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Cognitive- Behavioral Therapy for Generalized Anxiety Disorder With Integrations From Interpersonal and Experiential Therapies

Abstract: After providing background information on the definition and nature of generalized anxiety disorder, this article describes cognitive-behavioral therapy (CBT) methods that have been empirically supported in the treatment of this disorder. Subsequent to this description, relevant outcome literature is briefly reviewed, along with evidence that the addition of other techniques beyond traditional CBT methods may be necessary to maximize clinical outcome. A description is then provided of an integrated interpersonal/emotional processing therapy that the authors have recently added to their CBT protocol. CBT with and without this integrated treatment is currently being evaluated in an experimental trial.

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INTRODUCTION

Generalized anxiety disorder (GAD) appeared in the *Diagnostic and Statistical Manual of Mental Disorders, Third Edition* (1) in 1980, defined by symptoms involving anxious apprehension, motor tension, autonomic hyperactivity, vigilance, and scanning. The definition of GAD was modified over subsequent versions of the DSM and is now characterized by excessive and uncontrollable worry and anxiety over numerous events or activities for at least 6 months, accompanied by three of six associated symptoms (restlessness/keyed-up/on edge, difficulty concentrating, muscle tension,

insomnia, fatigability, irritability) causing significant distress or impaired functioning, and not due to other Axis I disorders or the physiologic effects of medical conditions or substance use, according to the *Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition (DSM-IV)* (2). GAD has a high prevalence rate (3.6% to 5.1% lifetime and 3.1% 1-year prevalence) (3, 4) and is often comorbid with other anxiety and mood disorders (5). Although individuals with GAD do not seek treatment from mental health practitioners as frequently as people with other anxiety and depression disorders, they are second only to patients with posttraumatic stress disorder and

panic disorder in seeking help from primary care physicians (6), and their rate of health-care utilization is very high (6, 7). Gastroenterologists are the most likely to be approached by individuals with GAD; indeed, half of patients suffering from irritable bowel syndrome meet criteria for GAD (8). GAD is a leading cause of workplace disability (9).

Over the past 20 years, considerable research has been conducted into the nature and functions of GAD and its central worry feature. GAD patients are constantly perceiving threat, showing a preattentive bias to threat-related information, and interpretative biases in the direction of threatening meanings (10). In response to perceptions of threat that exist only in the mind and in the non-existent future with no behavioral avoidance response available to cope with the danger, worrying is a type of cognitive avoidance that attempts to determine ways of preventing envisioned future catastrophes. Worry predominantly involves excessive negatively valenced thinking about such possible dangers, and both worry and GAD are associated with increased left frontal β activation in the cortex (11, 12) and increased γ activation in the posterior cortex (especially the left posterior, associated with negative emotion). This γ predominance moves toward normalization after successful psychotherapy (13). Although most other anxiety disorders are characterized by sympathetic activation in response to disorder-relevant stimuli, GAD does not always show such activation. Instead, GAD and worry are associated with reduced variability and increased rigidity in autonomic functioning (14, 15), as well as deficient parasympathetic tone (16). This may be why central nervous system-mediated symptoms are more frequently reported by GAD patients than are autonomic nervous system-mediated symptoms, resulting in the latter's deletion from associated symptoms in *DSM-IV*. The one peripheral physiologic system that is tonically elevated is muscle tension (15). Worry also reduces cardiovascular response to phobic images (17, 18), suggesting that it may preclude the kind of emotional processing necessary for change in anxious meanings (19) and further supporting its hypothesized cognitive avoidance function (20).

Development of interventions for GAD faces a considerable obstacle. Unlike other anxiety disorders, wherein circumscribed anxiety-provoking stimuli can be identified for the sake of effective exposure therapy methods, GAD involves diffuse anxiety with fears and worries over many (often vague) situations. Early psychotherapy methods, largely from a cognitive-behavioral therapy (CBT) perspective, focused on providing coping responses

for reducing anxiety any time that it occurs. Given that these initial approaches were only partially effective, investigators have been searching for new treatment elements, based on growing knowledge of GAD and worry, which might be usefully added to the basic CBT approach. This article will describe the basic CBT intervention (as well as how the authors' own program implements these methods), review extant outcome literature on its effectiveness, and then present recent therapy developments that involve targeting interpersonal and emotional factors for creating more effective interventions for this difficult-to-treat disorder.

