A Naturalistic Study of Psychotherapy for Bulimia Nervosa, Part 2

Therapeutic Interventions in the Community

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Abstract: Data from naturalistic samples provide an important complement to findings from randomized trials of psychotherapy. A random national sample of US clinicians provided data on 145 completed treatments of patients with bulimic symptoms. We attempted to characterize the nature of treatments in the community and to examine the relation between treatment variables and outcome. Clinicians of all theoretical orientations report using interventions with polysymptomatic cases designed to address clinically significant personality characteristics and interpersonal patterns. Whereas cognitive-behavioral therapy is associated with more rapid remission of eating symptoms, psychodynamic interventions and increased treatment length predict better global outcome across treatment modalities, suggesting the importance of integrative treatments for the broad range of pathology seen in patients with bulimic symptoms.

Key Words: Bulimia, treatment outcome, personality, comorbidity, eating disorders.

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Although the most widely studied psychotherapies for bulimia nervosa (BN) in randomized controlled trials (RCTs) are cognitive-behavioral therapy (CBT) and interpersonal psychotherapy, the most widely practiced treatments for the disorder in the community are CBT and psychodynamic therapy (Arnow, 1999). CBT for BN is based on the premise that bulimic behavior results from cognitive distortions assigning excessive importance to idealized body shape and low body weight (Fairburn et al., 1993; Wilson and Fairburn, 1998). According to the theory, cognitive distortions lead to dieting, dieting creates vulnerability to binge eating and purging, eating disorder (ED) symptoms lead to low self-esteem, and low self-esteem reciprocally increases motivation to improve self-esteem through weight loss (Wilson and Fairburn, 1998). The main elements of CBT for BN in the widely disseminated manual published in 1993 include self-monitoring of eating behavior, education about the theoretical model, prescription of regular eating, introduction of feared foods, development of strategies for self-control, and restructuring of cognitions about eating and body image (Fairburn et al., 1993; Wilson and Fairburn, 1998). A new CBT manual addressing a broader range of maintaining mechanisms is currently being tested in clinical trials, but the focused manual is the only one widely available to date (Fairburn, Cooper, and Shafran, 2003).

A substantial body of evidence from RCTs suggests that CBT can be effective for many BN patients (Compas et al., 1998; Whittal et al., 1999; Wilson and Fairburn, 1998). This has led many to argue that CBT is the treatment of choice for BN, and that clinicians should not practice other, largely untested treatments. As described in part 1 of this article, however, CBT leads to recovery in only 40–50% of patients in RCTs, and its generalizability is unknown, particularly for polysymptomatic patients (see also Haas and Clopton, 2003; Thompson-Brenner et al., 2003).

Psychodynamic treatments, in contrast, are widely practiced but have unknown efficacy. Psychodynamic therapy for BN is premised on the view that ED symptoms such as bingeing and purging tend to arise in the context of broader personality patterns (e.g., Bruch, 1979; Hartmann et al., 1992; Johnson and Sansone, 1993). From a psychodynamic viewpoint, ED symptoms could reflect problems with self-esteem or internalization of high standards for the self, including the body. However, ED symptoms could also reflect difficulty regulating emotions and impulses (e.g., expressed in impulsive eating as well as impulsive spending or sexual activity), conflicts about impulses (e.g., about sexual impulses, leading to desexualization of the body as in anorexia nervosa), problematic ways of experiencing the self and others (e.g., viewing the self as all good or all bad, and having difficulty

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accepting imperfections), and so forth (Westen, 1998). Psychodynamic approaches assume that patients who share a symptom such as binge-purge cycles may be very different in personality processes that provide one context for the emergence and maintenance of that symptom.

For example, Westen and Harnden-Fischer (2001) noted a paradox in the literature linking EDs with personality variables, namely that anorexia nervosa tends to be associated with rigidity and need for control whereas BN is associated with impulsivity, yet patients more often than not cross over from one diagnosis to the other at some point in their lives (Eddy et al., 2002). They suggested that the resolution to this paradox might lie in the characterological heterogeneity of patients who share similar symptoms. Using a cluster-analytic procedure (Q-factor analysis; see Block 1978), they identified three personality patterns in a mixed ED sample: a high-functioning/perfectionistic pattern, characterized healthy attributes such as conscientiousness and empathy as well as self-criticism, perfectionism, and negative affectivity (e.g., guilt and anxiety); a more disturbed constricted/overcontrolled pattern, characterized by inhibition across multiple domains, feelings of emptiness and inadequacy, cognitively sparse representations of the self and others, and an avoidant interpersonal style; and an equally disturbed dysregulated/undercontrolled pattern, characterized by poorly regulated emotions, impulsivity, and a tendency to seek relationships in self-destructive ways. Similar personality subtypes have also been identified in other recent studies (Espelage et al., 2002; Goldner et al., 1999). Patients who match prototypes of these personality configurations (treated categorically or dimensionally) differ on a range of variables, including adaptive functioning (Westen and Harnden-Fischer, 2001), patterns of comorbidity (Thompson-Brenner and Westen, part 1 of current report), ways of regulating emotions (Harnden et al., 2004), patterns of impulse regulation (Eddy, Novotny, and Westen, 2004), sexual attitudes and behaviors (Eddy, Novotny, and Westen, 2004), and serotonin regulation (Steiger et al., 2004). Although the three personality configurations show some association to ED symptoms (i.e., patients with anorexic symptoms are more likely to manifest constriction/overcontrol, whereas patients with bulimic symptoms are more likely to manifest dysregulation/undercontrol), diagnoses such as BN tend to be heterogeneous with respect to the three personality styles, raising questions about whether the same interventions are likely to be effective for a high-functioning/perfectionistic BN patient and a dysregulated patient.

