by therapist or in reactions to therapy.</td>
</tr>
<tr>
<td>Doesn’t measure up</td>
<td>As seen by therapist.</td>
</tr>
<tr>
<td>Failure</td>
<td>In therapy. With therapy tasks, homework.</td>
</tr>
<tr>
<td>Helpless</td>
<td>In relation to therapist, can’t influence therapist.</td>
</tr>
<tr>
<td>Inadequate</td>
<td>To understand the therapy, to get better with this treatment.</td>
</tr>
<tr>
<td>Incompetent</td>
<td>In therapy.</td>
</tr>
<tr>
<td>Ineffective</td>
<td>In therapy.</td>
</tr>
<tr>
<td>Inferior</td>
<td>To therapist, to other clients.</td>
</tr>
<tr>
<td>Loser</td>
<td>In relation to therapist, as seen by therapist, to be in therapy.</td>
</tr>
<tr>
<td>Loser (in relationships)</td>
<td>In therapy relationship.</td>
</tr>
</tbody>
</table>

*Adapted from Bruckner-Gordon, Gangi, and Wallman (1988).
(I want, I need, I would like). FECT therapists also model self-disclosure when it is in the client’s best interest (i.e., when relevant to the client’s issues, offering support, understanding, encouragement, hope, and the sense that the client is not alone).

Avoidance CRBs. From a behavioral viewpoint, avoidance is one of the major factors in the etiology and maintenance of depression (Ferster, 1973), and avoidance CRBs are often a target in FECT. For many clients, therapeutic change is facilitated when avoidance is gently blocked and clients are encouraged to take risks outside of their usual comfort zone both in the session and in daily life. For example, a client remains silent for a moment and looks troubled in response to a question. When the therapist inquires further, the client says, “Oh, I don’t know, nothing important.” This may be a CRB1. That is, in daily life, the client may avoid talking and feeling about troubling topics by using such dismissive phrases. This type of CRB1 precludes the possibility of the client’s resolving the issue that she or he is avoiding, and interferes with forming more satisfying relationships. Gentle inquiry into “nothing important” may prompt CRB2s, which, in this case, may be the client identifying and expressing his or her feeling of discomfort to the therapist. The therapist should take care that his or her response to the CRB2 will naturally reinforce the new behavior. This may involve risk-taking and real emotional involvement on the part of the therapist, so the therapist should also be aware of his or her own avoidance CRBs.

5. Ask Questions to Evoke CRBs

FECT therapists ask questions that bring the client’s attention to their thoughts and feelings at the moment about the therapy or therapeutic relationship. Table 3 presents several useful questions of this type.

### Table 3
Useful Sample Questions to Evoke CRB

<table>
<thead>
<tr>
<th>What’s your reaction to...</th>
<th>What I just said?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>to the rationale I just gave?</td>
</tr>
<tr>
<td></td>
<td>to me as your therapist?</td>
</tr>
<tr>
<td></td>
<td>to agenda setting?</td>
</tr>
<tr>
<td></td>
<td>to structured therapy?</td>
</tr>
<tr>
<td></td>
<td>to the homework assignment?</td>
</tr>
<tr>
<td></td>
<td>to time-limited 20-session therapy?</td>
</tr>
<tr>
<td>What were you thinking/feeling on your way to therapy today?</td>
<td></td>
</tr>
<tr>
<td>What are your behaviors that tend to bring closeness in your relationships?</td>
<td></td>
</tr>
<tr>
<td>What do you tend to do that decreases closeness in your relationships?</td>
<td></td>
</tr>
<tr>
<td>How would you feel about us watching for your behaviors in here which increase or decrease closeness?</td>
<td></td>
</tr>
<tr>
<td>What were you thinking/feeling while you were waiting for me out in the waiting room?</td>
<td></td>
</tr>
</tbody>
</table>

6. Increase Therapist Self-Awareness as an Aid to Detecting and Being Aware of CRBs

FECT therapists use their personal reactions to alert them to client CRBs. The more therapists are aware of and understand their own reactions to their clients, the easier it will be for them to detect CRBs and respond appropriately. For example, during supervision co-author Mavis Tsai noticed that in a tape of a session, when a client expressed warmth and appreciation toward the therapist, the therapist changed the subject without acknowledging what the client had said. Dr. Tsai also noticed that this therapist tended to be uncomfortable when Dr. Tsai complimented him. When this was pointed out, the therapist became more aware of this discomfort and focused on being more receptive and reinforcing when complimented. Subsequently, he was better able to detect and naturally reinforce positive interpersonal behaviors of his clients. Table 4 presents sample questions that can be used during supervision of FECT therapists to increase self-awareness related to provision of FECT.

