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Cognitive Behavioral Therapy for Bulimia Nervosa

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Cognitive–behavioral therapy (CBT) is a first-line psychotherapeutic treatment for bulimia nervosa (BN). This article outlines three specific interventions—introducing and using the CBT model of BN, self-monitoring of eating and related experiences, and psychoeducation regarding various aspects of BN—representative of CBT overall but unique in their application to individuals with BN. The theoretical basis and supporting research relevant to each technique are highlighted. Clinical vignettes are provided to illustrate how these interventions might be integrated into the psychotherapy.

Keywords: cognitive–behavioral therapy, bulimia nervosa, eating disorders, self-monitoring, psychoeducation

Cognitive–behavioral therapy (CBT) for bulimia nervosa (BN) was developed primarily by Fairburn and colleagues based on the principles of cognitive therapy (Beck, Rush, Shaw, & Emery, 1979), relapse prevention (Marlatt & Gordon, 1985), and established behavioral techniques such as stimulus control, selective reinforcement of desirable behaviors, and graded exposure. The initial manualized version (Fairburn, Marcus, & Wilson, 1993), used widely for 2 decades, has given way more recently to an elaborated version entitled enhanced CBT, or CBT-E, that may be delivered in a focused or broad form, the latter designed for patients with particular problems in the areas of self-esteem, perfectionism, or interpersonal functioning (Fairburn, 2008).

CBT for BN generally consists of 20 sessions delivered over 5–6 months with three distinct phases: (1) an initial phase (2 × /week sessions × 4 weeks) focused on rapid symptomatic improvement; (2) a middle phase (1 × /week sessions × 12 weeks) tackling dietary beliefs and practices, including avoidance of "forbidden" foods, as well as attitudes toward shape and weight that underlie the disorder; and (3) a final phase (1 × /1–2 weeks sessions × 4–8 weeks) that emphasizes continued improvement after termination and relapse prevention. Therapists using CBT for BN use many standard cognitive and behavioral techniques used for other psychological and behavioral disorders, such as cognitive restructuring, systematic problem-solving, stepwise engagement in anxiety-provoking activities, and development of self-efficacy through experimentation and debriefing. For the purposes of this article, we selected three interventions that we believe are representative of CBT overall but also illustrate some of the unique features of CBT with this patient population. All three of these interventions—introducing and using the CBT model of BN, self-monitoring of eating and related experiences, and psychoeducation regarding various aspects of BN—are begun during the initial sessions of CBT but are carried throughout the treatment, existing in some form in every session. Patients who are successful in using CBT to treat their BN typically carry these interventions with them as they transition to the post-treatment phase of continued improvement and long-term self-management. For each intervention, after the theoretical overview, fictionalized clinical vignettes based on the authors' experience are provided to illustrate typical interactions within a session.

CBT Model

Theoretical Basis

The CBT model of BN emphasizes factors that perpetuate the illness, rather than those that account for the onset of the disorder. The central principle is that eating disorder symptoms are maintained by the interaction between cognitive disturbances (e.g., preoccupation with shape, weight, and eating) and behavioral disturbances (e.g., rigid dietary rules, binge eating, purging) that impact eating and weight control (Fairburn, 2008; Fairburn et al., 1993).

The original CBT model for BN is illustrated in Fairburn and colleagues' treatment manual (1993). The model may be developed with the patient in diagram, or in narrative form, as used herein. An overreliance on control over shape, weight, and/or eating as the central or even sole determinant of self-worth, paired with social pressures to be thin and to eat sparingly, is theorized to be a conduit to the implementation of rigid dietary rules (Polivy & Herman, 1993). Dietary restriction predisposes individuals to experience binge eating episodes, which are defined by a loss of control over eating and may be characterized by feelings of guilt associated with the violation of dietary rules. Inappropriate compensatory behaviors, such as self-induced vomiting, laxative misuse, or overexercise, are relied on to counteract the effects of binge eating. These weight control behaviors instead promote subsequent

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binge eating, by disinhibiting further eating once the decision to purge is made, by disrupting normative satiety cues, or by creating distress after the fact that leads to further disinhibition. Moreover, episodes of binge eating and purging commonly result in a renewed commitment to limit caloric intake, thus promoting a pattern of restriction and binge eating. The binge–purge cycle in turn causes distress and reinforces low self-esteem, increasing the likelihood of continued cognitive distortions about shape and weight (Fairburn et al., 1993). An extended transdiagnostic CBT of eating disorders, including BN, also acknowledges that difficulty tolerating negative mood states, problems in interpersonal relationships, underlying low self-esteem, and marked perfectionism are likely to perpetuate the cycle of illness in certain individuals (Fairburn, 2008).