Data bearing on the efficacy of psychodynamic psychotherapy for BN (as for other disorders) are difficult to find. Treatment conditions frequently cited in the RCT literature using terms such as *psychodynamically inspired* were all constructed as credible controls for CBT rather than as active treatments, prescribe obviously nontherapeutic techniques such as reflecting back all questions regardless of content and avoiding discussion of eating or weight to minimize overlap with CBT (e.g., Garner et al., 1993[1]), and bear little relation to psychodynamic psychotherapy as practiced in the community. Perhaps most importantly, the theoretical rationale for psychodynamic psychotherapy for BN emphasizes changes in enduring personality diatheses. Identifying, let alone altering, such diatheses is unlikely to occur in brief treatments whose length was determined by researchers' efforts to match the number of sessions prescribed in the CBT manual.[2] Thus, the effectiveness of psychodynamic psychotherapy for BN at this point is best viewed as unknown (i.e., unvalidated rather than invalidated).

The present study used naturalistic data from clinicians in the community to provide a portrait of psychotherapy for patients with BN symptoms as practiced in the community, particularly cognitive-behavioral and psychodynamic psychotherapy. As a complement to part 1 of this report, which focused on patterns of comorbidity among bulimic patients treated in the community, the primary goals of this report were to examine the interventions used by experienced clinicians in the community, to identify adjustments clinicians make depending on comorbid features, and to examine associations between comorbidity, therapeutic approach, and outcome.

METHODS

Subjects and procedures were described in detail in part 1 of this report. In overview, 145 experienced doctoral-level psychologists and psychiatrists drawn from a random national sample completed a questionnaire describing their most recently terminated treatment of a patient with clinically significant symptoms of BN. The questionnaire included sections describing clinician characteristics, including theoretical orientation; patient characteristics, including demographics, ED symptoms, Axis I comorbidity, Axis II comorbidity, and subthreshold personality pathology; a range of treatment outcome variables; and interventions employed in the treatment. Clinicians rated Axis I and Axis II comorbidity and subthreshold personality pathology by checklist. We also measured personality dysregulation and constriction using principal components analysis (PCA) applied to all personality data (see part 1). To maximize the reliability of the treatment outcome variables, we use primarily two outcome ratings, ED outcome (two-variable aggregate of clinician ratings) and global outcome (six-variable aggregate of clinician ratings), described in more detail in Part 1 of this report.

Therapeutic Interventions

The final section of the measure, concerning treatment interventions, is the focus of this report and hence is described here in more detail. We devised an ED adaptation of a simple, reliable psychotherapy process/intervention mea-

sure, the Comparative Psychotherapy Process Scale (CPPS), devised by Hilsenroth and colleagues (Blagys and Hilsenroth, 2000; Hilsenroth et al., 2003, in press). Based on reviews of the literature across treatments for various disorders, Hilsenroth and colleagues identified items assessing the distinctive elements of psychodynamic and cognitive-behavioral therapies. The CPPS includes 20 items reflecting therapy practices that significantly differentiated psychodynamic therapy and CBT from one another in at least two studies (e.g., Goldfried et al., 1998) in at least two different research laboratories (Blagys and Hilsenroth, 2000). Factor analysis of the CPPS typically yields two factors, a CBT and a psychodynamic interventions factor. Previous research has demonstrated adequate interrater reliability for independent judges using the CPPS (Hilsenroth et al., 2003). To be maximally relevant to the treatment of BN, we modified the CPPS by adding (1) items specific to the treatment of BN adapted from CBT manual (Fairburn et al., 1993); (2) items assessing psychodynamic interventions not addressed in the original item set (e.g., interpretation of conflict, focus on sexuality, exploration of aggression); and (3) items assessing interventions commonly employed for personality problems of relevance to ED patients (e.g., interventions addressing emotional dysregulation; Linehan, 1993).

The adapted psychotherapy process questionnaire, which we refer to as the CPPS-BN, has 41 items We instructed clinicians to rate the extent to which each item was characteristic of their work with their patient, where 1 = not at all characteristic and 5 = very characteristic.

