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Cognitive Behavioral Therapy and Bulimia Nervosa: Is It Better than other Treatments and Who Does It Work for?

Julie Trompeter, M.A.[1]

Evidence has shown cognitive-behavioral therapy (CBT) to be an efficacious treatment for patients with bulimia nervosa (Wilson, Fairburn, Agras, Walsh, & Kraemer, 2002). Although CBT is an evidenced-based treatment, there are still many issues that remain unanswered. One issue that remains is whether CBT is more effective than other psychotherapies or drug therapies for the treatment of bulimia nervosa (BN). Another issue is the limitations of researchers' understanding of the mechanisms through which CBT works and the patient characteristics that are compatible with this form of treatment. This paper will: 1) briefly explain how CBT conceptualizes BN and give a rough outline of the treatment plan; 2) present studies that investigate CBT in

1: Department of Psychology, The New School for Social Research, New York, USA.

Address correspondence to Julie Trompeter, tromj904@newschool.edu

comparison to other treatments and studies that examine patient characteristics that may mediate the outcome of CBT on BN; 3) provide an analysis of the strengths and weaknesses of these studies and; 4) express the author's opinion of the clinical application of CBT for patients with bulimia nervosa when considering the individual differences of the patients.

Cognitive-behavioral therapy for Bulimia Nervosa concentrates on both the cognitive distortions and behavioral abnormalities of patients with the disorder (Wilson & Fairburn, 1993). In other words, the goals of CBT are to reduce the behavioral symptoms of binging and purging and restructure the "abnormal attitudes" about body shape and weight (Wilson & Fairburn, 1993). According to this perspective, BN is maintained by the inability to cope with trigger events due to dysfunctional thoughts and feelings about weight and shape. This, in turn, leads to the symptoms of binging and purging which are diagnostic of the mental disorder (Wilson et al., 2002). There are three stages in this treatment within 19 to 20 sessions of therapy. Stage one focuses on educating the patient about the disorder and trying to replace dietary restraint with a more "normal" eating routine. Stage two highlights cognitive distortions that the patient might have toward body shape and the behaviors that may result due to these dysfunctional schemas. Stage three concentrates on maintenance of change and relapse prevention strategies (Wilson et al., 2002). Progress is exemplified by both discussion in therapy sessions and through continuous assessments, such as the Eating Disorder Examination and the patient's self monitoring journals (Wilson & Fairburn, 1993).

There has been a vast amount of research comparing the efficacy of CBT on Bulimia Nervosa and the efficacy of other forms of therapy. Thackwray, Smith, Bodfish, and Meyer's (1993) findings suggest that CBT is superior to behavior therapy (BT) in decreasing symptoms of patients diagnosed with BN. The

authors argue that pure behavioral interventions are not sufficient to maintain abstinence of binging and purging. It is proposed that CBT's focus on the patient's belief system and behaviors is essential to the success of treatment (Thackwray et al., 1993). The researchers compared CBT and BT with both behavioral and psychological outcome measures. The findings of this study suggest that although both CBT and Behavior Therapy reduced bulimic behaviors compared to the control, comparisons showed significant differences favoring CBT for long-term effects in reducing behavioral and psychological symptoms (Thackwray et al., 1993). Interestingly all three conditions, including the control, revealed significantly positive changes in binge-purging behavior at post-treatment. However, these positive changes seen with the control condition deteriorated at follow-up. In addition, while a significant percent of participants in the BT group were abstinent at post-treatment, a majority of the participants in this group recommenced binge-purging behavior by follow-up. Conversely, a large percent of participants in the CBT group remained abstinent at the 6 month follow-up. In addition, although CBT and BT both reduced depression scores at post-treatment compared to the control, CBT was the only group that differed significantly from control at follow-up (Thackwray et al., 1993).

