ELSEVIER

Contents lists available at ScienceDirect

Journal of Contextual Behavioral Science

journal homepage: www.elsevier.com/locate/jcbs



In Practice: Applications of Contextual Behavioral Science

Acceptance and Commitment Therapy for eating disorders: Clinical applications of a group treatment



Adrienne Juarascio ^{a,*}, Jena Shaw ^a, Evan M. Forman ^a, C. Alix Timko ^b, James D. Herbert ^a, Meghan L. Butryn ^a, Michael Lowe ^a

- ^a Department of Psychology, Drexel University, Stratton Hall, 3141 Chestnut Street, Philadelphia, PA 19104, USA
- ^b Department of Behavioral and Social Sciences, University of the Sciences, Philadelphia, PA, USA

ARTICLE INFO

Article history: Received 13 March 2013 Received in revised form 22 July 2013 Accepted 20 August 2013

Keywords: Acceptance and Commitment Therapy Eating disorders

ABSTRACT

Eating disorders, particularly among adult patients with a long course of illness, are exceptionally difficult to treat. The few existing empirically supported treatments for adult patients with bulimia nervosa do not lead to symptom remission for a large portion of patients. For adults with anorexia nervosa there are currently no empirically supported treatments. A small but growing body of research indicates that Acceptance and Commitment Therapy (ACT) may be an effective treatment option for patients with eating disorders. Despite the promise of this approach, there are at present no established protocols with empirical support for an ACT-based treatment for adults with an eating disorder. The goal of the current paper is to describe the development of a semi-structured group-based treatment for eating disorders, discuss the structure of the manual and how we adapted standard ACT treatment strategies for use with an eating disorder population, and to discuss clinical strategies for successfully implementing the intervention. A brief summary of preliminary results of the program support the acceptability and efficacy of this novel treatment approach.

© 2013 Association for Contextual Behavioral Science. Published by Elsevier Inc. All rights reserved.

1. Treatment of eating disorders

Eating disorders are among the most challenging of psychiatric disorders to treat (Fairburn, 2008; NICE, 2004). Although standard cognitive behavioral therapy (CBT-BN; Fairburn, Marcus, & Wilson, 1993) and Enhanced Cognitive Behavioral Therapy (CBT-E; Fairburn, 2008) are currently the treatments of choice for bulimia nervosa (BN) and binge eating disorder (BED), a large subset of individuals (30-50%) remain partially or fully symptomatic at post-treatment (Brownley, Berkman, & Sedway, 2007; Fairburn et al. 2009; Mitchell, Devlin, & de Zwann, 2008; Wilson, 2005). For adults with Anorexia Nervosa (AN), there currently exist no empirically supported treatments, despite the fact that a variety of CBT and non-CBT based treatments have been evaluated (Byrne, Fursland, Allen, & Watson, 2011; Hay, 2013; Touyz et al., 2013; Watson & Bulik, 2012; Wild et al., 2009; Wilson, Grilo, & Vitousek, 2007; Yu et al. 2011). A recent study of CBT-E for underweight patients found that only 60% agreed to start treatment, and of those, only 60% demonstrated a clinically significant response (Fairburn et al., 2009). The lack of success of extant treatment approaches for eating disorders suggests that there is significant room for improvement in terms of both treatment acceptability and efficacy.

2. Acceptance and Commitment Therapy for eating disorders

A series of theoretical papers have been published suggesting that Acceptance and Commitment Therapy (ACT) might be a particularly beneficial treatment for eating pathology (Hayes & Pankey, 2002; Heffner & Eifert, 2004; Heffner, Sperry, Eifert, & Detweiler, 2002; Manlick, Cochran, & Koon, 2013; Merwin et al., 2011; Merwin & Wilson, 2009; Orsillo & Batten, 2002), and a growing body of research indicates that that factors targeted by ACT are highly relevant among adults with an eating disorder. Many of these variables appear to be temperamental features that pre-date illness onset among patients with an eating disorder, and a growing movement seeks to better address these characteristics in treatment (Zucker, Herzog, Moskovitch, Merwin, & Lin, 2011). A number of small pilot studies assessing acceptance-based behavioral approaches for eating pathology have demonstrated promise for the treatment of eating disorders (Anderson & Simmons, 2008; Kristeller, Baer, & Quillian-Wolever, 2006; Safer, Telch, & Chen, 2009; Wade, Treasure, & Schmidt, 2011; Wildes & Marcus, 2010). Preliminary data are likewise emerging for ACT

^{*} Corresponding author. Tel.: +1 443 801 8093. E-mail address: asj32@drexel.edu (A. Juarascio). URL: http://www.contextualscience.org (A. Juarascio).

Table 1Session outlines and descriptions of modifications to commonly used ACT-techniques.

