Casebook of Evidence-Based Therapy for Eating Disorders

edited by

Heather Thompson-Brenner

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About the Editor

Heather Thompson-Brenner, PhD, is a clinical psychologist in private practice in Cambridge, Massachusetts. She founded the Eating Disorders Program at the Center for Anxiety and Related Disorders at Boston University, and directed the program for more than 10 years. Dr. Thompson-Brenner is a former member of the research faculty in the Department of Psychological and Brain Sciences at Boston University, where she is now Associate Adjunct Professor. Her research and publications focus on the influences of patient personality traits, clinician emotions and attitudes, and patient race/ethnicity on eating disorder treatment, as well as the implementation of empirically supported treatments for eating disorders in clinical practice. Dr. Thompson-Brenner serves on the editorial boards of *Psychotherapy* and the *International Journal of Eating Disorders*. She is a Fellow of the Academy of Eating Disorders and is a recipient of a Patient-Oriented Career Development Award from the National Institute of Mental Health.

Contributors

Anne Marie Albano, PhD, New York State Psychiatric Institute, Columbia University, New York, New York

Kelly C. Allison, PhD, Center for Weight and Eating Disorders, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

Donald H. Baucom, PhD, Department of Psychology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Cynthia M. Bulik, PhD, Departments of Psychiatry and Nutrition, University of North Carolina School at Chapel Hill, Chapel Hill, North Carolina; Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden

Eunice Chen, PhD, Department of Psychology, Temple University, Philadelphia, Pennsylvania

Sarah I. F. Daniel, PhD, Department of Psychology, University of Copenhagen, Copenhagen, Denmark

Alison M. Darcy, PhD, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, California

Angela Celio Doyle, PhD, Evidence Based Treatment Centers of Seattle, Seattle, Washington

Kalina Eneva, MA, Department of Psychology, Temple University, Philadelphia, Pennsylvania

Melanie S. Fischer, MA, Department of Psychology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Kathleen K. Fitzpatrick, PhD, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, California

Deborah R. Glasofer, PhD, New York State Psychiatric Institute, Columbia University, New York, New York

Renee Rienecke Hoste, PhD, Department of Child and Adolescent Psychiatry, C. S. Mott Children's Hospital, University of Michigan, Ann Arbor, Michigan

Jennifer S. Kirby, PhD, Departments of Psychology and Psychiatry, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Daniel Le Grange, PhD, Eating Disorders Program and Departments of Psychiatry and Pediatrics, University of California, San Francisco, San Francisco, California

James Lock, MD, PhD, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, California

Alice Lowy, MA, Department of Psychology, Boston University, Boston, Massachusetts

Jennifer D. Lundgren, PhD, Department of Psychology, University of Missouri–Kansas City, Kansas City, Missouri

Susanne Lunn, MSc, Department of Psychology, University of Copenhagen, Copenhagen, Denmark; Institute for Psychology, Københavns University, København, Denmark

Marsha D. Marcus, PhD, Department of Psychiatry, University of Pittsburgh, and Western Psychiatric Institute and Clinic of UPMC, Pittsburgh, Pennsylvania

Elizabeth B. McCabe, PhD, Department of Psychiatry, University of Pittsburgh, and Western Psychiatric Institute and Clinic of UPMC, Pittsburgh, Pennsylvania

Lindsey A. Ohler, MA, Department of Psychology, Temple University, Philadelphia, Pennsylvania

Tibor P. Palfai, PhD, Department of Psychological and Brain Sciences, Boston University, Boston, Massachusetts

Stig Poulsen, PhD, Department of Psychology, University of Copenhagen, Copenhagen, Denmark; Institute for Psychology, Københavns University, København, Denmark

Elizabeth M. Pratt, PhD, Department of Psychology, Boston University, Boston, Massachusetts

Thomas J. Raney, PhD, Department of Psychiatry, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Dana A. Satir, PhD, Department of Psychology, University of Denver, Denver, Colorado

Kay Segal, PsyD, Center for Mindfulness and Behavior Therapy, Segal Behavioral Health, Deerfield, Illinois

Rebecca M. Shingleton, MA, Department of Psychological and Brain Sciences, Boston University, Boston, Massachusetts

Lauren B. Shomaker, PhD, Department of Human Development and Family Studies, Colorado State University, Fort Collins, Colorado

H. Blair Simpson, MD, PhD, New York State Psychiatric Institute, Columbia University, New York, New York

Joanna E. Steinglass, MD, New York State Psychiatric Institute, Columbia University, New York, New York

Marian Tanofsky-Kraff, PhD, Department of Medical and Clinical Psychology, Uniformed Services University of the Health Sciences, Bethesda, Maryland

Heather Thompson-Brenner, PhD, Department of Psychological and Brain Sciences, Boston University, Boston, Massachusetts

Jennifer E. Wildes, PhD, Department of Psychiatry, University of Pittsburgh, and Western Psychiatric Institute and Clinic of UPMC, Pittsburgh, Pennsylvania

Denise E. Wilfley, PhD, Department of Psychiatry, Washington University School of Medicine in St. Louis, St. Louis, Missouri

Jami F. Young, PhD, Graduate School of Applied and Professional Psychology, Rutgers, The State University of New Jersey, Piscataway, New Jersey

Contents

General Introduction

HEATHER THOMPSON-BRENNER

An increasing number of diverse approaches to treating eating disorders have obtained empirical support for their efficacy in recent years. The patients who benefit from these treatments are increasingly diverse as well, in terms of their eating disorder symptoms, the other problems with which they struggle, and the details of their life histories and circumstances.

The idea for this casebook emerged from the observation that clinicians and patients would like to see how therapy actually works—what happens in the therapy sessions. Readers of treatment manuals and research articles may understand the concepts and still find it difficult to imagine the actual conversations between clinician and patient in which those concepts are used. Clinicians remain uncertain of exactly "what to say" or "how to do it," and patients enter treatment with little concrete information about the nature of their chosen therapeutic approach or other available options. The cases in this book include many excerpts of dialogue between patients and therapists drawn or adapted from real psychotherapy interactions, disguised to protect patient confidentiality.

The cases in this book are "evidence based" in at least two important ways. First, these cases all emerged from clinical research that aimed to demonstrate that a defined method of treating eating disorders was actually beneficial to patients, relative to no treatment or relative to alternative treatment approaches. Second, the individual cases are presented with demonstrations of symptom change, including the results of research assessment interviews, self-report questionnaires, the clinicians' observations, and the patient's own words. Evidence from at least two time points—the beginning and end of treatment—is included in every case, and some cases include midtreatment or follow-up data.

The chapters were written by expert treatment–outcome researchers. Many of the cases were drawn from randomized clinical trials. The patients included in the book provided their initial consent to participate in the clinical research—including audio or video recording of sessions in some cases—and then later provided explicit consent for their individual psychotherapy material to be included in this book. In three cases (adolescent-focused therapy, cognitive-behavioral therapy for night eating syndrome, and emotion acceptance behavior therapy) the patient or his/her family either was not recorded or did not wish to provide full consent for the therapy interactions to be published; therefore, the psychotherapy material is less detailed and more thoroughly altered. Throughout the book, those cases based on a single patient who provided explicit consent to publish this material are noted, and those cases that represent composite patients and include altered therapy dialogue are also noted.

To provide perspective on the diversity and distinctiveness of treatment approaches, the cases have been grouped into five sections: "Behavioral Approaches" (exposure and response prevention and family-based treatment), "Cognitive Approaches" (motivational interviewing and cognitive remediation therapy), "Affect-Based Approaches" (psychoanalytic psychotherapy and emotion acceptance behavior therapy), "Relational Approaches" (interpersonal psychotherapy and couple therapy), and "Integrative Approaches" (cognitive-behavioral therapy, enhanced broad cognitive-behavioral therapy, dialectical behavior therapy, and adolescent-focused therapy). Though different approaches frequently overlap in their effect—for example, in a behaviorally focused therapy, changes in cognition and affect are evident as well—we have separated them to facilitate appreciation of the distinctive nature of certain interventions and the intended mechanisms of treatment. However, the inclusion of session process dialogue is intended to allow the reader to perceive the complex, multifaceted processes taking place. The introductions to each section provide theoretical and historical context to the approaches that are described.

OVERVIEW OF EATING DISORDER DIAGNOSES

To avoid repetition, we present here the key criteria of the major eating disorder diagnoses. At the time that the diagnoses in these case reports were made, the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) had not yet been published. In some cases, however, the authors indicate what diagnosis would be applicable in DSM-5, as well as the diagnosis that was made at the time. Given that the focus of the book is not classification, we will here present only the main criteria and definition for each disorder, as well as a few crucial treatment and research considerations.

Anorexia nervosa is characterized by distorted body image and excessive dieting, severe weight loss, and a pathological fear of becoming fat. Individuals with anorexia nervosa are underweight for their height, and may maintain their underweight status by exercising and purging as well as caloric restriction. Females with anorexia nervosa may have amenorrhea (lack of menstruation), and anorexia nervosa has many potentially serious physical effects. Anorexia nervosa among females typically manifests in adolescence or early adulthood, although it can affect females and males of all ages. Recommendations for appropriate treatment vary widely according to culture. In the United States, for example, inpatient or residential psychotherapy for low-weight patients is somewhat more commonly recommended than in other countries; in Europe, for example, outpatient psychotherapy is more common for patients at lower weights. Outpatient clinical trials for adult anorexia nervosa are not considered to have been particularly successful to date, with high observed dropout rates and low rates of recovery (Bulik, Berkman, Brownley, Sedway, & Lohr, 2007).

Bulimia nervosa is characterized by frequent and recurrent episodes of binge eating, which is eating characterized by the subjective "loss of control" over eating. Binge episodes are followed by behavior that compensates for the binge episode, such as purging (e.g., vomiting, excessive use of laxatives or diuretics), fasting and/or excessive exercise. Individuals with bulimia nervosa may be within or above the healthy weight range, and show dysfunctional levels of concern with their shape, weight, or eating. The frequency of binge–purge behaviors necessary for a bulimia nervosa diagnosis was reduced from twice per week to once per week in DSM-5. There are a large number of published outpatient clinical trials for outpatient psychosocial treatments of bulimia nervosa, with good outcomes observed among 40–70% of patients (depending on the definition of good outcome) in the best available treatments (Keel & Brown, 2010).

Binge-eating disorder is characterized by frequent and recurrent episodes of binge eating without specific compensatory behaviors. Individuals with binge-eating disorder may or may not exhibit overly high levels of concern with shape or weight, or distorted body image, which are not necessary to the diagnosis. Individuals with binge-eating disorder may be normal weight or overweight, though the diagnosis shows associations with overweight and obesity. Though binge-eating disorder was relatively recently defined, clinical interventions tend to show relatively good outcomes (and more placebo effects), with good outcomes regularly observed for 70% of participants in many clinical trials (Keel & Brown, 2010). Purely psychological interventions (as opposed to those with a specific weight loss component) are associated with good psychological outcomes, but low levels of overall weight loss (Wilson, 2011).