Loeb, Labouvie,Walsh, Petkova, Liu, and Waternaux (1999) conducted a particularly interesting study comparing CBT with both the psychodynamically oriented supportive psychotherapy (SPT) and pharmacological treatments. This article focuses on the time-course of change for these treatments. According to the results, CBT produced more rapid improvements in these assessment measures than SPT. CBT produced 69% improvement in purging frequency by week three and also 76% improvement of binge eating frequency by post-treatment. The researchers also divided the patients who completed treatment into "rapid" and "slow" responders. Compared to SPT early responders, the "rapid" responders maintained their improvements throughout

treatment. Therefore, the authors concluded that their results provide evidence that CBT is more efficacious and faster in producing improvements in patients than SPT (Loeb et al., 1999). They do admit, however, that the difference between fast and slow responders does not provide enough evidence to determine when treatment is not working for a particular patient.

Wilson and colleagues (2002) investigated the possibility that interpersonal psychotherapy (IPT) and CBT may work through different mechanisms to alleviate symptoms of BN. It is thought that CBT works directly to alleviate the eating habits of patients with BN, while IPT works at improving the patients' interpersonal skills and self-esteem in order to change their eating habits. Consequently, the researchers hypothesize that, due to these differing mechanisms of action, in the CBT group eating habits should change before interpersonal functioning and self-esteem and the opposite should be observed in IPT (Wilson et al., 2002). The findings revealed that CBT contributed to more rapid results than IPT in helping the subjects with BN. There were no differences found in improvements of shape or weight concerns. Furthermore, the ratios of recovered patients who remained recovered at follow-up were similar for both CBT and IPT (Wilson et al., 2002).

Interestingly, while some may interpret these results as evidence that IPT "caught up" to CBT at follow-up, Wilson et al. (2002) argue that this is merely a case of a regression to the mean. In other words, perhaps the level of symptoms decreased in the IPT group at follow-up due to chance and not due to a delayed therapeutic effect. Moreover, the discussion suggests that the main finding of the study is that the rapid change in dietary restraint is the most important mediator for treatment outcome. Likewise, the absence of an interactive effect between mediator and treatment provides evidence against the "different mechanisms" hypothesis. According to this interpretation, IPT does not pro-

duce change in interpersonal skills and self-esteem before changing eating habits. And CBT does not produce change in eating habits before interpersonal skills and self-esteem (Wilson et al., 2002). Instead, it is argued that CBT is more effective than IPT in reducing dietary restraint overall because self-esteem and interpersonal function did not have any mediation effect over either IPT or CBT. Reduction in dietary restraint is implied to be the main concern when treating Bulimia Nervosa and a treatment must aim to modify this aspect of the disorder. The investigators, therefore, conclude that the rapid action of CBT to reduce dietary restraint must have some significant implications that make it more effective than other therapies and that these should be investigated in further research (Wilson et al., 2002).

Constantino, Arnow, Blasey, and Agras, (2005) developed a very different approach to examining the effects of IPT and CBT. This approach compares the therapeutic alliance in each therapy to the outcome after CBT and IPT. Since both IPT and CBT have three phases in their treatment plans, the therapeutic alliance was examined at each stage and compared to the outcome at post-treatment. The results revealed that early and middle alliance were associated with post-treatment outcome in CBT, while there is only an association between middle alliance and post-treatment outcome in IPT (Wilson et al., 2002). Much like Wilson et al.'s findings (2002), there were no significant differences found in the outcomes of the different therapies at post-treatment; however, the researchers of this study interpret their results much differently. Rather than treating this equality of outcomes as a mere regression to the mean these authors argue that the lack of association in the IPT group found between early alliance and post-treatment outcome is due to the different mechanisms of action that IPT uses compared to CBT (Wilson et al., 2002; Constantino et al., 2005) . The first phase of treatment in IPT focuses on understanding eating difficulties in terms of an interpersonal context. As a result, the therapeutic alliance may not be as important

for outcome at this stage compared to the middle stage of IPT. Unlike the Wilson et al. (2002) study, this study argues that IPT and CBT do differ in their mechanisms of action and this accounts for their similar, positive outcomes at post-treatment (Constantino et al., 2005).

