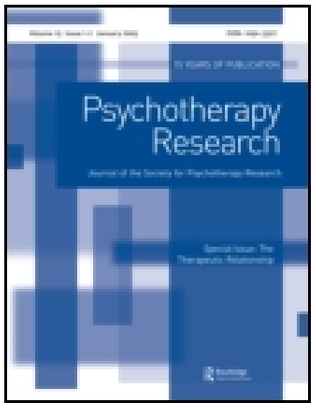

Psychotherapy Research
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/tpsr20

A Naturalistic Examination of Therapist Experience and Outcome of Exposure and Ritual Prevention for OCD

M.E. Franklin , J.S. Abramowitz , J.M. Furr , S. Kalsy & D.S. Riggs
Published online: 23 Apr 2010.

To cite this article: M.E. Franklin , J.S. Abramowitz , J.M. Furr , S. Kalsy & D.S. Riggs (2003) A Naturalistic Examination of Therapist Experience and Outcome of Exposure and Ritual Prevention for OCD, Psychotherapy Research, 13:2, 153-167

To link to this article: http://dx.doi.org/10.1080/713869637

Psychotherapy Research 13(2) 153–167, 2003
DOI: 10.1093/ptr/kpg016

A NATURALISTIC EXAMINATION OF THERAPIST EXPERIENCE AND OUTCOME OF EXPOSURE AND RITUAL PREVENTION FOR OCD

Martin E. Franklin
University of Pennsylvania School of Medicine
Jonathan S. Abramowitz
University of Pennsylvania School of Medicine and Mayo Clinic
Jami M. Furr
University of Pennsylvania School of Medicine
Sarah Kalsy
Mayo Clinic
David S. Riggs
University of Pennsylvania School of Medicine

The efficacy of exposure and ritual prevention (EX/RP) for reducing symptoms of obsessive–compulsive disorder (OCD) is well established. However, the question of whether therapist experience with EX/RP influences outcome has yet to be addressed. The authors examined therapist experience and EX/RP outcomes in the context of a specialty training clinic in which adult OCD patients received fee-for-service treatment. Patients treated by 2 groups of therapists with less clinical experience (0–1 year of experience and 2–8 years of experience) had mean posttreatment OCD severity scores comparable to those assigned to the most experienced clinicians (≥ 9 years of experience). However, reflecting the case assignment methods in this naturalistic study, patients assigned to the most experienced clinicians had more severe OCD at pretreatment. No posttreatment group differences in OCD severity were evident when pretreatment severity score was used as a covariate. Implications of these findings for the development of dissemination research projects are discussed.

Obsessive–compulsive disorder (OCD) is a typically chronic condition associated with significant functional impairment (Koran, Thienemann, & Davenport, 1996), interpersonal difficulties (Riggs, Hiss, & Foa, 1992), and psychiatric comorbidity (Rasmussen & Tsuang, 1986). Fortunately, the efficacy of two forms of treatment for OCD has already been established. Meta-analysis of multiple randomized controlled trials (RCTs) has indicated that serotonergic medications (e.g., fluvoxamine) are superior to placebo

Portions of this research were presented at the 34th Annual Meeting of the Association for Advancement of Behavior Therapy, New Orleans, LA, November 2000.

Correspondence concerning this article should be addressed to Martin E. Franklin, Center for the Treatment and Study of Anxiety, Department of Psychiatry, University of Pennsylvania School of Medicine, 3535 Market Street, 6th floor, Philadelphia, PA. E-mail: marty@mail.med.upenn.edu.

(Abramowitz, 1997). RCTs conducted worldwide have also found cognitive–behavioral therapy (CBT) involving exposure and response prevention (EX/RP) to be superior to various control conditions (e.g., Fals-Stewart, Marks, & Schafer, 1993; Foa et al., 2002; Lindsay, Crino, & Andrews, 1997; van Balkom et al., 1998). These studies necessarily placed strong emphasis on internal validity to allow for confident conclusions regarding the efficacy of the active treatments in comparison to control conditions.

Some have questioned whether findings from RCTs that strongly emphasize internal validity are generalizable to patients treated in typical clinical practice settings in which comorbidity is the norm, treatment manuals are typically not used, and therapist experience, training, and access to expert supervision vary widely (Persons & Silberschatz, 1998). Studies of EX/RP have already examined the influence of some of these factors and suggest that the encouraging findings are indeed generalizable to nonresearch and private practice settings (Franklin, Abramowitz, Kozak, Levitt, & Foa, 2000; Warren & Thomas, 2001) and to patients with moderately severe comorbid depressive symptoms (Abramowitz, Franklin, Street, Kozak, & Foa, 2000) and axis II psychopathology (Franklin, Harap, & Herbert, 2002). Thus, EX/RP is an apparently robust treatment that can be delivered effectively outside the research context, with patients who choose their own treatment and with those who suffer from comorbid axis I and II symptoms.

An issue that has received insufficient attention to date in the EX/RP literature is the influence of therapist experience on primary and secondary outcomes. Therapist experience can be defined in any number of ways. Most studies of therapist experience in the broader literature have defined the term by number of years of experience providing therapy (e.g., Huppert, Bufka, Barlow, Gorman, Shear, & Woods, 2001); however, it could also be argued that the number of cases seen, number of years postdegree, number of years working with a specific disorder or protocol, and number of hours of additional postdegree clinical training (e.g., workshops) are variables of relevance that should also be taken into account. The effect of therapist experience on outcome is of critical importance in the development of dissemination programs for OCD and other anxiety disorders given that many clinicians who provide treatment in community mental health settings may have little experience implementing empirically validated treatments. Wade, Treat, and Stuart (1998) demonstrated that CBT for panic disorder can be delivered effectively by therapists in a community mental health center, but they did not specifically explore whether therapist experience generally or specific experience with the CBT protocol for panic disorder influenced outcome. If it can be shown that patients treated by therapists who are less experienced achieve clinically meaningful symptom reductions, then CBT dissemination programs can be targeted to therapists of all experience levels.