Data Analysis

To provide a description of interventions used in the community in treating patients with bulimic symptoms, we applied factor analysis to our interventions measure, the CPPS-BN, and analyzed data both at the factor and item levels where appropriate, using independent samples *t* tests to compare groups where necessary. To identify patient and intervention variables that predict outcome of BN treatment in the community, we employed multiple regression, entering patient and treatment predictors earlier shown to be associated with outcome (e.g., comorbid disorders, treatment length) to predict global outcome using our most reliable aggregated indices of both predictor and criterion variables.

RESULTS

Clinician and Patient Demographics

In part 1, we reported clinician demographics. To review briefly, respondents were relatively evenly distributed by theoretical orientation, with 37.3% of the sample describing their theoretical orientation as solely or primarily CBT (hereafter self-reported CBT), 33.8% solely or primarily psychodynamic (self-reported psychodynamic), and 28.9% purely eclectic or other. Respondents were primarily psychologists (86.7%) and female (66.4%). Also as reported in part 1, patients averaged 28.5 years of age (*SD* = 10.2) and were primarily Caucasian and middle class, consistent with the population of patients with EDs in the US. Almost 90% met DSM-IV criteria for BN. The sample on aggregate showed fairly substantial impairment, with mean pretreatment GAF of 51.5 (*SD* = 12.3) and 42% with a history of psychiatric hospitalization.

Factor Structure of the CPPS-BN

Our first task was to identify latent variables (factors) underlying the interventions clinicians reported using on the CPPS-BN. As is standard in factor-analytic work, we first applied PCA to the 41 items of the CPPS-BN, specifying eigenvalues >1. We used the scree plot, variance accounted for, and parallel analysis (Horn, 1965; O'Connor, 2000) to determine the number of factors to rotate. Because these indicators suggested three to four factors, we rotated three-factor and four-factor solutions, examining both oblique and orthogonal rotations. We retained the first three factors of the four-factor Promax (oblique) solution using maximum-likelihood estimation, which accounted for 44.9% of the variance. These factors were theoretically coherent, were robust across different factor solutions and estimation procedures, and showed minimal cross-factor loadings. Table 1 shows the items that loaded on each of the three factors, which we labeled psychodynamic, cognitive-behavioral, and adjunctive treatments.

The psychodynamic factor includes seven interventions identified by Blagys and Hilsenroth (2000) as characteristic of psychodynamic therapies (e.g., addressed the patient's avoidance of important topics and shifts in mood) as well as several items we had added to reflect the broad spectrum of psychodynamic interventions used in the community (e.g., use of the therapeutic relationship for a corrective emotional experience). The CBT factor includes seven items identified by Blagys and Hilsenroth as characteristic of CBT (e.g., taught the patient specific techniques for coping with her symptoms) and four CBT items we added based on the manual by Fairburn et al. (1993) for BN (e.g., prescribed regular eating patterns). Both factors should be highly recognizable to adherents of each approach; indeed, the two items with the highest loadings on the CBT factor were derived from the CBT manual for BN. The adjunctive treatments factor included interventions common in the treatment of patients with EDs, such as hospitalization, not specific to any single theoretical approach.

Reliability and Validity of the CPPS-BN Factors

We created factor-based scores by averaging the items loading ≥.50 on each of the first two factors and

TABLE 1. Factor Structure of the CPPS-BN ($N = 142$)[a]

CPPS-BN items	Primary loading
Factor 1: psychodynamic psychotherapy	
Encouraged awareness and exploration of feelings the patient found uncomfortable or unacceptable	.86
Focused on the similarities between the patient's relationships and perceptions of relationships repeated over time, settings, or people	.80
Focused on the patient's conflicting feelings or desires	.77
Helped the patient come to terms with her relationships with and feelings about significant others from the past (e.g., mother, father)	.73
Addressed the patient's avoidance of important subjects and shifts in mood	.70
Identified maladaptive interpersonal patters and the thoughts, feelings, and motives underlying them	.65
Focused on ways the patients deals with anger or aggression	.64
Encouraged the patient to experience and express feelings in the session	.62
Used the therapeutic relationship to offer the patient a different model for relationships than she had previously experienced	.57
Linked the patient's current feelings or perceptions to experiences from the past	.57
Encouraged the discussion of the patient's wishes, fantasies, dreams, etc.	.56
Explored and addressed issues of sexuality	.56
Focused on the relationship between the therapist and patient	.55
Encouraged the patient to assert herself or get her needs met in relationships	.54
Helped the patient regulate intense emotions (e.g., anger, fear, etc.)	.53
Factor 2: CBT	
Helped patient develop strategies for eating appropriately, controlling impulses to binge, purge, fast	.80
Prescribed regular eating patterns	.67
Suggested specific activities or tasks for the patient to attempt outside the session	.64
Offered explicit advice or suggestions	.60
Taught the patient specific techniques for coping with her symptoms	.60
Challenged irrational or illogical conscious beliefs about food, diet, and eating	.59
Interacted with the patient in a didactic or teacher-like way	.58
Explained the rationale behind the therapeutic technique or approach to treatment	.56
Provided the patient with information and facts about her current symptoms, disorder, or treatment	.54
Encouraged the patient to practice behaviors, coping strategies learned in therapy between sessions	.54
Encouraged systematic self-monitoring of eating behavior (e.g., keeping a food diary)	.53
Factor 3: adjunctive therapies	
Used conjoint inpatient or day treatment	.65
Used conjoint psychopharmacology	.59
Encouraged the patient to be weighed regularly or worked with another professional in that role	.56
Established and maintained rules for therapeutic engagement	.54
Used conjoint psychosocial treatment (group treatment, nutritional counseling, family treatment)	.39