An intriguing line of research investigates the issue of possible patient characteristics that may be suitable for CBT's approach to treating BN. Fairburn, Peveler, Jones, Hope and Doll (1993), for instance, examined several possible mediator variables such as history of anorexia nervosa, frequency of bulimic episodes, severity of dietary restraint, overall personality disturbance, severity of attitudinal disturbance, and level of self-esteem. The results revealed that only the level of self-esteem and the level of attitudinal disturbance significantly related to outcome. As predicted, patients with higher self-esteem had a better outcome than patients with lower self-esteem. The researchers proposed that this linear relationship between self-esteem and outcome may be evidence that self-esteem plays a significant role in the maintenance of bulimia nervosa (Fairburn et al., 1993). Contrary to the authors' predictions, only patients with the most severe attitudinal disturbances had the best outcome. This is very surprising because one would expect the patients who have severe attitudinal disturbances to have the worst prognosis. The results, instead, suggest that those with intermediate levels of attitudinal disturbances gained the least from CBT and had the worst prognosis (Fairburn et al., 1993). Moreover, of the patients who did improve, those with moderate attitudinal disturbance were more likely to relapse than those with severe attitudinal disturbances. The researchers did not discuss the possible reasons for this surprising finding, but did suggest that the degree of attitudinal disturbance, like self-esteem, is a factor that may maintain the disorder. It was also found that patients who had more severe personality disturbances were more likely to drop out or be withdrawn.

Another study by Mussel, Mitchell, Crosby, Fulkerson, Hoberman, and Romano (2000) also explored possible client variables which may predict outcome after CBT. The researchers state that although bulimic severity, perfectionism, and depression have been suggested to affect outcome of treatment for BN in other studies, the investigation of possible mediators such as the client's motivation and expectations for change have often been neglected. The results suggest that at pretreatment most participants expressed a strong commitment to treatment goals and desire to change eating behaviors; however, many also expressed that they felt it would be difficult to change these behaviors (Mussell et al., 2000). At the end of treatment, half of the participants that completed treatment had symptom remission. Participants with higher depression scores had higher dropout rates. Also, depression scores, along with vomiting frequency, predicted symptom remission. Perfectionism, however, did not predict outcome. These findings were the same at follow-up. Significantly, commitment to goals of treatment was positively correlated with symptom remission at end of treatment and at each follow-up point. The authors explain that this particular finding may evidence the importance of "readiness of change" in prediction outcome. They also express that understanding client variables and how they relate to prognosis in CBT outcome is useful in determining which clients might be more likely to succeed with this kind of treatment (Mussell et al., 2000).

There are several notable strengths and weaknesses in each of the studies mentioned. Particularly interesting is Thackwray and colleagues' (1993) comparison of CBT's and BT's success in improving bulimic symptoms. This is an important study because it specifically looks at whether CBT's efficacy is due to the cognitive aspect of the therapy. Behavior Therapy is similar to cognitive-behavioral therapy because it focuses on changing the behaviors of a disorder such as the binging and purging behaviors

in BN. It is the cognitive focus of CBT that differentiates this treatment from BT. Because behavior therapy is missing this cognitive factor in its approach to improving bulimic symptoms, it seems like a very logical treatment to compare to CBT. Also, the sample of patients that was used for this study was representative of the true population of BN patients (Thackwray et al., 1993). The fact that they included patients that had previously been treated for other disorders such as anorexia, borderline personality disorder, substance abuse, and conduct problems makes this sample representative of patients that might actually be observed in a clinical setting. Patients diagnosed with specific mental disorders often have other co-morbid disorders; therefore, it would be beneficial to examine whether certain treatments work for these kinds of patients as well as patients with only the target mental disorder under investigation.