Eating disorder not otherwise specified was frequently diagnosed under the criteria included in DSM-IV, due to high thresholds for full

criteria diagnoses (which have been lowered in DSM-5), and due to the highly variable nature of eating disorders, which may manifest with or without insight into the nature of cognitive concerns, varying degrees of weight loss, and with or without the full complement of a wide range of unhealthy or unusual weight-control and eating behaviors (e.g., chewing and spitting, eating non-nutritive substances, night eating).

Patients with eating disorders are observed to show a wide degree of heterogeneity within diagnostic categories as well. For example, patients with severe malnutrition, major depression, or personality pathology may differ from other patients with the same eating disorder diagnosis without these co-occurring conditions, and may require different treatment approaches (e.g., Grilo, Masheb, & Wilson, 2001; Thompson-Brenner & Westen, 2005). Patients with severe malnutrition may require intensive interventions for medical or psychiatric reasons as well.

OVERVIEW OF CLINICAL ASSESSMENT

Another purpose of this casebook is to introduce clinicians to the assessment instruments—interviews and questionnaires—that are commonly used in research studies to provide relatively objective measures of pathology, improvement, and outcome. Increasingly, clinicians appreciate the utility of objective measures in clinical practice to inform themselves and their patients.

Common Research Instruments and Domains

The most commonly used structured clinical interview for eating disorder pathology is the Eating Disorder Examination (EDE; Fairburn, 2008; Fairburn & Cooper, 1993). The EDE is a structured interview that assesses the behavioral and cognitive symptoms of eating disorders (e.g., binge eating, compensatory behaviors, food restriction, body dissatisfaction, dietary restraint), as well as specific subscales for shape concerns, weight concerns, eating concerns, and dietary restraint, and a global score that is the mean of the four subscale scores. The EDE assesses the frequency and severity of symptoms over the past 28 days. Norms for the EDE in nonclinical and clinical samples, as well as benchmarks for significant improvements in EDE scores over short- and long-term treatment, have been well established. Most published clinical trials include the EDE as the gold-standard interview instrument with the best psychometrics and highest level of validity, when administered by reliable assessors who are blind to treatment condition.

Various other assessments were used depending on the treatment focus and research questions; all the relevant assessment instruments are described

in the individual case descriptions. Self-report instruments of current and recent eating symptoms, such as the Eating Disorders Examination—Questionnaire version, the Eating Disorders Inventory, or shorter measures of binge–purge symptoms, are commonly utilized to observe week-to-week symptom levels and changes (see chapters for specific instruments and citations). Co-occurring psychopathology, such as Axis I mood and anxiety disorders, or personality disorders, are commonly assessed at baseline and outcome time points using structured interviews with established reliability, and specific related symptom domains (depression level, social functioning) may be assessed using brief questionnaire instruments on the same schedule or more frequently.

Rationale for Research Assessment in a Clinical Scientist Model of Treatment

The importance of an evidence base for psychotherapy practice does not only apply to testing models of treatment in large-scale research studies, but also to the use of reliable and valid assessment instruments within individual courses of treatment. The rationales for collecting empirical evidence of treatment effects apply across treatment approaches. For example, research assessments can help clinicians safeguard against their own erroneous assumptions, which psychological research suggests are all too easy for us to make. Human beings are extremely likely to maintain their beliefs even when erroneous through their ways of collecting and processing information, and therapists and clients are *both* subject to these processes (Lilenfeld & O'Donohue, 2006). A large body of research indicates that clinicians regularly make errors or display biases in judgment in accordance with their own beliefs about treatment, psychology, and psychopathology (Kazdin, 1993; Persons, 2005).

As a simple but general example, a therapist may believe that a particular set of psychotherapy interventions are having a positive effect for his/her client despite the client's subjective experience of the contrary. Regular standardized assessments, in domains pertaining directly to the goals of treatment, allow the therapist and client to observe the same data—possibly more objective data, and certainly more uniform data than each would collect separately by independent observation—measured over time. Additionally, therapists and clients are both subject to make errors regarding *causation* and *expectancy*—that is, to believe that certain correlated events cause one another and that certain behaviors will bring about certain outcomes (Kazdin, 1993; Lilenfeld & O'Donohue, 2006). For example, a client may believe that because he becomes anxious when he socializes, social contact causes anxiety, and that increased social contact will lead to increased anxiety. In the context of an efficacious cognitive-behavioral treatment,

the client may be asked to test these beliefs through a series of behavioral experiments involving social interaction, coupled with frequent assessment of his anxiety levels. The evidence that his anxiety has reduced within one single extended social interaction, and that his anxiety is much reduced after exposure to frequent social contact, helps to disprove these beliefs and thereby promote flexibility in behavior and recovery from social anxiety.

The use of clinical assessment not only to be more "accurate" but also to augment the effect of individual patients' treatment is now well documented and well discussed elsewhere (see Kazdin, 1993; Persons, 2005). It is our hope that the benefits of formal assessments in the treatment of eating disorders in the following cases will be apparent to the readers.

What to Consider When Reading These Cases

Finally, here we present a few ideas for the reader regarding questions to hold in mind while reading the cases. In addition to the evident contrast between the different approaches, you might note also what is common across these generally successful cases. What is necessary, but not mentioned, to having the therapy progress so well? What are the personal qualities of certain individuals with eating disorders that might make a particular form of therapy a good or poor fit? Similarly, are there qualities of therapists that might make them more or less suited to using certain approaches? What would be similar or different if these forms of psychotherapy were used with other emotional issues besides eating disorders? What do you think the influence might have been of the research context to the psychotherapy, as opposed to if the treatment was implemented in a less structured community setting? If you could implement these treatments without such strict guidelines, what changes might you make?

Furthermore, it is fascinating to consider the skill of the therapists—their "art" as well as their science. All cases have difficult moments, when the therapist has an idea of what would be helpful that pushes up against the patient's customary way of behaving, thinking, or feeling. We hope you find it interesting to see how these expert therapists present new, challenging ideas about growth and change without losing their empathic connection to their patients in distress.

In general, we hope that this book will help clinicians (and their patients) to understand and appreciate evidence-based treatments for eating disorders. We hope the collection of different approaches, presented with therapy process material, will facilitate readers' understanding both of the important distinctions among treatment approaches, as well as key common factors across beneficial treatments.

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PART I

Behavioral Approaches

HEATHER THOMPSON-BRENNER

INTRODUCTION TO PART I

The shared characteristics of different approaches to behavior therapy (BT) include aspects of the therapeutic focus, psychotherapy process, and specific interventions (see Anthony & Roemer, 2011, for more complete discussion). Foremost, BT focuses on changing behavior—increasing adaptive behaviors, decreasing maladaptive behaviors, and increasing the flexibility of behavioral options. "Behavior" is conceived widely, including not only deliberate actions but also automatic attempts at avoidance and virtually any conditioned response. BT is active, and behavior change is encouraged inside and outside sessions. BT typically emphasizes the current circumstances that maintain the identified problem, as opposed to the historical antecedents of the problem. Therapy tends to be time limited, in part due to well-identified focal goals. However, the time limits placed on BT may be artifacts of their use in experiments (such as randomized controlled trials), and the optimal treatment length should be defined by the nature and scope of the presenting problems.

One key set of BT concepts pertain to learning by experience, particularly through the process of experiencing *consequences*. BT often includes identification and analysis of the consequences that reinforce a particular behavior (e.g., escape from a feared stimulus may lead to the short-term relief of anxiety, a negative reinforcer), as well as the harder-to-observe long-term consequences of behavior (e.g., repeated avoidance of a feared stimulus may lead to the development of an anxiety disorder or social

isolation). *Contingency management* refers to the practice of arranging the patient's environment so that desired behaviors are reinforced and other behaviors are not reinforced. *Behavioral experiments* allow patients to experience the consequences of new behaviors or new contingencies. *Modeling* involves learning by observation or imitation, as in the case where a patient observes another person doing a feared action, observes the consequences, and then follows his/her example.

BT in practice involves *exposure* to feared or avoided stimuli, including feared situations, objects, emotions, and ideas. *In vivo exposure* is the practice of introducing frightening stimuli in the therapy session, preventing the patient from engaging in behaviors that perpetuate maladaptive behavior (e.g., avoidance), and allowing time for the patient's fear to subside. The observed processes in which a patient's anxiety subsides during a single session of exposure, and also becomes less severe in response to the same stimulus over time, are known as *habituation* or *extinction*. The processes of *systematic desensitization* and *graduated exposure* are related terms, pertaining to therapeutic programs aiming at habituation, starting with a moderately feared stimulus and moving to increasingly more challenging stimuli.

Cognition has been an additional focus of BT from its early years, though the role of cognition has expanded over time. Two early cognitive concepts maintain their significance today. *Expectancies* are cognitions concerning the anticipated consequences of behavior, built up over repeated learning experiences. Expectancies guide behavior, and often have to be altered through new learning experiences. *Self-efficacy* is one important type of expectancy, that is, the belief that one's actions will have the desired positive effect. Self-efficacy is observed to be crucial to any human behavior, and particularly for sustained effort in the context of negative emotion. Therefore, behavior therapists help patients identify their expectancies, test them in behavioral experiments, and modify them to be more adaptive. Therapists also explicitly promote patients' self-efficacy concerning therapeutic practices. The implications of these concepts, and the integration of cognitive and behavioral therapeutic approaches that have taken place over time, are additionally discussed in the introductions to Part II, "Cognitive Approaches" and Part V, "Integrative Approaches" later in this book.

Behavior Therapy and Eating Disorders

Formal behavioral principles have been applied to the treatment of eating disorders from the 1960s, particularly in the treatment of anorexia nervosa (AN), with varying degrees of success. Inpatient programs in the 1960s and 1970s for many mental disorders were built around contingency management, for example, obtaining reinforcement (such as "privileges")

in response to weight gain. However, strict behavioral programs were observed to have limited success, and were experienced by some patients as punitive (Touyz, Beaumont, & Dunn, 1987).

More integrative approaches including behavioral and cognitive interventions were introduced and extensively investigated in the 1980s and 1990s, with more immediate success for the treatment of bulimia nervosa. These approaches are addressed extensively in the last section of the book, Part V, "Integrative Approaches." Integrative psychotherapies include interventions that might be understood from several perspectives, including behavioral: for example, the interventions that suggest and support eating at regular intervals may be understood from a physiological point of view (reducing physiological vulnerability to binge eating) but also might be understood as a *naturalistic exposure*. Patients who skip meals because they fear weight gain may find that eating regularly helps them to habituate to anxiety about eating, and disconfirms their expectancies of intolerable anxiety or immediate weight gain. Regular eating therefore might also be framed as a *behavioral experiment*.