After the general formulation of the eating disorder is explicitly reviewed with the patient at the outset of treatment, the therapist and patient collaborate to adapt it as needed to better fit the individual's narrative. It then becomes a central focus of treatment that is referred to throughout. Explicitly constructing a patient-specific CBT model serves to engage the patient, distance him or her from the problem, foster curiosity and understanding about the bidirectional relationship of symptoms, convey the idea that eating problems are complex but can be broken down into more manageable pieces, and provide a roadmap as to what will be focused on in therapy (and why) (Fairburn, Cooper, Shafran, & Wilson, 2008). It also serves as a platform to begin the process of psychoeducation. When reviewing the completed formulation, the therapist and patient can begin to discuss the centrality of dietary restraint in perpetuating aberrant eating behavior and the ineffectiveness of purging behaviors in controlling weight or quelling overconcern about shape and weight. This creates a rationale for targeting aspects of the illness that the patient may experience as ego-syntonic, such as dietary restriction and concern with shape and weight, as well as those that are more ego-dystonic, such as binge eating and purging. The model is also referred back to throughout treatment, as illustrated in the following vignette.

Clinical Vignette

Scene: CBT session number 10—patient is eating in a more regular pattern and is now discussing the rationale for beginning to include "forbidden foods" with the therapist.

Therapist: Now that you've been eating meals and snacks regularly, how would you feel about doing some experiments with challenging foods, like pasta or ice cream.

Patient: But those are foods I used to binge on. Wouldn't it be safer just to stay with the foods I'm comfortable with right now?

T: What is it that scares you about those foods?

P: I'm afraid that either I would binge and purge or that I would gain weight if I kept them down.

T: Let's take a look back at the CBT model that we created in our very first session. Is there anything that you remember about that model that would be relevant to this challenge?

P: Well, I see here [looking at copy of personalized model of illness]*, and I remember that we talked about the link between rigid dietary rules and bingeing and purging.*

T: Right. How do those things connect?

P: We said that such strict rules eventually catch up with me because I break them and then go to the other extreme and the bingeing feels even more out of control. We said that I need to learn how to have flexible guidelines for my eating instead of rigid rules.

T: Exactly. What would be a guideline?

P: I guess it would be okay to eat pasta or ice cream if I only ate a little.

T: Right, and actually, eating a little on a regular basis helps you not to overdo on any one occasion.

P: But I'm really afraid that even with a little bit, I'd gain weight.

T: Can you see how that worry relates to the model?

P: Yes. I see that being overly concerned with my weight is what makes me think I need to have such rigid rules in the first place.

T: Right. and the only way to counter that is to do the experiment. Are you ready?

Supporting Research

Randomized controlled trials of a manualized CBT for BN that is based on this model support its overall efficacy in symptom reduction and show it to be superior to other short-term psychological treatments (Wilson, Fairburn, Agras, Walsh, & Kraemer, 2002) and to antidepressant medications (Wilson, Grilo, & Vitousek, 2007) for achieving abstinence from bulimic symptoms. Given the efficacy of the treatment, investigators have attempted to validate the underlying conceptual model. Whereas studies of individuals with and without BN more heavily favor self-esteem and overvaluation of shape and weight as key components of the formulation (Byrne & McLean, 2002; Schnitzler, von Ranson, & Wallace, 2012), prospective research with those meeting criteria for BN indicate that overvaluation of shape and weight predicts change in dietary restraint, which in turn predicts change in frequency of binge eating (Fairburn et al., 2003).

