

Effectiveness of an Empirically Based Treatment for Panic Disorder Delivered in a Service Clinic Setting: 1-Year Follow-Up

Gregory L. Stuart
Brown University

Teresa A. Treat
Indiana University

Wendy A. Wade
Center for Behavioral Health

The transportability of cognitive-behavioral therapy (CBT) for panic disorder to a community mental health center (CMHC) setting at 1-year follow-up was examined by comparing CMHC treatment outcome data with results obtained in controlled efficacy studies. Participants were 81 CMHC clients with a primary diagnosis of panic disorder with or without agoraphobia who completed CBT for panic disorder. Despite differences in settings, clients, and treatment providers, both the magnitude of change from pretreatment to follow-up and the maintenance of change from posttreatment to follow-up in the CMHC sample were comparable with the parallel findings in the efficacy studies. At follow-up, 89% of the CMHC clients were panic free and a substantial proportion of the sample successfully discontinued benzodiazepine use.

Treatment outcome researchers have cautioned that the results of efficacy studies may not generalize from research to service settings because of differences in clients, settings, therapists, and other treatment delivery factors (Borkovec & Castonguay, 1998; Chambless & Hollon, 1998; Goldfried & Wolfe, 1998; Hollon, 1996; Jacobson & Christensen, 1996; Kendall, 1998a, 1998b; Kendall & Southam-Gerow, 1995; Persons & Silberschatz, 1998; Seligman, 1996). A promising solution to the generalizability problem is effectiveness research, in which empirically based interventions are evaluated in service settings (Borkovec & Castonguay, 1998; Hoagwood, Hibbs, & Brent, 1995; Kendall, 1998a, 1998b; Kendall & Southam-Gerow, 1995; Persons & Silberschatz, 1998). Effectiveness studies can provide invaluable information about factors that may mitigate the transportability of empirically

based treatments to other settings. An example comes from our earlier investigation of the transportability of cognitive-behavioral therapy (CBT) for panic disorder to a community mental health center (CMHC) setting (Wade, Treat, & Stuart, 1998).

In our original effectiveness study, we used a benchmarking research strategy (McFall, 1996) to evaluate the generalizability of Barlow and Craske's (1994) CBT protocol for panic disorder. The benchmarking strategy compares treatment outcome data obtained in service settings with data obtained in efficacy studies. Using point-by-point comparisons of data sets, we found that despite differences in clients, settings, exclusionary criteria, and treatment providers, the outcomes for treatment completers at the CMHC were comparable with treatment outcomes reported in efficacy studies (Barlow, Craske, Cerny, & Klosko, 1989; Telch et al., 1993). Specifically, 87% of the CMHC treatment completers were panic free at the end of treatment, and they reported significant improvements on measures of anticipatory anxiety, agoraphobia, and depression. There were interesting differences between the CMHC and benchmarking samples: The CMHC group was less educated, was more likely to be taking psychotropic medication, and reported more severe agoraphobia symptoms. Twenty-six percent of the CMHC group did not complete treatment; Barlow et al. (1989) and Telch et al. (1993) reported the combined loss of 1 participant.

One of the goals of treatment in the CMHC sample was discontinuation of potentially addictive anxiolytic medications. Previous research has demonstrated that rebound panic attacks and withdrawal symptoms often follow benzodiazepine tapering (Fyer et al., 1987; Pecknold, Swinson, Kuch, & Lewis, 1988), leading to difficulties with medication discontinuation. Benzodiazepine discontinuation for the CMHC participants was modeled after the program described by Spiegel (Bruce, Spiegel, & Hegel, 1999; Spiegel, Bruce, Gregg, & Nuzzarello, 1994).

Gregory L. Stuart, Center for Alcohol and Addiction Studies, Brown University; Teresa A. Treat, Department of Psychology, Indiana University; Wendy A. Wade, Center for Behavioral Health, Bloomington, Indiana.

Portions of this research were presented at the 30th Annual Association for the Advancement of Behavior Therapy Convention, New York, New York, November 1996.

This study would not have been possible without the support of the board of directors, administration, and staff of the Center for Behavioral Health. We thank all the Center for Behavioral Health staff who worked to make this program a success. We also thank Richard M. McFall and Richard J. Viken for their invaluable expertise and advice.