[a]To maximize reliability, we include items loading ≥.50 on factors 1 and 2 and ≥.30 on factor 3.

≥.30 on the third factor (which was well marked by fewer items). Reliabilities of the three factors (coefficient α) were .91 (15 items), .86 (11 items), and .67 (five items), respectively. As a first test of the validity of the CPPS-BN factors, we conducted t tests comparing self-reported CBT and psychodynamic clinicians on the three factors. For the CBT factor, self-reported CBT ($M = 4.01$; $SD = .62$) and psychodynamic ($M = 3.16$; $SD = .81$) clinicians differed significantly ($t[99] = -5.90$; $p < 0.001$; $r = .51$). For the psychodynamic factor, self-reported CBT ($M = 3.48$; $SD = .84$) and psychodynamic ($M = 4.22$; $SD = .53$) clinicians differed significantly ($t[99] = 5.27$; $p < 0.001$; $r = .47$). Supporting discriminant validity, the two groups had virtually identical means (2.70; $SD = .98$) on the adjunctive treatments scale. As an additional validity check, we used independent samples t tests to compare means on each item of the

CPPS-BN between self-reported psychodynamic ($N = 49$) and CBT ($N = 52$) clinicians. The two groups differed significantly on all but four items that loaded on the psychodynamic and CBT factors, with the remaining four showing trends in the expected direction.

Is Patient Comorbidity Related to Treatment Approach?

We reported in part 1 that treatment length in the community is systematically related to patterns of comorbidity. A related question is whether treatment techniques vary according to patterns of comorbidity—that is, whether clinicians adjust their interventions with BN patients to treat patient characteristics other than the nature or severity of their ED. The data suggest that they do. We provide two examples, focusing on CBT therapists, because of the presence of a manual for CBT for BN that was designed to guide clinical practice in the community as well as in clinical trials. We focus on two comorbid disorders shown to influence outcome in part 1 of this study and in RCTs: borderline personality disorder (BPD) and major depressive disorder (MDD).[3] We report results for these two disorders separately, although they are to some degree overlapping. In the sample of patients with MDD, 36% also had BPD. In the sample of patients with BPD, 71% also had MDD.

Table 2 describes the interventions CBT clinicians tend to use with patients with and without BPD and with and without MDD. It reports the highest rated items from the CPPS-BN (i.e., the items endorsed on average as most descriptive of the treatment) for self-reported CBT therapists ($N = 54$) when describing patients with and without each disorder. As Table 2 shows, when working with non-BPD patients, CBT clinicians tend to use primarily CBT interventions. The same is true in working with patients without MDD. Indeed, the interventions clinicians endorsed closely match those outlined in the treatment manual, although CBT clinicians in the community appear to address personality and interpersonal issues: they report encouraging the patient to experience and express emotions, assert herself, and get her needs met in relationships, and they focus on maladaptive interpersonal patterns in patients with BN but without these co-occurring diagnoses. Of note, the rating for use of conjoint psychopharmacology made the cutoff for patients with BPD but not those with MDD, although subsequent analyses (Table 3) show trend-level mean differences in medication use between patients with MDD and without MDD, with psychopharmacology usage high across the entire sample. Items characteristic of the treatment of patients with BPD and those characteristic of patients with MDD show moderate overlap, which is expected due to the overlap in diagnoses reported above, but there are also some apparently meaningful differences.

When CBT therapists treat BN patients with BPD or MDD, they continue to use many CBT interventions, but they supplement them with an even wider range of interventions, including several that load on the psychodynamic factor. They help patients deal with emotions they are avoiding, identify maladaptive interpersonal problems, regulate intense emotions, deal with their anger, come to terms with past relationships, and deal with traumatic experiences, as well as problem-solve current crises and interpersonal situations and deal with impulsive and self-destructive behavior.[4] Thus, with BN patients both with and without comorbidity, CBT clinicians in the community seem responsive to the broader context of eating pathology, whether personality or comorbid Axis I pathology, as reflected in both treatment length (part 1 of this study) and the interventions they report using.