Exposure and Response Prevention for Eating Disorders

The use of formal behavioral practices within cognitive-behavioral therapy for bulimia nervosa, such as *in vivo* exposure to feared foods, initially showed mixed results (Wilson, 1996). However, as explained and demonstrated in Chapter 1 (by Glasofer, Albano, Simpson, & Steinglass) the application of the best practices of exposure therapy to fear of food among individuals with AN shows signs of new promise. "Safety behaviors" are actions that anxious individuals perform to reduce their anxiety in exposure situations. These may include ritualistic and avoidant behaviors, including very subtle behavioral and cognitive methods of avoidance. In the case in Chapter 1, the therapist carefully elaborates and helps the patient to eliminate safety behaviors so that the exposures can be effective. Other "best practices" for the implementation of *in vivo* exposure also include sessions that are long enough that anxiety can be observed (through the use of a rating system such as the "subjective units of distress scale") to be reduced substantially, and that the exposure is repeated multiple times. Though there are limited data to evaluate whether prior exposure-based treatments for eating disorders utilized these practices—it is observed that individuals with AN show many of these rituals and safety behaviors when eating—treatment for AN often does not eliminate rituals and safety behaviors, and relapse to AN after weight restoration is common. The chapter that follows provides details regarding the research that has made these links, as well as detailed description of intensive, cutting-edge exposure and response prevention for AN.

Family-Based Treatment for Anorexia Nervosa

We include family-based treatment (FBT) for AN in Part I, "Behavioral Approaches" (Chapter 2, by Doyle & Le Grange) because the initial and primary focus of the treatment is normalization of the patient's eating and restoration of a normal weight. An earlier version of FBT was called "behavioral family systems therapy" (Lock & Le Grange, 2013; Robin et al., 1999). One of the most important interventions in FBT is the in-session "family meal." The therapist instructs the parents to bring a meal that is appropriate for their starving child, and supports the parental dyad to convince the adolescent with AN to eat one bite more than he/she is comfortable or initially willing to eat. The family meal may be understood in BT terms to be a functional assessment, as it allows the therapist to directly observe complex behavioral interactions, including the parents' choice of a meal, their behavior toward their child, and the subsequent interactions between the two parents (if two are present) and between parents and child. In the family meal, the parents are encouraged to change their behavior toward each other, particularly in order to better coordinate their efforts. They are encouraged to change their behavior toward their child, particularly to overcome various forms of resistance. Thus the family meal may also be understood as a behavioral experiment or exposure, as the parents and child are both asked to try a new behavior that typically triggers anxiety/fear. Though the family is not asked to generalize principles of behavior change beyond their interactions around eating, the successful completion of the family meal is intended to generate new learning regarding the parents' ability to get their child to eat, which is then applied and built upon in the home environment, with mastery that increases over time.

FBT for AN was first described and tested by practitioners at the Maudsley Hospital in London. Though these clinicians and researchers were well versed in many approaches to family therapy, they have described the utility of incorporating behavioral approaches in family therapy to achieve behavioral outcomes (Dare, 1992; Robin et al., 1999). FBT is also focused on the current maintaining mechanisms of the disorder, and is not focused on any historical factors. FBT therapists make it explicit that the family is seen as the source of the solution, not the cause of the problem. In service of achieving behavior change and weight restoration, FBT also employs strategies shown to be useful in other forms of family therapy, notably structural interventions such as unifying and empowering the parents to have authority over the adolescent (Lock & Le Grange, 2013).

Exposure and response prevention and FBT are placed together in this section due to their focus on behavioral change as both the most important focus of session content as well as crucially related to outcome. However, readers will observe that the interventions included in exposure and response prevention and FBT for AN vary widely. Obviously, behavior is

an important consideration in any form of psychotherapy, and relational and affect-oriented approaches include observations and outcomes that are behavioral as well. Additional formal behavioral interventions may be found in Part V, "Integrative Approaches," in Chapter 9 (by Lundgren & Allison) and Chapter 10 (by Thompson-Brenner, Shingleton, Satir, & Pratt) on cognitive-behavioral therapy, and in Chapter 11 (by Segal, Ohler, Eneva, & Chen) on dialectical behavior therapy.

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CHAPTER 1

Overcoming Fear of Eating

A Case Study of Exposure and Response Prevention for Anorexia Nervosa

DEBORAH R. GLASOFER, ANNE MARIE ALBANO, H. BLAIR SIMPSON, and JOANNA E. STEINGLASS

"I can't even drink a sip of water or drink a coffee at 11:00 P.M. if that's a time I usually never do it. I definitely can't eat a meal if it's not at the exact right time."

"Not being able to eat in a certain order makes me so uncomfortable. I eat vegetables and fruit first. I can't eat my main meal before my vegetables. And if I don't have my coffee first then I can't start eating at all."

"Having to make rushed decisions on what to eat . . . I go up to the last minute in deciding what to get . . . I could pick something I really don't want and then I'll regret it . . . I prepare myself for a certain food and that's the food I want. If I have to eat, it has to be what I want otherwise I will get really anxious."

"Sandwiches and wraps are my killer foods. I never eat them regularly. I have to pick them apart. If I try to do it differently, I notice that I get really anxious, but I don't know why this is."

Emily was a 21-year-old female with a 6-year history of anorexia nervosa (AN), binge–purge subtype. After a brief medical hospitalization for treatment of hypokalemia (K^+ = 2.2 mEq/liter), Emily was hospitalized on a specialized inpatient psychiatric unit for short-term treatment of eating disorders (EDs).

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Emily is a disguised/composite portrait.

Her admission height and weight were 5′1½″ and 91 pounds, respectively (body mass index [BMI] = 16.9 kg/m^2). After 2½ weeks, she had not gained weight and Emily was transferred to the New York State Psychiatric Institute (NYSPI)/Columbia Center for Eating Disorders, reporting, "I am looking for something longer term, and I heard good things about this place from one of my friends." On admission to NYSPI, Emily weighed 89 pounds (BMI = 16.5 kg/m^2).

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Cognitive-behavioral therapy (CBT) is often prescribed for AN, due in large part to its success in the treatment of other, related eating disorders such as bulimia nervosa (Wilson, Grilo, & Vitousek, 2007). While CBT has been shown to be more successful than nutritional counseling in preventing relapse, no clear treatment for relapse prevention has been identified. Given the success of treatments of bulimia nervosa, the comparatively limited success of psychotherapy for AN has been disappointing. Similarly, medication trials have generally focused on treatment targets such as depression, and translated from other populations. Yet medications have also not been found to be useful, either for weight restoration (Attia, Haiman, Walsh, & Flater, 1998) or relapse prevention (Crow, Mitchell, Roerig, & Steffen, 2009; Keel, Dorer, Franko, Jackson, & Herzog, 2005). The largest prospective treatment trial for patients with AN provided CBT with fluoxetine versus placebo for relapse prevention and even in that setting, the relapse rate was 57% after 1 year (Walsh et al., 2006). New ideas and new treatment targets are needed. Based on a new model of AN we have developed a treatment for AN using exposure and response prevention techniques that emphasizes eating-related anxiety as the key target of treatment (Steinglass et al., 2011).

ADDRESSING EATING ANXIETY

Individuals with AN commonly describe feeling generally nervous and unable to relax, and endorse many physical symptoms of anxiety, even when at normal weight (Pollice, Kaye, Greeno, & Weltzin, 1997). Anxiety disorders commonly precede the onset of AN (e.g., Bulik, Sullivan, Fear, & Joyce, 1997), and individuals with AN describe specific fears related to food (Fairburn, 2008; Sunday, Halmi, & Einhorn, 1995), including anxiety in anticipation of a meal, concern about the contents of the food they eat, and fear of the effect of food on their shape and weight. They manifest repetitive, stereotyped behaviors used to decrease anxiety around eating that have long been observed to bear similarities to obsessive–compulsive disorder (OCD) (Hsu, Kaye, & Weltzin, 1993). For example, some individuals need to consume foods in a particular order, and some need to

eat slowly so that only small amounts are consumed over time. In short, patients manifest avoidance of feared stimuli, akin to specific phobias (Barlow & Durand, 2005) and ritualized behaviors to reduce distress, akin to OCD. While there are important differences between AN and anxiety disorders, the shared clinical phenomena suggest that anxiety is an appropriate treatment target for AN and that there may be useful overlap in treatment strategies (Steinglass et al., 2011).

THE IMPORTANCE OF EATING BEHAVIOR

It may seem obvious that eating behavior is disturbed in AN—these individuals do not eat adequately to maintain body weight. Yet, the aberrant behaviors related to food that patients describe to clinicians have actually rarely been studied directly. The existing data indicate that even after successful weight restoration, many patients continue to exhibit maladaptive eating. In addition to cognitive symptoms, patients may persist in rigid eating patterns, demonstrate strong preferences for "safe" foods, and avoid a range of specific eating situations. At the end of full weight restoration, scores on measures of ED psychopathology improve from baseline but remain significantly elevated compared with healthy norms (Sysko, Walsh, Schebendach, & Wilson, 2005). Individuals with AN persistently consume inadequate calories to maintain a healthy weight, a core feature of the illness that has been demonstrated in objective laboratory settings (Hadigan et al., 2000). Even after full weight restoration, and with improvement in multiple psychological measures, individuals with AN continue to eat significantly fewer calories, and significantly less fat, than healthy peers (Mayer, Schebendach, Bodell, Shingleton, & Walsh, 2012; Sysko et al., 2005). Moreover, this dietary pattern has been shown to be related to a longer-term course: individuals who eat a diet low in variety and low in energy density are significantly more likely to have a poor outcome at 1 year after hospitalization (Schebendach et al., 2008, 2011).

OVERVIEW OF EXPOSURE AND RESPONSE PREVENTION FOR ANOREXIA NERVOSA

Exposure and response prevention for anorexia nervosa (AN-EXRP) is a treatment approach that specifically targets eating-related anxiety with the intent to improve the restrictive eating patterns that persist after acute weight restoration. This case study will describe treatment of a hospitalized individual with AN using AN-EXRP as an adjunctive strategy. AN-EXRP was developed using the exposure and response prevention techniques of established efficacy in the treatment of anxiety disorders adapted for use

with patients with AN (Goldfarb, Fuhr, Tsujimoto, & Fischman, 1987; Hallsten, 1965), with particular emphasis on response prevention as described in the treatment of OCD (Kozak & Foa, 1997). Exposure techniques have a history in ED treatment. Exposure and response prevention has been studied in bulimia nervosa, focusing on binge eating and purging cues primarily (Bulik, Sullivan, Carter, McIntosh, & Joyce, 1998), with mixed results (Wilson, Eldredge, Smith, & Niles, 1991). The case was selected from a small randomized controlled trial of AN-EXRP (Steinglass et al., 2014). Clinical characteristics have been changed to protect patient confidentiality.