Торіс	Citation*	Description/Modifications
Session 1		
Homework review and introduction to ACT model	n/a	
Human suffering is universal	p. 10	
The suffering inventory	p. 12	
If the pain were gone	p. 14	
Control strategies (Creative hopelessness)	p. 33	
Tug of war with a monster	p. 32	
"Dropping the rope" and eating symptoms	n/a	We extended the discussion of the tug of war metaphor, focusing on the use of eating symptoms (restricting, binging, purging, etc.) as a way to control or avoid distressing thoughts and feelings, and applying the concept of "dropping the rope" to these behaviors, and emphasizing that stepping back from the struggle to control these thoughts and feelings through disordered behaviors frees up resources to engage in behaviors consistent with other life values.
Homework: Record daily coping strategies and rate how well they work in the short and long-term. Practice "dropping the rope."	p. 27	Patients were asked to think of a value-based goal that they could complete before the next session. They were asked to notice distressing thoughts or feelings that arise in pursuing the goal, and to apply the metaphor of "dropping the rope" to continue working on goal in spite of their presence.
Session 2		
Homework review and introduction to ACT model	n/a	
Quicksand and willingness	p. 3	
What is willingness?	p. 125	
Being willingly out of breath	p. 49	
Urge surfing	Bowen, Chala, and Marlatt, (2010)	Discussion of the use of willingness and "urge surfing", particularly in situations involving strong urges about eating (e.g. the urge to eat or binge, the urge to restrict, the urge to use food rituals).
Willingness and following a meal plan	n/a	Discussion of the importance of normalizing eating to both decreasing eating symptoms and the ability to pursue other valued goals. Discussed using willingness to confront barriers (upsetting thoughts, feelings and bodily sensations) that patients struggle with in attempting to follow a meal plan.
Short-term mind versus long-term mind and the relation to eating disorder symptoms		Discussion of using willingness to make decisions from your "long-term mind" based on valued directions instead of your "short-term mind" which often urges you towards whatever decision causes the least pain or most pleasure in the short-term regardless of its long-term consequences.
Yellow glasses	p. 75	
Homework:		Activity guided patients to identify and observe experiencing an urge without
Urge surfing practice. Practice willingness when following your meal plan.		reacting to it. Activity guided patients to use willingness strategies to complete a challenging meal or snack (e.g. choosing a feared food, completing a greater percentage of the meal) in spite of the presence of distressing thoughts, feelings, or bodily sensations.
Session 3		
Homework review and Introduction to ACT model	n/a	
The polygraph machine	,	
Epitaph exercise	p. 30 p. 166	Noted how patients did not report wanting to be remembered for maladaptive
Epitapii exercise	р. 100	behaviors such as, "Being really good at controlling her eating" or "Being really thin".
Get off your "buts" exercise	p. 84	
Cognitive defusion and "feeling" fat	n/a	Feeling fat is often perceived by the mind as the same as being fat (it's a thought that feels really true). Instead of automatically buying into "feeling fat," we can treat it as any other thought and use defusion techniques.
Be where you are/Mindfulness	p. 107	
Homework "Reasons as Causes" worksheet		The <i>Reasons as Causes</i> handout is an exercise in which a patient examines his/ her reason-giving and evaluates their effects on behavior. It illustrates the importance of not allowing reasons (i.e., verbal constructs) to dictate behavior.
Practice using cognitive defusion.		Patients were asked to practice using cognitive defusion. when "feeling" fat and with other distressing thoughts.
Session 4		
Homework review and Introduction to ACT model	n/a	
Snake phobia	p. 36	
Values mountain	p. 161	
Defusion and picking up a pen	Bach (2005)	
Mindful eating	p. 110	
Homework	p. 112	Patients were instructed to eat a meal or snack mindfully and record their
Mindful eating	1	experience.
Session 5 Homework review and Introduction to ACT model The volleyball game	n/a Eifert and Forsyth	
	(2005)	
Passengers on the bus Willingness to reduce dietary restriction	p. 153 n/a	Discussion of dietary restriction as potentially reinforcing in the short-term, but problematic in the long-term. Discussed using willingness to reduce
		restriction in spite of distress that may arise in doing so.
Values	p. 154	

Table 1 (continued)

Торіс	Citation*	Description/Modifications
Liminal eating	Wilson (2008)	Exercise taken from Contextual Science listserve discussion: http://www.contextualpsychology.org/node/3474.
Homework		Patients were asked to notice ways they may still be trying to restrict (e.g.
Practice reducing dietary restriction		hiding food, choosing low calories options) and challenge themselves to be willing to experience the discomfort that comes with not restricting.
Mindfulness Meditation		Patients were asked to practice mindfulness meditation for a minimum of two 2-minute sittings, record their experiences/observations.
Session 6		
Homework review and Introduction to ACT model	n/a	
Automatic word associations	p. 73	
Storytelling Fat, fat, fat	Harris (2008) p. 71	Modification of "milk, milk, milk"
Thank your mind	p. 83	widefication of mink, mink
Pattern smashing	p. 189	
Value cards	n/a	Patients were given 1-3 cards (depending on group size) each listing a valued
		domain, and asked to write about their own values related to that area on the reverse side, then share at least one value with the group.
Homework		Participants were asked to challenge themselves by breaking up a eating or
Pattern smashing		body-image related pattern, and observe their experience and thoughts as
Practice using cognitive defusion		they did so. Patients were asked to practice using cognitive defusion, particularly with
Practice using cognitive defusion		disorder-related thoughts.
Session 7		
Homework review and Introduction to ACT model	n/a	
Yellow jeep/chocolate cake	p. 24	
Cranky Aunt Ida	p. 125	Developed continuo about hody abouting and avaidance. Dath many manida about
Willingness and body checking/avoidance	n/a	Psychoeducation about body checking and avoidance. Both may provide short- term relief but increase weight/shape concerns in the long run. Discussed use of mindful awareness to observe one's whole body, rather than scrutinizing a
Lanuar on a chuam	n 76	specific part or aspect.
Leaves on a stream Body exposure	p. 76 n/a	Participants were asked to look at or imagine looking at a part of their body that they usually would either avoid or check. They were asked to observe this
		part fully, noticing if they were focusing particularly on aspects that they disliked and redirecting their attention to noticing all features present. They were also asked to nonjudgmentally observe the thoughts and feelings that arose during the exercise and remain in contact with the image in spite of any
Homework	p. 170	distress. Participants were asked to engage in a body image exposure that would be
Ten valued domains worksheet	p. 170	challenging for them (e.g. avoid body checking, wear form-fitting clothes).
Body image exposure		They were asked to mindfully observe the thoughts and feelings that arise and practice defusing from judgments and evaluations.
Session 8	,	
Homework review and Introduction to ACT model My values pie chart	n/a Fairburn (2008)	Patients created two pie-charts, the first showing the percent of their time and
	Tunisum (2000)	effort that is currently being devoted to different valued domains (including weigh/shape and eating which dominated in many individuals first pie-chart). They were then asked to create a second pie chart showing the relative
		importance of valued domains and discussed using the pie chart as a guide for how much time and effort they should spend on these areas. We also included an open discussion of whether categories like weight and shape should be
Chimaga Furan turu	. 27	featured in the second pie chart.
Chinese finger trap Two radio dials	p. 37 p. 134	
Hands in front of face	p. 134 p. 71	
Eating a single chocolate	n/a	Patients were asked to write down all of the negative thoughts that might arise while eating a single chocolate (e.g. thoughts urging them to binge, restrict, or purge, fears of weight gain, etc.). They then were paired with a partner and each took turns eating a single chocolate while the partner read
		their "thoughts" aloud to them.
Homework Willingness in the service of values		Participants were asked to commit to be willing to experience a certain distressing thoughts or feeling in order to engage in a valued behavior, then to

*The "Citations" column provides a source for obtaining a full description of the activity or exercise. Although many of these exercises are referenced in numerous ACT resources, we have chosen to refer the reader to Hayes and Smith (2005), wherever possible due to its user-friendly nature. Citation page numbers refer to this source unless otherwise specified. The full treatment manual and all associated worksheets are available at contextualscience.org.

specifically (Berman, Boutelle, & Crow, 2009; Juarascio, Forman, & Herbert, 2010; Merwin, Zucker, & Timko, 2012). Several books detailing ACT-based treatments for eating disorders and related

concerns have been published (Eifert & Timko, 2012; Heffner & Eifert, 2004; Pearson, Heffner, & Follette, 2010; Sandoz, Wilson, & Dufrene, 2011); however, no data supporting the efficacy of these

treatments are available. Despite the promise of this approach, there are at present no established protocols with empirical support for an ACT-based treatment for adults with an eating disorder.