Unlike Thackwray and his colleagues' study (1993), Loeb et al.'s research (1999) examined two therapies that appear to have very different approaches to treating patients with BN. Supportive psychotherapy is a psychodynamically oriented treatment and differs greatly from CBT. While SPT is a more nondirective treatment which focuses on self-exploration and understanding, CBT is more directive and focuses specifically on the distorted thoughts and harmful behaviors of the patient (Loeb et al., 1999). This is a stimulating comparison because of this extreme difference in orientation. Comparing two very different therapies for the treatment of BN is clinically useful because it may provide evidence of which focus is more useful for the treatment of BN. Furthermore, if one treatment is more efficacious than the other, then this may suggest that this specific treatment's conceptualization of BN is more accurate than the conceptualization of the less efficacious treatment. The results of this study suggest that patients in the CBT group responded more quickly and were less likely to relapse at follow-up than patients in the SPT group (Loeb et al., 1999). Thus, perhaps, CBT is better for treating BN

and has a more accurate conceptualization of BN. Also, the researchers' attempt to compare these two treatments to pharmacotherapy is admirable (Loeb et al., 1999). I think it is very helpful for patients and clinicians to see evidence for whether psychotherapy or pharmacotherapy is better at treating any psychological disorder. The most commendable aspect about this study is the focus on time course. Loeb et al. (1999) state that time-course may be a predictor of the usefulness of the therapy. For example, if a patient has not responded or improved in treatment within a given amount of time, then perhaps this therapy is not working and another form of treatment should be used. This time course variable can be used to determine whether a certain therapy is appropriate for a patient. Although there was not enough evidence of such a "cut off" point, it is still a very promising concept to examine.

Wilson and his colleagues (2002) and Constantino and his colleagues (2005) both compared IPT and CBT in very original and creative ways. Especially fascinating is Wilson and his colleagues' (2002) inspection of the possibility of IPT and CBT working through different mechanisms. This allows the likelihood that these therapies may both work to improve bulimic symptoms, but in different ways. Similarly, Constantino and his colleagues (2005) also looked at the possibility for different mechanisms of action of these two therapies; through the therapeutic alliance. The results of this study did reveal different trends in the therapeutic alliance at different stages of each therapy (Constantino et al., 2005). Patients reported better early therapeutic alliances in CBT than in IPT; however, both patients in IPT and CBT improved by the end of treatment. This may signify that this alliance is not as important for the early focus of IPT and, thus, IPT may work separately from CBT to improve BN.

A central concern of researchers and clinicians should be the patient. Matching a patient with the most appropriate and best

therapy for him or her should be a critical objective of the therapist. Fairburn and his colleagues (1993) and Mussel and his colleagues (2000) investigate possible client variables which may predict a positive outcome for BN patients in cognitive-behavioral therapy. One study found that higher self-esteem may be a predictor for better outcome of patients in CBT (Fairburn et al. 1993). This is important knowledge because if a bulimic patient has lower self-esteem, then perhaps CBT is not the most appropriate treatment for that patient to be enrolled in. The other study was appealing because it examined the motivation of the client with regards to client outcome (Mussel et al., 2000). This was particularly impressive because the authors draw a parallel between substance abuse research and their research on BN (Mussel et al., 2000). Other research has found that "readiness to change" may predict outcome for people with addictive behaviors (Mussel et al., 2000).

Although there are many strong points to each of these studies, there are also several weaknesses that must be discussed. Although the Loeb et al. (1999) study had great potential, it was particularly disappointing with the manner in which the pharmacological condition was treated. It is clear that the "pharmacological only" condition had to be excluded due to the immense drop out rates; however, the combined psychotherapy and pharmacological therapy group was completely dropped as well, without any explanation. The researchers did not analyze or discuss these conditions (Loeb et al., 1999).

Moreover, the interpretation of the results of the Loeb et al. (2000) study can be disputed. For example, it is argued that CBT produces quicker improvement in patients and this implies that CBT works better than SPT. The logic of this conclusion is due to the results that suggest that the early responders in CBT remained improved throughout the course of treatment compared to the early responders' improvement in the SPT condition, which

deteriorated by the end of treatment. There is a problem with this logic because it does not take into account the differences of focus of the two therapies. SPT is a psychodynamically oriented, nondirective therapy that focuses on self-exploration, while CBT is directive therapy focusing on cognitions and behaviors. It may be that SPT works on self-understanding first and then this self-understanding will lead to a delayed improvement in bulimic symptoms. To clarify, it is possible that early response is a good indicator for CBT, but not for SPT. Perhaps "slow" responses mean different things for different treatments. "Slow" response may be a bad prognosis for CBT, but could be a good prognosis for SPT. Psychodynamically oriented treatments are much different than other forms of therapy; therefore, this should be taken into account when comparing such therapy to other treatments.