### Table 4
Sample Questions for Use During Supervision of FECT Therapists to Increase Self-Awareness

| What thoughts and feelings is the client stirring up in you? |
| How can these reactions help/hinder the client or the therapy? |
| What does this tell you about the client? |
| What does this tell you about yourself? |
| What are your own CRB1s and CRB2s in relationships and particularly as they pertain to your work with this client? |
| What would be helpful to the client and also promote better therapist behavior? What do you uniquely bring to the therapy relationship? |
| How do you think the ways you’ve been hurt emotionally shaped who you are (your behavior) as a therapist, both positively and negatively? |
| In general, what do you think your strengths and weaknesses are as a therapist? |
| What concerns and apprehensions do you have as you begin seeing FECT clients? |

7. Use the Modified Thought Record

We modified the thought record (A. T. Beck et al., 1979, p. 403) used during CT in the following ways. First, the instructions were modified to include the expanded rationale: The client is asked to consider whether the A-B-C, A-C, or A-C-B paradigms fit his or her particular experiences.

Begin filling out this record with the problematic situation, what you did, or what you felt. If possible, denote whether the thinking, feeling, or doing came first, second, or third (which did you experience first, second, and third?).

Second, a new column, “In Vivo,” has been added to the form to facilitate the therapist-client focus. After
denoting the thoughts, feelings, and actions that occurred in response to the particular event in daily life, the client is asked, “How might similar problematic thoughts, feelings, and/or actions come up in session, about the therapy, or between you and your therapist?”

Third, a new column, “Alternative, More Productive Ways of Acting” asks clients to come up with alternative ways of acting that would help them achieve their goals. The client is also asked to rate his or her “Commitment to Act More Effectively” using the following scale:

- 0% None (I can’t act better while I have negative thoughts and/or feelings).
- 50% I am willing to give it a try.
- 100% Very much. I will act effectively and have my negative thoughts and feelings at the same time.

Based on acceptance (Hayes, Strosahl, & Wilson, 1999; Linchanc, 1993) and behavioral activation (Jacobson et al., 1996; Martell, Addis, & Jacobson, 2001) approaches, this column can be used to raise the issue that it is possible to improve even if one has negative thoughts and feelings. This approach is particularly useful for helping clients who do not improve with standard cognitive therapy interventions or for those who reject the cognitive hypothesis.

These seven specific techniques incorporating two main enhancements to CT were tested in the course of a 3-year study.

Empirical Findings

Depressed subjects were sequentially assigned, in waves, to each of four experienced cognitive therapists. During the first 6 months of the study, 18 subjects were assigned to CT and received standard CT for depression. In the 7th month, FECT began and the next 28 subjects were sequentially assigned in waves to the same four therapists.

Method

Clients

Eligibility criteria were a diagnosis of major depressive disorder according to the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1995) and a score of 18 or greater on the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Exclusion criteria were the same as Jacobson et al. (1996).

Participants were recruited through community clinic referrals and newspaper advertisements. After an initial phone screening, participants were given a full diagnostic evaluation to determine study eligibility. Of the 116 participants interviewed, 49 met full eligibility criteria and were accepted into the study. Three participants dropped before therapist assignment; 46 participants were assigned to either CT (18 clients) or FECT (28 clients) and started therapy. Two additional clients (one CT and one FECT) were removed from the study after therapy began. One was due to a therapist medical emergency and one was due to the emergence of a severe personality disorder missed during screening. Participants’ mean age was 41.69 ± 9.61; 64% were female, 38.5% were married or living with someone, and 46% had graduated from a 4-year college.

Therapists

Our research therapists had been in practice for at least 10 years and had served as cognitive therapy research therapists on prior clinical trials. Three therapists were psychologists; one was a social worker. Two therapists were board certified by the Academy of Cognitive Therapy.

Procedure

Standard CT phase. Each therapist was instructed to do 20-session CT for depression, using A. T. Beck and colleagues (1979) and J. S. Beck (1995) as manuals. The therapists met for weekly group supervision meetings. Dr. Sandra Coffman, an experienced cognitive therapist who served as a research therapist on two prior clinical trials, attended about 50% of the group meetings during the CT phase and provided individual CT supervision. Additionally, Dr. Keith Dobson rated four sessions from each therapy case for competency on the Cognitive Therapy Scale (Dobson, Shaw, & Vallis, 1985; Vallis, Shaw, & Dobson, 1986) and ongoing feedback based on these ratings was provided to the therapists.

ECT phase. The same four therapists began FECT treatment during the second year of the study. Training in FECT consisted of a 6-hour workshop and weekly group and individual supervision from Dr. Kohlenberg or Dr. Tsai. The treatment manuals for this phase consisted of the two CT books (A. T. Beck et al., 1979; J. S. Beck, 1995), the FAP book (R. J. Kohlenberg & Tsai, 1991), and supplemental FECT materials, such as the questions in Tables 1 through 4 and forms commonly used in CT that were modified to be consistent with FECT.