More recent studies have provided support for additional maintaining factors, including mood intolerance, core low self-esteem, and interpersonal problems (Tasca et al., 2011), negative affect (Stice, 2001), thin-ideal internalization, and impulsiveness (Schnitzler et al., 2012). These findings support the potential utility of personalizing the original formulation with a patient to identify additional treatment targets (e.g., affect tolerance, shape/weight comparisons) that both help to maintain disordered eating and merit treatment in their own right.

Treatment studies have yielded data that further support the theoretical model. The reduction in dietary restraint achieved by CBT has been shown to partly mediate the intervention's efficacy in eliminating binge eating and purging (Wilson et al., 2002). This is consistent with the CBT formulation's emphasis on the role of rule-bound eating in perpetuating illness. The effects of CBT for BN are also evident in improvements in general psychopathology, including depressive symptoms, self-esteem, and social functioning (Chen et al., 2003), thus supporting the inclusion of these constructs in the model of illness.

Taken together, extant data clearly support the CBT formulation of BN. The evidence base for the conceptualization and approach to treatment can help instill hope and provide a roadmap for recovery to individuals suffering from the bulimic cycle.

Self-Monitoring

Theoretical Basis

Self-monitoring refers to the routine collection of information related to target symptoms by a patient in his or her naturalistic environment. The purpose of self-monitoring is to enhance awareness of patterns and the occurrence of relevant behaviors, decrease the automaticity of actions, and provide a record that will be relevant to the development of incremental change toward treatment goals (Korotitsch & Nelson-Gray, 1999), including the progressive reduction in anxiety that results when once-forbidden eating patterns become routine.

In CBT for BN, self-monitoring takes on a relatively standardized format. It consists of daily "real-time" recording of eating and purging behavior, thoughts, feelings, and relevant events (for sample forms see p. 58, Fairburn, 2008). Patients are expected to monitor food intake, but are encouraged to do so in terms of approximation rather than in precise measurements (i.e., calories, grams) that might further promote restrictive or rule-bound eating (Wilson & Vitousek, 1999).

At the beginning of treatment, the records are used to further explicate the CBT model of illness as it plays out for the individual (e.g., adherence to particular dietary rules, emotional "triggers" for aberrant eating and purging, negative preoccupying thoughts about weight). Next, self-monitoring becomes a catalyst for change. The emphasis shifts to the patient's eating habits, with the goal of behavior modification, including normalizing the eating pattern (i.e., three meals plus approximately two planned snacks daily) and enhancing the variety of foods eaten. Patient and therapist agree on appropriate "experiments" to challenge patients' assumptions regarding the consequences of more normal eating, thus undermining food avoidance and systematically exposing patients to feared "forbidden foods" when feared uncontrolled weight gain is documented not to occur.

Self-monitoring records can be also be used to capture problematic behaviors, such as hypervigilant body-checking or excessive exercise; document their emotional, cognitive, and behavioral effects; and ultimately modify them. Finally, negative automatic thoughts and moods are addressed, particularly in relation to any lapses. Self-monitoring is discontinued toward the end of treatment, after an individual has experienced a significant period of abstinence from binge eating and purging while maintaining a regular eating pattern. However, it remains a central relapse prevention tool meant to be revisited as needed in anticipation of high-risk situations or in light of any lapses that occur.

Clinical Vignette

Scene: CBT session number 15—patient and therapist are reviewing self-monitoring records and analyzing recent urges to binge eat and purge.

Patient: I'm glad we decided last time that I should continue to closely monitor my eating on weekends. This weekend was rough.

Therapist: How so? Let's have a look at the records.

P: Well, Saturday morning I was doing fine. I went out to brunch with Dana. I had an omelet. Oh and that's right, I wrote down here that I felt a little bad that she had a salad.

T: What about that made you feel bad?

P: I guess I should know better at this point, but somehow I still feel like if I'm not the healthiest eater at the table, then I'm being a pig or that I'm out of control.

T: Then what happened?

P: Well, dinner was really a close call. I was pretty stressed out, even before I started, so having a burger may not have been the best choice. If I'd been by myself, I'm pretty sure that I would have purged.