BASIC COGNITIVE-BEHAVIORAL THERAPY FOR GENERALIZED ANXIETY DISORDER

Although early forms of CBT for GAD have varied in the specific elements of their treatment packages, four components have been most commonly used: self-monitoring, relaxation training, cognitive therapy, and the rehearsal of new learned relaxation and cognitive coping responses.

SELF-MONITORING

Teaching patients to objectively observe their anxious responses and its triggering environmental cues is foundational to most CBT approaches to adult anxiety disorders. The earlier a patient can identify incipient anxiety or worry, the more effective will be the deployment of coping responses to reduce the anxiety. Therapists and patients work together in sessions to determine characteristic cognitive, somatic, affective, and behavioral reactions involved in their anxious responding and how these internal reactions causatively relate to each other (e.g., what patients think affects how they feel, and how they feel affects what they think) and to the external environment and perceptions of threat. They do so through devices, such as discussions of recent anxious or worrisome periods during the past week, and imaginary reliving of stressful events. Clients are then encouraged to observe themselves and their inner and outer worlds between sessions in order to identify other cues involved in their anxious process. In the authors' work, they also make use of self-monitoring as a device for teaching our patients to pay attention to what it means to live more objectively in the present moment. By helping them pay attention to what is actually occurring internally and externally, we hope to facilitate a growing recognition that observed worrisome thoughts about the nonexistent future are illusory.

RELAXATION TRAINING

Jacobson's (21) original progressive relaxation approach to anxiety was designed to teach patients how to create a relaxed lifestyle. A brief version of relaxation training was incorporated into systematic desensitization therapy for treating phobic disorders; an anxiety-incompatible parasympathetic relaxation response during graduated exposure technique was assumed to facilitate a counterconditioning of the phobic stimuli. Once attention was turned to the diffuse anxieties of GAD in the early 1980s, the application of relaxation methods returned to Jacobson's original idea of using relaxation as a method of coping with anxiety any time it appeared and of cultivating relaxation as a way of living moment to moment. This use of relaxation has been described as applied relaxation training (22). Patients are trained in relaxation (most commonly in abbreviated progressive muscular relaxation [23]) during treatment sessions and are asked to practice their techniques twice a day to strengthen their ability to rapidly produce relaxation. They are also encouraged to make use of this response whenever they notice incipient anxiety or worry during their self-monitoring, and to cultivate relaxation as a way of being throughout the day. As our own relaxation approach has evolved, we also train our patients in additional relaxation techniques (slowed diaphragmatic breathing, meditation, pleasant imagery) for use in daily applications. The use of multiple relaxation methods is in keeping with our general approach to provide patients with flexibility and choice among several coping responses, given the rigidity and habitual nature of our patients' cognitive, affective, somatic, and behavioral ways of responding. Given our emphasis on living in the present, relaxation techniques are also used as an introduction in how to create affectively pleasant present moments upon which to focus, instead of the illusions about the future that their minds are constantly creating in their worrisome thinking.

COGNITIVE THERAPY

Because GAD centrally involves perceptions of threat and worrisome reactions predicting negative future events, cognitive therapy was viewed early on as a potentially significant approach for helping GAD patients replace frequently inaccurate ways of thinking about the future with more accurate cognitions. Basic cognitive therapy for GAD, usually adapted from Beck and Emery (24), involves four sequential steps: identifying how the patient is thinking and the beliefs about self, world, and future that underlie those thoughts; evaluating the

accuracy of those cognitions through examination of their logic, probability, and past evidence; generating alternative, more accurate interpretations, predictions, and ways of believing; and using these new perspectives whenever anxiety and worry are detected and engaging in deliberate behavioral experiments to provide further evidence to support them. The Socratic method is often used to help patients come to their own conclusions about the way things actually are or are likely to be in the future, in contrast to their customary negative interpretations. The decatastrophizing method is often used to identify the worst things that patients fear might happen and evaluate whether or not these events would indeed be so bad or whether the patient would be able to cope with them after all. In our own treatment program, we place special emphasis on the generation of multiple perspectives for any given area of worry or anxiety. We encourage our patients to flexibly try out various ways of seeing things more accurately and of constantly modifying those perspectives in response to new information that they are learning to pay attention to in their present moment observations of the way things actually are.