We next conducted independent samples t tests comparing self-described CBT therapists' ratings of psychosocial interventions used with patients with and without BPD, and with and without MDD. In both cases, out of 38 psychosocial interventions, significant differences or trends emerged for six items. (Because of the small Ns per cell, and the fact that this is the first study examining such relationships, we include trends here, although most of the findings reached conventional significance standards.) Table 3 shows that when working with BPD patients, CBT therapists rated the following interventions more highly (all of which seem suitable to the patient's pathology, but are not elaborated in the CBT manual for BN): helping the patient problem-solve crises, addressing traumatic experiences, addressing avoidance of topics or shifts in mood, regulating intense emotion, dealing with self-destructive impulses, and using conjoint psychopharmacology. When working with depressed patients, self-reported CBT therapists rated more highly the use of the following interventions: exploration of wishes, fantasies, and dreams; addressing traumatic experiences; use of the therapeutic relationship as a corrective emotional experience; and exploration of feelings about past relationships. Interestingly, in working with patients with comorbid depression, CBT therapists do not simply double up on cognitive interventions by supplementing the CBT BN manual with the CBT depression manual, but instead turn to more psychodynamic interventions, perhaps because the combination of depression and BN signals the presence of personality diatheses requiring attention. In working with comorbid MDD patients, CBT clinicians less often addressed sexuality (perhaps because of their depressed libido, which makes these issues less salient) and less often behaved in a didactic or teacher-like way (i.e., were less likely to act like CBT therapists treating depression). These findings suggest that CBT therapists make substantial adjustments—particularly by adding interventions not included in the manual—when treating polysymptomatic patients.[5]

TABLE 2. Highest-Rated Interventions Used by CBT Clinicians Treating Bulimic Patients With and Without BPD and MDD (3.9 or Above on 5-Point Scale)[a]

CPPS-BN item
Interventions rated highly in work with all groups of patients ($N = 52$)
Encouraged the patient to practice behaviors or coping strategies learned in therapy between sessions
Helped the patient develop strategies for eating appropriately, controlling impulses to binge, purge, fast
Suggested specific activities or tasks for the patient to attempt outside of session
Taught the patient specific techniques for coping with her symptoms
Encouraged the patient to become less self-critical or perfectionistic, or to "tone down" unrealistic expectations of herself
Provided the patient with information and facts about her to current symptoms, disorder, or treatment
Explained the rationale behind the therapeutic technique or approach to treatment
Helped the patient problem-solve current crises or difficult interpersonal situations
Challenged irrational or illogical conscious beliefs about food, diet, and eating
Encouraged the patient to assert herself or get her needs met in relationships
Identified maladaptive interpersonal patterns and the thoughts, feelings, and motives underlying them
Additional most descriptive items in work with nonborderline patients ($N = 41$)
Encouraged the patient to experience and express feelings in the session
Additional most descriptive items in work with borderline patients ($N = 11$)
Helped the patient think of other ways to respond when she was feeling impulsive or self-destructive
Addressed the patient's avoidance of important topics and shifts in mood
Helped the patient regulate intense emotions (e.g., anger, fear, etc.)
Focused on ways the patient deals with anger or aggression
Challenged irrational or illogical beliefs about issues other than food, diet, or eating
Established and maintained rules for therapeutic engagement (e.g., managing extra sessions, phone calls, boundaries, and safety issues)
Helped the patient come to terms with her relationships with and feelings about significant others from the past (e.g., mother, father)
Helped the patient deal with traumatic experiences
Used conjoint psychopharmacology
Additional most descriptive items in work with nondepressed patients ($N = 29$)
Actively initiated the topics of discussion and other therapeutic activities
Additional most descriptive items in work with depressed patients ($N = 23$)
Encouraged the patient to experience and express feelings in the session
Focused on ways the patient deals with anger or aggression
Helped the patient regulate intense emotions (e.g., anger, fear, etc.)
Helped the patient come to terms with her relationships and feelings about significant others from the past (e.g., mother, father)
Challenged irrational or illogical beliefs about issues other than food, diet, or eating
Helped the patient think of other ways to respond when she was feeling impulsive or self-destructive

[a]The sample of CBT clinicians ($N = 52$) included 48 psychologists and four psychiatrists.

Predicting Outcome in Treatments for BN in the Community Using Multiple Regression

One of the advantages of naturalistic treatment data, particularly when the sample shows substantial variation in the patients treated and interventions used, is that they allow us to test the relation among therapeutic outcome, patient, and treatment characteristics taken together. As we saw in part 1, numerous patient variables (co-occurring Axis I and personality pathology) showed significant relationships to outcome variables; however, the likely intercorrelations among the predictor variables render these results vulnerable to overinterpretation. Thus, in a final set of analyses, we used multiple regression to test the association among therapeutic outcome, Axis I, personality, and treatment variables. To maximize statistical power and reliability, we minimized the number of predictor variables and aggregated where possible, both in the criterion and predictor variables. To assess Axis I pathology relevant to outcome, we created an additive Axis I index, combining absent/present scores (coded 0/1) for the three diagnoses shown in part 1 to be consistently associated with poor outcome (MDD, substance use disorder, and panic disorder). To assess personality pathology, we used the dysregulation and constriction factor scores derived by PCA. To assess treatment variables, we included treatment length and