Wilson and his colleagues (2002) also made some problematic interpretations of their results. Similar to Loeb and his colleagues (1999), it is implied that CBT is more efficacious than IPT because it produces faster results. The problem with this interpretation is that the findings also revealed that there were no differences in the ratios of patients who remained in remission at follow-up. Despite these results, the authors still concluded that CBT is more efficacious than IPT (Wilson et al., 2002).

In addition to specific weaknesses, there are general weaknesses to the research investigating the effect of CBT on patients with BN. For example, with a few exceptions, most of the research mentioned in this paper included controlled experiments that had specific exclusion criteria for the subjects participating in these studies (Thackwray et al., 1993). One study excluded BN patients who also had anorexia nervosa, were taking psychotropic meds, and had any history of psychosis (Constantino et al., 2005). Another study did not have any patients with Axis II personality disorders (Loeb et al., 1999). Although a controlled design is

desirable in research, it is difficult to apply to the real world. In a true clinical setting, many patients with BN have co-morbid mental disorders such as schizophrenia and borderline personality disorder; therefore the lack of representation of these kinds of patients makes it difficult to determine whether CBT is more effective than other psychotherapies.

In conclusion, the vast research investigating cognitive-behavioral therapy and bulimia nervosa has shed light on the efficacy of this treatment and the client variables that may mediate its successful outcomes. Nonetheless, further investigation is necessary due to the following issues: 1) the contradiction of findings comparing CBT to other psychotherapies; 2) the questionable interpretations of the results of these various studies and; 3) the lack of clinically significant effects in research including subjects with co-morbid mental disorders and patients with more severe bulimic symptoms. CBT is a treatment that can potentially improve the quality of life of patients with BN. The apparent "rapid" improvements of patients with BN produced by CBT and its useful integration of cognitions and behaviors make this form of treatment enticing (Loeb et al., 1999; Thackwray et al., 1993). However, a better understanding of the kinds of patients that this treatment is appropriate for must be pursued.

References

Constantino, M. J., Arnow, B. A., Blasey, C., & Agras, W. S. (2005). The association between patient characteristics and the therapeutic alliance in cognitive-behavioral and interpersonal therapy for bulimia nervosa. *Journal of Clinical Psychology, 73,* 203-211.

Fairburn, C. G., Peveler, R. C., Jones, R., Hope, R. A., & Doll, H. A. (1993). Predictors of 12-month outcome in bulimia nervosa and the influence of attitudes to shape and weight. *Journal of Consulting and Clinical Psychology, 61,* 696-698.

Loeb, K. L., Labouvie, E., Walsh, B. T., Petkova, E. L., & Waternaux, C. (1999). Psychological versus pharmacological treatments of bulimia nervosa: Predictors and processes of change. *Journal of Consulting and Clinical Psychology, 67,* 451-459.

Mussell, M. P., Fulkerson, J. A., Mitchell, J. E., Crosby, R. D., Hoberman, H. M., & Romano, J. L. (2000). Commitment to treatment goals in prediction of group cognitive-behavioral therapy treatment outcome for women with bulimia nervosa. *Journal of Consulting and Clinical Psychology, 68,* 432-437.

Thackwray, D. E., Smith, M. C., Bodfish, J. W., & Meyers, A. W. (1993). A comparison of behavioral and cognitive-behavioral interventions for bulimia nervosa. *Journal of Consulting and Clinical Psychology, 61,* 639-645.

Wilson, G. T., & Fairburn, C. G. (1993). Cognitive treatments for eating disorders. *Journal of Consulting and Clinical Psychology, 61,* 261-269.

Wilson, G. T., Fairburn, C. G., Agras, W. S., Walsh, B. T., & Kraemer, H. (2002). Cognitive-behavioral therapy for bulimia nervosa: Time course and mechanisms of change. *Journal of Consulting and Clinical Psychology, 70,* 267-274.