Optimally, the effects of therapist experience on treatment outcome should be examined using a study design that includes random assignment of patients to therapists of varying levels of expertise who are delivering the same treatment to a relatively homogeneous diagnostic sample. By isolating the influence of therapist experience in this way, its effects could be examined more definitively. Such studies pose practical difficulties with recruitment and other feasibility challenges, such as the gaining of experience by therapists over the course of the study, which may explain why no published study of EX/RP for OCD has used such a design. Thus, the question of whether therapist experience influences EX/RP outcome remains largely unanswered. Meta-analytic investigations across a broad range of disorders and psychotherapies have suggested that therapist variables, including experience,

may influence outcome (e.g., Luborsky, McLellan, Diguer, Woody, & Seligman, 1997), although the effects of experience may be mitigated if manuals are used to standardize treatment delivery (Crits-Christoph et al., 1991). However, an examination of therapist variables in a multicenter RCT of a manualized CBT regimen for panic disorder indicated that therapist experience was related to some key outcome measures; patients treated by more generally experienced therapists fared better (Huppert et al., 2001). This study suggests that therapist experience may indeed influence outcome, even in the context of research that included careful patient selection criteria and the use of a treatment manual.

In the current investigation, we explored the relationship between therapist experience and treatment outcome naturalistically in the context of a large-scale effectiveness study in which outpatients who received EX/RP were treated by therapists with varying degrees of experience (Franklin et al., 2000). As discussed later, this naturalistic study did not include random assignment of patients to therapists of varying levels of experience; therefore, we cannot isolate the effects of therapist experience on EX/RP outcome. However, the current study does allow us the opportunity to explore whether patients treated by less experienced therapists achieve generally positive outcomes and whether these outcomes are similar to those achieved by patients treated by more experienced therapists using identical treatment protocols in the context of a specialty clinic's outpatient EX/RP program. Because this practical question frequently arises when patients are deciding whether to enroll in our program, we believe it is important to explore this issue using these clinical data despite the methodological compromises inherent given the context. Patients who are treated in this context are typically more complex clinically than those treated in RCTs, they choose their own treatments, and some even enter EX/RP treatment already on medications. Thus, patients in the current sample are more similar to OCD patients who receive their clinical care in the community. It has been argued that effectiveness studies of this kind are especially important when the evidence for the treatment's efficacy has already been established from carefully RCTs (e.g., Wade et al., 1998), as is quite clearly the case with EX/RP for adult OCD. The current effectiveness study extends the available EX/RP literature by examining the effects of therapist experience in a naturalistic context, providing data that may be quite useful in determining the next stage for dissemination research.

Methods

Study Context

The Center for the Treatment and Study of Anxiety (CTSA) is a clinical research facility in which OCD patients can be randomized to EX/RP as part of ongoing National Institute of Mental Health-funded RCTs. If patients are ineligible for or disinterested in RCT participation, they can receive EX/RP on a fee-for-service basis. All patients in the current study participated in our fee-for-service program. In comparison to typical RCT samples, these fee-for-service patients are more representative of the broader population of patients with OCD in that they also suffer from comorbid conditions (e.g., current major depression), are unwilling to discontinue ongoing pharmacotherapy or to risk randomization to inactive treatment, and choose their own therapy.

Participants

Participants were 86 consecutively referred adult outpatients (41 women [47.7%] and 45 men [52.3%]) who completed treatment on a fee-for-service basis at the CTSA. Most had been referred by a mental health practitioner or a patient advocacy group (e.g., Obsessive–Compulsive Foundation) or responded to media advertisements about our clinical and research program. Participants were treated between 1992 and 1998; 34 additional patients who also received open EX/RP treatment at our clinic during this period were excluded from the current study because of missing essential data (e.g., pretreatment Yale-Brown Obsessive–Compulsive Scale; Y-BOCS). Written informed consent was obtained from all patients after a complete description of the EX/RP treatment program was provided. Patients were not excluded from this study because of secondary comorbid axis I or II diagnoses, medical problems, treatment history, or use of concomitant medication. Forty-three patients (50%) met *Diagnostic and Statistical Manual of Mental Disorders* (third edition, revised or fourth edition) criteria for comorbid psychiatric diagnoses as assessed by unstructured clinical interview. Data from this interview indicated that 12 patients (14%) had an additional diagnosis of major depression and 10 (12%) had an additional anxiety disorder.

Concomitant Treatment

Thirty-four of the 86 participants (39.5%) were not taking any psychotropic medications at intake. However, most of these patients reported previous treatment with a serotonergic medication of documented efficacy for OCD. Of the 52 patients using concomitant medication at intake, 23 (44.2%) were using either clomipramine or a selective serotonergic medication (e.g., sertraline) only, 3 (5.8%) were taking one anxiolytic medication (e.g., buspirone) only, 10 (19.2%) were taking a serotonergic agent plus an anxiolytic, and 16 (30.8%) were taking several medications, including clomipramine, selective serotonergic compounds, and anxiolytic medications. Notably, we found that patients who received EX/RP alone in the context of the larger effectiveness study did not differ at pre- or posttreatment compared with those who received combined treatment (Franklin, Abramowitz, Bux, Zoellner, & Feeny, 2002). Patients on medication at intake who then entered the EX/RP program continued to take their medication at the same dose throughout EX/RP treatment.