The goal of this paper is to describe the development of a group-based treatment for eating disorders, discuss the structure of the manual and how we adapted standard ACT treatment strategies for use with an eating disorder population, and to discuss clinical strategies for successfully implementing the intervention. An empirical paper reporting initial results of the program described here was recently published (Juarascio et al. 2013), and a brief summary of the primary findings of that study are discussed below.

3. Developing an ACT-based group treatment

Given that there are currently no empirically supported ACT manuals for adult eating disorders, we developed and evaluated a manualized group treatment for this population. The manual was designed to be used in the context of a residential treatment facility for eating disorders, wherein patients ranged widely in age, motivation for treatment, presenting diagnosis, and co-morbid diagnoses. We decided to create a group treatment for use in an intensive treatment program because of the high utilization of inpatient treatment, residential treatment, and intensive outpatient programs among patients with eating disorders (Bowers, Andersen, & Evans, 2008). The development of effective treatment groups in residential or inpatient settings is therefore warranted. Although the present program was designed for use in a residential program, the manual can be easily adapted for other treatment modalities.

4. Manual development

The treatment manual was based on several well-known ACT sources such as *Acceptance and Commitment Therapy: An Experiential Approach to Behavior Change* (Hayes, Strosahl, & Wilson, 1999, 2012) and *Get Out of Your Mind and Into Your Life* (Hayes & Smith, 2005). Exercises and discussions were drawn from these sources and then tailored to address eating disorder symptoms. Three initial waves of ACT groups were conducted at the residential facility and edits to the manual were made iteratively following each round. For example, the manual initially contained fewer experiential exercises, but after receiving positive feedback on these exercises from patients and witnessing increased engagement in treatment following participation in the exercises in the first round of groups, the manual was modified to increase the focus on experiential exercises.

5. Manual overview

The final treatment manual consists of eight, 75-min group sessions. An outline of the exercises and metaphors used in each of the eight sessions can be found in Table 1. Although the manual can be easily adapted for a different type of treatment program or in an outpatient setting, it was designed to complement an existing residential treatment program and not to serve as a stand-alone treatment for eating disorders. The manual is structured in an open group format to allow new patients to join the group at any time. Each session is designed to serve as a free-standing intervention in which the overall ACT model is discussed and implemented. Thus, each session addresses core ACT principles such as developing openness to an acceptance perspective, fostering a willingness to accept distress, teaching defusion from thoughts and feelings, and clarifying life values. Every session also

includes educational information, experiential exercises, and homework assignments designed to encourage patients to utilize the strategies outside of the group time. Although each session can stand alone, the sessions are also designed to work in conjunction with one another to build on ACT skills each week. To facilitate this, patients new to the group are encouraged to participate in the discussion of the previous week's homework and session content that occurs at the beginning of each session by bringing in relevant examples from their own experience. Furthermore, other patients can be encouraged to use information learned in previous sessions to help orient new members. The group facilitator can help any group members who report difficulty with the exercises problem solve what they could have done differently, and encourage patients to continue practicing the skills even if they were not initially successful. The homework review comprises approximately 15 min at the beginning of each group. After homework is reviewed, the subsequent 60 min of the group consists of new material, exercises, and discussions.

6. Treatment components

Below we discuss several of the primary treatment components and how they were adapted to focus on eating pathology. Throughout, it is important to keep in mind that the main therapeutic goal of ACT is to promote psychological flexibility, i.e., the ability to persist or change behaviors in the pursuit of goals and values even when doing so brings a person into contact with aversive internal experiences (Hayes, Barnes-Holmes, & Wilson, 2012; Hayes, Levin, Plumb-Vilardaga, Villatte, & Pistorello, 2013; Hayes, Villatte, Levin, & Hildebrandt, 2011). Therefore, symptom reduction, especially of internal experiences such as distressing thoughts about the body, urges to binge, or feeling anxious or depressed, is de-emphasized in our treatment, with the focus instead on helping patients live a more valued life. In order to promote therapeutic improvement, the manual targets six psychological processes (acceptance, defusion, present-moment awareness, self-as-context, values, and behavioral commitment) that can together promote psychological flexibility. The six processes can in turn be summarized into three main targets of ACT: being open (acceptance and defusion), centered (present-moment awareness and self-as-context), and engaged (values and behavioral commitments). The overarching goal of psychological flexibility calls for patients to be actively engaged in their valued pursuits, which is facilitated by being open to internal experiences and centered in the here-and-now. Each of these six processes can be viewed as belonging to a continuum, with the goal of the treatment to move from the pathological end of the spectrum (dominance of the conceptualized past or future, cognitive fusion, experiential avoidance, attachment of the conceptualized self, lack of values clarity/contact, unworkable action) to psychological flexibility.

6.1. Experiential acceptance

Consistent with an ACT conceptualization (Heffner & Eifert, 2004; Sandoz et al., 2011), eating disordered behaviors are construed broadly throughout the treatment as coping mechanisms that have developed to serve the function of helping individuals avoid distressing thoughts, feelings, and sensations. Experiential avoidance is conceptualized as occurring both around body and food-specific internal experiences and also around broader distressing thoughts (e.g. "No one likes me" or "I'll never be good enough") and feelings (e.g. anxiety, depression, boredom, anger). Discussions, metaphors, and guided practices are used to help patients connect their eating disorder behaviors to the desire to

avoid certain uncomfortable thoughts, feelings, and bodily sensations (i.e., experiential avoidance). An overarching goal of the ACT groups is therefore to increase psychological flexibility, and in particular to decouple the link between distressing experiences and maladaptive behavior, and to increase willingness to experience distress in the service of behavior change. During the groups, the types of distressing internal experiences targeted include eating disorder-specific thoughts, feelings, and urges and other thoughts and feelings related to depression, anxiety, interpersonal difficulties, family concerns, and trouble at school or work. Exercises such as the Chinese Finger Trap Metaphor (Hayes et al., 2012) are employed to show how eating disordered behaviors that temporarily allow patients to avoid emotions such as anxiety or boredom actually worsen the experience of these thoughts and exacerbate symptoms. By actually "pushing" into these thoughts and fully experiencing them, patients can choose behaviors inconsistent with the eating disordered thoughts without first having to change the thoughts themselves.

6.2. Defusion

The manual also focuses heavily on helping patients learn to defuse, or achieve psychological distance, from their thoughts, feelings, and urges. We found that patients often reported trying to make unpleasant thoughts about their body "go away" by engaging in a number of maladaptive behaviors including disordered eating. Therapists used this opportunity to help patients realize that efforts to eliminate or avoid these types of thoughts are rarely effective in the long-term and often paradoxically worsen body-related distress. Exercises such as a modification of the "Milk, Milk, Milk" exercise described in Hayes and Smith (2005, p. 71), in which patients instead repeat the word "fat" over and over again, provided powerful demonstrations that the emotional associations of words and thoughts are "accidental" products of one's learning history, and that one can learn to experience these associations in a new way, such that they need not be eliminated nor determinative of behavior. Defusion exercises were also applied to non-body or food related distressing thoughts that might similarly impair the patient's ability to make flexible behavioral choices (e.g. "No one likes me" leading to avoidance of intimate relationships). Ultimately, we found that increased defusion or distance from thoughts could increase flexibility in the presence of difficult thoughts and feelings and allowed patients to more effectively pursue value-consistent behavior.