T: So having somebody with you really helped you. What else could we learn from this sequence of events?

P: I guess I didn't realize, but my experience at brunch set me up for problems later on.

T: How might you have handled brunch differently?

P: Maybe I could have checked in with myself and done a thought record.

T: Which thought would you have chosen?

P: The thought that just because Dana ate a salad, that my eating an omelet makes me a pig. Even just saying that makes me realize how irrational that is. I know that an omelet is fine and it doesn't matter what Dana eats.

T: Great. Your self-monitoring really helped us to crack the case. Maybe the challenge for next time is to question your automatic thoughts in the moment. Let's try that a little bit more together now, so you'll be prepared.

Supporting Research

Findings from studies of self-monitoring in BN support the CBT formulation of the illness. The collective body of literature, for example, has demonstrated that aberrant eating episodes are typically preceded by negative emotional states, and that those with BN experience more fluctuations in mood and negative affect than their healthy counterparts (Wilson & Vitousek, 1999). In addition, records of those with BN have yielded a fairly consistent pattern of late-day binge eating episodes that occur while alone and at home (Wilson & Vitousek, 1999).

Treatment outcome research has shown that when CBT for BN works, it works quickly, commonly achieving substantial therapeutic effect within the first month of sessions (Wilson et al., 1999, 2002). The rapid impact on symptoms may, in part, be ascribed to the early introduction of self-monitoring (Wilson, 1999; Wilson & Vitousek, 1999). Dismantling studies evaluating the additive effects of different components of CBT for BN suggest the effectiveness of self-monitoring depends on the therapeutic procedures used during the review of records (Agras, Schneider, Arnow, Raeburn, & Telch, 1989; Kirkley, Schneider, Agras, & Bachman, 1985). Using daily records as a platform for behavior change experiments is essential, comparing favorably with the use of nondirective and nonspecific review of self-monitoring, in effecting reduction in or abstinence from binge eating and purging (Agras et al., 1989).

Because the literature clearly favors self-monitoring as a cornerstone of CBT for BN, researchers have become interested in using advances in technology to enhance its use as a tool for behavior change (e.g., Rodgers et al., 2005; Shapiro et al., 2008, 2010). Preliminary data from feasibility research suggest that the use of text-messaging, for example, in the treatment of BN may enhance adherence to and accuracy of self-monitoring (Shapiro et

al., 2010). Clinicians and patients may therefore want to think together about how to creatively approach self-monitoring (e.g., using applications on smartphones) so that it remains a viable aspect of treatment.

Psychoeducation

Theoretical Basis

Psychoeducation in CBT for BN covers topics including the deleterious effects of purging (and its ineffectiveness as a method of weight control), normative fluctuations in weight, healthy weight ranges (i.e., their derivation and significance from a medical perspective), energy regulation and weight change, and regular eating. Because individuals with eating disorders may be simultaneously overinformed and misinformed in these areas (Fairburn et al., 2008), psychoeducation is a critical component of the treatment approach, and it is important that the clinician be well-versed.

The most common educational points made within a course of CBT for BN are: (1) 3,500 kcal *in excess* of what one needs to maintain his or her body weight are required to gain one additional pound; (2) weight typically fluctuates within an approximately five-pound range and thus weight trends are more important than fluctuations; (3) on average, self-induced vomiting removes 50% of what had been ingested; (4) laxatives cause dehydration, not weight loss; and (5) lapses in behavior are expected and do not indicate failure.

Psychoeducation regarding the risks of purging behaviors or the particulars of regular eating is provided in the form of informational handouts assigned as take-home reading that is then reviewed in session. Other topics are covered primarily during sessions, either as discrete agenda items or in relation to specific erroneous beliefs that may become apparent in the review of self-monitoring records.

Clinical Vignette

Scene: CBT session number 3—patient and therapist are reviewing food records.

Therapist: So here again we see that the binge took place after you hadn't eaten anything for several hours.

Patient: Yeah, I was really hungry and I started eating cookies, but I know that's just going to make me gain weight, so I had to get rid of it.

T: And then it turned into a whole binge episode.

P: Yeah, because once I had something as fattening as the cookies, I knew I would get rid of everything, so I just let myself go.