Assessment

Diagnosis of OCD according to *Diagnostic and Statistical Manual of Mental* Disorders (third edition, revised) (American Psychiatric Association, 1987) or, if during or after 1994, *Diagnostic and Statistical Manual of Mental* Disorders (fourth edition) criteria (American Psychiatric Association, 1994) was established in a two-stage intake process in which each patient was interviewed separately by two assessors. First, each patient was interviewed for 2 hr by a doctoral-level clinical psychologist experienced and trained extensively in diagnosing OCD. The interview began with general inquiry into the current symptoms, review of treatments for OCD and related problems, and an unstructured assessment of current comorbid axis I conditions. The interview was then guided by the use of the Y-BOCS checklist, a comprehensive list of typical obsessions and compulsions, and the Y-BOCS symptom severity scale (see description in Measures section). In addition, inquiry was made about current cognitive and vegetative symptoms of depression (see description of the Hamilton Rating

Scale for Depression [HRSD] in the Measures section). On completion of this intake, the first assessor presented the interview data to a senior psychologist, who confirmed the OCD diagnosis and discussed treatment options with the patients and their families. All patients in the current study were diagnosed as having primary OCD by both interviewers (100% interrater agreement) and agreed to enter the fee-for-service treatment program. Symptom severity was assessed at pre- and posttreatment by trained evaluators not otherwise involved in the patient's therapy.

Measures

Y-BOCS (*Goodman, Price, Rasmussen, Mazure, Fleischmann, et al., 1989; Goodman, Price, Rasmussen, Mazure, Delgado, et al., 1989*). OCD symptoms were assessed using the Y-BOCS, a semistructured clinical interview that includes a 10-item severity scale. Obsessions and compulsions are rated separately, yielding two subscores (range = 0–20) that are added to produce a total severity score (range = 0–40). Symptoms are rated on a 5-point Likert scale ranging from 0 (*no symptoms*) to 4 (*severe symptoms*). Items are (a) time spent on symptoms, (b) interference, (c) distress, (d) resistance, and (e) control. The instrument also contains a checklist of obsessions and compulsions. The Y-BOCS has satisfactory psychometric properties and has been found to be sensitive to treatment effects (e.g., Hiss, Foa, & Kozak, 1994).

HRSD (*Hamilton, 1960*). Depressive symptoms were assessed via the 17-item HRSD, a widely used clinician rating scale for vegetative symptoms of depression. Scores on this version of the HRSD range from 0 (*no symptoms*) to 50 (*very severe symptoms*). The sound psychometric properties of the scale are supported by an extensive literature (Hedlund & Vieweg, 1979).

Treatment

All patients received intensive EX/RP for OCD, involving 2 to 3 treatment planning sessions followed by 15 exposure sessions. The details of this treatment are described elsewhere (e.g., Foa & Franklin, 2001) and thus are not reviewed here. Sessions lasted for 2 hr each, and treatment was conducted over the course of approximately 4 weeks. Treatment planning involved information gathering about the nature of the patient's OCD symptoms, development of an exposure hierarchy, education about OCD, and the rationale for EX/RP procedures. Exposure sessions consisted of a review of homework assignments that patients had been asked to complete between sessions and in vivo or imaginal exposure to fear-evoking situations. The rationale for ritual prevention was introduced at the first session and emphasized before and throughout treatment, and patients were instructed to refrain from rituals and passive avoidance behaviors throughout the entire treatment period. Although a treatment manual was used (Kozak & Foa, 1997), formal treatment fidelity data were not gathered.

Therapists

Treatment was conducted by doctoral-level clinical psychologists (n = 11) and clinical psychology interns (n = 16) who were trained in EX/RP at the CTSA as specified later. The amount of experience in treating OCD using EX/RP ranged from no postdoctoral training (intern) to 17 years postdoctoral experience. Six of the 11 clini-

cal psychologists and 8 of the 16 interns were women. Fourteen therapists treated 1 patient in this naturalistic study, whereas the other 13 therapists treated more than 1 patient. For those who treated more than 1 patient, the number of cases treated ranged from 2 to 17, with 5 therapists treating 6 or more patients. All 27 therapists self-identified as cognitive–behaviorally oriented and were either participating in an internship with a strong emphasis on CBT or were employed at a clinic known as a center of CBT expertise. Thus, there was little variability in this sample of therapists with regard to theoretical approach to therapy. Training of new therapists consisted of reviewing the treatment protocol and detailed case descriptions, observing and assisting another therapist delivering EX/RP, and serving as the primary therapist with daily individual supervision meetings.

Case Assignment

Assignment of treatment cases to therapists was nonrandom and was made by the CTSA clinical directors on the basis of clinical factors (e.g., case complexity), patient preferences (e.g., preference for female therapist), and practical matters (e.g., therapist availability). Certainly, the lack of random assignment to therapists inherently weakens conclusions that can be drawn about the specific effects of therapist experience on outcome. On the other hand, because this case assignment method is representative of what is done in many if not most community settings, studying the issue in a naturalistic context such as this enhances the external validity of our findings to clinical practice.

Clinical Supervision

Senior clinical psychologists with considerable expertise in EX/RP for OCD provided individual supervision for nonlicensed therapists; frequency of these supervision meetings varied from 1 to 2 hr per week depending on the case. Supervision for the least experienced therapists (e.g., interns) typically consisted of daily individual contact for approximately 45 min. Additionally, all cases were discussed in weekly group supervision meetings chaired by senior-level clinicians. In addition to focusing on the ongoing cases, more general issues pertaining to EX/RP were also discussed in these supervision meetings. For example, the supervision group routinely discussed methods to enhance patient compliance, necessary and sufficient stimuli to include in exposure hierarchies, and management of patients' concerns about the potential for relapse after positive response to EX/RP.