6.3. Awareness

Consistent with previous reports (e.g., Frank et al., 2012; Harrison, Sullivan, Tchanturia, & Treasure, 2009; Merwin et al., 2011; Zucker et al., 2007), patients in our groups had trouble reporting their thoughts or feelings and alexithymia was commonly noted. Mindful awareness is incorporated in to the treatment approach as a necessary precursor to accepting thoughts and feelings. Awareness is also connected to values, and patients were taught how to articulate their personal values and bring an awareness of these values into the present moment in order to better allow values to guide behavior. Patients were also taught mindful eating during practice exercises conducted during groups (Segal, Williams, & Teasdale, 2002). Afterwards therapists led a discussion about the function of this activity, i.e., becoming aware of the distressing thoughts brought on by eating outside of the meal plan and being willing to allow those thoughts to be there while continuing to engage in the exercise. Throughout these discussions, patients were encouraged to examine how increased mindfulness allowed them to better defuse from and accept distressing thoughts and feelings. In our experience, many patients reported that they distracted themselves throughout meals and would do whatever they could to avoid experiencing the taste of their food or the thoughts that occurred as they ate. The novel experience of being aware of and defusing from thoughts prompted many patients to challenge themselves to practice eating more mindfully during meals.

6.4. Willingness

Throughout the treatment approach, acceptance, defusion, and awareness are taught to patients as skills that increase willingness to make behavioral choices consistent with living a more valued life despite distressing internal experiences during the recovery process (Hayes et al., 2012). Willingness is described as an active behavior, and exercises focused both on distressing food and bodyrelated experience (e.g., wearing a tight outfit for patients with AN) and on broader behaviors connected with values (e.g., being more open in family therapy, resisting urges to isolate oneself at the treatment facility). For example, eating exposure exercises allowed patients to practice willingly eating challenging foods, despite the presence of negative thoughts and feelings. Willingness exercises also comprise a large number of the homework assignments, with goals such as choosing more difficult foods during snack, reducing body checking, and engaging in other difficult behaviors connected with broader values.

6.5. Self-as-context

Eating disorders are notoriously difficult to treat, in part because the disorder feels like an essential part of the self (Schmidt & Treasure, 2006). Although not surprising given the ego-syntonic nature of eating disorders and the variety of functions that such behavior can serve, this strong attachment to the disorder is problematic. During our groups, patients often reported reluctance to give up their disorder because it is part of "who they were as a person" and they were unsure who they might be without the disorder. This problematic attachment to a conceptualized self-image can make recovery challenging. Patients tended to behave in ways that maintained this sense of self, even when doing so led to problematic behaviors and valuesinconsistent action. Throughout the group, therapists used a variety of activities that helped patients more directly connect to the "observer self," or a sense of self that can have a variety of thoughts and feelings without allowing these internal experiences to define who one is as a person or how one should behave. Many of the activities described above that are designed to foster experiential acceptance and defusion simultaneously function as activities that promote this contextual sense of the observing self, which is also known as "self-as-context." For example, any activity that promoted an ability to obtain distance from thoughts also helped the patient be able to see herself as someone separate from her eating-related thoughts, feelings, and urges. Additionally, activities focused on values clarification also promoted this particular sense of self as patients began to develop the sense that they were complete individuals who are distinct from their eating disorder. By seeing where they hope their life to be going, and how it contrasts with where they were now, patients were able to gain perspective towards a self that is broader than the eating disorder and more able to engage flexibly in a variety of behaviors. The focus of our treatment on long-term goals and broader behavior change maps closely onto a growing body of work supporting a long-term approach in the treatment of chronic eating disorders (Touyz et al., 2013; Waller, Evans, & Pugh, 2013).

6.6. Values and committed action

The ultimate goal of increasing willingness is to foster flexibility in the patient's behavior so that she can behave consistently with her chosen values, rather than becoming locked into a pattern of behavior that is maintained by the desire to avoid distress and remain consistent with a conceptualized self-image. The end result is a more valued and meaningful life. We found that fostering committed action was highly relevant for the patients in our groups, as many reported poor ability to engage in behaviors consistent with their values and many others lacked clarity with respect to any values aside from those related to their disorder. The exercises in our treatment manual attempt to increase patients' clarity about what it is they truly value, examine the ways in which the eating disorder conflicts with these values, and help patients begin to take concrete steps toward behaving consistently with valued areas of life. In some sessions, patients were asked how their lives would be different if they did not have an eating disorder (or other concerns such as depression or anxiety). This helped patients begin to explore what life domains they might want to re-incorporate into their lives. In other sessions, patients were asked specifically about their values in specific domains or were asked to complete a valued domain questionnaire to help clarify and increase mindfulness awareness of values. Therapists encouraged patients to write down a list of their most important values to keep with them throughout treatment and review during challenging moments. Therapists also asked patients to develop value-consistent goals. We suggested that patients set up weekly check-ins with themselves to regularly examine their behaviors and ask questions such as "Have my actions this past week taken me closer to or farther away from my values?" and "What could I do differently next week to remain more consistent with my long-term goals?" Values work also provides a context for the other ACT strategies, and therapists emphasized that increased willingness to live with distressing thoughts and emotions served a larger purpose in that it affords the opportunity to make progress in areas of one's life that provide meaning and personal fulfillment.

6.7. Homework

Our treatment approach assigns homework at the end of every session to encourage utilization of the treatment strategies outside of group; worksheets describing the assignment and providing prompts for recording of experiences are provided in the manual. Assignments are primarily focused on practicing ACT skills within the context of accomplishing a challenging behavioral goal. Whereas some goals focus specifically on increasing eating flexibility or decreasing body checking or avoidance, other assignments allow patients to set their own goals based on their chosen values. Patients were instructed to bring their worksheets to the following group, and homework assignments from the previous group session were reviewed as described above.