Correspondence concerning this article should be addressed to either Gregory L. Stuart, Center for Alcohol and Addiction Studies, Brown University, Box G—Butler Hospital, Providence, Rhode Island 02912 or Wendy A. Wade, Center for Behavioral Health, Bloomington, Indiana 47403. Electronic mail may be sent to either Gregory_Stuart@Brown.edu or garthw@indiana.edu.

The present study extended Wade et al.'s (1998) effectiveness research on CBT for panic disorder by extending benchmark comparisons to 1 year posttreatment. Two research teams have conducted follow-up studies of CBT for panic disorder. Telch et al. (1993) reported that 83% of their sample was panic free at the 6-month follow-up. In a 2-year follow-up study, Craske, Brown, and Barlow (1991) reported that 87% of their sample was panic free. Although our original study suggests the short-term effectiveness of CBT for panic disorder in a CMHC, it is unclear whether these effects hold up over time. Thus, in the present study, we attempted a more rigorous test of CBT transportability by examining treatment outcome at 1 year posttreatment. Once again, we adopted McFall's (1996) benchmarking strategy to address the following questions: (a) To what extent are treatment gains sustained in a CMHC sample? and (b) How does the CMHC sample compare with the benchmarking samples on measures of normative functioning? We benchmarked our 1-year follow-up data against the data obtained in two efficacy studies: (a) the study by Craske et al. (1991), who presented 2-year follow-up data for the Barlow et al. (1989) sample, and (b) the study by Telch et al. (1993), who presented 6-month follow-up data on their sample.

Method

Participants

Participants were 81 clients who completed treatment for panic disorder at the Center for Behavioral Health, a CMHC in Bloomington, Indiana. Clients with a primary *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; *DSM-III-R*; American Psychiatric Association, 1987) diagnosis of panic disorder with agoraphobia or without agoraphobia were admitted for treatment. Exclusionary criteria, which also were used in the benchmark efficacy studies, included active symptoms of alcohol or drug dependency, psychosis, or mental disorder due to a medical condition. Unlike some of the original efficacy studies of panic disorder (e.g., Barlow et al., 1989; Brown & Barlow, 1995; Telch et al., 1993), the present study did not make any exclusions on the basis of medication use or changes, severity or frequency of panic attacks, age, or the presence or severity of agoraphobia. Detailed comparisons of treatment completers ($n = 81$) and noncompleters ($n = 29$), as well as benchmarking comparisons of the CMHC and efficacy samples, are reported by Wade et al. (1998).

Measures

DSM-III-R diagnoses were based on a modified version of the Anxiety Disorders Interview Schedule—Revised (DiNardo & Barlow, 1988). Clients completed a battery of self-report questionnaires at pretreatment, posttreatment, and 1-year follow-up.

The Fear Questionnaire (FQ; Marks & Mathews, 1979) assesses phobic avoidance and contains three 5-item subscales: Agoraphobia (FQ-Ag), Blood Injury, and Social Phobia. Participants rated their level of avoidance for each item on a 9-point Likert scale ranging from 0 (*would not avoid it*) to 8 (*always avoid it*). Subscale scores range from 0 to 40. Marks and Mathews reported high test-retest reliability and high sensitivity to clinical improvement in each of the FQ subscales.

The Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) is a 21-item self-report questionnaire used to assess depressive symptoms (Beck, Steer, & Garbin, 1988). Scores range from 0 to 63. Beck et al. (1988) reviewed numerous studies conducted over the past 25 years documenting the reliability and validity of the BDI.

The Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) contains two 10-item mood subscales, Positive Affect and

Negative Affect. Clients rated the extent to which they experienced each emotion on the PANAS in the past week on a 5-point Likert scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). Subscale scores range from 10 to 50. Watson et al. reported high internal consistency and test-retest reliability in a psychiatric sample, as well as excellent convergent and discriminant validity.

Once admitted into treatment, clients self-monitored panic attacks and other symptoms using self-monitoring records included in Barlow and Craske's (1994) panic control treatment client manual, *Mastery of Your Anxiety and Panic*. Clients made daily ratings of depressed mood, general anxiety, and anticipatory anxiety (i.e., worry about panicking) on a 9-point Likert scale ranging from 0 (*none*) to 8 (*very severe*). Daily ratings were averaged each week during treatment and for the week preceding the 1-year follow-up contact.