T: OK. Let's look at that idea of "getting rid of everything." What do you know about what happens when you vomit after a large binge?

P: Well, I know it's bad for my stomach and it makes my throat hurt but it's the only way to get rid of the calories. I'm sure I don't get everything up, if that's what you mean, but I get most of it.

T: What percentage of the calories do you think you get rid of when you vomit?

P: I think about 90%. I usually rinse a couple of times with water, and vomit as much as I can.

T: That's what most people think, but the reality might surprise you. Scientists carried out studies some years ago in which people who had BN binged and vomited in a laboratory. The scientists analyzed what came up in order to determine its caloric content, which they can do very precisely. It turns out that the amount that came back up was quite variable, but averaged out to about half.

P: Well maybe, but I keep vomiting until I see the first foods that I ate come up.

T: Actually, the participants in the study were doing the same things that you do, like checking for the first foods or rinsing to try to get all the food out. It turns out that it's just not possible to get rid of all the food—your body begins to move the food out of the stomach and digesting it as soon as you start eating.

P: Wow, you mean that with all the food I binge on, I'm keeping half of it? That's really scary.

T: That's part of why this is a behavior that does not really help people control their weight. But there's also some good news. If you're keeping down half of the calories in your binges and maintaining your weight, that means that you will maintain your weight on a higher number of calories than you thought. So if you stop binge eating and purging, you have a lot of calories to redistribute into regular planned meals and snacks. That's why most people don't gain weight when they stop their bulimia and begin to eat regularly. If you are willing to start to do this experiment, I bet that's what we will see for you too. But I know it's scary until you experience it for yourself.

Supporting Research

To date, no studies have been done to look at specific effects of the psychoeducational components of CBT for BN. However, psychoeducation has frequently been conceptualized as a necessary, but not sufficient, element of psychotherapeutic intervention for a variety of psychiatric illnesses (Colom & Lam, 2005; Colom & Vieta, 2004; Segredou et al., 2012; Xia, Merinder, & Belgamwar, 2011), including eating disorders (Davis, Olmsted, Rockert, Marques, & Dolhanty, 1997; Geist, Heinmaa, Stephens, Davis, & Katzman, 2000). In the treatment of BN, providing education on the aforementioned topics is critical in engaging and empowering the patient in the other essential aspects of the therapy, such as a regular eating pattern and increased variability in food choices, and enhancing his or her ability to challenge cognitive distortions.

Notably, all of the information provided to patients is well-grounded in biology and human physiology. At times, research that specifically supports a particular educational point may be profitably shared with the patient. For example, the study of Kaye, Weltzin, Hsu, McConaha, and Bolton (1993) regarding the inefficiency of self-induced vomiting is often eye-opening for patients who believe that they are getting rid of all calories in a binge meal and therefore maintain their weight on low daily intake. In addition, there are data to support the normative fluctuations of weight over time in those maintaining a stable weight (Fairburn, 2008, pp. 63–65). This can help patients understand the rationale for not interpreting a single weight reading as a meaningful trend.

Conclusion

As is hopefully now evident, CBT offers an approach that is conducive to the targeting of the symptoms of BN. Its focus on the

here and now, enhanced awareness of behavioral patterns and related cognitions, problem-solving, and between-session behavioral experiments afford individuals with BN tools to carry forward into recovery after the formal psychotherapy has ended. To date, data suggest that 30% to 50% of individuals who receive CBT for BN are fully abstinent from binge eating and purging behaviors by conclusion of the treatment (Wilson et al., 2007). The effects of CBT for BN are evident not only in improvements in binge eating and purging, but also for general psychopathology, including depressive symptoms, self-esteem, and social functioning (e.g., Chen et al., 2003). Moreover, improvement is often sustained at 1-year follow-up (Wilson et al., 2007).

However, although a large majority of patients improve substantially with a time-limited course of CBT, a significant number do not achieve binge–purge remission (Wilson et al., 2007). Thus, medication treatment and other forms of psychotherapy such as interpersonal therapy or dialectical behavior therapy have additionally been found effective and may be appropriate for some patients. Self-help and guided self-help forms of CBT for BN have also been developed and are helpful for some (Wilson & Zandberg, 2012). Unfortunately, few factors that predict differential response to particular treatments have been identified. Until these factors are clarified, CBT remains a first-line treatment for individuals with BN.