Measures

We wanted to measure several different classes of variables in this study. First, we wanted our study to be comparable to traditional outcome studies on treatment for depression, so traditional outcome measures were used (e.g., Elkin et al., 1989). We used (a) the 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967); (b) the Global Assessment of Functioning Scale (GAF;
Table 5
Mean Scores on Major Outcome Variables by Condition, p Values and Effect Sizes

<table>
<thead>
<tr>
<th>Time</th>
<th>N</th>
<th>M ± SD</th>
<th>N</th>
<th>M ± SD</th>
<th>p</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CT</td>
<td>FECT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>15</td>
<td>21.67 ± 8.09</td>
<td>23</td>
<td>21.65 ± 5.36</td>
<td>.20</td>
<td>.28</td>
</tr>
<tr>
<td>Post</td>
<td>15</td>
<td>10.67 ± 10.05</td>
<td>23</td>
<td>8.61 ± 5.45</td>
<td>.50</td>
<td>.17</td>
</tr>
<tr>
<td>Follow-up</td>
<td>15</td>
<td>8.87 ± 7.43</td>
<td>23</td>
<td>7.85 ± 4.76</td>
<td>.06</td>
<td>.83</td>
</tr>
<tr>
<td>HRSD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>15</td>
<td>14.93 ± 4.06</td>
<td>23</td>
<td>14.65 ± 3.75</td>
<td>.06</td>
<td>.53</td>
</tr>
<tr>
<td>Post</td>
<td>15</td>
<td>8.60 ± 7.12</td>
<td>23</td>
<td>5.52 ± 4.54</td>
<td>.06</td>
<td>.53</td>
</tr>
<tr>
<td>Follow-up</td>
<td>15</td>
<td>4.47 ± 4.24</td>
<td>23</td>
<td>4.04 ± 3.69</td>
<td>.40</td>
<td>.08</td>
</tr>
<tr>
<td>SCL-90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>15</td>
<td>0.92 ± 0.42</td>
<td>23</td>
<td>0.80 ± 0.35</td>
<td>.06</td>
<td>.61</td>
</tr>
<tr>
<td>Post</td>
<td>15</td>
<td>0.54 ± 0.42</td>
<td>18</td>
<td>0.35 ± 0.20</td>
<td>.10</td>
<td>.48</td>
</tr>
<tr>
<td>Follow-up</td>
<td>13</td>
<td>0.66 ± 0.37</td>
<td>17</td>
<td>0.46 ± 0.43</td>
<td>.06</td>
<td>.61</td>
</tr>
<tr>
<td>GAF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>15</td>
<td>54.67 ± 5.23</td>
<td>23</td>
<td>55.09 ± 7.82</td>
<td>.29</td>
<td>.19</td>
</tr>
<tr>
<td>Post</td>
<td>15</td>
<td>70.27 ± 15.52</td>
<td>23</td>
<td>73.13 ± 13.79</td>
<td>.03</td>
<td>.65</td>
</tr>
<tr>
<td>Follow-up</td>
<td>15</td>
<td>78.87 ± 11.42</td>
<td>23</td>
<td>85.39 ± 9.52</td>
<td>.03</td>
<td>.65</td>
</tr>
</tbody>
</table>

Note. p = p value for between condition ANCOVA; ES = Effect size; BDI = Beck Depression Inventory; HRSD = 17-item Hamilton Rating Scale for Depression; SCL-90 = Symptom Check-List 90, total score; GAF = Global Assessment of Functioning.

*Four CT clients did not return their post-treatment assessment packets (which included the SCL-90 and SAD).
*b Five FECT clients did not return their post-treatment assessment packets (which included the SCL-90 and SAD).
*c Two CT clients did not return their 3-month follow-up assessment packets (which included the SCL-90 and SAD).
*d Five FECT clients did not return their 3-month follow-up assessment packets (which included the SCL-90 and SAD), and one client did not return the SCL-90 with the follow-up assessment packet.

had more responders than did CT on all measures. Averaging the BDI and HRSD, 79% of FECT clients and 60% of CT clients responded to treatment. We defined failures as those with less than a 25% reduction in symptoms. Figure 3 shows the percentage of failures in CT and FECT for each outcome measure. FECT had fewer failures than did CT on all measures.

Remission. Defining remission at the end of treatment as HRSD 6 or less, FECT patients showed an incremental increase in remission of 67%. Eighteen of 23 (78.3%) FECT patients remitted compared to 46.7% (8/15) of CT clients (χ² = 4.03, p = .049). Differences in remission rates defined as BDI 8 or less were not statistically significant between conditions. It is not clear as to why reliable differences in remission were found only with the HRSD criterion.

Relapse analyses. Since we only had a 3-month follow-up assessment, our analyses of relapse were based on this limitation. We looked at sustained remission rates (SR; Holton, 2011) at the 3-month follow-up. A client was in SR if he/she was randomized to treatment, did not drop out at any point in the study, was not clinically depressed at the end of acute treatment (HRSD < 13), and remained depression-free throughout the follow-up period (did not meet criteria for depression for 2 weeks according to the LIFE interview). This index is an improvement over simple relapse rates for two reasons. First, it includes all clients randomized to treatment and thus is an intent-to-treat analysis, which is more inclusive and powerful.

Figure 2. Percent of CT and FECT responders on major outcome variables. BDI = Beck Depression Inventory; HRSD = 17-item Hamilton Rating Scale for Depression; SCL-90 = Symptom Check-List 90 Item Version, total score; GAF = Global Assessment of Functioning.