AN-EXRP aims to improve eating behavior by reducing fear and anxiety surrounding eating. The goal is to activate eating-related fears through exposure in the absence of anxiety-reducing rituals. This process disconfirms the patient's identified belief, or "feared consequence." Like standard CBT, treatment addresses the irrational beliefs that can serve to perpetuate dysfunctional behaviors. However, AN-EXRP is distinct from standard CBT in its reliance on the behavioral techniques of exposure and response prevention—rather than cognitive interventions—to address these beliefs. AN-EXRP is also distinct from standard behavioral treatment of AN in that exposure sessions push beyond the practice of normal eating to elicit the fear structure. This is analogous to treatment of OCD, where exposure therapy asks an individual with contamination fears to cease washing while purposefully exposing themselves to things that healthy individuals might normally avoid (e.g., touching public toilet seats) (Kozak & Foa, 1997). In AN-EXRP, sessions may include immersing hands in greasy food until the anxiety about touching food subsides, or sitting with a large amount of food until the fear of binge eating abates. Akin to exposure therapy as it applies to the treatment of anxiety disorders, unusual or "extreme" scenarios practiced during sessions with the therapist enable the patient to practice more manageable exposures on his/her own.

AN-EXRP differs from exposure and response prevention treatment of other diagnoses in some important ways. Because of the extent of ambivalence about healthy weight and ego-syntonic nature of the eating disorder that is common in AN, exposures are typically initiated very gradually to establish alliance or "meet the patient where he/she is," build self-efficacy, and foster belief in the treatment approach.

CASE STUDY: EMILY

History of Present Illness

The current episode of illness began during Emily's second semester in a nursing degree program while she was living at home with her parents and two siblings. Prior to this episode, she had had a year of relative recovery, with a BMI = 19.1 kg/m^2, regular menses, and restrictive intake without

compensatory behaviors. Emily became "more stressed" and stopped eating lunch because she "needed to study." Her eating restrictions increased, such that she was skipping breakfast in addition to lunch, and eating only when other family members were at home. At times, her intake consisted primarily of coffee and hard candies. By Emily's estimate, she typically ate 200–300 kilocalories (kcal) per day. She began to exercise again, increasing her level of exercise to match the number of calories she believed she had taken in that day. Emily ultimately resumed binge-eating and purging behaviors. Her weight plummeted, though she intensely feared becoming fat and described feeling "huge," especially after meals. The precipitous weight loss and resumption of compensatory behaviors led to her tenth hospitalization for AN and her first at NYSPI.

Earlier History

Emily's illness began at age 15. In her explanatory model, she felt that the illness began as an attempt to develop a unique identity. As the fourth child in her family, she believed she was trying to "figure out who [I] was on my own" and dealing with the stresses of "teenage life." She began by reducing what she was eating and developing a regular exercise regimen. This routine became rigid and then excessive and her weight began to fall. By age 16, her pattern of severe dietary restriction was punctuated by binge eating and vomiting. She denied any history of using other compensatory purging behaviors (e.g., laxatives or diuretics).

Swift weight loss resulted in Emily's first hospitalization at age 16. After acute weight restoration treatment, she maintained a normal weight (120–125 pounds, BMI = 22.3–23.2 kg/m^2) for approximately 6 months, motivated by a desire to enjoy her senior year of high school. However, shortly after graduating from high school, Emily was rehospitalized for low weight. Her adolescence and early adulthood were subsequently punctuated by recurrent hospitalizations for AN. She suffered recurrent medical complications of AN (e.g., hypokalemia, bradycardia with heart rate in the 40s, electrocardiograms notable for prolonged PR and QT intervals) leading to psychiatric hospitalizations. She repeatedly achieved weight gain in structured settings, and then rapidly resumed ED behaviors after discharge from the hospital.

Inpatient Treatment Course

The standard treatment protocol for AN at NYSPI consists of a structured behavioral treatment program aimed at normalizing eating behavior and weight. This program has been in place for 30 years and is highly successful at helping patients achieve substantial weight gain (Attia & Walsh, 2009). As she was transferred from an outside hospital, Emily's caloric

prescription was initiated at 2,200 kcal and she was expected to gain 3–5 pounds per week (with caloric increases as needed) until reaching 90% of ideal body weight (IBW), as defined by the Metropolitan Life Tables (Metropolitan Life Insurance, 1959). Ongoing treatment included individual, group, and family therapies, all focused on promoting weight restoration. Individual treatment was a blend of supportive psychotherapy, CBT, and dialectical behavior therapy techniques. When anxiety symptoms were addressed, standard interventions included reassurance, relaxation, and cognitive restructuring. The NYSPI unit has flexibility to function similarly to a residential program when clinically appropriate and the standard program includes a weight maintenance phase after acute restoration. During this treatment phase, structured treatment continues, yet patients have the opportunity to increase autonomy and spend more time off the unit. Emily's course of AN-EXRP began prior to the weight maintenance phase and ended during the weight maintenance phase, prior to hospital discharge. At initiation of AN-EXRP, Emily was sufficiently nourished to be able to maximize participation and learning in a new treatment, with sufficient time left on the inpatient unit to receive a brief course of this adjunctive intervention.

Emily began AN-EXRP approximately 6 weeks after admission, when she had restored weight to 104 pounds (BMI = 19.33 kg/m^2). She transitioned to the weight maintenance phase of treatment during the course of AN-EXRP, on reaching 106 pounds (90% IBW, BMI = 19.70).

MEASURING TREATMENT OUTCOME

AN-EXRP was delivered as an adjunctive strategy concurrent with structured inpatient weight restoration treatment. This short-term intensive program consisted of 12 individual 90-minute sessions conducted over 4 weeks, with between-session practice assignments (Steinglass et al., 2014) in the context of a randomized clinical trial. Assessment focused on measurement of eating behavior and eating-related anxiety as proximal measures of treatment effect with real-world applicability.

Eating Behavior

Intake was measured in pre–post objective assessments and daily self-report.

Laboratory Meal

The laboratory eating assessment provides an objective measurement of intake in an observed setting. Laboratory meals (Steinglass et al., 2012),

in which the patient is alone in the room and makes his/her own choices about intake are modeled after behavior avoidance tasks for social phobia (Becker & Heimberg, 1988; Beidel, Turner, Jacob, & Cooley, 1989). On the morning of the test meal, Emily received a 300-kcal breakfast (yogurt, fruit, and juice) at 8:00 A.M. and then had nothing to eat or drink until the laboratory lunch meal at noon. She was presented with a tray containing a turkey foot-long sub sandwich (600 kcal), a large bowl of potato chips (455 kcal), and a small bottle of water (8 ounces). A jar of mayonnaise was also available on the tray. Intake was calculated by measuring the weight of the food before and after the meal and calculating calories consumed based on kcal/gram weight of the foods.

Food Records

Self-reported food records were collected over 4 days following the protocol of Schebendach and colleagues (2008). Food records are a validated measure in research, and are analogous to the collection of self-monitoring food records that are an essential component of clinical practice for EDs. Emily recorded everything consumed over 4 days. Nutritionist Pro© software (version 1.2.207, First DataBank, Inc.) was used to calculate average daily caloric intake and percent of calories from fat. Dietary patterns were further analyzed by calculating a diet energy density score and a diet variety score. Diet energy density is the mean kcal per gram of food and diet variety reflects the mean number of different foods consumed per day.

Anxiety

Anxiety was measured using standard self-report and interview assessments.

Spielberger Anxiety Inventory—State Version

Emily completed the Spielberger Anxiety Inventory—State Version (STAI-S; Spielberger, Gorsuch, & Lushene, 1970)—rating a range of anxiety-related feelings, such as "I am jittery" and "I feel calm"—prior to entering the room for the laboratory test meal, as an assessment of premeal anxiety. Premeal anxiety has been shown to be related to caloric intake (Steinglass et al., 2010).

Subjective Units of Distress Scale

Emily reported her anxiety prior to and every 3 minutes during the laboratory lunch meal on the Subjective Units of Distress Scale (SUDS; Wolpe & Lazarus, 1966) on a 0–10 scale, to quantify general anxiety. Emily also communicated SUDS levels during exposure sessions.

Yale–Brown–Cornell Eating Disorder Scale

The Yale–Brown–Cornell Eating Disorder Scale (YBC-EDS; Mazure, Halmi, Sunday, Romano, & Einhorn, 1994) is a semistructured interview that is a modification of the Yale–Brown Obsessive Compulsive Scale that yields two subscales that reflect severity of current ED-related rituals (e.g., "need to manipulate or stir food") and preoccupations (e.g., "thinks excessively about the fat content of food").

EMILY'S BASELINE ASSESSMENT

Emily was essentially unable to eat at the baseline meal (total intake was 18 kcal, with a diet energy density score = 0.09). She took bites of the lettuce and tomato provided with the sandwich. Immediately after the meal, she completed a "thought record" form in which she listed the thoughts she remembered having during the meal. Emily wrote, "I really don't want to eat this" and "Put your fork down now. If you continue eating, you'll regret it later." Emily demonstrated high eating-related anxiety on both the STAI-S and SUDS measures. Her premeal STAI-S was 54. The mean for healthy individuals prior to a test meal has previously been reported as 25.0 ± 4.6 (Steinglass et al., 2010). Her premeal SUDS rating was 8 out of 10. Emily reported a YBC-EDS with total score of 25 (rituals = 12, preoccupations = 13), reflecting "extreme distress" related to preoccupations and "yielding to all" rituals.

Emily's daily food records, though restrictive, reflected more appropriate intake than her laboratory meal would suggest. She was in a structured eating program with a daily prescription of 3,000 kcal and many of her meals were provided for her, though she had some element of choice in menu items. One-third of her meals were eaten off the inpatient unit on meal passes. As calculated from her food records, her average daily caloric intake was 2,299 kcal, with 27.6% of calories from fat. Food records reflected a diet energy density score of 0.79 and a diet variety score of 10.25. For comparison, diet energy density scores of 0.9–1.0 and diet variety scores of 12.8–15.7 were associated with good outcome in prior studies of AN (Schebendach, Mayer, Devlin, Attia, & Walsh, 2012; Schebendach et al., 2008).