Design

We compared treatment outcome across three groups of patients treated by therapists with different levels of experience providing EX/RP for OCD. Patients treated by therapists with 1 full year or less postdoctoral experience with EX/RP were included in the less experienced therapists group (LET; n = 20). Of the 16 therapists whose patients comprised this group, 8 were women. None of these therapists treated more than 5 patients. Those treated by therapists with 2 to 8 years of experience comprised the moderately experienced therapists group (MET; n = 42). Of the 11 therapists whose patients comprised this group, 6 were women. Two of these therapists treated 6 or more patients. Those treated by therapists with 9 or more years of experience were included in the highly experienced therapists group (HET; n = 24).

Of the 3 therapists whose patients comprised this group, 2 were women. All 3 of these therapists treated 6 or more patients. The specific cut-off points for therapist experience were chosen because they (a) ensured sufficient numbers of patients in each group and (b) conformed with our general clinical impressions of these therapist experience categories. We chose therapist experience at the time of treatment as the grouping variable because we were interested in this issue specifically. Because most of the therapists in this data set treated only 1 patient in this study, we were unable to examine the effects for particular therapists without discarding data from a large percentage of the sample. Further, because only 3 of the 27 therapists moved from one experience category to another over the course of the study and none of those therapists treated more than 3 patients in both categories, meaningful within-therapists analyses could not be conducted.

Results

Drop-Outs

As reported in the parent study (Franklin et al., 2000), there was a 9% drop-out rate for this study on the whole. Examination of these data suggests that drop-outs were dispersed equally across these three therapist groups. Given that we were most interested in completers' treatment response by therapist group and that there was no differential drop-rate in the three groups, we decided not to include data from drop-outs in our analyses.

Demographic Characteristics

Treatment completers' demographic characteristics appear in Table 1. The results of analyses of variance (ANOVA) and chi-square tests, as appropriate, are also presented in Table 1. As can be seen, there were no significant differences among the groups in age, gender, educational status, medication use, and severity of depressive symptoms.

Treatment Outcome

OCD severity. Pre- and posttreatment means, standard deviations, and within-subjects effect sizes for each patient group on the Y-BOCS and HRSD are presented in Table 2. To examine pre–post treatment change in OCD symptom severity by group, we conducted a repeated measures Group (LET, MET, HET) × Time (pre, post) ANOVA of Y-BOCS scores. This analysis revealed a significant effect of time, $F(1, 83) = 566.43$, $p < .001$, as well as a significant Group × Time interaction, $F(2, 83) = 3.74$, $p < .05$. The main effect of group was not significant, $F(2, 83) = 1.77$, $p > .05$. Follow-up one-way ANOVAs indicated significant differences in Y-BOCS scores at pretreatment, $F(2, 83) = 4.70$, $p < .05$, but not at posttreatment, $F(2, 83) = 0.83$, $p > .05$. Post hoc comparisons indicated that the HET group had higher pretreatment Y-BOCS scores compared with the other two groups (all ps $< .05$).

Analysis of covariance (ANCOVA). We also examined whether posttreatment group differences emerged on the Y-BOCS when controlling for pretreatment Y-BOCS scores by conducting an ANCOVA with pretreatment Y-BOCS scores as the covariate. This

TABLE 1. Demographic Data for 86 Obsessive–Compulsive Disorder Patients

Variable	LETs	METs	HETs	F or χ^2 (df)
Age				2.18 (2, 74)
M	38.7	31.11	34.52	
SD	12.5	13.1	11.2	
Male gender				1.67 (2)
N	12	19	14	
%	60.0	45.2	58.3	
College degree				1.47 (2)
N	13	20	10	
%	65.0	47.6	41.7	
Using medication				2.06 (2)
N	14	26	12	
%	70.0	61.9	50.0	

Note. LET = less experienced therapist; MET = moderately experienced therapist; HET = highly experienced therapist.

analysis indicated that, after controlling for pretreatment OCD severity, there were no group differences in posttreatment OCD severity, $F(2, 82) = 1.48$, $p > .05$.

Depression. To examine pre–post treatment change in depressive symptoms by group, we conducted a similar ANOVA of HRSD scores. This analysis revealed a significant effect of time, $F(1, 71) = 102.50$, $p < .001$. Neither the main effect of group, $F(1, 71) = 0.33$, $p > .05$, nor the Group × Time interaction, $F(2, 71) = 0.21$, $p > .05$, were significant. The mean HRSD scores presented in Table 2 suggest that patients' depressive symptoms improved as a result of therapy.

ANCOVA. We also examined whether posttreatment group differences emerged on the HRSD when controlling for pretreatment HRSD scores by conducting an ANCOVA with pretreatment HRSD scores as the covariate. This analysis indicated that, after controlling for pretreatment depression severity, there were no differences in posttreatment depression, $F(2, 70) = 0.25$, $p > .05$.

Effect sizes for OCD symptom reduction. The analyses just described suggest that on average the groups improved with EX/RP, yet they do not address the magnitude of change from pre- to posttreatment. Effect sizes, which express differences between mean scores in standard deviation units, allow us to place these results in a broader context and to compare our observed effect sizes using Cohen's (1988) classification of effect size magnitudes. Therefore, to further examine the effects of treatment in each group, we computed an effect size for each group by subtracting the group's posttreatment mean Y-BOCS score from the pretreatment score and dividing by the pooled standard deviation (see Table 2). As can be seen, all of these effect sizes were quite large, albeit with some variability among them.