TABLE 3. Mean Differences in Intervention Ratings by CBT Clinicians Treating Bulimic Patients With and Without BPD and MDD (Non-BPD, *N* = 41; BPD, *N* = 11; Non-MDD, *N* = 29; MDD, *N* = 23)

		Mean	*SD*	*df*	*t*	*p*
BPD						
Helped the patient problem-solve current crises or difficult interpersonal situations	Non-BPD	4.01	0.94	50	−2.08	0.04*
	BPD	4.72	0.65			
Helped the patient deal with traumatic experiences	Non-BPD	2.73	1.45	49	−2.38	0.02*
	BPD	3.91	1.91			
Addressed the patient's avoidance of important topics and shifts in mood	Non-BPD	3.37	1.26	50	−2.41	0.02*
	BPD	4.36	1.03			
Helped patient think of other ways to respond when feeling impulsive or self-destructive	Non-BPD	3.78	1.31	22	−2.20	0.04*
	BPD	4.55	0.93			
Used conjoint psychopharmacology	Non-BPD	2.88	1.85	22	−2.12	0.05*
	BPD	3.91	1.30			
Helped the patient regulate intense emotions (e.g., anger, fear, etc.)	Non-BPD	3.61	1.28	20	−1.82	0.08
	BPD	4.27	1.01			
Taught the patient specific techniques for coping with her symptoms	Non-BPD	4.49	0.75	25	−1.76	0.09
	BPD	4.80	0.42			
MDD						
Encouraged discussion of the patient's wishes, fantasies, dreams, etc.	Non-MDD	2.41	1.18	49	−1.99	0.05*
	MDD	3.05	1.05			
Helped the patient deal with traumatic experiences	Non-MDD	2.62	1.54	49	−1.98	0.05*
	MDD	3.45	1.41			
Used the therapeutic relationship to offer the patient a different model for relationships than she had previously experienced	Non-MDD	2.83	1.34	50	−2.41	0.02*
	MDD	3.65	1.07			
Helped the patient come to terms with her relationships and feelings about significant others from the past	Non-MDD	3.17	1.28	50	−2.26	0.03*
	MDD	3.96	1.19			
Explored and addressed issues of sexuality	Non-MDD	3.45	1.27	50	2.07	0.04*
	MDD	2.74	1.18			
Used conjoint psychopharmacology	Non-MDD	2.72	1.79	50	−1.72	0.09
	MDD	3.56	1.70			
Interacted with the patient in a didactic or teacher-like way	Non-MDD	3.34	1.04	49	1.74	0.09
	MDD	2.86	0.89			

*$p \leq .05$.

the psychodynamic and cognitive-behavioral factor scores from the CPPS-BN. We entered the six variables into two multiple regression equations, one predicting global outcome (aggregated across four outcome ratings) and the other predicting ED outcome (aggregated across two ratings).

As can be seen from Table 4, global outcome was positively associated with treatment length and the psychodynamic treatment factor, and negatively associated with both forms of personality dysfunction (dysregulation and constriction). Axis I pathology was not associated with outcome with the other variables held constant. ED outcome was associated positively with treatment length and negatively with both forms of personality dysfunction. It was not, however, associated with any particular intervention style.

DISCUSSION

When we examined interventions practiced in the community using a scale that included common CBT and psychodynamic interventions as well as interventions from manuals specific to BN, we derived CBT and psychodynamic factors via factor analysis that distinguish approaches used by experienced clinicians in the community. The CBT factor included prototypical CBT interventions such as addressing cognitive distortions as well as specific interventions from the BN manual such as prescribing regular eating patterns. Although we cannot be confident that the implementation of the interventions in the community is the same as the implementation in clinical trials, the data suggest that CBT clinicians in the community do appear to be aware of, and attempt to use,

TABLE 4. Multiple Regression Analyses: Treatment Outcome ($df = 6,138$)[a]

Outcome variable	R	R^2	Stand. β	F (model) or t (β)	p
Global outcome	.53	.28		8.83	0.001
Axis I (MDD + SUD + panic disorder)			.01	.068	0.95
Dysregulation			−.38	−4.67	0.001
Constriction			−.30	−4.11	0.001
Treatment length			.29	3.67	0.001
Psychodynamic factor			.23	2.95	0.004
Cognitive-behavioral factor			.06	.75	0.46
ED outcome	.41	.17		4.65	0.001
Axis I (MDD + SUD + panic disorder)			−.08	−.89	0.37
Dysregulation			−.30	−3.39	0.001
Constriction			−.25	−3.16	0.002
Treatment length			.18	2.05	0.042
Psychodynamic factor			.11	1.33	0.19
Cognitive-behavioral factor			.08	1.03	0.30

[a]For these analyses, we replaced missing data with means to maximize power. Analyses without missing data yielded virtually identical estimates and significance values.

the kinds of interventions specified in the manual widely tested in RCTs. The psychodynamic factor included interventions aimed at exploring the patient's feelings, conflicts, impulses, significant relationships, defenses, and so forth. The theoretical coherence of the items with high loadings on each factor, their close correspondence with prior research on other disorders, their correlation with clinicians' self-reported theoretical orientation, their statistical independence from a theory-neutral third factor (adjunctive interventions), and their high internal consistencies provide initial data on reliability and validity, although of course additional research with independent observers is necessary.