References

Agras, W. S., Schneider, J. A., Arnow, B., Raeburn, S. D., & Telch, C. F. (1989). Cognitive-behavioral and response-prevention treatments for bulimia nervosa. *Journal of Consulting and Clinical Psychology, 57,* 215–221. doi:10.1037/0022-006X.57.2.215

Beck, A. T., Rush, A. J., Shaw, B. R., & Emery, G. (1979). *Cognitive therapy for depression*. New York: Guilford Press.

Byrne, S. M., & McLean, N. J. (2002). The cognitive-behavioral model of bulimia nervosa: A direct evaluation. *International Journal of Eating Disorders, 31,* 17–31. doi:10.1002/eat.10002

Chen, E., Touyz, S. W., Beumont, P. J., Fairburn, C. G., Griffiths, R., Butow, P., . . . Basten, C. (2003). Comparison of group and individual cognitive-behavioral therapy for patients with bulimia nervosa. *International Journal of Eating Disorders, 33,* 241–254; discussion 255–246.

Colom, F., & Lam, D. (2005). Psychoeducation: Improving outcomes in bipolar disorder. *European Psychiatry, 20,* 359–364. doi:10.1016/j.eurpsy.2005.06.002

Colom, F., & Vieta, E. (2004). Improving the outcome of bipolar disorder through non-pharmacological strategies: The role of psychoeducation. *Bipolar Disorders, 6,* 480–486. doi:10.1111/j.1399-5618.2004.00136.x

Davis, R., Olmsted, M., Rockert, W., Marques, T., & Dolhanty, J. (1997). Group psychoeducation for bulimia nervosa with and without additional psychotherapy process sessions. *International Journal of Eating Disorders, 22,* 25–34. doi:10.1002/(SICI)1098-108X(199707)22:1<25::AID-EAT3>3.0.CO;2-4

Fairburn, C. G. (2008). *Cognitive behavior therapy and eating disorders*. New York: Guilford Press.

Fairburn, C. G., Cooper, Z., Shafran, R., & Wilson, G. T. (2008). Eating disorders: A transdiagnostic protocol. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (4th ed., pp. 578–614). New York: Guilford Press.

Fairburn, C. G., Marcus, M. D., & Wilson, G. T. (1993). Cognitive-behavioral therapy for binge eating and bulimia nervosa: A comprehensive treatment manual. In C. G. Fairburn & G. T. Wilson (Eds.), *Binge eating: Nature, assessment, and treatment* (pp. 361–404). New York: Guilford Press.

Fairburn, C. G., Stice, E., Cooper, Z., Doll, H. A., Norman, P. A., & O'Connor, M. E. (2003). Understanding persistence in bulimia nervosa: A 5-year naturalistic study. *Journal of Consulting and Clinical Psychology, 71,* 103–109. doi:10.1037/0022-006X.71.1.103

Geist, R., Heinmaa, M., Stephens, D., Davis, R., & Katzman, D. K. (2000). Comparison of family therapy and family group psychoeducation in adolescents with anorexia nervosa. *The Canadian Journal of Psychiatry, 45,* 173–178.

Kaye, W. H., Weltzin, T. E., Hsu, L. K., McConaha, C. W., & Bolton, B. (1993). Amount of calories retained after binge eating and vomiting. *The American Journal of Psychiatry, 150,* 969–971.

Kirkley, B. G., Schneider, J. A., Agras, W. S., & Bachman, J. A. (1985). Comparison of two group treatments for bulimia. *Journal of Consulting and Clinical Psychology, 53,* 43–48. doi:10.1037/0022-006X.53.1.43

Korotitsch, W. J., & Nelson-Gray, R. O. (1999). An overview of self-monitoring research in assessment and treatment. *Psychological Assessment, 11,* 415–425. doi:10.1037/1040-3590.11.4.415

Marlatt, G. A., & Gordon, J. R. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford Press.