Benchmarking. To place our findings into the larger context of published studies on OCD, we compared the effect sizes obtained in our study with those reported in several RCTs of EX/RP for OCD. Fals-Stewart et al. (1993) found an effect size of 0.93 for their individual EX/RP intervention; Lindsay et al. (1997), an effect size of 3.88 for EX/RP; and van Balkom et al. (1998), an effect size of 1.00. From

TABLE 2. Pre- and Posttreatment Mean Scores, Standard Deviations, and Effect Sizes for 86 Obsessive–Compulsive Disorder Patients

Variable	LETs	METs	HETs
Y-BOCS			
Pretreatment			
M	24.60	26.21	28.92
SD	4.8[a]	5.0[a]	5.0[b]
Posttreatment			
M	9.35	11.12	9.75
SD	4.3	6.9	4.2
Effect size	3.31	2.52	4.17
HRSD			
Pretreatment			
M	12.74	12.51	12.65
SD	5.6	5.8	5.8
Posttreatment			
M	5.78	6.34	6.73
SD	3.9	5.0	5.9
Effect size	1.45	1.14	1.00

Note. Means with different superscripts are significantly different. LET = less experienced therapist; MET = moderately experienced therapist; HET = highly experienced therapist; Y-BOCS = Yale-Brown Obsessive–Compulsive Scale; HRSD = Hamilton Rating Scale for Depression.
*$p \leq .05$.

these comparisons it is clear that the LET, MET, and HET groups in this study achieved outcomes that were comparable to those reported in these OCD treatment outcome studies.

Clinically significant improvement. To determine the number of patients in each group who achieved (a) end-state functioning within the nonpatient distribution of Y-BOCS scores and (b) reliable change, we used the methods detailed by Jacobson and Truax (1991). Nonpatient Y-BOCS data from Steketee, Frost, and Bogert (1996) were used to calculate the cut-off score for the nonpatient Y-BOCS distribution (Y-BOCS = 16). Next, the test–retest reliability of the Y-BOCS interview (r = .88; Steketee et al.) was used to calculate a reliable change index (Jacobson & Truax), which indicated whether each patient's pre- to posttreatment change was attributable to therapy as opposed to imprecision in the Y-BOCS. Table 3 presents the number of patients in each group who had posttreatment Y-BOCS scores lower than the cut-off score and also evidenced reliable change. As can be seen, the substantial majority of each group was clinically significantly improved after treatment. Chi-square analyses indicated no group differences in the percentage of patients thus classified, χ^2 (2, N = 86) = 2.65, $p > .05$.

Discussion

Results from our naturalistic examination of therapist experience and EX/RP treatment outcome provide data to help answer a common practical question asked by patients considering a course of EX/RP: Namely, do patients whose therapists have

TABLE 3. Clinically Significant Change by Level of Therapist Experience

Therapist	*N*	No. in nonpatient distribution (%)[a]	No. with reliable change (%)	No. clinically significantly improved (%)[b]
LET	20	18 (90.0)	19 (95.5)	17 (85.0)
MET	42	34 (81.0)	38 (90.5)	32 (76.2)
HET	24	22 (91.7)	24 (100.0)	22 (91.7)

Note. LET = less experienced therapist; MET = moderately experienced therapist; HET = highly experienced therapist.
[a]Nonpatient distribution defined as a posttreatment Yale-Brown Obsessive–Compulsive Scale score ≤ 16.
[b]Defined as achieving both nonpatient distribution and reliable change.

more experience with EX/RP have better outcomes than those whose therapists have less experience? We did detect a Group × Time interaction on the repeated measures ANOVA, which on further inspection indicated that (a) patients treated by highly experienced therapists had more severe OCD symptoms at pretreatment compared with those treated by providers with less experience and (b) no group differences in OCD severity were evident at posttreatment. From these analyses we can surmise that patients treated by the most experienced therapists made the most progress. Notably, when we controlled for pretreatment OCD severity, no posttreatment group differences emerged. Thus, it appears from our data that less experienced therapists can be effective, at least with OCD patients who are less symptomatic initially. Consistent with previous studies of EX/RP, the vast majority of patients in each of the three groups achieved clinically significant improvement.

It is important to acknowledge, however, that, because clinical severity and complexity influenced case assignment, we cannot assess whether the more clinically complicated patients would have fared quite as well had they been assigned to the less experienced therapists. Because our clinic's case assignment methods continue to take severity and complexity into account, we are confident that these findings can be used to help our potential patients decide whether or not to accept assignment to the less experienced therapists. This issue is of considerable practical importance for our clinic for two reasons: (a) The waiting list is much longer for our few highly experienced therapists given that the vast majority of our available clinicians are with our group for 3 years or less; and (b) the fee is typically lower for the less experienced therapists who have not yet been licensed. These circumstances are likely highly representative of those in other community centers that offer anxiety disorders treatments; as such, our findings have implications well beyond our center.

More specifically, what are the implications of these results beyond our own specialty clinic? Our findings imply that certain training experiences may be important in disseminating EX/RP to less experienced therapists. These include a conceptually driven treatment manual and sufficient initial training in its use, the opportunity to observe more experienced clinicians implement the treatment, individual and group supervision by experts, and employment in an environment that supports the use of empirically derived therapies. There are centers throughout the world in which many, if not all, of these factors are already in place; thus, research on this important topic using other diagnostic samples is needed to determine whether our findings with adult OCD are generalizable to other settings and disorders. Such undertakings are imperative and will go a long way toward stimulating further interest in CBT and in

the examination of other therapist variables that may influence its outcome. One of the current barriers to the dissemination of CBT is concern that developing proficiency in its use will prove too time consuming and costly; thus, research that allows for an empirical examination of the variables that affect the development of this proficiency is clearly warranted.