Procedure

Clients participated in panic control treatment, a 15-session CBT protocol (Barlow & Craske, 1994). The two sessions devoted to agoraphobic exposure (Craske & Barlow, 1994) were optional for clients without an agoraphobia diagnosis. Primary therapists were psychologists and master's-level clinicians self-selected from the CMHC adult outpatient staff. Therapist training and measures to promote treatment adherence are described in detail by Wade et al. (1998).

Participants completed the pre- and posttreatment assessment battery at the CMHC. Approximately 1 year following treatment ($M = 12.6$ months, $SD = 1.3$ months), participants were mailed the PANAS, the FQ, and the BDI, which were completed during a phone contact with advanced clinical psychology graduate students. In addition, participants answered questions regarding the frequency and severity of panic attacks, the interference of panic and agoraphobia in their lives, and whether they were taking psychotropic medications. Participants also rated their generalized anxiety, anticipatory anxiety, and depression for the previous week using the scale described previously. The clinical psychology graduate students were aware that the clients had received panic control treatment, but they were not involved in the clients' treatment and were not familiar with information contained in the clients' charts, including the clients' posttreatment outcome. Graduate students followed a standardized script that emphasized the importance of providing an accurate description of current symptomatology. In nearly all cases, CMHC psychiatrists prescribed the patients' psychotropic medications. Thus, we were able to assess and verify clients' reports of medication discontinuation by reviewing the clients' medical records at the CMHC.

Results

Results are presented in two sections. In the first section, we compared participants whom we were and were not able to contact for the follow-up assessment (contact and no-contact groups). In the second section, we analyzed the CMHC data across points in time—(a) changes from pretreatment to the 1-year follow-up and (b) changes from posttreatment to the 1-year follow-up—which were then followed by point-by-point comparisons of the CMHC and the benchmarking results.

Comparison of Clients Who Were Contacted Versus Not Contacted at Follow-Up Within the CMHC Sample

Of the 81 clients who completed treatment, we were able to contact 57 clients (70%) for the follow-up assessment. In contrast, all the clients in the Barlow et al. (1989)/Craske et al. (1991) sample and 88% of the clients in the Telch et al. (1993) sample completed the follow-up assessment. We examined differences between individuals contacted and not contacted at follow-up in the CMHC sample using

independent *t* tests for continuous variables and chi-square tests for categorical variables. Sample size differed across analyses because of missing data. As shown in Table 1, there were few differences between the two groups (contact and no contact) on pre- and post-treatment variables. Contact clients were more likely to be married, endorsed less agoraphobia on the FQ and less interference of agoraphobia in their lives at pretreatment, and reported significantly higher self-monitored depression at posttreatment.

Comparisons of Treatment Changes in CMHC and Controlled Efficacy Study Samples

We examined within-subject changes from pretreatment to follow-up and from posttreatment to follow-up using paired *t* tests; Wade et al. (1998) presented pre- to posttreatment changes in the CMHC sample. The pretreatment to follow-up comparisons examined whether the magnitude of change achieved by participants in

Table 1
Comparison of Demographic and Clinical Characteristics of Clients Who Were Contacted Versus Not Contacted at Follow-Up Within the Community Mental Health Center Sample