7. Practical tips for using the manual

7.1. Utilizing the group

We found that group treatment is well suited to an ACT approach and allowed our therapists to utilize the group in ACT-consistent ways to improve comprehension and acceptability of the treatment. For example, we often utilized the group to enact metaphors and exercises experientially. The "Passengers on the Bus" metaphor is an excellent example of utilizing the power of the group to act out the scenario. Having the group members play

passengers on the bus while one patient acts as the driver allowed patients to experience the metaphor in a more encompassing way than one might by just presenting the metaphor in a therapy session. We found that the more interactive we made the group sessions, the more engaged patients were during treatment. Experiential exercises that utilized the full group were often the best way to ensure engagement. An additional example of how we utilized the group to facilitate treatment is encouraging patients to explore the function of each other's behavior during group. For example, if a patient refused to do a food exposure or switched the topic away from a sensitive area, we encouraged group members to gently point out these subtle avoidance behaviors and encourage the patient to explore the thoughts and feelings leading to avoidance. We found that when group members noted this behavior in each other, the patient was less resistant than when it was the therapist who was pointing out avoidance patterns. Additionally, group members also encouraged each other to be willing to try challenging exposures and the experience of seeing other group member's engaged in the same behaviors facilitated willingness. Although we were initially concerned about negative peer pressure, we found this to be rare and noticed that most patients were supportive of each other's progress in treatment.

7.2. Open group format

The residential treatment setting in which this program was developed necessarily shaped the manual in several ways. Because patients are admitted to the facility on a rolling basis and are sometimes not able to attend all ACT groups available during their stay, each group was designed as a stand-alone session that included multiple core ACT principles. Application of the program in a different treatment setting may require modifications. For example, if using the manual in an outpatient closed group, it may be preferable to structure the program so that each group focuses on a more limited range of topics and builds on each other rather than having each group focus on a larger number of ACT principles. However, in some ways, we found that the open-group and rolling admission was useful in maintaining a positive group dynamic. For example, group members who had been to a number of ACT sessions were often more likely to engage in difficult exposures and encourage others in the group to participate, which provided a useful opportunity for new members to see the benefits of engaging in challenging values-consistent activities. Additionally, patients who were further along in treatment had already learned many of the ACT skills and were able to facilitate newer members learning the skills more quickly. As mentioned above, we found that patients often responded better to group members rather than therapists noting maladaptive avoidance behaviors, fusion, or attachment to the conceptualized self. Having advanced group members provided valuable opportunities for positive peer-based learning that was well-suited to undermining treatment resistance.

7.3. Diagnostic sub-groups

The manual was designed to be a transdiagnostic treatment manual, consistent with the transdiagnostic CBT approach developed by Fairburn, for use with patients with a variety of eating disorders (Fairburn, 2008). Functionally, eating disordered behaviors are often more similar than different, with most functioning to relieve or otherwise avoid distressing thoughts or feelings. However, despite the transdiagnostic nature of the manual, we found it beneficial to separate patients into groups primarily characterized by AN or restrictive disorder and groups characterized primarily by BN or BED. Splitting groups by diagnostic spectrum allowed group leaders to focus on examples that

resonated most with their patient population. For example, when discussing urge surfing, the BN group was able to focus on urge to binge while the AN group focused on urges to restrict or over-exercises. Although binge eating, dietary restriction, and over-exercising can occur in a variety of eating disorder diagnoses, we found that the group was more engaged by targeting experiences all or nearly all patients in a group could relate to. Although the separation by diagnosis was not necessarily made explicit to the patients, many often expressed that the examples used by group leaders and other patients fit well with their experiences. On certain occasions when patients accidentally attended the other section, they noted that the discussion in their assigned group seemed more applicable to them. Overall content, including the focus on eating disorder behaviors as forms of experiential avoidance, was parallel in the two groups.

Initially, we expected that patients with AN might have more difficulty with ACT concepts as prior studies have indicated that patients with AN often struggle with types of complex thinking requiring cognitive flexibility (Harrison et al., 2009; Lopez, Tchanturia, Stahl, & Treasure, 2008). However, in our experience, we found that patients with AN grasped the concepts as easily as those in the BN/BED group. Of note, several patients reported feeling more willing to engage in treatment because the therapist was not attempting to alter long-standing and incredibly ingrained thoughts regarding body weight. This group of patients found that the acceptance-based strategies for interacting with internal experiences were more feasible than cognitive change strategies they had previously been taught in other treatment programs. In fact, although only significant at the trend level, initial data from our empirical paper (Juarascio et al., 2013) suggests that AN spectrum patients may have even stronger benefits from the ACT groups than BN spectrum patients, further reinforcing the use of this manual within an AN population.

7.4. Conducting experiential activities

We experienced certain limitations to the types of activities that could be included in the groups due to the residential setting. Because patients' calorie consumption is strictly monitored, food exposures could only use very small snacks (i.e., one chocolate or one pretzel), whereas in a different treatment setting or structure larger snacks or meals could be used to practice ACT exercises. Similarly, exposures to more extreme levels of consumption such as "planned binges" without vomiting are not possible in this context. Although most patients reported that the small food exposures were still quite anxiety provoking (and therefore allowed patients to practice ACT skills during the exposure), some patients had little trouble with the small amounts of food provided. For example, many BN patients noted that they did not experience an urge to binge because they knew that there was no access to a larger food supply during group. The fact that patients were in a residential treatment facility also limited the extent to which challenging non-food and body-related exposures could be assigned since the people, locations, or objects needed to engage in these exposures were unavailable. If using the treatment manual in a more flexible treatment setting, the types of experiential activities, exposures, and homework assigned might be broadened to allow for more challenging values-consistent

Despite the limitations we experienced in conducting experiential activities, patients routinely noted that the activities we employed were key components of the treatment. We found that most patients within our groups were more willing to engage in challenging exposures than we originally expected, particularly when the rational for the exposures was clearly presented. For example, we found that patients were much more willing to

engage in an "urge surfing while having the desire to purge" exposure when it was explained as a practice opportunity for learning several ACT concepts such as acceptance, willingness, and defusion rather than just tolerating uncomfortable feelings for no meaningful reason. The connection of values to the behavioral exercises also increased motivation and served to provide a strong rational for recovery even when recovery proved to be distressing. When patients were asked to describe the most useful components of the program they almost always mentioned the in-session experiential exercises, highlighting the benefits of this component of the treatment program.

8. Common challenges

Despite the strengths of the manual, a number of challenges arouse in implementing the treatment. Below, we note several of the most common challenges and ways in which we were able to successfully approach them.