Although self-reported CBT and psychodynamic clinicians show substantially different means on treatment factors, the relatively high mean scores for both groups on both factors suggest that most clinicians practice more integrative treatments than prescribed in manuals, which are designed to maximize differences between treatments (Westen, Novotny, and Thompson-Brenner, 2004a). Further, clinicians appear to tailor their treatments to patients' problems. Both dynamic and CBT clinicians report addressing common problems among women with EDs, such as perfectionism and underassertiveness, and CBT therapists substantially augment their therapeutic practices when working with BPD and MDD patients with EDs. CBT therapists significantly increase their use of one set of therapeutic interventions when treating BN patients with BPD—by helping to regulate intense emotion, respond to self-destructive feelings, address traumatic experience, and address avoidance of topics and shifts in mood—and another set when working with MDD patients—addressing traumatic experience, using the therapeutic relationship as a corrective emotional experience, and addressing feelings about past relationships. These observations support recent suggestions in the CBT community to add interventions targeting emotional regulation, interpersonal difficulties, clinical perfectionism, and low self-esteem to the original CBT manual (Fairburn, Cooper, and Shafran, 2003).

Analyses in part 1 of this report indicated that self-described psychodynamic and CBT clinicians report comparable rates of improvement and recovery, although CBT clinicians report gaining control over ED symptoms more rapidly. The data from part 2 suggest, in contrast, that across theoretical orientations, longer treatments and use of psychodynamic interventions predict global outcome, whereas use of CBT interventions does not. Examination of process items suggests that CBT interventions directly target ED symptoms and hence address them more efficiently. Psychodynamic interventions focus on a range of issues related to personality, emotional functioning, and interpersonal functioning that take longer to change but are associated with changes in those target domains. These data suggest the utility of testing staged treatment approaches focusing initially on eating behavior and gradually shifting to broader issues as the eating issues resolve, as well as treatments that integrate symptom-focused and personality-focused interventions from the outset. Such treatments would likely be more compatible than current manualized treatments with the increasing body of evidence showing that personality variables constitute diatheses for virtually all mood, anxiety, and EDs

(e.g., Brown and Barlow, 1992; Krueger, 2002) and hence should be a focus of treatment alongside symptoms (Westen et al., 2004a).

The difference between these findings and the widely accepted conclusion that CBT is more effective than psychodynamic therapy for BN is worthy of comment. As noted earlier, the treatment conditions cited in the RCT literature for BN using terms such as *psychodynamically inspired* bear little relation to psychodynamic psychotherapy ideal practices, or to the psychodynamic factor that emerged empirically here, which is, to our knowledge, the first empirical description of psychodynamic treatments for BN as practiced by experienced clinicians. The purportedly psychodynamic conditions used to date as controls in RCTs have also been too brief to expect the distinctive goal of psychodynamic therapies would be accomplished, namely characterological change or treatment of personality diatheses.

From a methodological point of view, correlational data from naturalistic studies, particularly when amenable to multiple regression, provide a way to address some of the potential blind spots of the literature on empirically supported therapies (for BN as well as other disorders), which has focused almost exclusively on brief, largely CBT therapies that can be tested in eight to 20 sessions (Westen et al., 2004a). We cannot draw conclusions about treatment of choice when we only examine one of the alternatives. The value of data such as these, flawed as they are in multiple respects (see Limitations and Potential Objections), is that they can aid in generating hypotheses about potential moderators and candidate intervention strategies to test in more controlled experimental settings. The obtained findings suggest that we should extend the range of interventions tested to include psychodynamic interventions widely practiced in the community, and should develop treatment strategies for addressing enduring personality dispositions toward emotional dysregulation and constriction, which appear to influence outcome above and beyond Axis I symptoms. The multiple regression analyses reported here also suggest that treatment length should not be a fixed variable set arbitrarily prior to testing a manual but should instead be varied parametrically (Westen et al, 2004b). We do not know if 69 sessions of CBT (the mean in this naturalistic sample) are more or less effective than 19 sessions, but we do know that most patients in RCTs are not well after 19 sessions, though many derive substantial benefit from what may be an inadequate dose of CBT (Thompson-Brenner et al., 2003).