Variable	Contacted (<i>n</i> = 57)			Not contacted (<i>n</i> = 24)			<i>df</i>	<i>t</i> or χ^2
	<i>M</i>	<i>SD</i>	%	<i>M</i>	<i>SD</i>	%		
Age at intake (years)	33.08	9.05		30.38	11.20		79	1.14
Gender (% female)			79			67	1	1.37
Marital status							2	11.84**
Never married			23			50		
Married			70			29		
Divorced/separated			7			21		
Education							3	0.36
<high school			4			4		
High school completed			28			33		
Partial college			35			29		
College completed			33			33		
No. of panic attacks in past week								
Pretreatment	2.03	2.41		1.91	2.17		75	0.20
Posttreatment	0.16	0.50		0.16	0.42		76	0.14
Interference of panic disorder (pretreatment)	2.96	1.00		3.13	0.89		78	-0.72
FQ Agoraphobia								
Pretreatment	14.31	11.26		20.27	9.54		74	-2.18*
Posttreatment	8.90	7.48		7.64	4.97		53	0.59
Interference of agoraphobia (pretreatment)	2.76	0.98		3.40	0.84		64	-2.55*
BDI								
Pretreatment	13.58	7.79		17.13	10.30		79	-1.70
Posttreatment	6.63	6.89		4.14	3.66		53	1.29
PANAS Positive Affect								
Pretreatment	27.49	8.02		27.43	8.57		76	0.03
Posttreatment	32.46	8.27		31.71	6.08		53	0.31
PANAS Negative Affect								
Pretreatment	29.89	9.45		29.04	8.61		76	0.37
Posttreatment	17.54	6.86		16.86	4.26		53	0.44
Anticipatory anxiety								
Pretreatment	3.36	1.66		3.48	1.47		68	-0.28
Posttreatment	1.65	1.34		1.41	1.18		60	0.66
Depression								
Pretreatment	2.20	1.68		2.64	1.76		63	-0.98
Posttreatment	1.54	1.62		0.75	0.97		58	2.36*
General anxiety								
Pretreatment	3.50	1.47		3.92	1.19		72	-1.18
Posttreatment	2.44	1.31		2.21	1.26		60	0.66
One or more comorbid Axis I diagnoses (pretreatment)			35			30	1	0.16
Anxiolytic medication								
Pretreatment			61			57	1	0.16
Posttreatment			23			23	1	0.00
Depression medication								
Pretreatment			19			22	1	0.06
Posttreatment			16			18	1	0.04

Note. FQ = Fear Questionnaire; BDI = Beck Depression Inventory; PANAS = Positive and Negative Affect Schedule.

* $p < .05$. ** $p < .01$.

the CMHC sample was similar to the magnitude of change achieved by the efficacy study samples. The posttreatment to follow-up comparisons investigated whether the maintenance of treatment gains was similar in the CMHC and efficacy study samples. As shown in Table 2, the CMHC participants improved significantly on virtually every measure at the 1-year follow-up relative to pretreatment. Although CMHC clients reported more agoraphobia, generalized anxiety, depression, and medication use (including benzodiazepines) at pretreatment relative to benchmark participants, the magnitude of CMHC client improvement was comparable with that reported in the benchmark studies. Additionally, posttreatment to follow-up analyses for the CMHC sample revealed that clients maintained—and in some cases improved on—treatment gains on every variable. The maintenance of change in the CMHC sample was similar to that reported in the benchmark studies. No benchmark comparison data were available for some measures administered to the CMHC sample, but Table 2 presents these data as well for use in future comparisons.

The clinical significance of treatment gains was determined through normative comparisons (Kendall & Grove, 1988) by examining the proportion of clients who attained scores in the normative range on four relevant clinical dimensions of panic disorder. The clinical dimensions (and relevant cutoffs) for normative functioning, based on well-accepted norms reported in the literature, were as follows: panic attacks (0 panic attacks; Barlow et al., 1989; Craske et al., 1991), anticipatory anxiety (scores < 2; Barlow et al., 1989; Craske et al., 1991), agoraphobic avoidance (FQ-Ag scores < 12; Telch et al., 1993), and depression (BDI scores < 10; Beck et al., 1988). Table 3 presents the proportion of the CMHC contact clients who fell within the normative range of functioning at pretreatment, posttreatment, and follow-up, as well as corresponding data from the benchmarks. The magnitude of therapeutic change on all the variables was similar across studies. In comparisons of agoraphobic avoidance (the FQ-Ag) between the present sample and the Telch et al. sample, the CMHC sample reported more severe avoidance at pretreatment, posttreatment, and follow-up; nevertheless, the magnitude of improvement was similar for the two samples.

Discussion

We used a benchmarking research strategy (McFall, 1996) to evaluate the effectiveness of CBT for panic when transported to a service clinic. Despite differences in settings, treatment providers, and clients, the magnitude and maintenance of change at the 1-year follow-up for CMHC clients were comparable with changes reported in the benchmarking efficacy studies. Similar improvements were reported across studies and along every dimension of panic disorder.