The next step in dissemination research on EX/RP is to determine the extent to which elements present at the CTSA (e.g., intensive training and supervision with experts) are necessary to yield satisfactory outcomes. Initial research on this topic has been conducted in panic disorder (Wade et al., 1998) and posttraumatic stress disorder (Foa, Cahill, & Hembree, 2001). In each of these studies, empirically supported treatments were provided successfully in community-based mental health settings. The switch in setting to clinical venues outside the academic context does not in and of itself appear to hinder OCD outcome. For example, one study indicated that an expert private practitioner was able to achieve very positive posttreatment outcomes with OCD patients using a weekly treatment regimen (Warren & Thomas, 2001). However, these results address only the switch in clinic setting, because Dr. Warren's status as an EX/RP clinical expert himself renders the findings moot with respect to the issue of disseminating treatment to nonexperts. Because OCD is not highly prevalent, it is unclear at this point whether it would be more prudent to attempt widespread dissemination of EX/RP to clinicians at large or to support the creation of centers of expertise, like the CTSA, in which positive outcomes can be achieved readily even by less experienced clinicians, even though evidence suggests positive outcomes with less clinically severe patients. Future research is needed to clarify which of these paths would be most fruitful to venture down.

Results of the current study must be interpreted with caution for several reasons. Because we used a naturalistic design and chose to focus on treatment effectiveness in a "real-world" fee-for-service clinical setting, we did not randomly assign patients to conditions, did not use a control condition, did not use formal lengthy diagnostic procedures that would substantially inflate the cost of assessments, and allowed patients to enter the study who were receiving concomitant pharmacotherapy. Our study suffers from several additional methodological limitations, including the absence of long-term follow-up data and a measure of homework compliance. Further, because budgetary constraints precluded taping of treatment sessions, we were unable to gather fidelity data or classify therapists based on their in-session behaviors, and our sample's ethnic and racial homogeneity limits generalizability to more diverse populations. Another important caveat is that the naturalistic design resulted in most therapists treating a few patients and a small majority of therapists treating more than 6 patients, causing the latter therapists to have greater weight in our data analyses.

At the same time, the study also possessed several strengths, including the use of (a) a CBT manual that promoted the standardization of treatments across conditions, (b) a sample of clinical patients more similar to those treated in clinical practice settings than are typical RCT samples, and (c) independent evaluator ratings of symptoms rather than reliance on self-report or the ratings of the treating clinician. The aforementioned caveats notwithstanding, we believe that these study strengths, the importance of the issue of therapist experience and treatment outcome more broadly, and the absence of any other published studies on this topic to guide clinical recommendations regarding therapist experience and EX/RP outcomes outweigh the limitations inherent in naturalistic studies of this sort. Indeed, more research on

this topic is sorely needed: EX/RP is currently considered the treatment of choice for OCD in that it appears to be the most efficacious method available (March, Frances, Carpenter, & Kahn, 1997). However, because its availability continues to be severely limited, it is rarely the treatment that is chosen (Kozak, 1999). Until the problems that limit its availability are directly addressed and rectified, EX/RP will remain an "ivory tower" intervention available only to the few who happen to live within reasonable commuting distance from the handful of centers that use it routinely.

References

Abramowitz, J. S. (1997). Effectiveness of psychological and pharmacological treatments for obsessive–compulsive disorder: A quantitative review. *Journal of Consulting and Clinical Psychology, 65,* 44–52.

Abramowitz, J. S., Franklin, M. E., Street, G. P., Kozak, M. J., & Foa, E. B. (2000). The effects of pre-treatment depression on cognitive–behavioral treatment outcome in OCD clinic outpatients. *Behavior Therapy, 31,* 517–528.

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (3rd ed.). New York: Academic Press.

Crits-Christoph, P., Baranackie, K., Kurcias, J. S., Beck, A. T., Carroll, K., Perry, K., et al. (1991). Meta-analysis of therapist effects in psychotherapy outcome studies. *Psychotherapy Research, 1,* 81–91.

Fals-Stewart, W., Marks, A. P., & Schafer, J. (1993). A comparison of behavioral group therapy and individual behavior therapy in treating obsessive–compulsive disorder. *Journal of Nervous and Mental Disease, 181,* 189–193.

Foa, E. B., Cahill, S. P., & Hembree, E. A. (2001, November). Effectiveness of prolonged exposure with and without cognitive restructuring for PTSD in community and expert clinics. In P. A. Resick (Chair), *Three clinical trials for PTSD: Outcome and dissemination*. Paper presented at the 35th Annual Meeting of the Association for the Advancement of Behavior Therapy, Philadelphia, PA.

Foa, E. B., & Franklin, M. E. (2001). Obsessive–compulsive disorder. In D. H. Barlow (Ed.) *Clinical handbook of psychological disorders* (3rd ed., pp. 209–263). New York: Guilford Press.

Foa, E. B., Liebowitz, M. R., Kozak, M. J., Davies, S., Campeas, R., Franklin, M. E., et al. (2002). Treatment of obsessive–compulsive disorder by exposure and ritual prevention, clomipramine, and their combination: A randomized, placebo-controlled trial. Manuscript submitted for publication.

Franklin, M. E., Abramowitz, J. S., Bux, D. A., Zoellner, L. A., & Feeny, N. C. (2002). Cognitive–behavioral therapy with and without medication in the treatment of obsessive–compulsive disorder. *Professional Psychology: Research and Practice, 33,* 162–168.

Franklin, M. E., Abramowitz, J. S., Kozak, M. J., Levitt, J. T., & Foa, E. B. (2000). Effectiveness of exposure and ritual prevention for obsessive–compulsive disorder: Randomized compared with non-randomized samples. *Journal of Consulting and Clinical Psychology, 68,* 594–602.