Limitations and Potential Objections

We described the limitations of this study in detail in part 1 of this report. We summarize them here and add several limitations particular to part 2. The major limitations involve retrospective reports, by a single observer (the clinician), often involving new or adapted measures. Within these constraints, we attempted to minimize bias in diagnosis and outcome by providing structured diagnostic anchors where appropriate, testing for potential biases by theoretical orientation, aggregating variables to maximize reliability, and testing hypotheses (e.g., about composite variables such as dysregulated personality style) unfamiliar to clinicians and hence not readily biased by informant knowledge or expectancies. The fact that clinicians were willing to describe unsuccessful as well as successful treatments (e.g., half of the patients did not fully recover by termination) and reported using a range of interventions that crossed theoretical party lines, and that the data yielded findings that cut across party lines (e.g., that CBT worked more efficiently for treating ED symptoms, but that the use of psychodynamic interventions, across clinicians of both orientations, was associated with greater improvements in global functioning), does not support explanations of the findings based on clinician bias. Clearly, however, the next step is a large effectiveness study with multiple informants (e.g., patient, therapist, and external raters).

The clinician sample was limited to experienced psychologists and psychiatrists. Some diagnoses were of limited reliability due to the use of a checklist format to allow the maximum number of observations. In prior studies (e.g., Westen and Weinberger, 2004), we found that clinicians underdiagnose when using checklist format relative to the individual DSM-IV criteria. However, the patients whom they do assign a diagnosis using a checklist are almost uniformly also diagnosed using individual criteria. Thus, while we may have missed some patients who actually have BPD and MDD, the groups of patients cormobid for these disorders described in this report are likely accurately diagnosed. In this naturalistic study, we are unable to control for potential biases such as patient-clinician match, and it is possible that patients with more severe psychopathology seek out experienced or doctoral-level clinicians. However, analyses reported in part 1 of the study suggest that very few differences in patient comorbidity or other definable patient characteristics were identified in subgroups of the clinician sample defined by orientation or discipline, and no association was found in this sample between patient personality pathology and clinician years of experience. While our estimates of the prevalence of comorbid diagnoses are of uncertain reliability, possible sources of bias (underdiagnosis using a checklist, overrepresentation within this clinician sample, underdiagnosis due to exclusion of patients only attending one or two sessions, overdiagnosis due to sampling the last terminated patient) appear at least to be countervailing. As noted earlier, large effectiveness studies with multiple informants (e.g., patient, therapist, and external raters) are needed.

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END NOTES

[1]The manual's instructions in nondirection were presumably based on the psychodynamic concept of technical neutrality; however, we believe these directions comprise an exaggerated and stereotyped view of psychodynamic technique and are obviously particularly unproductive in the context of short-term treatment. Psychodynamic therapists do often allow patients to initiate the topic of discussion and refrain from expressing opinions before topics are fully explored (Blagys and Hilsenroth, 2000). Refusal on principle to answer any questions or to provide the patient with honest opinions or perspective, however, is not common practice, at least in contemporary psychodynamic psychotherapy. Such rigidity would create an untenable interpersonal situation that is likely to compromise the therapist-patient relationship, which is viewed as crucial to therapeutic change in dynamic treatments (e.g., the patient may, with justification, feel that therapist has another agenda other than her welfare that is mandating an obvious limitation in the treatment; Wachtel,

1993). Furthermore, technical neutrality is not recommended in short-term psychodynamic psychotherapy, which requires active intervention (Sifneos, 1981).

[2]The absence of studies testing genuine, well-operationalized psychodynamic treatments for BN unfortunately reflects a wider failure of many proponents of psychodynamic approaches to EDs to take a serious interest in testing them. However, we also argue that it reflects some genuine difficulty reconciling long-term psychodynamic psychotherapy to the constraints of RCT methodology. For a fuller discussion of these issues, see Westen et al., 2004a.

[3]Descriptive statistics concerning the degree to which clinicians reported their length of treatment and treatment interventions selected were affected by insurance considerations are reported in part 1 of this report. One-way ANOVAs comparing mean levels of dynamic intervention, cognitive-behavioral intervention, and pharmacological intervention showed no significant differences according to whether the clinician reported that the selection of treatment interventions had been affected by insurance. Independent samples *t* tests comparing the CBT and psychodynamic clinicians on their rating (1 = no, 2 = somewhat, 3 = yes) of whether the treatment length and interventions selected had been affected by insurance considerations also showed no significant differences.

[4]We recognize there are both cognitive-behavioral and psychodynamic versions of some of these interventions, though these items loaded together on the psychodynamic factor in this sample. Some items (e.g., deal with emotions they are avoiding, deal with their anger, come to terms with past relationships) are more characteristically dynamic (Blagys and Hilsenroth, 2000; Goldfried et al., 1998), while others (e.g., problem-solve current crises, deal with impulsive or self-destructive behavior) are less.

[5]Expected significant differences also emerged for the use of medication and hospitalization with these comorbid conditions, although these findings are not of particular interest here.