Another noteworthy finding from the present study was the proportion of clients in the CMHC sample who discontinued use of potentially addictive anxiolytic medications. The proportion of clients using benzodiazepines in the CMHC sample decreased substantially from pre- to posttreatment and at the 1-year follow-up. Although discontinuation of benzodiazepines was not an explicit treatment goal in the Albany efficacy studies, benzodiazepine use also decreased from pretreatment to follow-up in the Barlow et al. (1989), Brown and Barlow (1995), and Craske et al. (1991) samples. Research has demonstrated that it is difficult to

taper panic disorder clients off of benzodiazepines (Otto, Jones, Craske, & Barlow, 1996). Indeed, approximately one fifth of the CMHC treatment completers continued at least occasional use of benzodiazepines at 1 year posttreatment. Benzodiazepine discontinuation appears to be easier for some segments of the panic disorder population than for others. We need ongoing research that targets those who do not succeed in benzodiazepine discontinuation in response to standard CBT interventions.

Although the present investigation supports the use of CBT for panic disorder in service clinic settings, our findings must be interpreted with caution. We were unable to follow up with approximately 30% of those who completed treatment. As noted by Chambless and Hollon (1998), this threatens the generalizability of our findings, as more improved clients may be more likely to complete the follow-up assessment. There were some differences between contact and no-contact groups in our sample. Most notably, prior to treatment, the no-contact group endorsed more severe agoraphobic concerns on the FQ and reported greater interference in their daily lives as a result of agoraphobia as compared with the contact group. Although these between-groups differences were no longer significant at posttreatment, perhaps those experiencing greater pretreatment agoraphobic symptoms were more vulnerable to relapse posttreatment. Although the contact group reported significantly higher self-monitored levels of depression at posttreatment, there were no significant differences between groups on either self-monitored depression at pretreatment or BDI scores at pre- and posttreatment. Not surprisingly, clients who were married were easier to contact than clients who were single. We lost contact with a number of clients who were students at the time of treatment and who left the area after graduation. Some efficacy investigators make extensive efforts to maintain contact with participants throughout the duration of the study. Examples include obtaining driver's license data, social security numbers, or contact information for significant others and regularly corresponding with participants in the hope of obtaining address changes and maintaining their participation. Such efforts were not feasible in our CMHC setting but would be beneficial to future researchers with adequate resources.

Feasibility issues negatively influenced other aspects of our research. First, pre- and posttreatment assessments were conducted face-to-face at the CMHC, whereas follow-up interviews were conducted by graduate students on the telephone. We can determine neither how this method variance influenced the results of the study nor how the graduate students may have impacted the clients' self-reports. Future studies would be strengthened by using assessors unaware of treatment conditions in addition to consistent methods of data collection. Second, we relied on a relatively small number of self-report questionnaires and did not conduct diagnostic interviews at follow-up. We selected our self-report measures on the basis of what had been used in efficacy studies and what was feasible to collect in our setting. In short, we used questionnaires that were practical and that we considered to be the best available measures when we initiated our study. Future research would be improved by inclusion of diagnostic interviews at all assessment points.

The results of the present investigation highlight the need for additional research targeting the treatment of panic disorder with moderate and severe agoraphobia. Efficacy studies have demonstrated that CBT is an effective treatment for panic disorder

Table 3

Percentage of Community Mental Health Center (CMHC), Telch et al. (1993), and Barlow et al. (1989)/Craske et al. (1991) Samples Scoring in the Normative Range of Functioning at Pretreatment, Posttreatment, and Follow-Up

Variable	Criterion for recovery	CMHC ^a			Barlow et al. (1989)/Craske et al. (1991)			Telch et al. (1993)		
		Pre	Post	FU	Pre	Post	FU	Pre	Post	FU
Panic attacks	panic attacks = 0	32	88	89	15	85	87	29	85	83
Anticipatory anxiety	score < 2	25	79	85						
	ASI < 27							32	97	87
Avoidance	FQ-Ag < 12	46	66	72				62	85	90
Depression	BDI < 10	30	73	75				24	65	60

Note. The recovery criteria for panic attacks, anticipatory anxiety, the FQ-Ag, and the BDI were based on well-accepted norms reported in the literature. Empty cells indicate that the information was not reported. Pre = pretreatment; Post = posttreatment; FU = follow-up (1 year for the CMHC sample, 2 years for the Barlow et al., 1989/Craske et al., 1991, sample, and 6 months for the Telch et al., 1993, sample); ASI = Anxiety Sensitivity Index (Reiss, Peterson, Gursky, & McNally, 1986); FQ-Ag = Agoraphobia subscale of the Fear Questionnaire; BDI = Beck Depression Inventory.