8.1. Managing lack of motivation

Eating disorders can be incredibly challenging to treat due to the ego-syntonic nature of the disorder and the corresponding low motivation to change. We noticed that in running our groups, most patients began treatment with ambivalence about recovery. Often patients reported a desire to stop certain aspects of the disorder (e.g. binge eating, anxiety, or low self-esteem) but not other aspects (e.g. dietary restriction or excessive exercise). When we explored why patients did not want to give up the desired aspects of the disorder, it was commonly noted that thinness, purging, or excessive exercising was "working" for the patient by allowing her to feel more comfortable in her body or reducing other unpleasant internal experience such as anxiety or depression. We found that creative hopelessness strategies were especially well suited in helping patient realize that the aspects of the disorder that they believed were working for them are in reality leading to only short-term benefits. For example, although purging might temporarily reduce discomfort related to fears of weight gain, it rarely leads to patients feeling better about their bodies in the long-run and often leads to distress after the purge as patients feel like they have "failed" at treatment. Patients often reported that the thinner they became and the more frequently they engaged in disordered eating behaviors the worse they actually felt about their body. For this reason, the manual contains a large number of exercises and metaphors designed to foster a sense of creative hopelessness and encourage patients to be open to exploring ways of living without the desired symptoms. These exercises were often successful in helping patients come to their own conclusions regarding the ineffectiveness of their disordered eating symptoms in controlling distressing internal experiences, and we found that once this awareness of ineffectiveness occurred, motivation and openness to trying the other strategies discussed during group increased.

We also found that a strong focus on values work was particularly important among our patients. Given that so many patients had completely given up other areas of life outside the eating disorder and lacked clarity regarding non-eating disordered values, it was challenging for patients beginning treatment to identify motivators for recovery. Some patients even reported fear of identifying values because doing so created an expectancy that they would work on these areas, and this expectancy invokes the possibility of failure or other feared outcomes. However, highlighting the degree to which the eating disorder had narrowed their ability to pursue other life goals was often helpful in increasing motivation to change disordered eating behaviors.

By helping the patient identify what her eating disorder has cost her and clarifying what she truly wants her life to be about, we found we could increase the patient's willingness to undergo the challenging work needed to make behavioral changes.

8.2. Differential speed in learning group material

As with all group-based treatments, we found that some patients in the groups grasped the concepts far quicker than other patients. Because some components of an ACT treatment protocol can be more complicated than other types of psychosocial treatments that may be more intuitive, differing rates of learning can become particularly problematic within this treatment paradigm. Additionally, patients with chronic starvation may be less able to grasp challenging concepts such as those presented in an ACT treatment approach. As mentioned above, one benefit of the rolling nature of the groups was that at any given time, the group contained members who had previously attended several ACT groups and members who were just beginning treatment. Having more experienced group members who could give personal examples of using ACT strategies often facilitated understanding in newer group members. We also found that simply reminding participants that they would be exposed to the same concepts repeatedly in upcoming groups and that it often takes several groups to fully understand the concepts alleviated some distress for those who did not entirely grasp the material. The benefits of having ACT groups throughout the residential stay became clear as we noticed patients applying the ACT techniques in more complex ways as they continued to more strongly grasp the concepts. For example, it was common that patients might report using acceptance-based techniques to help complete meals early in treatment and then extending acceptance-based techniques to more complex situations such as managing fears of intimacy later in treatment. For group members who were experiencing more substantial difficulties with the group material, we would often meet privately after group for a brief period of time to clarify concepts and provide more individualized support and feedback. Despite initial concerns about difficulty understanding and integrating acceptance-based techniques, we found that most participants picked up the material quickly and began applying the techniques outside of groups after attending a relatively small number of sessions.

8.3. Alexithymia

It is widely accepted that patients with eating disorders tend to be less aware of their emotions than healthy individuals (Merwin et al., 2011; Merwin & Wilson, 2009; Zucker et al., 2011). Previous research has demonstrated that individuals with eating disorders show deficits in emotion recognition, poor interceptive awareness, and poor emotional awareness (Harrison et al., 2009; Harrison, Sullivan, Tchanturia, & Treasure, 2010; Oldershaw, Treasure, Hambrook, Tchanturia, & Schmidt, 2011). In addition, research has indicated that patients with bulimia nervosa and anorexia nervosa have high levels of alexithymia, and that it appears to be a trait that may be unaffected by clinical improvement unless emotional expression is explicitly addressed in treatment (Schmidt & Treasure, 2006). Alexithymia was common in our participants and often contributed to artificially high fear of negative emotions. Combined with tendencies towards high harm avoidance, this led to many patients trying to avoid contact with nearly all emotions. We found that treatment may need to initially focus on teaching emotional recognition and identification skills, and subsequently on increasing non-judgmental awareness. Mindfulness exercises were particularly useful for allowing patients to more directly contact their internal experiences and served as a useful technique for very preliminary emotion recognition.

8.4. Managing frustrations with the recovery process

A large number of patients drop out of treatment for eating pathology (Hay, 2013; Watson & Bulik, 2012; Wilson et al., 2007). Although this is partially due to a lack of motivation for treatment, a great deal is also due to the challenging aspect of recovery from the disorder. Recovering from an eating disorder requires patients to engage in a number of distressing experiences such as normalizing their eating, gaining weight, eating "fear foods," and eliminating compensatory behaviors. In addition, much of the challenging work of recovery involves working on underlying fear, anxiety, and depression that the patient may be avoiding through a hyper-focus on the body. For all of these reasons, recovery is filled with challenging internal experiences; many patients will drop-out of treatment once recovery becomes challenging, even if initial motivation was high. We found that ACT is incredibly well suited for managing this barrier to treatment completion. Because of the strong focus on acceptance of distressing internal experiences, ACT clinicians can directly address the emotional challenges of recovery and help patients learn to continue maintaining behavioral changes despite discomfort. We found that warning patients upfront about that process and encouraging patients to discuss their frustrations and the barriers to recovery in group was beneficial. A number of patients reported during group that they had considered signing themselves out of treatment during particularly challenging times in the recovery process, but by using skills such as urge surfing or reminding themselves of their values these patients were able to stay in treatment.

9. Feedback from patients and staff

Overall, anecdotal feedback from our groups was highly positive, and both staff and patients reported finding the groups to be a useful addition to treatment. The groups tended to be well attended by patients and homework completion rates were surprisingly high relative to the fact that no other groups at the treatment facility required homework completion. Patients were often seen spontaneously gathering together to practice mindful eating and willingness exercises during meals and snacks. Patients who missed groups or who were discharging and would not be able to attend further groups often requested handout and homework materials from the sessions they have missed or will miss. Other therapists frequently remarked to our group leaders that their patients had discussed the helpfulness of the groups in individual therapy sessions, and in patients' discharge questionnaires they often mentioned the ACT group when asked to list the most helpful aspects of treatment. Despite some initial skepticism, therapists at the facility were receptive to the addition of the ACT groups and often sought out our group leaders to learn more about the ACT groups, including asking for session materials or sitting in on group sessions. This favorable reaction was in stark contrast to past resistance from the therapists to implementing a more traditional CBT program at the treatment center (Lowe, Bunnell, Neeren, Chernyak, & Greberman, 2011). When the original pilot study ended and ACT groups were no longer offered, both patients and therapists advocated heavily for the groups' return. Because of the popularity of the groups with both staff and patients, the ACT groups were made a permanent feature of the treatment program and non-study staff without extensive ACT training are now utilizing the treatment manual to run on-going ACT groups, reportedly with continued success.