Two additional methods have also been incorporated into the authors' version of cognitive therapy. Patients note in a "Worry Outcome Diary" any time that they notice themselves worrying, writing down the worry and what they are afraid might happen. At the end of each day, they review prior entries and identify whether an outcome relevant to a particular worry has actually occurred. If so, they rate whether the outcome turned out poorly or well and whether they coped with the outcome poorly or well. The vast majority of the things the authors' patients worry about turn out well, and they cope better than they expected with the small number of bad things that do occur. By this monitoring method, patients direct their attention to what actually transpires in their worlds and begin to build a history of reality-based evidence specific to their own worries. Second, as the authors' patients are learning to spend increasing time in the present rather than in their minds and the future, they are encouraged to bring additional positive values to the engagement of that present moment (25). In this way, a positive approach to life and to stressful or anxiety-provoking situations is cultivated.

REHEARSAL OF COPING RESPONSES

Most CBT approaches view nonadaptive behavior to involve over-learned habits. Therefore, they often emphasize gradual change through frequent

practice of new, more adaptive actions. For GAD patients, learning to relax and see things more accurately represent new ways of acting with which they have little familiarity. Consequently, rehearsing their new coping skills has always been incorporated into CBT treatments for GAD. This is commonly accomplished by use of one of a family of related techniques developed in the 1970s from a coping (rather than mastery) orientation and including anxiety management training (26) and self-control desensitization (27). In these methods, patients detect anxious or worrisome feelings in daily living and/or generate those feelings in the therapy session (e.g., through imagery induction of anxiety cues). Then, patients practice deploying their cognitive and/or relaxation coping skills in response to those cues. This is sometimes accomplished with the use of graduated exposures to commonly confronted stressful situations. In therapy-session rehearsals, they repeatedly engage in imagery rehearsals with one set of anxiety and worry cues until they are experiencing success at rapidly reducing the anxiety before moving on to another representative set of external and internal cues. These rehearsals presumably increase the habit strength of new coping responses and help establish daily anxiety cues as reminders to rapidly deploy those new responses upon incipient anxiety detection.

In addition to such imagery rehearsals, the authors' program also has patients imagine during the therapy session the most likely outcomes relevant to a particular worry (based on preceding cognitive-therapy analyses) and encourage them to replace immediately any catastrophic thoughts or images concerning worrisome outcomes with images of these more realistic outcomes during their daily living. This imagery method is based on two empirical facts. First, imagery (as efferent command or implicit action) generates the same pattern of physiologic activation that the actual occurrence of an event causes. Consequently, replacing inaccurate images with more accurate images lessens the duration and intensity of catastrophic mentations (thus reducing further strengthening of anxious meanings) and generates more positive feelings about the future. Second, imagining an event increases the probability that that event will be remembered as if it actually happened (28). Thus, GAD patients who are often thinking about possible catastrophes are in a sense building a history of evidence that those things did actually happen. Balancing these mentations with more frequent, accurate images of future outcomes helps to build, at an affective level, the feeling that things generally turn out well and without catastrophe.

ADDITIONAL BEHAVIORAL AND COGNITIVE TECHNIQUES

In addition to the most common elements of the basic CBT package described here, other methods have periodically been incorporated. One is the scheduling of pleasant activities (29). Because depression is a frequent accompanying problem in GAD, activating behavior and helping patients come in contact with naturally occurring reinforcing activities is likely to be helpful. Moreover, such activities provide opportunities for patients to shift their attention away from negative, illusory thoughts about the future and onto pleasant present-moment realities. Second, stimulus control techniques have sometimes been included (30). Given that worry can occur any time and anywhere, it is likely under poor stimulus control. Instructing patients to establish a brief worry period each day and to postpone any detected worries during the day to that period can help them temporarily let go of their worrying, focus their attention back on the task at hand or on present-moment reality, and achieve some greater degree of environmental control over this internal process. The worry period is then used to apply cognitive therapy skills to generate alternative perspectives for the postponed worry for use the next time that worry occurs. Finally, a recent study (31) reports the successful use of a set of novel CBT techniques for reducing intolerance of uncertainty characteristic of GAD patients, correcting erroneous beliefs about the usefulness of worry, teaching better problem-solving skills, and repeatedly exposing patients to tape recordings of their worries for the sake of exposure to anxiety-provoking material.