^a Because of missing data, the sample sizes varied on each measure.

without agoraphobia and panic disorder with mild agoraphobia. However, systematic research evaluating the effectiveness of CBT for individuals with more severe agoraphobic fears is lacking. In our CHMC setting, nearly half of the individuals we treated met the criteria for moderate or severe agoraphobia at pretreatment. Panic disorder and agoraphobia are related—but different—syndromes. Some individuals may be panic free yet continue to manifest agoraphobia symptoms. For example, 89% of our treatment completers were panic free at the 1-year follow-up, despite the fact that 28% of the follow-up sample endorsed excessive agoraphobic concerns. These are important treatment issues for service clinics in which panic disorder with moderate and severe agoraphobia are common presentations. It is possible that our agoraphobic treatment completers were avoiding situations they associated with panic, leaving them at risk for relapse. Perhaps individuals with more severe agoraphobic concerns require more intensive treatment, such as additional treatment sessions devoted to agoraphobia, augmenting the intensity and/or length of the agoraphobic exposure, or using in vivo therapist-directed exposure. Obtaining answers to these treatment questions is important, given the individual and societal costs associated with agoraphobia and as managed care organizations attempt to define the parameters of necessary treatment.

The present study illustrates use of the benchmarking strategy (McFall, 1996) to examine the generalizability of empirically based treatments. This quasi-experimental design is a user-friendly approach to effectiveness research, but it is not a substitute for internally valid efficacy studies. Rather, the benchmarking strategy is a useful approach for furthering our understanding of how well empirically based treatments travel to service settings. The results of the present study suggest that CBT for panic disorder is a viable treatment in a CMHC setting and that the durability of treatment effects is comparable with what is reported in efficacy studies. Future research in which evidenced-based treatments are compared with “treatment as usual” in CMHCs, in combination with benchmarking data, would be extremely informative. Descriptions of many issues involved in the transportability of empirically

based treatments to service clinic settings and suggestions for future research are offered elsewhere (e.g., Addis, Wade, & Hatgis, 1999; Wade et al., 1998). Given the increasing importance of accountability in psychotherapy and the effectiveness initiatives supported by the National Institutes of Health, we eagerly anticipate additional treatment effectiveness studies.

References

- Addis, M. E., Wade, W. A., & Hatgis, C. (1999). Barriers to dissemination of evidence based practices: Addressing practitioners' concerns about manual based psychotherapies. *Clinical Psychology: Science and Practice*, 6, 430–441.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.
- Barlow, D. H., & Craske, M. G. (1994). *Mastery of your anxiety and panic: II*. Albany, NY: Graywind.
- Barlow, D. H., Craske, M. G., Cerny, J. A., & Klosko, J. S. (1989). Behavioral treatment of panic disorder. *Behavior Therapy*, 20, 261–282.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77–100.
- Borkovec, T. D., & Castonguay, L. G. (1998). What is the scientific meaning of empirically supported therapy? *Journal of Consulting and Clinical Psychology*, 66, 136–142.
- Brown, T. A., & Barlow, D. H. (1995). Long-term outcome in cognitive-behavioral treatment of panic disorder: Clinical predictors and alternative strategies for assessment. *Journal of Consulting and Clinical Psychology*, 63, 754–765.
- Bruce, T. J., Spiegel, D. A., & Hegel, M. T. (1999). Cognitive-behavioral therapy helps prevent relapse and recurrence of panic disorder following alprazolam discontinuation: A long-term follow-up of the Peoria and Dartmouth studies. *Journal of Consulting and Clinical Psychology*, 67, 151–156.
- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66, 7–18.
- Craske, M. G., & Barlow, D. H. (1994). *Agoraphobia supplement to the mastery of your anxiety and panic: II*. Albany, NY: Graywind.