Figure 3. Percent of CT and FECT failures on major outcome variables. BDI = Beck Depression Inventory; HRSD = 17-item Hamilton Rating Scale for Depression; SCL-90 = Symptom Check-List 90 Item Version, total score; GAF = Global Assessment of Functioning.
Endicott, Spitzer, Fleiss, & Cohen, 1976); (c) the Beck Depression Inventory (BDI; A. T. Beck et al., 1961); and (d) the Symptom Checklist–90 Total Score (SCL-90; Derogatis, Lipman, & Covey, 1973). These four measures are established instruments for the measurement of depressive symptoms (BDI and HRSD), overall symptoms (SCL-90), and general level of functioning (GAF). All measures were administered at pretreatment, posttreatment, and at a 3-month follow-up. The HRSD and GAF were completed by a trained evaluator at pretreatment and follow-up and by the therapist during the final session. Also, to assess diagnostic status and relapse rates at the 3-month follow-up, we administered the Longitudinal Interval Follow-up Evaluation (LIFE; Keller et al., 1987), a semi-structured retrospective interview that assesses the longitudinal course of depression and other disorders.

Second, we were interested specifically in the effects of the FECT enhancements that emphasize interpersonal problems and improvements, so we included several measures of interpersonal functioning. We administered the Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983), a well-validated measure that asks subjects to list up to nine individuals to whom subjects feel they could turn for support in each of six different situations and to rate their satisfaction with available support for each situation on a 6-point Likert scale. The mean number of individuals and mean satisfaction ratings across the six situations are used as subscale scores. We also administered the Social Avoidance and Distress Scale (SAD; Watson & Friend, 1969). Although the SAD is widely used in treatment research on social phobia, we believe it has relevance to depression in general and to FECT treatment of depression in particular. This is because a behavioral view of depression specifically emphasizes a lack or avoidance of social reinforcers (Boiling, Kohlenberg, & Parker, 2000; Lewinsohn, 1974), and overcoming social avoidance is targeted in both FECT and Behavioral Activation treatments for depression.

We also wanted a measure of relationship satisfaction that tracked progress weekly throughout therapy. Before beginning each therapy session, clients responded to two questions (in a confidential, sealed questionnaire that the therapist did not see) about their interpersonal relating during the previous week. The first question was, “Have your relationships been different than usual?” Clients were asked to respond to this question on a 5-point scale (1 = much worse, 3 = no change, and 5 = much better). The second question was, “If your relationships are different this week, is this difference due to therapy?” Clients were asked to respond on a 4-point scale (1 = due to other factors, 4 = definitely due to therapy).

We also conducted several intensive videotape rating projects to assess additional client reactions and changes not assessed by existing measures. First, we were interested in evaluating the effect of the FECT enhancement to the CT rationale. Second, we assessed additional relationship improvements using information gleaned from the diagnostic interviews before the study started and at 3-month follow-up. Third, we assessed statements made by clients themselves during the final therapy session using a new scale, created through a content analysis procedure, to assess for patterns of improvements from the clients’ perspectives. Finally, in order to measure therapist adherence and competence, we created and administered a measure to check that the therapists were able to implement FECT and that FECT as implemented differed from standard CT. We assessed CT competency using the Cognitive Therapy Scale (CTS; Dobson et al., 1985; Vallis et al., 1986). Each of these projects will be described more fully below.

Results

Because this study was not a randomized clinical trial, it is not possible to unambiguously attribute outcome differences to the treatment conditions. Thus, our conclusions about outcome are preliminary in nature. Despite the numerous analyses conducted, we elected to retain an uncorrected \( p \) value of .05 and risk Type I errors because of the preliminary and exploratory nature of this study.

Major Outcomes

Statistical significance. We first tested for statistical significance of mean differences between treatment conditions on the four major outcome measures using ANCOVA, with pretreatment scores on each measure entered as covariates. Table 5 shows sample sizes, means and standard deviations for CT and FECT on the four measures at pretreatment, posttreatment, and follow-up. Table 5 also shows the \( p \) value (one-tailed) for each ANCOVA comparing CT and FECT. Results favored FECT at all time points, with a significant difference found on the GAF at follow-up, and trends found on the HRSD and SCL-90 at posttreatment.

Effect sizes. Because of small sample size, we were particularly interested in effect sizes as measured by \( d \), and used adjusted values as instructed by Cohen (1988, p. 380). Across all measures (see Table 5), the mean posttreatment effect size was .40, and the mean follow-up effect size was .34.

Clinical significance. We also split our clients into groups of “responders” and “failures.” We defined responders as those with a clinically significant reduction in depressive symptoms, defined as greater than or equal to 50% reduction in overall symptom severity measured at pretreatment. Figure 2 shows the percentage of responders in CT and FECT for each outcome measure. FECT
Second, it takes into account both those who did not respond to acute treatment and those who relapsed after a response; thus it more fully captures the range of depression treatment outcomes possible. We found that 47.1% of CT clients and 74.1% of FECT clients were in SR at follow-up ($ \chi^2 = 1.29, p = .068$). This index subsumes simple relapse rates: One CT client and one FECT client had relapsed.