10. Efficacy

Juarascio et al. (2013) described the first empirical test of this treatment program, i.e., whether the addition of ACT groups to treatment as usual (TAU) at a residential treatment facility for eating disorders would improve treatment outcomes. TAU patients received an intensive residential treatment, while ACT patients received these services but additionally attended, depending on diagnosis, either ACT for AN groups or ACT for BN groups. Although individuals in both treatment conditions demonstrated substantial decreases in eating pathology, there were trends toward larger decreases among those receiving ACT. ACT patients also trended towards lower rates of re-hospitalization during the six months following discharge. Overall, results suggest that this treatment program was able to increase efficacy over and above the specialized residential treatment program.

11. Future directions

Given the growing body of research suggesting that ACT-related factors are highly relevant in the development and maintenance of eating pathology, ACT appears to be well-suited as a treatment for this group of disorders. The positive anecdotal impressions and initial data for our manualized group treatment program further suggest that this treatment is beneficial for adults with eating pathology. Additional research is needed to evaluate the program in methodologically rigorous trials. We also hope to further develop the manualized treatment by tailoring the protocol to different forms of eating pathology. In addition, research is needed to examine how this treatment approach can be used in other settings such as day programs, intensive outpatient programs, or as an addition to outpatient therapy, where patients would have more opportunities to work on valued behavioral change in their daily lives.

References

- Anderson, D. A., & Simmons, A. M. (2008). A pilot study of a functional contextual treatment for bulimia nervosa. *Cognitive and Behavioral Practice*, *15*(2), 172–178, http://dx.doi.org/10.1016/j.cbpra.2006.06.002.
- Berman, M., Boutelle, K., & Crow, S. J. (2009). A case series investigating acceptance and commitment therapy as a treatment for previously treated, unremitted patients with anorexia nervosa. *European Eating Disorders Review*, 17(6), 426–434, http://dx.doi.org/10.1002/erv.962.
- Bowen, S., Chala, N., Marlatt, A.G. (2010). Mindfulness-based relapse prevention for addictive behaviors: A Clinician's Guide. New York, NY: Guilford Press.
- Bowers, W. A., Andersen, A. E., & Evans, K. (Eds.). (2008). Philadelphia, PA: Lippincott Williams & Williams.
- Brownley, K. A., Berkman, N. D., & Sedway, J. A. (2007). Binge eating disorder treatment: A systematic review of randomized controlled trials. *International Journal of Eating Disorders*, 40, 337–348.
- Byrne, S. M., Fursland, A., Allen, K. L., & Watson, H. (2011). The effectiveness of enhanced cognitive behavioural therapy for eating disorders: An open trial. *Behaviour Research and Therapy*, 49(4), 219–226.
- Eifert, G., & Timko, C. A. (2012). Mehr vom Leben: Wege aus der Anorexie für Betroffene und Angehörige das ACT-Selbsthilfebuch. Weinheim: Beltz Verlag.
- Fairburn, C. G. (2008). Cognitive behavior therapy and eating disorders cognitive behavior therapy and eating disorders (p. xii, 324)New York, NY: Guilford Pressxii, 324.
- Fairburn, C. G., Cooper, Z., Doll, H. A., O'Connor, M. E., Bohn, K., Hawker, D. M., et al. (2009). Transdiagnostic cognitive-behavioral therapy for patients with eating disorders: A two-site trial with 60-week follow-up. *American Journal of Psychiatry*, 166(3), 311–319.
- 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, NY: Guilford Press.
- Frank, G. K., Roblek, T., Shott, M. E., Jappe, L. M., Rollin, M. D., Hagman, J. O., et al. (2012). Heightened fear of uncertainty in anorexia and bulimia nervosa. *International Journal of Eating Disorders*, 45(2), 227–232.
- Harrison, A., Sullivan, S., Tchanturia, K., & Treasure, J. (2009). Emotion recognition and regulation in anorexia nervosa. Clinical Psychology & Psychotherapy, 16(4), 348–356, http://dx.doi.org/10.1002/cpp.628.