OUTCOME LITERATURE ON BASIC COGNITIVE-BEHAVIORAL THERAPY FOR GENERALIZED ANXIETY DISORDER

The first controlled trial on psychotherapy for GAD appeared in 1984 (32). Since then, 16 such experimental evaluations (all involving CBT methods) have been reported (29, 31–45). Prior reviews and meta-analyses concur that the evidence consistently supports the efficacy of traditional CBT. Indeed, CBT for GAD is listed as an empirically-supported treatment by the Task Force for the Dissemination and Promotion of Empirically-Supported Treatments (46). The most recent meta-analysis of controlled trials was based on 13 investigations available at the time (47). This review builds upon that review with the addition of the three further experimental studies (31, 37, 40) that have since appeared.

Like the prior meta-analysis, the review below summarizes relevant results both in terms of both group comparisons within each of the 16 investigations and average effect sizes. Two types of effect sizes are presented: The first, within-group effect sizes: [(posttherapy/follow-up score minus pretherapy score) divided by pretherapy standard deviation]; and between-group effect sizes: [(posttherapy/follow-up score for CBT minus post-therapy/follow-up score for the comparison condition) divided by pooled posttherapy standard deviation]. These effect sizes represent averages over the three most commonly employed outcome measures in the GAD literature (Hamilton Anxiety Rating Scale (48), Assessor Severity Rating (49), and the Trait version of the State-Trait Anxiety Inventory [50]) from 13 of the 16 investigations that provided sufficient information on those measures to allow such calculations to be made. The patient samples in the reviewed studies have been two thirds women, average age 40 years, average GAD duration 7 years, and average length of therapy 11 sessions. See Table 1 for post-therapy and follow-up means for each of the three outcome measures for CBT; component control conditions (i.e., behavior therapy alone or cognitive therapy alone); conditions that have served as controls for nonspecific effects, including placebo, low-dosage fixed-regimen diazepam administration, supportive listening, and a psychodynamic condition; and no-treatment conditions.

In terms of within-group effect sizes, CBT has generated the largest degree of improvement relative to other comparison conditions prior to posttherapy and follow-up (means: 2.50 and 2.44, respectively, based on 14 separate CBT conditions). Conditions that have served as controls for nonspecific effects have generated smaller effect sizes (means: 2.09 and 2.00, respectively, among eight such conditions). Component control conditions have shown effects that were slightly lower than those of nonspecific treatments (means: 1.82 and 1.81, respectively, based on 14 such conditions). Four of the seven studies that included a waiting-list no-treatment condition and provided measures and data allowing effect-size calculations found virtually no change for these control conditions (mean: 0.01 for pre- to post-assessment periods).

Within individual studies, CBT has been found superior to waiting-list no-treatment conditions in all seven investigations that have employed this control condition. Between-group effect sizes have averaged 1.09 at posttherapy among such studies. Although no follow-up data for comparison are available on no-treatment conditions due to patients receiving therapy at the end of the

postassessment period, CBT conditions have routinely maintained or increased their degree of improvement at the 6-month or 12-month follow-up assessments commonly reported in these investigations. CBT also has been found superior to the various conditions controlling for nonspecific factors in 9 out of 11 such comparisons at post-therapy and 7 out of 9 comparisons at follow-up. Between-group effect sizes in these latter studies have averaged 0.71 at posttherapy and 0.30 at follow-up. Less clarity has emerged from comparisons of CBT to one or more of its therapy components. CBT superiority has been found in only 2 out of 11 such comparisons at posttherapy and 3 out of 8 comparisons at follow-up. Between-group effect sizes have ranged from small to moderate, averaging 0.24 at posttherapy and 0.46 at follow-up. Whether or not significant differences have emerged in such comparisons in individual studies has been recently found to be associated with the amount of therapy provided. Studies finding equivalence among conditions have employed lengthier treatment (averaging 13 sessions), whereas trials that have discovered CBT superiority over one of its components have averaged 9 sessions ($t=2.23$, $P<.07$) (37). It appears that targeting one process of anxious functioning (e.g., cognitions via cognitive therapy or somatic anxiety via relaxation techniques) for a long enough period ultimately results in therapeutic changes in the other processes, whereas providing the multiple cognitive and behavioral coping skills inherent in CBT appears to be clinically most useful when treatment duration is relatively brief.