**Interpersonal Functioning Outcomes**

On the SSQ, no significant differences between conditions were found in the number of social supports clients identified, although results favored FECT with small effect sizes at posttreatment (.29) and follow-up (.27). However, significant differences were found in relationship satisfaction with large effect sizes at posttreatment, $F(1, 26) = 5.57, p = .03$, $ES = .91$, and follow-up, $F(1, 28) = 7.45, p = .01$, $ES = .99$ (see Table 6). CT clients on average did not improve on relationship satisfaction at posttreatment (percent change = 0.00 ± 0.38) or follow-up (−0.03 ± 0.22), while FECT clients improved 47% at posttreatment and 39% by follow-up. Differences in percent change scores between conditions were significant (posttreatment: $t[27] = 1.69, p = .050$; follow-up $t[29] = 1.84, p = .038$).

On the SAD, no significant differences were found in social avoidance between groups using ANCOVA at posttreatment or at follow-up, but moderate effect sizes were found at both time points favoring FECT (posttreatment $d = .38$; follow-up $d = .36$). Percent change scores indicated a worsening of social anxiety over the course of therapy for CT, while the FECT average indicated an improvement (CT = −0.29 ± 1.08; FECT = 0.36 ± 0.43; $t[27] = 2.27, p = .016$). Similar differences were found at follow-up (CT = 0.00 ± 0.63; FECT = 0.39 ± 0.43; $t[29] = 1.59, p = .062$).

Concerning weekly relationship satisfaction, as shown in Figure 4(a), both CT and FECT clients consistently reported that their relationships were improving as therapy progressed. As shown in Figure 4(b), both groups attributed this improvement increasingly to therapy, with FECT showing more improvement than CT at all but three time points.

**Interpersonal functioning and treatment failures.** We also looked specifically at how the treatment failures (those with less than 25% change on the BDI) did on these measures. Since FECT focused on building interpersonal relating skills (in addition to using CT interventions), it was possible that there might have been improvements in relationships that preceded changes in depression scores. These patients would have been classified as failures on the BDI but would differ from CT failures in that new interpersonal relating skills were learned.

Our data supported this possibility. At posttest, the FECT failure for whom we had data (one FECT failure and one CT failure did not return their posttreatment assessments) did not fail on the SSQ or SAD, but the CT

### Table 6

<table>
<thead>
<tr>
<th>Time</th>
<th>CT N</th>
<th>M ± SD</th>
<th>FECT N</th>
<th>M ± SD</th>
<th>p</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>15</td>
<td>4.02 ± 1.48</td>
<td>23</td>
<td>4.04 ± 1.42</td>
<td>.97</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>11</td>
<td>4.08 ± 1.61</td>
<td>18</td>
<td>4.69 ± 0.92</td>
<td>.01</td>
<td>.91</td>
</tr>
<tr>
<td>Follow-up</td>
<td>13</td>
<td>4.05 ± 1.66</td>
<td>18</td>
<td>4.76 ± 1.24</td>
<td>.01</td>
<td>.99</td>
</tr>
</tbody>
</table>

*Note. p = p value for between-conditions ANCOVA, ES = Effect size.*

![Figure 4](image-url)
failures did. On the SSQ, the CT failures’ percent change scores (pre to post) averaged .08 with only one above .00, while the FECT failure’s percent change score was 1.00. On the SAD, the CT failures’ percent change scores (pre to post) averaged -.44 with none above .04, while the FECT failure’s percent change score was .40. The same was found at follow-up (all seven failures returned their follow-up assessments). On the SSQ, the CT failures’ percent change scores averaged -.10, while the FECT failure’s percent change scores averaged .29. On the SAD, the CT failures’ percent change scores averaged -.07, while the FECT failure’s percent change scores averaged .29.

FECT failures also consistently reported that their relationships were doing better as therapy progressed (Figure 5a), and they attributed this improvement increasingly to therapy (Figure 5b). CT failures did not consistently report improved relationships, nor did they attribute any improvements that did occur to therapy. Given the very small number of treatment failures, these results are merely suggestive and should be interpreted with caution.

**Reaction to Rationale**

One of the two major enhancements to CT in FECT is an expanded rationale. At the end of Session 1, therapists were encouraged to distribute the appropriate brochures (Beck and Greenberg’s 1995 *Coping With Depression* for the CT condition and *Coping With Depression* and a FECT brochure for the FECT condition), and to discuss them with the client in Session 2. Our hypothesis was that the expanded FECT rationale would improve the match between client and therapy and clients would respond more favorably to the expanded rationale than to the standard CT rationale.