AN-EXRP TREATMENT COURSE

Evaluation and Treatment Planning (Session 1)

AN-EXRP begins with an assessment and extended treatment planning session (90–120 minutes). The goal of Session 1 is to elaborate in detail the beliefs the patient has about eating, stimuli that generate the most anxiety

(or avoidance), feared consequences he/she imagines will happen if he/she eats, and behaviors to reduce anxiety (i.e., rituals and avoidance behaviors; see Table 1.1 for common fears and behaviors).

The therapist provides psychoeducation about the role of irrational beliefs in AN and the dimensional nature of anxiety. The rationale for exposure therapy and response prevention is provided explicitly:

> "The goal of this treatment is to reduce the power that eating-related anxiety [or distress] has over your behavior. Unless you confront the feelings/situations you may continue to believe that the situation is dangerous, and continue to feel anxiety [or distress]. If you confront the feelings in the situation, you will find out that it is not as scary as you believed, that what you fear is not really happening, and that your anxiety will diminish with repeated confrontations."

To create a shared language around anxiety, the therapist asks the patient to identify some fears that are not related to eating, and may even be normative fears. Together, the patient and therapist arrange fears in a hierarchical order using a SUDS, similar to, but more elaborate than the SUDS developed by the patient for use during the test meal. This concept—that

TABLE 1.1. Common Fears and Behaviors

Eating situations	Rituals	Avoidance behaviors
• Food preparation • Buffet-style eating • Selecting portions • Grocery shopping • Eating in front of people • Eating in particular moods • Holding food • Choosing food from a menu • Particular food items	• Using a napkin between bites • Cutting food into small pieces/particular number of pieces • Eating/drinking slowly or quickly • Eating in a particular order (e.g., vegetable, protein, starch) • Separating or combining foods in particular ways • Separating foods on a plate • Counting bites • Comparing with others who are eating • Leaving some amount of food on the plate • Mental rituals (e.g., counting calories, reciting a mantra)	• Not touching foods • "Checking out" or "numbing out" • Eating with television or music on • Thinking about other things while eating • Not eating particular meals, foods, or food categories (e.g., sweets) • Not eating at particular times of day • Stop eating due to a particular sensation • Eating alone • Drinking only with a straw

anxiety is dimensional and not "on–off"—becomes a framework for the treatment. The SUDS framework is then applied to the eating situations the patient has described as anxiety provoking, and to the associated rituals, avoidance behaviors, and feared consequences. Each situation is given a SUDS ranking, thereby creating an elaborate individualized hierarchy of feared foods and eating-related situations.

At the end of Session 1, the first exposure is planned. This aims to be something very low in the hierarchy, to build trust in the therapist and the treatment through a successful exposure experience. Finally, self-monitoring homework, focused on increasing awareness of fluctuations in anxiety and use of avoidance and/or rituals, is introduced and assigned.

EMILY'S SESSION 1

Over the course of this session, Emily described many of her eating symptoms and her fears. It became clear, as she and the therapist agreed, that her primary fear related to unending weight gain: "I will get fat . . . so fat that I will be physically unable to move."

She identified numerous specific eating situations that activated this fear: drinking caloric beverages, finishing a meal in its entirety, portioning food for herself, and eating foods when she didn't know the caloric intake or had received something slightly different than what she expected (e.g., a sandwich on wheat bread instead of pita bread). In addition, Emily identified specific foods that were anxiety inducing as she feared these foods would inevitably lead to binge eating and purging.

With probing, Emily also articulated a "fear of fear itself": "I don't know what might happen. I'd just get really, really anxious."

She identified situations related to this feared consequence in which she feared becoming so anxious that she "could not manage": not looking at a menu in advance, eating at the "wrong" time, eating out of order, choosing foods off a menu quickly.

Emily's fears were arranged into her individual SUDS hierarchy (see Table 1.2). Even in this first session, Emily identified behaviors that she relied on to reduce anxiety: estimating caloric content of each food she ate and tallying up the day's total repeatedly; picking apart, separating, or manipulating foods; drinking fluids slowly; and fidgeting or pacing frequently to burn calories. It was agreed that these behaviors could be named "rituals." Emily also described recurrent behaviors to avoid intake: not finishing her plate of food, underportioning, avoiding calorically dense foods, and enforcing strict rules regarding timing of meals and snacks. These were named as "avoidant behaviors."

Emily understood the rationale for AN-EXRP, and provided her own example of how exposure can be helpful. She explained that at the start of

TABLE 1.2. Emily's Exposure Hierarchy

This table presents a selection of situations and foods that Emily identified. Her full list, as used in treatment, is much broader, and the version of the hierarchy that is used in the treatment is spread across multiple pages.

SUDS	Eating-related situations and foods
10	French fries; pasta with olive oil; pizza
9	Finishing whole plate of food; portioning at a buffet; butter on toast/muffin; eating a meal at an "off" time
8	Iced latte; soda; bagel and cream cheese (portioning from large container); eating whole sandwich without picking it apart; picking a snack quickly; not changing order at a restaurant
7	Hot latte; smoothie from street cart (unknown calories); eating "out of order"; bagel and single-serve container of cream cheese; finishing a yogurt or small bag of chips; plain pasta; not walking after a meal
6	Eating one-half sandwich without picking it apart; not fidgeting/body checking at a meal; hard-boiled egg; eating a snack at an "off" time
5	Bites of sandwich without picking it apart; instant oatmeal with fruit mixed in; drinking sips of juice at an "off" time; not fidgeting after a meal
4	Coffee with milk and sugar; fruit juice; finishing a portion of fruit salad; instant oatmeal; drinking sips of water at an "off" time
3	Fat-free popcorn; cucumbers; lettuce
2	Egg whites
1	Plain coffee; water

her graduate training, she found it anxiety provoking to work as a trainee in the hospital:

> "When I first started [clinical rotations] at the hospital, I was really anxious but the more I went, the more accustomed I became to it . . . at first, I'd be terrified to even approach a patient, but eventually it became just like I was changing a dressing and it would be totally okay."

In Emily's description, she initially feared making a mistake and causing someone harm, being reprimanded by a supervisor, or becoming so anxious that she would be unable to perform her role competently. Emily explained

that as she pushed herself to face this new role, she learned that she could do the job, that supervisors expected her to make some errors and provided supervision such that no harm would be done, and that her anxiety would substantially decrease the more frequently and completely she threw herself into the work. With repeated "exposure," Emily grew to love the job and to feel quite good at it. This story, which embodies the spirit of exposure, was returned to throughout Emily's AN-EXRP sessions to reiterate the rationale for treatment and maintain her motivation.

Emily and her therapist planned for Session 2, the first exposure—selected from the bottom third of her hierarchy (at a SUDS rung of 3 or 4): coffee with milk and sugar. The therapist introduced the structure for Session 2:

> "This is a therapy that is likely to feel difficult and demanding. But it is collaborative . . . you will always have an idea of what we will be working on in a session . . . and my role in this is to work with you, to help you approach the things that feel scary . . . it's to coach, not to push, so that you are working on things that are challenging but not totally overwhelming."

Between sessions, Emily began the homework of self-monitoring. Using the AN-EXRP framework, she recorded her anxiety level through the day, reported as SUDS, in relation to eating- and weight-related triggers ("self-monitoring").

Phase I: Engagement (Sessions 2–3)

Each exposure session consists of an eating experience selected from the patient's hierarchy. In Phase I, sessions strongly emphasize developing confidence in and obtaining success with exposure. The immediate goals in Phase I are to engage with, learn about, and begin to tolerate the function, nature, and course of anxiety. Eating situations are selected from the lower third of the hierarchy, where the content is feasible, and the session will promote self-efficacy.

Homework in this phase (reviewed at the beginning of each session) is daily self-monitoring of anxiety, rituals, and avoidant behaviors. After homework review, the patient is asked his/her current anxiety level reported as a SUDS rating. SUDS ratings of anxiety are acquired every 5–10 minutes throughout the session. The session continues until the patient's anxiety decreases by at least 25% from its peak.

Before the eating exposure begins, the patient is asked to articulate his/her goal for the session. This in part serves to confirm understanding of the treatment rationale. The food is placed on the table and the patient is

encouraged to approach the situation and begin. Throughout the exposure, the patient is coached to remain fully present, and to be aware of his/her experience. The therapist helps prevent avoidant behaviors by coaching to look at the food, bring the food close, and experience textures and flavors, as well as to talk about how the food tastes and the experience of swallowing the food, and feeling sensations of fullness or digestion.

At the end of the session, the patient identifies something that he/she learned from the specific exposure (i.e., a "take-home message"). Specific practice assignments are created at the end of each session to be conducted repeatedly between sessions. The content of the next session is identified.

EMILY'S PHASE I

Self-monitoring forms indicated that Emily experienced high anxiety most of the time in food-related situations. She noted that she could identify modest fluctuations in these feelings. Emily identified triggers of anxiety that led to fidgeting or pacing to reduce distress. She reported: "[The homework] makes me much more aware of it all, as I'm doing it, and I think of ways to combat [rituals]."

Exposure to Coffee with Milk and Sugar

The therapist set the table with cups of coffee varying in size, milk poured out into separate cups, and sugar. The fat content of the milk was not identified. Emily appeared flushed and described feeling warm, noticing tightness in her chest and throat as well as racing thoughts. She leaned away from the coffee and directed her gaze away from the drink. The therapist reiterated the rationale for exposure therapy and reminded Emily of the narrative she had provided about her experiences successfully facing anxiety as a student. The therapist coached her first to face, then lean toward, then hold the drink in her hands while expressing her fears aloud and describing all physical sensations of anxiety as they occurred.

THERAPIST: Where should we start?

EMILY: I really don't want to drink this.

THERAPIST: I know. Remember, in these sessions we go after the situations where there is going to be a lot of resistance. Kind of like how at first when you did your clinical rotation, you did not want to approach the patient and then with practice it got easier. What we work on here is noticing this fear and going for it.

EMILY: (*Adds milk and sugar to her coffee and begins to drink it. After a*

sip, she puts the lid back on, puts the cup on the table and leans back in her chair.) Can we wait a little? If we wait a little, I'll be less full then.

THERAPIST: Part of what we're working on here is this fear that fullness is actually dangerous.

EMILY: (*Picks up the cup, uncovers it, and continues to drink*.) I'm just so heavy.

THERAPIST: Where is the heaviness in your body?

EMILY: My abdomen.

THERAPIST: And what are you feeling there right now?

EMILY: (*Begins pinching at her stomach.*) Oh now, see, I went right to body checking.

THERAPIST: Okay, let's keep your hand on the coffee cup.

EMILY: At least I noticed it, I see the connection.

THERAPIST: Yeah, that's good. The body checking, the ritual, is definitely connected to the anxiety. Stay with it [the anxiety].

EMILY: (*Continues to hold the cup and drink the coffee.*) I think I'll take a bigger sip and see what happens.