CBT has also been associated with very low dropout rates in these experimental investigations, averaging less than 9%. Moreover, the several trials that have included medicated patients have found no association between medication status and responsiveness to psychotherapy, and those trials tracking patient drug use have often found decreases in medication by the end of therapy. Many investigations have also included measures of depression and demonstrated significant improvements after CBT, as well. Finally, in the one investigation to examine this issue, comorbid anxiety and mood disorders have been found to dramatically decrease after successful psychotherapy for GAD (51).

Although these results are very encouraging, some methods of assessing the degree of clinically significant change (e.g., high endstate functioning) suggest that only about half of GAD patients receiving CBT return to normal levels of anxiety (52). Indeed, some investigators have argued that GAD may be the most difficult anxiety disorder to

Table 1. Means for HAM-A, Assessor Severity Rating, and STAI at Posttherapy and Follow-up for CBT, BT or CT, NS, and NT

	CBT	BT or CT	NS	NT
HAM-A (post)	9.63	11.05	15.81	15.79
HAM-A F/U	8.23	12.10	9.97	N/A
Assessor severity (post)	2.37	2.62	3.06	5.11
Assessor severity (F/U)	2.04	1.99	1.90	N/A
STAI (post)	44.19	47.86	47.60	54.43
STAI (F/U)	42.94	46.31	44.17	N/A

HAM-A=Hamilton Anxiety Rating Scale; STAI=State-Trait Anxiety Inventory; CBT=cognitive-behavioral therapy; BT=behavioral therapy; CT=cognitive therapy; NS=non-specific control; NT=no-treatment control; post=posttreatment; F/U=follow-up; N/A=not available

treat (53). It appears necessary, then, to continue efforts to develop more effective forms of intervention for this disorder.

RECENT THERAPY DEVELOPMENTS INVOLVING INTERPERSONAL FACTORS

One promising strategy to improve the efficacy of CBT for GAD is to target interpersonal problems. This is in part suggested by empirical evidence showing that as many as 50% of individuals with GAD have one or more comorbid Axis II diagnoses (54), which by definition involve rigid and maladaptive ways of relating to others. Previous studies have also demonstrated that social phobia is the most common comorbid Axis I diagnosis in GAD (55) and that interpersonal fears are the most common worry topic (56). In addition, a recent study of nine Axis I disorders found that not getting along with one's spouse was uniquely and most strongly associated with GAD after controlling for the quality of other relationships and comorbid disorders, and that the absence of close friends was significantly associated with GAD (57). These results are consistent with our own findings that persons with GAD may be particularly vulnerable to interpersonal problems. Average scores of our GAD sample on five of the eight Inventory of Interpersonal Problems Circumplex Scales (58) were significantly higher than Horowitz and colleagues' (59) clinical norms for 200 psychiatric patients of mixed diagnoses. Taken together, the data suggest that people with GAD focus their worrisome concerns on interpersonal threats and that they may behaviorally respond to this threat in a maladaptive, inflexible manner (60).

This empirical evidence is consistent with our anecdotal experience with patients GAD. These

patients often focus so much energy on protecting themselves from potential threat from others that they fail to attend to and process information regarding their interpersonal impact. Thus, they fail to learn that their ways of relating to others may not be working for them and may be impacting others negatively, and they repeat these maladaptive patterns. As suggested by Robins and Hayes (61), such patterns become so habitual that change requires targeting them directly.