Our Reaction to Rationale scale (RTR) was modified from Addis’s Reaction to Rationale Scale (unpublished) and consists of 7 items scored on a 5-point scale of −2 (strongly negative) to +2 (strongly positive). Two items on that scale allowed for comparisons between the FECT and CT conditions: overall response to the rationale and response to the cognitive conceptualization. Two research assistants assessed clients’ reactions to rationales by rating clients’ responses in Session 2 using the RTR. It was impossible to maintain blindness to treatment condition because the rationales identify the condition. We included treatment completers (CT = 15, FFCT = 23) and dropouts who completed Session 2 (CT = 1, FECT = 3) in this analysis. In four cases (3 CT, 1 FECT) there was no discussion of the rationale in Session 2, leaving 13 CT clients and 25 FECT clients. Looking at overall response to the respective rationales, FECT clients displayed a significantly more positive overall response than did CT clients: CT M = .15, SD = .80; FECT M = .88, SD = .73; t(36) = 2.83, p < .01. Also, clients displayed a significantly more positive reaction to the CT conceptualization in FECT when it was presented as part of the expanded rationale than did clients in CT when it was presented in isolation: CT M = .08, SD = .64; FECT M = .83, SD = .65; t(33) = 3.41, p < .01. (Two additional FECT clients displayed no specific reaction to the CT conceptualization and were not included in this analysis.)

**Relationship Improvements From the SCID to the LIFE**

During the SCID interview at pretreatment and the LIFE interview at follow-up, the interviewer took notes about all aspects of clients’ lives. To create an additional measure of changes in interpersonal functioning from pretreatment to follow-up, we isolated the notes about clients’ relationships, and had two advanced undergraduate research assistants rate the degree of improvement from

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**Figure 5.** Treatment failures’ (CT = 5, FECT = 2) mean self-reported relationship improvements and attributions for change over the course of therapy. (A) Mean ratings on question: Have your relationships been different than usual? 1 = much worse, 3 = no change, and 5 = much better. (B) Mean ratings on question: If your relationships are different this week, is this difference due to therapy? 1 = due to other factors, and 4 = definitely due to therapy.
the SCID to the LIFE. Raters were blind to treatment condition and to other client outcomes. A 7-point scale with verbal anchors (ranging from 1 = much worse, 4 = no change in relationships, to 7 = much improved) was used. To evaluate interrater reliability, each rater independently scored three clients that the other rater had independently scored, with 100% agreement.

Because the range of scores was restricted (no client was rated as 1, 2, or 7, and only 1 client was rated 3), ratings were then categorized as either "improved" (scores of 5 or 6) or "no change or not improved" (scores of 3 or 4). Results indicate that relationships improved significantly more frequently for FECT (85%, 17/20) clients than for CT (53%, 8/15) clients, \( \chi^2 = 4.21, p = .047 \).

Clients' Statements of Improvement

We also assessed clients' statements of improvement during the 20th session of treatment. Our hypothesis was that clients' statements of improvement would favor FECT and reflect the increased focus on the client-therapist relationship in FECT. A content analysis of Session 20 dialogue yielded 27 exhaustive and mutually exclusive categories. For example, one category was "becoming aware of feelings," defined as a report that expressing or being aware of their feelings has been useful or helpful to the client in some way. Two categories dealt with cognitive change, for example, "cognitive strategies," defined as a report that the client had been helped by using a cognitive strategy (such as using thought logs or thinking up alternative ways to view a situation). Two categories dealt specifically with relationships, for example, "attitude and behavior toward others," defined as a report of a positive change in the client's attitude or behavior with respect to other people. For 19 of the 27 categories, raters also were asked to distinguish whether the particular improvement was attributed specifically to the therapist (e.g., "You showed me . . .") or not (e.g., "I found out . . ."). Two undergraduate research assistants, blind to condition, rated the tapes. Twenty-five percent of the tapes were rated by the graduate research assistants who developed the measure as criterion ratings for a reliability check on the raters.

Results indicated that subjects in the FECT condition identified more improvements overall (mean number of statement categories identified): CT = 4.47, SD = 2.36, FECT = 8.04, SD = 3.27, t(36) = 3.66, \( p < .01 \). Furthermore, subjects in the FECT condition attributed improvements more often to the therapist: CT M = 0.53, SD = 0.74, FECT M = 3.26, SD = 1.94, t(equal variances not assumed, 30) = 6.10, \( p < .01 \). In addition, there were no significant differences between FECT and CT subjects in the identification of cognitive strategies as helpful, but FECT subjects also specified more relationship improvements, CT M = 0.73, SD = 0.70, FECT M = 1.17, SD = 0.78, t(36) = 1.77, \( p = .04 \).

Adherence and Competence Measurement and Results

Adherence measurement is a central feature of treatment development. For FECT, there were two basic questions to answer. First, did our therapists do FECT? Second, is FECT truly different from standard CT? We developed the Therapist In Session Strategies Scale (THISS) adherence measure to answer these questions. The method and structure of the THISS was adapted from the Collaborative Study Psychotherapy Rating Scale-Version 6 (CSPRS-6; Hollon et al., 1987), and the Vanderbilt Therapist Strategy Scale (VTSS; Butler, Henry, & Strupp, 1992). The 36 THISS items were divided into four rational content subscales: CT, In Vivo CT, FAP, and Interpersonal Therapy (IPT). For the In Vivo CT subscale, items were modified to specify a focus on in vivo material. For example, item 60 from the CSPRS-6,

Exploring underlying assumptions: Therapist explores with the client a general belief that underlies many of the client's specific automatic negative thoughts,

was modified into two separate items:

Exploring daily life assumptions: Therapist explores with the client a general belief that underlies many of the client's specific automatic negative thoughts in daily life.