Franklin, M. E., Harap, S., & Herbert, J. D. (2002). *Effects of axis II personality disorders on exposure and ritual prevention treatment outcome for OCD*. Manuscript in preparation.

Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Delgado, P., Heninger, G. R., et al. (1989). The Yale-Brown Obsessive–Compulsive Scale: II. Validity. *Archives of General Psychiatry, 46,* 1012–1016.

Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., et al. (1989). The Yale-Brown Obsessive–Compulsive Scale: I. Development, use, and reliability. *Archives of General Psychiatry, 46,* 1006–1011.

Hamilton, M. (1960). A rating scale for depression. *Journal of Neurological and Neurosurgical Psychiatry, 18,* 315–319.

Hedlund, J., & Vieweg, B. (1979). The Hamilton Rating Scale for Depression: A comprehensive review. *Journal Operating Psychiatry, 10,* 149–165.

Hiss, H., Foa, E. B., & Kozak, M. J. (1994). A relapse prevention program for obsessive–compulsive disorder. *Journal of Consulting and Clinical Psychology, 62,* 801–808.

Huppert, J. H., Bufka, L. F., Barlow, D. H., Gorman, J. M., Shear, M. K., & Woods, S. W. (2001). Therapists, therapist variables, and cognitive–behavioral therapy outcome in a multicenter trial for panic disorder. *Journal of Consulting and Clinical Psychology, 69,* 747–755.

Jacobson, N., & Truax, P. (1991). Clinical signifi-

cance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59,* 12–19.

Koran, L., Thienemann, M., & Davenport, R. (1996). Quality of life for patients with obsessive–compulsive disorder. *British Journal of Psychiatry, 156,* 51–54.

Kozak, M. J. (1999). Evaluating treatment efficacy for obsessive compulsive disorder: Caveat practitioner. *Cognitive and Behavioral Practice, 6,* 422–426.

Kozak, M. J., & Foa, E. B. (1997). *Mastery of obsessive–compulsive disorder: A cognitive–behavioral approach*. San Antonio, TX: Psychological Corporation.

Lindsay, M., Crino, R., & Andrews, G. (1997). Controlled trial of exposure and response prevention in obsessive–compulsive disorder. *British Journal of Psychiatry, 171,* 135–139.

Luborsky, L., McLellan, T., Diguer, L., Woody, G., S., & Seligman, D. A. (1997). The psychotherapist matters: Comparison of outcomes across twenty-two therapists and seven patient samples. *Clinical Psychology: Science and Practice, 4,* 53–63.

March, J. S., Frances, A., Carpenter, D., & Kahn, D. A. (1997). Expert Consensus Guidelines series on treatment of obsessive–compulsive disorder. *Journal of Clinical Psychiatry, 58*(Suppl. 4), 1–72.

Persons, J. B., & Silberschatz, G. (1998). Are results of randomized controlled trials useful to psychotherapists? *Journal of Consulting and Clinical Psychology, 66,* 126–135.

Rasmussen, S. A., & Tsuang, M. T. (1986). Clinical characteristics and family history in DSM-III obsessive–compulsive disorder. *American Journal of Psychiatry, 143,* 317–322.

Riggs, D. S., Hiss, H., & Foa, E. B. (1992). Marital distress and the treatment of obsessive compulsive disorder. *Behavior Therapy, 23,* 585–597.

Steketee, G. S., Frost, R. O., & Bogert, K. (1996). The Yale-Brown Obsessive–Compulsive Scale: Interview versus self report. *Behaviour Research and Therapy, 34,* 675–684.

van Balkom, A. J., L. M., deHaan, E., van Oppen, P., Spinhoven, P., Hoogduin, K. A. L., & van Dyk, R. (1998). Cognitive and behavioral therapies alone versus in combination with fluvoxamine in the treatment of obsessive–compulsive disorder. *Journal of Nervous and Mental Disease, 186,* 492–499.

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.

Warren, R., & Thomas, J. C. (2001). Cognitive–behavior therapy of obsessive–compulsive disorder in private practice: An effectiveness study. *Journal of Anxiety Disorders, 15,* 277–285.

Zusammenfassung

Die Effektivität von Desensibilisierung und Ritualprävention (exposure and ritual prevention, EX/RP) zur Reduzierung von Zwangsstörungen (obsessive-compulsive disorders, OCD) ist bewiesen. Die Frage jedoch, ob die Erfahrung des Therapeuten mit EX/RP das Therapieergebnis beeinflusst, ist noch offen. Die Autoren haben Therapeutenerfahrung und EX/RP Ergebnisse in einer für dieses Training spezialisierten Klinik bei selbstzahlenden, erwachsenen OCD Patienten untersucht. Patienten, die von Therapeuten mit geringerer klinischer Erfahrung (0 bis 1 und 2 bis 8 Jahre Erfahrung) behandelt wurden, hatten nach der Behandlung im Durchschnitt vergleichbare OCD Schweregrade wie Patienten von sehr erfahrenen Klinikern (neun und mehr Jahre Erfahrung). In dieser naturalistischen Studie waren jedoch Patienten mit einem höheren Schweregrad von OCD zu Beginn der Behandlung den sehr erfahrenen Klinikern zugewiesen worden. Wurde der Schweregrad von OCD vor der Behandlung als Kovariate genommen, ergaben sich jedoch auch keine Gruppenunterschiede für den OCD-Schweregrad nach der Behandlung. Die Implikationen dieses Ergebnisses für die Weiterverbreitung von Forschungsprojekten dieser Art werden diskutiert.