- Craske, M. G., Brown, T. A., & Barlow, D. H. (1991). Behavioral treatment of panic disorder: A two-year follow-up. *Behavior Therapy, 22*, 289–304.
- DiNardo, P. A., & Barlow, D. H. (1988). *Anxiety Disorders Interview Schedule—Revised (ADIS-R)*. Albany: State University of New York, Phobia and Anxiety Disorder Clinic.
- Fyer, J. F., Liebowitz, M. R., Gorman, J. M., Campeas, R., Leven, A., Davies, S. O., Goetz, D., & Klein, D. F. (1987). Discontinuation of alprazolam treatment in panic patients. *American Journal of Psychiatry, 144*, 303–308.
- Goldfried, M. R., & Wolfe, B. E. (1998). Toward a more clinically valid approach to therapy research. *Journal of Consulting and Clinical Psychology, 66*, 143–150.
- Hoagwood, K., Hibbs, E., & Brent, D. (1995). Introduction to the special section: Efficacy and effectiveness in studies of child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology, 63*, 683–687.
- Hollon, S. D. (1996). The efficacy and effectiveness of psychotherapy relative to medications. *American Psychologist, 51*, 1025–1030.
- Jacobson, N. S., & Christensen, A. (1996). Studying the effectiveness of psychotherapy: How well can clinical trials do the job? *American Psychologist, 51*, 1031–1039.
- Kendall, P. C. (1998a). Directing misperceptions: Researching the issues facing manual-based treatments. *Clinical Psychology: Science and Practice, 5*, 396–399.
- Kendall, P. C. (1998b). Empirically supported psychological therapies. *Journal of Consulting and Clinical Psychology, 66*, 3–6.
- Kendall, P. C., & Grove, W. M. (1988). Normative comparisons in therapy outcome. *Behavioral Assessment, 10*, 147–158.
- Kendall, P. C., & Southam-Gerow, M. A. (1995). Issues in the transportability of treatment: The case of anxiety disorders in youths. *Journal of Consulting and Clinical Psychology, 63*, 702–708.
- Marks, I. M., & Mathews, A. M. (1979). Brief standard self-rating for phobic patients. *Behaviour Research and Therapy, 17*, 263–267.
- McFall, R. M. (1996, July). *Consumer satisfaction as a way of evaluating psychotherapy: Ecological validity and all that versus the good old randomized trial*. Panel discussion conducted at the 6th Annual Convention of the American Association of Applied and Preventative Psychology, San Francisco, CA.
- Otto, M. W., Jones, J. C., Craske, M. G., & Barlow, D. H. (1996). *Stopping anxiety medication: Panic control therapy for benzodiazepine discontinuation*. Albany, NY: Graywind.
- Pecknold, J. C., Swinson, R. P., Kuch, K., & Lewis, C. P. (1988). Alprazolam in panic disorder and agoraphobia: Results from a multicenter trial. III: Discontinuation effects. *Archives of General Psychiatry, 45*, 429–436.
- Persons, J. B., & Silberschatz, G. (1998). Are results of randomized controlled trials useful to psychotherapists? *Journal of Consulting and Clinical Psychology, 66*, 126–135.
- Reiss, S., Peterson, R. A., Gursky, D. M., & McNally, R. J. (1986). Anxiety sensitivity, anxiety frequency and the prediction of fearfulness. *Behaviour Research and Therapy, 24*, 1–8.
- Seligman, M. E. P. (1996). Science as an ally of practice. *American Psychologist, 51*, 1072–1079.
- Spiegel, D. A., Bruce, T. J., Gregg, S. F., & Nuzzarello, A. (1994). Does cognitive behavior therapy assist slow-taper alprazolam discontinuation in panic disorder? *American Journal of Psychiatry, 151*, 876–881.
- Telch, M. J., Lucas, J. A., Schmidt, N. B., Hanna, H. H., Jaimez, T. L., & Lucas, R. A. (1993). Group cognitive-behavioral treatment of panic disorder. *Behaviour Research and Therapy, 31*, 279–287.
- Wade, W. A., Treat, T. A., & Stuart, G. L. (1998). Transporting an empirically supported treatment for panic disorder to a service clinic setting: A benchmarking strategy. *Journal of Consulting and Clinical Psychology, 66*, 231–239.
- Watson, D., Clark, L. A., & Tellegen A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.

Received March 17, 1999

Accepted October 14, 1999 ■