Exploring in-vivo underlying assumptions: Therapist explores with the client a general belief that underlies many of the client's specific in-session automatic negative thoughts.

The FAP subscale included 6 items measuring general in vivo interventions specific to FAP, such as commenting on some aspect of the client's in vivo behavior, disclosing his or her own thoughts or feelings about the client's in vivo behavior, and providing an expanded rationale for treatment that allows for additional reasons for depression other than the client's cognitions. The FAP subscale was distinguished from the In Vivo CT subscale because no FAP subscale items measured cognitive therapy interventions.

Rating procedures. Sessions 4, 8, 12, and 16 were rated by trained undergraduates for the 38 clients who completed the study. Raters had to meet a reliability criterion of at least .7 for three consecutive ratings compared to data raters before being used as data raters (calculated using the intraclass correlation coefficient for generalizing to other trained raters; ICC[2,k]) (Armstrong, 1981; Shrout & Fleiss, 1979). Reliability of data raters compared to the expert criterion ratings was found to be high (mean ICC = .88, range = .75 to .96). The internal consistency of the scale was \( \alpha = .64 \) with subscale values of .79, .74, .58, and .60, respectively, for FAP, In Vivo CT, CT, and IPT.
Results. Four mixed between/within subjects ANOVAs were computed with each subscale score as the dependent measure, condition as a between-subjects factor, and session as a within-subjects factor. Only FAP subscale scores were significantly different between conditions, $F(1, 36) = 19.15, p < .01$, with significantly higher scores in the FECT condition ($M = 1.57, SD = .35$) than in the CT condition ($M = 1.15, SD = .16$).

Our adherence data also is informative regarding therapist training issues. Figure 6 presents THISS subscale scores for each wave of the study (IPT subscale scores are not shown because no differences were found and no training issues are relevant to it). As can be seen, In Vivo CT subscale scores were low throughout the study, although during the final wave therapists were able to incorporate in vivo CT into therapy. FAP subscale scores show a marked increase at the wave-5 transition from CT to FECT, remain elevated throughout the FECT waves, and show a second jump during the final wave. CT subscale scores show a marked drop at the wave-5 transition from CT to FECT as therapists focused on implementing unfamiliar techniques, but CT scores regain their former elevations by waves 9 and 10.

CT competency. Fifty-two (24 CT and 28 FECT) tapes were rated for CT competency by Dr. Keith Dobson using the Cognitive Therapy Scale (CTS). Sessions 4 and 12 were targeted for rating, and 30 of the 38 clients had at least one session rated. There were no significant differences in CTS total scores between therapists or between conditions, nor was there a significant Therapist × Condition interaction. The mean CTS total score was 43.58, $SD = 6.00$, which is considered adequate and comparable to other studies. For comparison, Shaw (1984) proposed a competency cutoff score of 39, and the mean CTS total score of CT therapists in the TDCRP was 41.28, $SD = 4.24$.

Summary of adherence and competence. THISS ratings showed that FAP subscale scores were elevated during FECT. Interestingly, in vivo CT interventions were infrequent overall, although more likely to occur during FECT by wave 10. CT subscale scores were similar in both treatment conditions. These data indicate that the standard CT done by our therapists in the initial phase of our project employed no focus on the in vivo aspect of therapy. Further, these same therapists did use in vivo strategies during FECT. In addition, competency ratings suggest that therapists were performing competent CT throughout the study, which was expected given their collective experience and training. These results, however, must be interpreted with caution. Although the particular cognitive therapists in our study did not use in vivo strategies during CT, other cognitive therapists might. Further, given our A-B design, there are numerous other variables that could have contributed to these findings. For example, because the CT clients were seen first, it is possible the therapists were simply adapting to our study procedures and that the increase in in vivo work during FECT simply reflects habituation or an acclimatization effect.

Relationship Between Adherence and Outcome

To assess the relationship between THISS subscale scores and outcome, five regression equations were evaluated, each with BDI posttest scores as the dependent variable. Two-tailed significance tests were used because specific predictions were not made about each subscale. First, BDI pretest scores were entered on the first step, and all four THISS subscales were entered simultaneously on the second step. This equation showed that BDI pretest scores accounted for 10% of the variance and the subscales accounted for an additional 14%. Then, four additional equations were evaluated to estimate the unique contribution of each subscale score, after accounting for the contribution of BDI pretest scores and other subscale scores (Shaw et al., 1999). Each regression equation added BDI pretest scores on the first step, three of the four THISS subscale scores on the second step, and the remaining THISS subscale score on the last step. Table 7 shows the results of these four regression equations: the percent of unique variance explained by each subscale when added last ($R^2$ change), the F-test evaluating whether the unique variance explained by that subscale is a significant change from that explained by the other subscales, and the $p$ value for that test. Table 7 shows that the In Vivo subscale uniquely accounted for most of the variance explained by the subscales ($R^2$ change = .10), and the other subscales had negligible contributions. The In Vivo subscale's unique contribution was significant, $F$ for $R^2$ change $(1, 32) = 4.26, p = .047$, and no other subscales were significant contributors.
Measure and R² for R² Change and Distress Scale; R² change = the percent of unique variance explained by each subscale when added last; F for R² change = F test evaluating whether the unique variance explained by that subscale is a significant change from that explained by the other subscales.