Résumé

L'efficacité de l'exposition et de la prévention de rituels (EX/RP) pour réduire les symptômes du trouble obsessionnel-compulsif (TOC) est bien établie. Par contre, la question d'une influence de l'expérience des thérapeutes avec EX/RP sur les résultats doit encore être posée. Les auteurs ont examiné l'expérience thérapeutique et les résultats avec EX/RP dans le contexte d'une clinique formant dans les spécialités où des patients adultes avec un TOC recevaient un traitement aux frais du service. Les patients traités par deux groupes de thérapeutes avec moins d'expérience clinique (0–1 an et 2–8 ans) avaient des scores de sévérité post-traitement du TOC comparables à ceux attribués aux cliniciens avec le plus d'expérience (≥ 9 ans). Cependant, les patients attribués aux cliniciens les

plus expérimentés avaient un TOC plus sévère en début de traitement, ce qui reflète les méthodes d'attribution de cas dans cette étude naturaliste. Lorsque le score de sévérité pré-traitement a été pris comme une co-variante, aucune différence post-traitement entre les groupes s'est montrée pour la sévérité du TOC. Les implications de ces résultats pour le développement de projets de recherche de dissémination sont discutées.

Resumen

Está bien establecida la eficacia de la exposición y de la prevención de rituales (EX/RP) para reducir los síntomas del desorden obsesivo-compulsivo (OCD). Sin embargo, la cuestión de si la experiencia del terapeuta con la EX/RP influye en los resultados aún no ha sido abordada. Los autores examinan la experiencia del terapeuta y los resultados de la EX/RP en el contexto de una clínica para el entrenamiento en la especialidad, en la que los pacientes OCD adultos recibieron tratamiento a cambio de honorarios. Los pacientes tratados por dos grupos de terapeutas con menor experiencia clínica (0–1 año y 2–8 años) tuvieron una media de menor puntaje en el postratamiento del OCD que los obtenidos por clínicos de mayor experiencia (9 años). No obstante, el examen de los métodos de asignación de casos en este estudio naturalista mostró que los pacientes asignados a los clínicos más experimentados habían registrado un OCD más severo en el pretratamiento. No se encontraron diferencias grupales de severidad postratamiento del OCD cuando se usó el puntaje de severidad pretratamiento como una covariante (covariate). Se estudian las implicaciones de estos hallazgos para el desarrollo de proyectos de multiplicación de las investigaciones.

Resumo

A eficácia da exposição e prevenção do ritual (EX/RP) para a redução de sintomas da Perturbação Obcessivo-Compulsiva (POC) está bem demonstrada. No entanto, é necessário abordar a questão da influência da experiência do terapeuta nos resultados. Os autores analisaram a experiência do terapeuta e os resultados da EX/RP no contexto duma clínica de treino especializado na qual pacientes adultos com POC recebem tratamento a troco de pagamento adequado aos seus rendimentos. Os pacientes tratados pelos 2 grupos de terapeutas com menos experiência clínica (0–1 ano de experiência e 2–8 anos de experiência) obtiveram resultados de gravidade médios no final do tratamento da POC comparáveis com aqueles que tinham sido indicados para os clínicos mais experientes (≥ 9 anos de experiência). Porém, reflectindo sobre os métodos de distribuição de casos, neste estudo naturalista, os pacientes indicados para os clínicos mais experientes tinham POC mais graves no início do tratamento. Não foram evidentes diferenças na gravidade da POC nos grupos no final do tratamento quando os resultados de severidade do início do tratamento foram usados como co-variante. São discutidas as implicações destes resultados para o desenvolvimento da disseminação de projectos de investigação.

Sommario

L'efficacia dell'esposizione e della prevenzione del rituale(EX/RP) per la riduzione sintomatologica del Disturbo Ossessivo Compulsivo (DOC) è ormai appurata. Tuttavia deve essere ancora studiato quanto l'esperienza del terapeuta con EX/RP influenzi l'outcome. Gli autori hanno esaminato la relazione tra esperienza del terapeuta e outcome in trattamenti con EX/RP all'interno di un training clinico nel quale pazienti adulti con DOC ricevevano un trattamento "fee for service." I pazienti trattati dai due gruppi di terapeuti con minore esperienza clinica (0–1 anno e 2–8 anni d'esperienza) avevano punteggi di gravità del disturbo post-trattamento paragonabili a quelli di pazienti trattati da terapeuti con maggiore esperienza clinica (9 anni d'esperienza). Va segnalato come, essendo uno studio di tipi naturalistico non è stato controllato il metodo di assegnazione dei casi: i pazienti caratterizzati da una maggiore gravità del disturbo pre-trattamento erano assegnati a terapeuti con maggiore esperienza clinica. Utilizzando la gravità pretrattamento del disturbo come covariata non è stata evidenziata differenza tra i gruppi nei livelli post-trattamento di gravità del DOC. Vegono infine discusse le implicazioni di tali risultati per lo sviluppo di ulteriori progetti di ricerca.

摘要

暴露和反應克制法(EX/RP)的技術對減緩強迫症症狀的效能已被確認。然而，治療師使用 EX/RP 技術的經驗是否會影響治療結果則尚未被提出。本研究在臨床專業訓練機構的情境中，以付費接受治療的成人強迫症患者為研究對象，檢視治療師

經驗對治療結果的影響。兩組由臨床經驗較資淺(0-1 年經驗、 2-8 年經驗)的治療師所治療的患者，與資深組(9 年以上經驗)治療師治療的患者相比，治療後的強迫症嚴重性分數相當。然而本研究在自然情境中分派患者時，常將治療前症狀較為嚴重的強迫症患者分派給資深治療師。研究將治療前強迫症嚴重性列為共變數進行考驗，發現治療後強迫症嚴重性的組間差異並未達顯著。最後報告將針對研究結果如何運用於發展推廣計劃進行討論。

Received October 31, 2001
Revision received December 15, 2002
Accepted December 20, 2002