- Harrison, A., Sullivan, S., Tchanturia, K., & Treasure, J. (2010). Emotional functioning in eating disorders: Attentional bias, emotion recognition and emotion regulation. *Psychological Medicine*, 40(11), 1887–1897.
- Hay, P. (2013). A systematic review of evidence for psychological treatments in eating disorders: 2005–2012. *International Journal of Eating Disorders*, 46(5), 462–469.
- Hayes, S. C., Barnes-Holmes, D., & Wilson, K. G. (2012). Contextual behavioral science: Creating a science more adequate to the challenge of the human condition. Journal of Contextual Behavioral Science
- Hayes, S. C., Levin, M. E., Plumb-Vilardaga, J., Villatte, J. L., & Pistorello, J. (2013). Acceptance and commitment therapy and contextual behavioral science: Examining the progress of a distinctive model of behavioral and cognitive therapy. Behavior Therapy, 44(2), 180–198.
- Hayes, S. C., & Pankey, J. (2002). Experiential avoidance, cognitive fusion, and an ACT approach to anorexia nervosa. Cognitive and Behavioral Practice, 9(3), 243–247, http://dx.doi.org/10.1016/S1077-7229%2802%2980055-4.
- Hayes, S. C., & Smith, S. (2005). Get out of your mind & into your life: The new Acceptance and Commitment Therapy (1st ed.). Oakland, CA: New Harbinger Publications.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). Acceptance and commitment therapy: An experiential approach to behavior change. New York, NY: Guilford Press.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). Acceptance and Commitment Therapy (2nd ed.). Guilford Press.
- Hayes, S. C., Villatte, M., Levin, M. E., & Hildebrandt, M. (2011). Open, aware, and active: Contextual approaches as an emerging trend in the behavioral and cognitive therapies. *Annual Review of Clinical Psychology*, 7, 141–168.
- Heffner, M., & Eifert, G. H. (2004). The anorexia workbook: How to accept yourself, heal your suffering, and reclaim your life. Oakland, CA: New Harbinger Publications.
- Heffner, M., Sperry, J., Eifert, G. H., & Detweiler, M. (2002). Acceptance and Commitment Therapy in the treatment of an adolescent female with anorexia nervosa: A case example. Cognitive and Behavioral Practice, 9(3), 232–236, http: //dx.doi.org/10.1016/S1077-7229%2802%2980053-0.
- Juarascio, A. S., Forman, E. M., & Herbert, J. D. (2010). Acceptance and commitment therapy versus cognitive therapy for the treatment of co-morbid eating pathology. *Behavior Modification*, 34(2), 175–190, http://dx.doi.org/10.1177/ 0145445510363472
- Juarascio, A. S., Shaw, J. S., Forman, E. M., Herbert, J. D., Timko, C. A., Butryn, M. L., et al. (2013). Acceptance and commitment therapy as a novel treatment for eating disorders: An initial test of efficacy and mediation. *Behavior Modification*, 37(4), 459–489.
- Kristeller, J. L., Baer, R. A., & Quillian-Wolever, R. (2006). Mindfulness-based approaches to eating disorders. In: R. A. Baer (Ed.), Mindfulness-based treatment approaches: Clinician's guide to evidence based and applications (pp. 75–91). San Diego, CA: Elsevier Academic Press.
- Lopez, C., Tchanturia, K., Stahl, D., & Treasure, J. (2008). Central coherence in eating disorders: A systematic review. Psychological Medicine, 38(10), 1393–1404.
- Lowe, M. R., Bunnell, D. W., Neeren, A. M., Chernyak, Y., & Greberman, L. (2011). Evaluating the real-world effectiveness of cognitive-behavior therapy efficacy research on eating disorders: A case study from a community-based clinical setting. *International Journal of Eating Disorders*, 44(1), 9–18.
- Manlick, C. F., Cochran, S. V., & Koon, J. (2013). Acceptance and Commitment Therapy for Eating disorders: Rationale and literature review. *Journal of Contemporary Psychotherapy*, 1–8.
- Merwin, R., Timko, C. A., Moskovich, A., Konrad Ingle, K., Bulik, C. M., & Zucker, N. (2011). Psychological inflexibility and symptom expression in anorexia nervosa. *Eating Disorders: Journal of Treatment and Prevention*, 19(1), 62–82.
- Merwin, R., & Wilson, K. G. (2009). In J. T. Blackledge (Ed.), Understanding and treating eating disorders: An ACT perspective (pp. 87–117) Sydney, Australia: Australian Academic Press.
- Merwin, R., Zucker, N., & Timko, C. A. (2012). A pilot study of an acceptance-based separated family treatment for adolescent anorexia nervosa. *Cognitive and Behavioral Practice*
- Mitchell, J., Devlin, M., & de Zwann, M. (2008). Binge eating disorder. Clinical foundations and treatment. New York: Guilford Press.
- NICE. (2004). Eating Disorders: Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa, and related eating disorders NICE clinical guideline 9. www.nice.org.uk/CG9.
- Oldershaw, A., Treasure, J., Hambrook, D., Tchanturia, K., & Schmidt, U. (2011). Is anorexia nervosa a version of autism spectrum disorders? *European Eating Disorders Review*, 19(6), 462–474.
- Disorders Review, 19(6), 462–474.

 Orsillo, S. M., & Batten, S. V. (2002). ACT as treatment of a disorder of excessive control: Anorexia. Cognitive and Behavioral Practice, 9(3), 253–259, http://dx.doi.org/10.1016/S1077-7229%2802%2980057-8.
- Pearson, A. N., Heffner, M., & Follette, V. M. (2010). Acceptance and commitment therapy for body image dissatisfaction: A practitioner's guide to using mindfulness, acceptance, and values-based behavior change strategies. Oakland, CA: New Harbinger Publications, Inc.
- Safer, D. L., Telch, C. F., & Chen, E. (2009). Dialectical behavior therapy for binge eating and bulimia. New York: Guilford Press.
- Sandoz, E., Wilson, K. G., & Dufrene, T. (2011). Acceptance and commitment therapy for eating disordesr: A process-focused guide to treating anorexia and bulimia. Oakland, CA: New Harbinger Publication.
- Schmidt, U., & Treasure, J. (2006). Anorexia nervosa: Valued and visible. A cognitive-interpersonal maintenance model and its implications for research

- and practice. British Journal of Clinical Psychology, 45(3), 343–366, http://dx.doi.org/10.1348/014466505X53902.
- Segal, Z., Williams, M., & Teasdale, J. (2002). Mindfulness-based cognitive therapy for depression. New York: Guilford Press.
- Touyz, S., Le Grange, D., Lacey, H., Hay, P., Smith, R., Maguire, S., et al. (2013). Treating severe and enduring anorexia nervosa: A randomized controlled trial. *Psychological Medicine*, 1–11.
- Wade, T. D., Treasure, J., & Schmidt, U. (2011). A case series evaluation of the Maudsley Model for treatment of adults with anorexia nervosa. *European Eating Disorders Review*, 19(5), 382–389.
- Waller, G., Evans, J., & Pugh, M. (2013). Food for thought: A pilot study of the pros and cons of changing eating patterns within cognitive-behavioural therapy for the eating disorders. *Behaviour Research and Therapy*
- Watson, H. J., & Bulik, C. M. (2012). Update on the treatment of anorexia nervosa: Review of clinical trials, practice guidelines and emerging interventions. *Psychological Medicine*, 1(1), 1–24.
- Wild, B., Friederich, H. C., Gross, G., Teufel, M., Herzog, W., Giel, K. E., et al. (2009). The ANTOP study: Focal psychodynamic psychotherapy, cognitive-behavioural therapy, and treatment-as-usual in outpatients with anorexia nervosa—a randomized controlled trial. *Trials*, 10(1), 23.
- Wildes, J. E., & Marcus, M. D. (2010). Development of emotion acceptance behavior therapy for anorexia nervosa: A case series. *International Journal of Eating Disorders*, 44(5), 421–427, http://dx.doi.org/10.1002/eat.20826.

- Wilson, G. T. (2005). Psychological treatment of eating disorders. *Annual Review of Clinical Psychology*, 1(1), 439–465, http://dx.doi.org/10.1146/annurev.clinpsy. 1.102803.144250.
- Wilson, G. T., Grilo, C., & Vitousek, K. (2007). Psychological treatment of eating disorders. American Psychologist, 62(3), 199–216, http://dx.doi.org/10.1037/ 0003-066X.62.3.199.
- Yu, J., Stewart, A. W., Halmi, K. A., Crow, S., Mitchell, J., & Bryson, S. W. (2011). A 1-year follow-up of a multi-center treatment trial of adults with anorexia nervosa. *Eating and Weight Disorders*, 16(3), e177.
- Zucker, N., Herzog, D. B., Moskovitch, A., Merwin, R., & Lin, T. (2011). Incorporating dispositional traits into the treatment of anorexia nervosa. *Current Topics in Behavioral Neurosciences*, 6, 289–314.
- Zucker, N., Losh, M., Bulik, C. M., LaBar, K. S., Piven, J., & Pelphrey, K. A. (2007).
 Anorexia nervosa and autism spectrum disorders: Guided investigation of social cognitive endophenotypes. *Psychological Bulletin*, 133(6), 976–1006.