The importance of addressing interpersonal problems may partly explain the limitations of CBT treatments for GAD. Support for this argument can be found in a recent study showing that the degree of remaining interpersonal problems after CBT was predictive of failure to maintain follow-up gains (7). Although not conducted with GAD patients, a number of process studies involving depressed samples have also shed light on the potential deficits of CBT for addressing interpersonal difficulties. One study found that cognitive therapists focus less on interpersonal issues, as opposed to intrapersonal (62).

Another investigation (63) revealed that when cognitive therapists focus on interpersonal issues, they emphasize thoughts about relationships, as opposed to directly addressing interpersonal situations. This study found that while a focus on interpersonal situations was positively related to outcome, focus on patient thoughts about relationships related negatively to outcome. Two comparative process studies also found that while an interpersonal focus in CBT was not related to outcome, a focus on interpersonal issues was related positively with change in psychodynamic treatment (64, 65). Other studies have shown that when cognitive therapists focus on interpersonal issues typically emphasized in psychodynamic

treatment (e.g., the link between the therapeutic relationship and other relationships, exploration of relationship with parents), such focus was predictive of outcome (63, 66). These research findings suggest that CBT may not address GAD interpersonal problems adequately and that the addition of techniques, including those associated with psychodynamic and interpersonal traditions, specifically targeting GAD patients' maladaptive ways of relating to others may improve its effectiveness. Indeed, interpersonal problems in GAD predict CBT treatment failure (67) and dropouts (68).

The authors' research group has begun testing a new integrative treatment that has combined CBT and non-CBT interventions, including techniques specifically focused on GAD patients' maladaptive relationship patterns. This integrative protocol, described elsewhere in more detail (69), uses important relationships in patients' lives and the therapeutic relationship to help patients determine how they impact negatively on others. To avoid making patients feel blamed and defensive, therapists acknowledge that in most cases a negative impact is unintended and a result of habitual ways in which a patient is trying to avoid potential interpersonal threats. Patients are also informed that such avoidance often maintains irrational interpersonal fears and that they are unlikely to get what they need from others when they are busy avoiding potential dangers. The authors have observed that when therapists juxtapose patients' fears and needs, patients frequently become aware that they are often choosing avoidance of fear at the expense of their interpersonal needs. Patients also frequently realize that whatever they are doing to avoid interpersonal threat ironically increases the probability that the feared event will occur.

The therapeutic relationship is a particularly salient tool for assessing patients' impact on others and helping them become aware of maladaptive interpersonal patterns. One of the most common difficulties for patients entails a failure to effectively communicate to their therapist (and others) in their body language, emotional expression, and words. This can make it very difficult for therapists to connect emotionally with patients. Our patients frequently have difficulty talking directly about the therapeutic relationship, whether it involves expressing positive emotions (e.g., feeling close and safe) or negative reactions toward the therapist (e.g., not feeling understood). The authors also have observed that facilitating the exploration and communication of patients' and therapists' experiences can provide optimal conditions for developing adaptive interpersonal skills. Consistent with previous studies (70, 71), it is also the authors'

impression that addressing and resolving alliance ruptures may facilitate change and provide unique opportunities for patients to disconfirm core interpersonal schema.

In addition to using the therapeutic relationship to identify maladaptive interpersonal patterns, therapists also ask patients to track their interactions with other people, particularly uncomfortable or unsatisfying interactions. Therapists then ask patients to describe these interactions in a blow-by-blow manner ensuring that patients attend as much to their own behavior as to the behavior of others. This level of detail can help therapists obtain a more objective picture of how patients may be contributing to their interpersonal difficulties. The patient and therapist then examine whether there was something the patient wanted from the other person that they did not get and, if so, what the patient might have done differently to increase the probability of getting what they wanted. At this point, therapists also sometimes use role-playing and/or social skills training to help patients learn how to increase their positive impact on others.

RECENT THERAPY DEVELOPMENTS INVOLVING EMOTIONAL PROCESSING FACTORS

Emotional processing has also emerged as a highly promising intervention target for GAD. As mentioned earlier, evidence suggests that worrisome thinking may be a cognitive avoidance response that blocks some forms of emotional processing. Additional research also supports the avoidant function of worry. When GAD and control participants rated the reasons why they worried, only one reason distinguished the two groups: "Worrying about most of the things I worry about is a way to distract myself from worrying about even more emotional things that I do not want to think about" (72). GAD patients may thus habitually worry as a means to avoid certain other topics and the uncomfortable primary affect that underlies those topics.