Polivy, J., & Herman, C. P. (1993). Etiology of binge eating: Psychological mechanisms. In C. G. Fairburn & G. T. Wilson (Eds.), *Binge eating: Nature, assessment and treatment* (pp. 173–205). New York: Guilford Press.

Rodgers, A., Corbett, T., Bramley, D., Riddell, T., Wills, M., Lin, R. B., & Jones, M. (2005). Do u smoke after txt? Results of a randomised trial of smoking cessation using mobile phone text messaging. *Tobacco Control, 14,* 255–261. doi:10.1136/tc.2005.011577

Schnitzler, C. E., von Ranson, K. M., & Wallace, L. M. (2012). Adding thin-ideal internalization and impulsiveness to the cognitive-behavioral model of bulimic symptoms. *Eating Behaviors, 13,* 219–225. doi:10.1016/j.eatbeh.2012.02.007

Segredou, I., Xenitidis, K., Panagiotopoulou, M., Bochtsou, V., Antoniadou, O., & Livaditis, M. (2012). Group psychosocial interventions for adults with schizophrenia and bipolar illness: The evidence base in the light of publications between 1986 and 2006. *International Journal of Social Psychiatry, 58,* 229–238. doi:10.1177/0020764010390429

Shapiro, J. R., Bauer, S., Andrews, E., Pisetsky, E., Bulik-Sullivan, B., Hamer, R. M., & Bulik, C. M. (2010). Mobile therapy: Use of text-messaging in the treatment of bulimia nervosa. *International Journal of Eating Disorders, 43,* 513–519. doi:10.1002/eat.20744

Shapiro, J. R., Bauer, S., Hamer, R. M., Kordy, H., Ward, D., & Bulik, C. M. (2008). Use of text messaging for monitoring sugar-sweetened beverages, physical activity, and screen time in children: A pilot study. *Journal of Nutrition, Education, and Behavior, 40,* 385–391. doi:10.1016/j.jneb.2007.09.014

Stice, E. (2001). A prospective test of the dual-pathway model of bulimic pathology: Mediating effects of dieting and negative affect. *Journal of Abnormal Psychology, 110,* 124–135. doi:10.1037/0021-843X.110.1.124

Tasca, G. A., Presniak, M. D., Demidenko, N., Balfour, L., Krysanski, V., Trinneer, A., & Bissada, H. (2011). Testing a maintenance model for eating disorders in a sample seeking treatment at a tertiary care center: A structural equation modeling approach. *Comprehensive Psychiatry, 52,* 678–687. doi:10.1016/j.comppsych.2010.12.010

Wilson, G. T. (1999). Rapid response to cognitive behavior therapy. *Clinical Psychology: Science and Practice, 6,* 289–292. doi:10.1093/clipsy/6.3.289

Wilson, G. T., Fairburn, C. C., 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. doi:10.1037/0022-006X.70.2.267

Wilson, G. T., Grilo, C. M., & Vitousek, K. M. (2007). Psychological treatment of eating disorders. *American Psychologist, 62,* 199–216. doi:10.1037/0003-066X.62.3.199

Wilson, G. T., Loeb, K. L., Walsh, B. T., Labouvie, E., Petkova, E., Liu, X., & Waternaux, C. (1999). Psychological versus pharmacological treatments of bulimia nervosa: Predictors and processes of change. *Journal of Consulting and Clinical Psychology, 67,* 451–459. doi:10.1037/0022-006X.67.4.451

Wilson, G. T., & Vitousek, K. M. (1999). Self-monitoring in the assessment of eating disorders. *Psychological Assessment, 11,* 480–489. doi:10.1037/1040-3590.11.4.480

Wilson, G. T., & Zandberg, L. J. (2012). Cognitive-behavioral guided self-help for eating disorders: Effectiveness and scalability. *Clinical Psychology Review, 32,* 343–357. doi:10.1016/j.cpr.2012.03.001

Xia, J., Merinder, L. B., & Belgamwar, M. R. (2011). Psychoeducation for schizophrenia. *Cochrane Database System Reviews,* CD002831.

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