THERAPIST: That's a good idea. Let's give it a shot and see what happens.

EMILY: (*Takes a large mouthful of her drink, and then starts to put the cup down.*)

THERAPIST: Keep hold of the cup. Stay with it and tell me what you are feeling.

EMILY: It was too big. Now I've put too much in my body . . . I am just so afraid of being so full . . . I won't be able to move . . .

Over the course of the session, Emily reported multiple fears. She described fear of feeling fullness, fear of the unknown caloric content (as milk and sugar were unmeasured), and fear of the feeling of anxiety itself. As the coffee cooled, she expressed fear that calories taken in from cold beverages might be "different to my body" (i.e., more "harmful") than hot beverages.

THERAPIST: Let's try again to lean into the anxiety, in the same way or a different way, and see what happens. You can try taking another big sip, you can add more milk or sugar to what you already have, or you can take one of the cups of coffee, milk, and sugar that I mixed ahead of time.

EMILY: I really, really don't want to do this, but I'm going to do this because

this is the thing I really don't want to do and I think it will make me so, so anxious. (*Reaches for the premixed drink and takes a sip.*) I feel the same.

THERAPIST: Good, that was not what you expected. Can you up the ante then? Can you add another sugar or more milk?

EMILY: I can't.

THERAPIST: What would it be like if you did?

EMILY: More calories.

THERAPIST: And what would that mean? What would happen from those calories?

EMILY: I just don't think it's necessary today. I don't need the calories and it tastes fine like this.

THERAPIST: There is some sort of slippery slope that happens with anorexia nervosa where there's a good story you could tell yourself, like why would I bother, it tastes fine as is, there's no reason to . . . so you're saying you can live without it, but the question we ask here is can you live with it? We want to dial it up and see what it's like, see what the big scary thing in the room is that we're up against.

Emily anticipated that she would become so anxious and fat that she would be "unable to move." She then tested this fear, taking several sips of a drink prepared by the therapist. She noted that—counter to her feared consequence—her anxiety did not worsen. She was, in fact, more full, but she was not uncomfortable or unable to move. This exemplifies the "disconfirming of the feared consequence" that is the goal of every exposure session.

In the session, Emily revealed that she had a rule that she would not let herself consume any liquids after 3:00 P.M., until dinner. She explained her reasoning:

> "If it's not my mealtime, my body won't know what to do because it's not used to it . . . I'll be so full . . . and here it'll store it all as fat because it's not used to me having a snack. But wait, that doesn't make any sense. That really does not make sense."

The therapist noted this new identification of an avoidant behavior that she most likely used to minimize fear of fullness before a meal. Emily took additional sips of her drink.

To complete the explanation of the rationale for AN-EXRP, the therapist provided psychoeducation about anxiety. She described that anxiety has a natural time course and will dissipate on its own. She reviewed the

patient's anxiety ratings over the course of this session. The decrement in anxiety, or, within-session habituation, was explicitly described as "riding the wave of anxiety down from its peak." Looking at a plot of her SUDS ratings from the session, Emily noted, "That looks good. I allowed myself to be challenged and my anxiety still went down." The therapist introduced the goal of between-session habituation (e.g., "feeling less anxious with repeated practice") across future sessions.

Phase I concluded with a repetition of the same exposure. Emily's initial and peak SUDS ratings were lower than those reported at the first exposure (see Figure 1.1). She was less avoidant of the food stimuli overall and moved faster to begin preparing, holding, and drinking the coffee, milk, and sugar. Emily closed her eyes while the therapist adjusted her drink with milk and sugar. This helped Emily to more deeply connect with fears of weight gain from items with unknown caloric content. She again verbalized her fear of fullness, elaborating that fullness felt "like a 10-pound weight sitting on [my] stomach." Saying it out loud reinforced her own evaluation that this thinking was irrational.

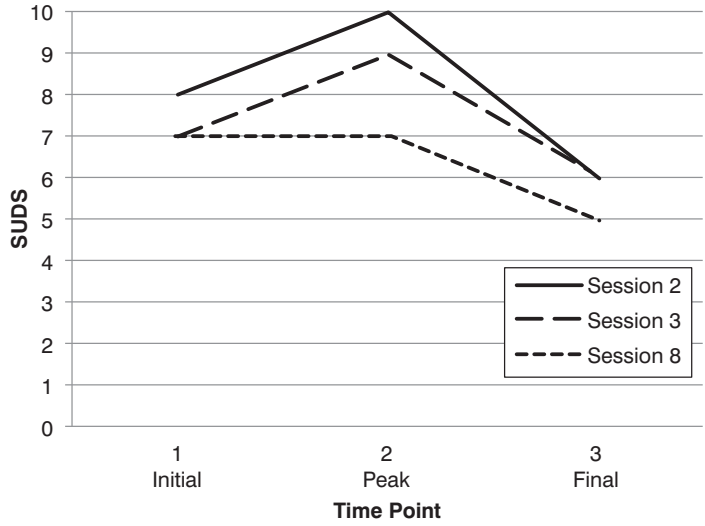

FIGURE 1.1. Example of habituation across sessions. In each of these sessions, Emily was exposed to a caloric hot beverage, namely, coffee with milk and sugar. Exposure manipulations by the therapist are described in the text. Each line depicts the increase in anxiety rating (SUDS) during that session to a peak, followed by within-session habituation reflected in a decreased SUDS rating at the end. Between-session habituation is also depicted, as SUDS ratings at each time point decrease with repeated exposure.

Emily identified several take-home messages:

"The longer I delay, the more the anxiety builds up."
"I drank 'the unknown' and my anxiety did not spike."
"I can push through and do uncomfortable things."

Homework in Phase I included taking sips of liquids throughout the day, and drinking all beverages slowly at meals and snack time. Additional assignments addressed Emily's problematic use of activity (i.e., fidgeting to avoid anxiety, walking to burn calories). She planned to stand at a red traffic light or while waiting for a subway train to arrive (instead of pacing) and sit still while outside getting fresh air with other patients after meals.

Phase II: Exposure Hierarchy Challenges (Sessions 4–9)

In the middle portion of AN-EXRP, exposure content moves up the individual's hierarchy as rapidly as possible. The aim is "to reduce the power that your feelings have over you," and this is stated to the patient. The more specific goals of this phase are to reach the top third of the hierarchy, to expand from snack or single-item exposures to full meal-based exposures, to increase between-session practice, and to note decreased use of rituals and avoidant behaviors in self-monitoring.

The therapist repeatedly actively engages the patient in learning to tolerate high levels of anxiety. During the exposure, the therapist asks the patient to identify and verbalize his/her somatic sensations, to describe the experience of the food- or eating-related situations, and to articulate his/her thoughts as they occur. These thoughts are formulated as the feared consequences of the eating situation and emphasized to the patient as the fears that he/she needs to challenge. In keeping with AN-EXRP's collaborative stance, the therapist may remind the patient at the start of an exposure that the therapist's role is to coach, but not to reassure. Thus, it is explicitly agreed that reassuring psychoeducational information will be provided only once. The therapist also interrupts any ritual and safety behaviors during exposures. As Phase II progresses, the therapist may shift this responsibility to the patient, so that he/she will stop him/herself from these behaviors.

Classic exposure therapy commonly includes "environment sessions" in the patient's home. However, the patients in this study did not all live locally, so the environment sessions in Phase II consisted of one to three sessions in the local environment, including restaurants or other public settings. In a restaurant setting, exposure content might include finishing a

meal, or ritual prevention during a meal (e.g., not cutting food into tiny pieces, not blotting oil), allowing for the gathering of information about the individual's functioning in the environment. Examples of environment-specific exposure content include ordering from an unknown menu, increasing variety in ordering from a menu, interacting with the server, or ordering quickly. In addition, the therapist has an opportunity to assess the patient's social fears of eating situations with probes such as "What does it feel like to be sitting in public, eating?" or "What kinds of concerns do you have about being seen eating by others?" Particularly difficult sessions are sometimes repeated to achieve substantial habituation.

Homework assignments are designed to occur on the inpatient unit, or during time spent off the unit. Exposures in the environment commonly generate new content for between-session practice. Repetition is essential and prescribed. Self-monitoring is further emphasized in this phase, as the patient is more aware of the triggers for and fluctuations in anxiety. He/she is encouraged to discontinue use of rituals and safety behaviors (including avoidance) altogether, particularly when his/her SUDS rating is low. When a patient has difficulty resisting the use of his/her rituals and safety behaviors, he/she is encouraged to "undo" the ritual to reconnect with some degree of anxiety:

> "Most people find that their brains automatically distract them from the task at hand and/or generate reassuring thoughts or behaviors during exposure work. The ideal way to handle this in the context of exposure work is to 'undo' these as best you can and allow yourself to return to (not avoid) your distress."

For example, in response to feeling fat or worried about weight gain, a patient might initially put on an oversized shirt to drop his/her anxiety (the ritual). One potential "undo" for this behavior would be for the patient to attempt wearing a fitted top for anywhere from 5 minutes to an hour to reengage the anxiety, at a lower, more manageable level. The undo is also utilized for mental rituals (e.g., repeatedly counting calories, reassuring thoughts). An undo typically involves replacing the reassuring mental act with a thought that is less reassuring or introduces more uncertainty. The undo therefore represents another way for patients with AN to practice leaning into anxiety.

EMILY'S PHASE II

Emily gradually worked her way up to having sessions that included foods ranked at a SUDS level of 8 on her hierarchy, such as bagels and cream

cheese. Sessions confronted eating situations ranked at a SUDS level of 9, such as portioning food for herself from a large container, eating a sandwich without picking it apart, and finishing food items. Sessions took place on the inpatient unit and in the therapist's office. Environment sessions occurred in the hospital courtyard and a local restaurant. The therapist encouraged Emily to use what she had learned from prior exposures about the natural, dissipating course of her anxiety to help her to consistently approach—rather than pull away from—food. Emily and her therapist regularly targeted avoidant behaviors. As Phase II progressed, Emily learned to verbalize her anxiety state or feared consequence after which she was able to immediately eat without prompting.

Session 7 was a breakfast meal consisting of a bagel, an individualized portion of cream cheese, a hard-boiled egg, and orange juice. Emily's goal was to finish the meal in its entirety. (Of note, at this point in her clinical treatment, Emily found that she was unable to finish meals when she was on her own, off the unit, and the constraints of the behavioral reinforcement were not present.) At the start of the session, she paused only briefly after putting cream cheese on the bagel before she began eating.

EMILY: I'm really afraid to start eating it [the bagel].

THERAPIST: What is your SUDS rating?

EMILY: 9.

THERAPIST: And what have we learned about the fear?