<table>
<thead>
<tr>
<th>Measure and Subscale</th>
<th>R² Change</th>
<th>F for R² Change</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In vivo</td>
<td>.10</td>
<td>4.26</td>
<td>.05</td>
</tr>
<tr>
<td>FAP</td>
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<td>0.14</td>
<td>.71</td>
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<tr>
<td>CT</td>
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<td>0.47</td>
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</tr>
<tr>
<td>IPT</td>
<td>.00</td>
<td>0.00</td>
<td>.99</td>
</tr>
<tr>
<td>SAD</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>In vivo</td>
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<td>5.38</td>
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<td>.76</td>
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<tr>
<td>IPT</td>
<td>.03</td>
<td>2.00</td>
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</table>

Note. BDI = Beck Depression Inventory; SAD = Social Avoidance and Distress Scale; R² change = the percent of unique variance explained by each subscale when added last; F for R² change = F test evaluating whether the unique variance explained by that subscale is a significant change from that explained by the other subscales.

(Note that this result is statistically equivalent to finding a significant β only for the In Vivo subscale in the first equation, when all four subscales were entered simultaneously.)

To assess the relationship between THISS subscale scores and interpersonal outcomes, a similar set of equations were evaluated using SAD pre- and posttreatment scores instead of BDI scores, with similar results. SAD pre-test scores accounted for 50% of the variance, and the subscales accounted for an additional 11%. Table 7 shows that the In Vivo subscale uniquely accounted for most of this additional variance (R² change = .09) and the other subscales had negligible contributions. The In Vivo subscale’s unique contribution was significant, F for R² change (1, 23) = 5.38, p = .03, and no other subscales were significant contributors.

Summary and Conclusion

CT therapists trained in FECT increased their focus on using the client-therapist relationship as an in vivo learning opportunity. The in vivo work mostly targeted intimacy, avoidance, and other interpersonal relating skills. Although our therapists markedly increased their focus on client-therapist intimate and avoiding relating when doing FECT, they showed relatively small increases in in vivo cognitive therapy. This was surprising since, as experienced cognitive therapists, they were already proficient at doing CT interventions, whereas attending to the client-therapist intimacy and interpersonal avoidance involved different skills. It is also of interest that even low levels of in vivo CT led to improved outcomes. Future work will focus on improving methods for training therapists in In Vivo CT. The work of Safran and Segal (1990) may be useful in this regard.

Keeping in mind that this was an uncontrolled trial and findings must be considered preliminary in nature, the outcome data are promising. FECT achieved moderate effect sizes over CT on outcome measures traditionally used in depression studies. FECT evidenced incremental efficacy, even though CT performed well in this study (60% of CT clients responded successfully). Further, clients’ self-reported statements of improvement suggested that FECT clients felt they had improved more than did CT clients, and specifically attributed this improvement to the therapy.

PECT improved interpersonal functioning. On our measure of interpersonal satisfaction, CT clients did not improve at all, while FECT clients improved significantly. Further, an examination of clients classified as failures according to the BDI showed that those who received FECT improved on measures of interpersonal functioning while CT failures did not. One interpretation of this finding is that the items on the BDI might not reflect the improvement of a client who is confronting his or her interpersonal avoidance and taking risks because these involve an increase in psychological distress. However, confronting avoidance increases the probability of achieving more intimate and satisfying relationships and it is possible that the FECT failures would become less depressed over time. Consistent with this interpretation, the generally improved interpersonal functioning of FECT clients might increase their resistance to relapse. Research involving longer-term follow-up is being planned to provide data on these issues.

TECT clients also responded more favorably to their rationale than did CT clients. This was predicted given that FECT’s expanded rationale was intended to improve therapy-client matching.

Future studies will provide stronger tests of FECT’s efficacy compared to CT on diverse outcome measures. Current results are promising, and add to a growing body of literature on new, behaviorally informed treatment approaches for adult outpatient psychotherapy (Nelson-Gray, Gaynor, & Korotitsch, 1997) such as FAP (R. J. Kohlenberg & Tsai, 1991), Acceptance and Commitment Therapy (Hayes et al., 1999), and Dialectical Behavior Therapy (Linehan, 1993). These treatments may hold promise in that they are rooted in behavioral principles, but, unlike earlier behavioral forays into adult outpatient psychotherapy, they do not discard cognitive phenomena; they foster deep, intense psychotherapy experiences and genuine, curative client-therapist relationships often associated with nonbehavioral approaches.
References


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