GAD patients have reported greater difficulty identifying what they feel and providing descriptions of feelings (73), suggesting that they may avoid emotional experience in general, and not just anxious feelings. The possibility that worry may lead to a reinforced avoidance of emotion is also supported by our experience with GAD patients. Many find it very difficult to experience and "stay with" their feelings. Rather than exploring or expressing emotions that emerge during sessions, many of them redirect their attention to cognitions;

being “in their head” seems safer and familiar.

Many traditional CBT protocols can unintentionally reinforce the GAD avoidant strategy. Theoretical critiques (74, 75) and empirical findings (76) suggest that CBT clinicians often see emotions as phenomena to be reduced or controlled rather than explored or deepened, despite the fact that higher levels of emotional experience (including negative affect) are associated with positive outcome in CBT (77, 78). Consistent with neobehavioristic theory, these findings suggest that adding interventions designed to foster affective experience could improve CBT efficacy.

Thus, to counteract the avoidant mechanisms that likely maintain worry, the authors' integrative protocol also includes techniques aimed at processing emotional reactions. The authors' therapists employ a variety of experiential therapy methods to help deepen emotions that momentarily surface and that patients typically push away out of habit. Because emotional expression from the authors' patients is rarely intense, therapists must learn to identify subtle markers of either emotional experience or avoidance of affect. Common markers include changes in voice tone, facial expression, pace of speech, and switching topics or shifting affect (e.g., talk about pain quickly shifts to anger). Based on the work of Greenberg and colleagues (79), specific types of markers serve as guidelines for the selection of particular interventions, such as the empty chair technique (i.e., imagining a significant person in a nearby empty chair and expressing one's feelings to that person) to process an unresolved emotional issue or a two-chair technique (i.e., having a dialogue between conflicted aspects of one's self) to deal with internal conflicts.

ONGOING EMPIRICAL TEST OF INTEGRATIVE THERAPY FOR GENERALIZED ANXIETY DISORDER

For the past 6 years, the authors have been developing and empirically testing the integrative therapy for GAD described here. This integrative treatment involves the sequential combination of two separate segments: 55 minutes of CBT, followed by 55 minutes of interpersonal/emotional processing therapy which includes several interpersonal, psychodynamic, and humanistic interventions (69). In the authors' first research project, we attempted to determine whether it was possible to train therapists to conduct this innovative treatment competently and reliably. The project also served as a pilot for the efficacy of the authors' therapy. Three therapists from divergent theoretical

orientations conducted therapy with 18 patients with GAD.

Once we were able to establish that our therapy was viable (69), we began a controlled clinical trial to examine its efficacy. The authors' choice to sequentially combine CBT and non-CBT techniques as two distinct therapeutic segments was based on empirical and theoretical issues. The main goal of the authors' research is to determine whether the efficacy of CBT can be improved for GAD (80). Thus, the optimal strategy is an additive design (81) comparing CBT plus interpersonal/emotional processing to a protocol of the same length that combines CBT with a supportive-listening segment (to control for time in therapy and common factors such as the therapeutic relationship). If CBT plus interpersonal/emotional processing leads to significantly greater improvement, it will provide evidence that interpersonal and emotional processing techniques add a therapeutic benefit beyond CBT alone. Although it is too early to draw definitive conclusions, preliminary data analyses suggest that this combined therapy is quite promising (69, 82).

CONCLUSION

Considerable progress has been made in our understanding of GAD and its treatment. Initial attempts to create cognitive-behavioral strategies for this difficult-to-treat disorder have led to intervention packages demonstrated in several experimental trials to be significantly efficacious. However, many GAD patients, though improved, remain posttherapy at levels of anxiety that are above the norm. Recent promising efforts to increase the effectiveness of psychological interventions for GAD have been exploring the possibility of integrating CBT with interpersonal therapies to help patients overcome their interpersonal fears and better satisfy their interpersonal needs; and experiential therapies to facilitate the deepening of emotional experience, which GAD patients so often avoid.

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