EMILY: It goes higher the longer I wait. (*Moves to start eating, but reaches for a different food item.*)

THERAPIST: Can you see if you can start with the bagel?

EMILY: (*Picks up the bagel and cream cheese and takes a bite.*) It's not as bad as I thought. I'm at an 8 now.

Later in the session, Emily described fear of the calories in the egg yolk of the hard-boiled egg. She then took a bite, unprompted, again noting that her anxiety did not worsen.

Emily was consciously invested in challenging her avoidance of anxiety. Nevertheless, the avoidant behaviors were numerous and not always immediately recognizable to her. One of her avoidant techniques involved distracting herself, and her therapist coached her to remain present. Halfway through an exposure meal, Emily began to talk about recent experiences at other meals on the inpatient unit:

THERAPIST: Let's keep it [our focus] here.

EMILY: I don't want to keep it here.

THERAPIST: I know. Why is that?

EMILY: It would be so much easier if I could talk about anything else . . . then I wouldn't have to concentrate on this.

THERAPIST: What's the benefit of checking back in?

EMILY: Being able to deal with the anxiety.

Emily grew increasingly aware of avoidant behaviors and took responsibility for reducing them. The treatment focus then moved up the hierarchy to challenge her rituals during and between her exposure sessions. She practiced eating big bites, eating without manipulating foods (e.g., not separating a sandwich), eating "out of order," finishing items completely, and taking a bite she considered "extra" to challenge fears of fullness and weight gain.

In early Phase II (Sessions 4–6), Emily did not experience a 25% reduction in anxiety by the end of the exposure session. The therapist advised her to continue regular SUDS monitoring after the session and in so doing she learned that her anxiety continued to decrease with time. By Session 7, she experienced the expected reduction in anxiety within the time frame of the exposure session. Emily described the knowledge that her anxiety would always decrease and that this was happening more rapidly, even in the face of moving up the hierarchy, to be "relieving" and "empowering, like I'm not helpless."

Session 8 consisted of exposure to coffee, which was a repetition of the content from Phase I. Emily expressed that her overall anxiety was diminished, even as she behaved in new ways by quickly approaching the drink, staying focused on it, and allowing the therapist to put unknown amounts of sugar and milk into the mix (see Figure 1.1).

In Emily's self-monitoring homework, she recorded that she resisted using rituals and safety behaviors when her SUDS level was at or below 7. When her anxiety was rated greater than 7, she commonly engaged in the ritual behavior but maintained adherence to the treatment by doing an "undo" that brought back anxiety sensations. For example, if she felt an urge to walk, with an associated SUDS so high that she found she could not resist, she started walking to her destination in an effort to prevent weight gain. This ritual served to drop her anxiety immediately. She noticed this, and would pause and choose to increase her anxiety modestly by taking a shorter walking route, and then by sitting still for several minutes. Emily used the undo technique to address avoidant behavior. When she became aware that she had "checked out" during a meal, she would stare intently at each item on the tray that she had finished to reconnect with anxiety about her intake.

Phase III: Consolidation (Sessions 10–12)

Phase III aims to help the patient consolidate what he/she has learned from the entire course of AN-EXRP. The content of Sessions 10 and 11 come from a plateau point in the top third of the patient's hierarchy. In Session 12, the final exposure is designed not to be challenging, so as to end with a guaranteed success. This often involves repeating prior content, or selecting something that is a modest step down on the hierarchy. Session 12 also focuses on the individual continuing his/her skills after termination. The patient and therapist review together each of the prior sessions, including the content, themes, and take-home messages. The patient is asked to create a written plan for relapse prevention after hospital discharge with the directions to consider how he/she might carry skills and knowledge developed during this treatment into the future, and to identify at least five ways to integrate what he/she has learned. The patient is encouraged to be as specific as possible in formulating future plans and goals. AN-EXRP ends with the therapist and patient reflecting on the patient's plan and supporting the continued integration and generalization of treatment principles going forward.

EMILY'S PHASE III

Exposure content came from the top third of Emily's hierarchy, including an iced latte, and a peanut butter and jelly sandwich. She continued to challenge her fidgeting and food manipulation rituals in session, with an additional emphasis on avoidant behaviors such as underportioning foods and leaving food on the plate. Emily recognized that while she thought of these behaviors as "playing it safe" and aiming to "not gain weight," they perpetuated her fears. In Session 10, Emily consumed an iced latte, which moved her up her hierarchy from the repetitions of hot coffee to the consumption of a cold beverage (rated high on her hierarchy; see Table 1.2) because she believed cold beverages were digested differently. When it came time to do the exposure, Emily found that her SUDS was 7.5, peaked at 7.5, and then came down to 4.5, which demonstrated both between-session habituation and generalization to the iced beverage from what she had learned with the hot coffee (see Figure 1.1).

In Emily's final AN-EXRP session she prepared and finished eating a peanut butter and jelly sandwich, portioned chips from a large bag, and drank a caloric beverage (juice). This content was a repetition from prior sessions. Her goal was to adequately portion the chips and to again finish her meal in its entirety. With minimal guidance from the therapist, she approached and then tolerated anxiety using a variety of behavioral strategies: she portioned more peanut butter than she felt was "safe," she kept the

sandwich together, she took bites from the middle of the sandwich while actively focusing on the "filling" of peanut butter and jelly, and she resisted the urge to fidget. Emily finished each item in its entirety. She described an overall decrease in anxiety (SUDS level started at 7.5, peaked at 7.5, and lowered to 3.5) compared with earlier sessions. During the debriefing after the exposure, Emily articulated a good understanding of why it would be critical for her to continue to challenge rituals and avoidant behaviors:

EMILY: This [taking appropriate portions, not calorie counting, finishing a meal] is good. This is hard but it's good. This is what I'm going to need to know how to do. When I go out to eat, I can't possibly know what's in the food or how much I need.

THERAPIST: That's right and here you really went against that.

EMILY: I know. Like I even took more chips than I wanted because I knew I had not taken enough.

The therapist explicitly acknowledged Emily's initiative throughout the last exposures as treatment neared its end:

> "You have really started to take charge here, to be your own exposure therapist and figure out the ways you can keep leaning in towards your anxiety. That is going to be really helpful and important as you keep working on this after our time together ends."

Emily brought her final AN-EXRP assignment to the last session (see Figure 1.2). Her plan demonstrated her understanding of the treatment approach, its rationale, and her desire to use behavioral strategies herself. In the session, Emily's therapist worked with her to turn these general principles into specific behaviors.

1. *If I am portioning, go over my comfort level since I usually underestimate.*
2. *The more I sit with a feeling, the easier it is to deal with it in the long run, so keep challenging my urges to fidget and walk.*
3. *Drink caloric beverages; cold fluids do not stay in you forever.*
4. *Distracting myself makes anxiety worse since each time I bring myself back, anxiety peaks again. Anxiety also builds up with time, so avoidance doesn't work. I need to go for it and get started, and stay with it!*
5. *Repetition of new things really helps me. I need to keep trying new and scary foods and then repeat them (example: pizza).*

FIGURE 1.2. Emily's relapse prevention plan.

POSTTREATMENT ASSESSMENTS

The comparison of pre- and posttreatment assessments are presented in Table 1.3. Emily's intake in the test meal improved after AN-EXRP. She consumed 209 kcal, with a diet energy density score of 0.93. In her thought record form after the meal, she stated her thoughts as "I think I can challenge myself to the chips," "I want to rip this sandwich apart, but I won't," and "Just a few more bites." This was a substantial change from her pretreatment self-talk, which had been entirely centered on inhibiting her eating.

Emily's levels of eating-related anxiety were lower than at baseline, but were still relatively high. Her premeal STAI-S was 51 and SUDS rating was 6.5. Consistent with the goal of AN-EXRP, she demonstrated an ability to eat at the test meal, even in the presence of anxiety. More broadly, her overall obsessive and compulsive symptoms improved, with a YBC-EDS

TABLE 1.3. Emily's Data Summary

	Pre	Post	Clinical context
STAI-S	54	51	Population norms for STAI-S are below 30, and 45 is considered clinically significant anxiety.
SUDS	8	6.5	SUDS > 7 reflects severe anxiety, whereas 4 to 6 reflect moderate anxiety.
Test meal intake	18	209	Mean intake in the lab across all participants was 421 ± 254 and 413 ± 216, respectively.
Daily intake	2,299	2,040	Prescribed intake was 3,000 kcal at both time points.
DVS	10.25	12	DVS of 12.8–15.7 at posttreatment (prior to discharge) is associated with better outcome at 1 year.
DEDS	0.79	0.87	DEDS of 0.9–1.0 at posttreatment (prior to discharge) is associated with better outcome at 1 year.
YBC-EDS	25	20	Mean YBC-EDS pretreatment is usually reported ~18.

Note. STAI-S, Spielberger Anxiety Inventory—State Version; SUDS, Subjective Units of Distress Scale; DVS, Diet Variety Score; DEDS, Diet Energy Density Score; YBC-EDS, Yale–Brown–Cornell Eating Disorder Scale.

At the test meal, Emily shows some minimal improvement in eating-related anxiety (STAI-S and SUDS), with considerable increase in intake. Emily's daily eating pattern is more mixed. She shows improvement in the indicators that have been specifically associated with longer-term prognosis (DEDS and DVS), without improvement in daily caloric intake.

total score of 20 (preoccupations = 9, rituals = 11), reflecting change from "extreme" to "moderate" for preoccupations, and a new ability to "make some effort to resist" rituals.

Emily's daily food records reflected an average intake of 2,040 kcal/day, with 28% of her calories from fat. Her eating pattern, or food selections, showed important improvements. She was eating a greater variety of foods, reflected in a diet variety score of 12, and more energy-dense foods, reflected in a diet energy density score of 0.87.

THERAPIST CONSIDERATIONS AND CONCLUSIONS

Exposure and response prevention therapy, in general, can be an intense experience for the therapist as well as the patient. For those in the healing profession, it is common to want to help patients to feel better, and asking them instead to lean in to the discomfort of anxiety can feel uncomfortable and disconcerting. AN-EXRP, like all exposure therapies, teaches the therapist to tolerate the patient's high level of distress in the interest of longer-term health. Here we highlight some therapist "helpful hints" for each section of this treatment.

Evaluation and Treatment Planning

- A considerable amount of material is covered in the intake session, including both psychoeducation and patient history. The hierarchy as developed in Session 1 is meant to be a fluid treatment tool that can be amended (e.g., items added or moved around).
- Patients with AN are sometimes unable to articulate their feared consequence for a given anxiety-inducing situation when they are not experiencing the anxiety. Queries about feared consequences in the treatment-planning session are meant to obtain this information to the extent it is known, but also to model for the patient a way of thinking about anxiety and instill curiosity about the fears.
- This session yields a basic map for the AN-EXRP treatment, with the assumption that details will continue to be filled in. In particular, modifications to the treatment plan occur after initial exposure sessions.

Phase I

- The therapist will often need to put the patient's behaviors and beliefs into the AN-EXRP framework and educate the patient explicitly about this new conceptualization. For example, reluctance to initiate eating (i.e., to take the first bite) is common during early exposure sessions. This

can be framed nonjudgmentally as an avoidance behavior that understandably seeks to decrease anxiety. And then this plan is put aside empathically by the therapist as he/she coaches the patient on how to engage with fears despite all the seemingly compelling reasons not to do so.

- At the start of initial exposure sessions, anxiety ratings are often in the "moderate" range, even in the absence of the feared stimulus. In-session habituation should be considered successful if the patient's anxiety decreases from its peak. For the patients who struggle with high anxiety, pointing out any decrement in anxiety may be necessary to help the patient learn that anxiety does change.

- Homework assignments are always created collaboratively. Assignments should be informed by in-session work, must be feasible for repeated practice in short periods of time between sessions, and manageable when the therapist is not present. The hierarchy serves as a blueprint to develop relevant homework assignments related to rituals/avoidant behaviors that may not be addressed in sessions. In addition, rituals and/or avoidant behaviors that emerge in the patient's self-monitoring homework may offer further guidance to the therapist and patient about relevant between-session exposure practice.

Phase II

- This phase varies greatly between individuals. For some individuals with numerous fears, the therapist may identify one primary theme and create sessions that build difficulty within one area. Once the theme has been agreed on, the role of repetition in conjunction with upward progression of the hierarchy becomes clearer and helps to engage the patient in the process.

- Some patients find that once they "push through" anxiety, it falls quickly. This can be an opportunity to conduct a second exposure within the session.

- Commonly, patients express fears that reflect misinformation (e.g., "My body digests hot beverages differently from cold beverages"). In these situations, the therapist may provide corrective information briefly during the exposure. However, the therapist and patient need to be mindful not to let the facts become a safety ritual.

- Therapeutic alliance, familiarity with the AN-EXRP approach, and upward movement on the individual's hierarchy also allow for elaboration of feared consequences. For example, in the initial session, the fear may have been identified as "it will make me fat." In-session experiences may lead to recognition that a bigger fear is "loss of control."

Phase III

- The major therapeutic challenge is the successful transfer of responsibility from the therapist as coach to the patient as his/her own coach. If this is not occurring organically by the final phase of treatment, the therapist may explicitly name this goal for the patient and engage him/her in a dialogue about its importance in continued progress. Then, for example, the therapist might choose to stay silent during portions of the exposure while the patient acts as his/her own coach.
- During the last session, when more formal posttreatment planning occurs, it is critical to identify and address any barriers the patient anticipates in carrying forward the work and spirit of AN-EXRP.

CONCLUSION

Emily presented for inpatient treatment of AN and she used the behaviorally oriented, structured program to successfully achieve weight restoration. Yet despite all her hard work, and a multidisciplinary approach, Emily continued to have significant fears of eating, and a myriad of maladaptive eating behaviors that became particularly prominent as the rigid structure of the unit gave way to offer her more control. Through the addition of AN-EXRP, Emily focused on the ways in which her eating behavior was organized around irrational fears of chaos and loss of control. By confronting her fears, she learned experientially that her fears were excessive, that anxiety is not constant, and that she could, in fact, feel more in control around eating by decreasing the very behaviors that she had thought were managing her fears. AN-EXRP creates a new lens through which patients and therapists can view eating-related emotions and behaviors, and offers new techniques to increase healthy eating behavior among individuals with AN.

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CHAPTER 2

Family-Based Treatment for Anorexia Nervosa in Adolescents

ANGELA CELIO DOYLE and DANIEL LE GRANGE

CHARLOTTE: (*angry, crying*) My eating is none of your business. You don't know ANYTHING about healthy eating. Just look at what you eat! . . . You just want to make me fat! . . . If you guys just let me do it myself, I promise I will eat.

CHARLOTTE'S MOTHER: It's like our daughter is gone and was replaced by an alien or some other person . . . She's always been stubborn, but never about anything so destructive to herself . . . Meal times are a war zone. She is always either sad or angry and I am wondering how much longer we can take this . . . We've already tried a hundred different ways to get her to eat.

CHARLOTTE: Sometimes I feel in control and other times I get scared . . . The hospital was scary . . . I'm usually even more scared of gaining weight. Nothing can make that idea feel okay.

CHARLOTTE'S SISTER: All Charlotte ever does anymore is look up calories [on the computer] and run . . . I just wish she would eat. She used to be so fun and funny . . . I want my sister back.

CHARLOTTE'S FATHER: We're *not* going to let this eating disorder kill our daughter.

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Charlotte is a disguised/composite portrait.

CHARLOTTE'S MOTHER: We had one high-stress meal, Sunday dinner. We spent the day at my mother's house and we talked about grilling burgers. I know any red meat is scary for Charlotte. When we added a slice of cheese to each of the burgers, that caused a big blowup . . . We held the line, Charlotte got through the meal, and life went on. I think we are getting much better at dealing with the anorexia.

CHARLOTTE'S MOTHER The food is WORKING! Charlotte actually said she was hungry and I heard her laughing with her sister last night from the other room. It's been months since we heard that sound.

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Family-based treatment (FBT), sometimes called "Maudsley family therapy," was developed at the Maudsley Hospital in London and is considered to be a leading treatment for children and adolescents with anorexia nervosa (AN). It is a brief, outpatient approach in which parents take temporary control of their child's eating to assist with weight restoration and, subsequently, that control is handed back over to the adolescent when symptoms have subsided. FBT has been manualized for use as an outpatient treatment (Lock & Le Grange, 2013) and tested in multiple randomized clinical trials with good outcomes for 60–70% of patients (Loeb, Lock, Le Grange, & Greif, 2012).

THEORETICAL BASIS OF FAMILY-BASED TREATMENT

The theoretical basis for FBT is best described by first reviewing historical approaches to the treatment of AN in adolescents. In the late 1800s, shortly following the first psychiatric account of AN in the literature, several influential physicians suggested that it was the dysfunctional interactions of individuals and their families that brought about the development of AN. Rather than seeing the family as a potential resource, these authors indicated that families were best excluded from treatment due to their harmful influence on the patient (e.g., Gull, 1874; Lasègue, 1873).

Almost a century later, several leading family therapists observed "interactional difficulties" between patients and their families that they posited produced and maintained AN. They highlighted the importance of addressing these issues within the family in the treatment of the illness (e.g., Minuchin, Rosman, & Baker, 1978; Selvini-Palazzoli, 1974). In their influential clinical observation of families of individuals with AN, Minuchin and colleagues (1978) described the transactional characteristics of families that had an anorexic child as characterized by enmeshment, overprotectiveness, rigidity, and the lack of conflict resolution. The authors asserted that treatment of AN requires addressing the dysfunctional family processes

or structures in order to resolve the psychosomatic symptoms manifested through the illness.

Since that time, a third view of the role of the family in the etiology, maintenance, and treatment of AN was developed and is represented within FBT. FBT is influenced by the works of Minuchin and colleagues (1978) and Selvini Palazzoli (1974), in that the family is seen as a system in which transactional relationships influence the maintenance of the eating disorder (ED). However, the Maudsley group in London asserted that there is insufficient empirical evidence to support the idea that family dynamics engender AN (Dare, Le Grange, Eisler, & Rutherford, 1994). Instead, it is believed that AN causes the dysfunction in familial processes and structures, which further serve to maintain the illness. Eisler (2005) enlists Steinglass's (1998) family accommodation model to further describe this process. Steinglass posits that within families that have a medically ill child, normal family processes are disrupted and reorganized. Similarly, within families where a child has AN, the fabric of daily family life has been altered. Food and eating-related issues dominate and more typical family engagement, such as recreational activities and travel, is eroded. Conflict and anxiety mount over months, and sometimes years, and this infects larger developmental processes and needs within the family, such as individuation of the adolescent, the health of the marital relationship, and appropriate attention toward siblings.

The early impetus for the FBT intervention was not prompted by a theoretical or etiological model, however, but rather by the practical considerations of weight restoration and maintenance outside the hospital setting (Russell, Szmukler, Dare, & Eisler, 1987). In fact, the original impetus for developing FBT was to provide an alternative to the potentially deleterious effects of inpatient weight restoration and the clinical decline often seen postdischarge from hospitalization. Inpatient weight restoration was seen as potentially traumatic to the child, who would be separated from family and friends; disempowering for the parents, who would be led to believe that they were ineffective as agents of change; a source of interference for normal adolescent development as a result of the negative effects of institutionalization; and very expensive. By having parents take on the task of weight restoration, much as a medical staff would in a hospital, the problematic aspects of inpatient weight restoration could be obviated.

KEY PRINCIPLES OF FAMILY-BASED TREATMENT

FBT relies on key principles to guide treatment intervention, though these principles would require more support as mechanisms of action in treatment. These principles are as follows:

Agnostic View of the Cause of the Illness

Most treatments for AN target etiological issues for the purpose of symptom reduction. However, in the context of an illness where physical health is deteriorating and the longer duration of illness predicts worse prognosis (Ratnasuriya, Eisler, Szmukler, & Russell, 1991), timely intervention is crucial. As such, engaging in the hard work of addressing etiological issues at the start of therapy puts the adolescent at great risk. In contrast, accepting an agnostic approach to the anorexia allows for swift attention to halting weight loss and restoring weight. As weight becomes healthier, more insight-driven psychotherapy could be more appropriate, although this is not a part of FBT. In addition, taking an etiologically agnostic approach aids in reducing parents' feelings of blame for the development of the ED. Feelings of blame can undermine parents' confidence in their ability to play a positive role in their child's recovery. The intervention for this principle comprises telling parents that there are multiple factors hypothesized to contribute to the development of the ED and that there is little substantive evidence that parents are the "cause" of EDs. Furthermore, there is no way to conclusively know the precise equation of issues that contributed to their child's ED and, as such, efforts to intervene should not wait until the "root cause" has been discovered.

Parental Responsibility for Weight Restoration

FBT conceptualizes the ED as negatively affecting family life, from family structure to daily activities within the family. This is in contrast to other family therapies in which family dysfunction is believed to cause and maintain ED symptoms (e.g., Minuchin et al.'s [1978] psychosomatic families), yet the goal of restructuring the family to help in the alleviation of the symptoms stands. One such way in which family structure is disturbed is that parents consciously or unconsciously are relegated to a nonparental role. Parents are often too frightened to intervene with the ED for fear of exacerbating the illness, which may be believed to be a maladaptive form of separation and control. As a result, some parents abdicate their usual parental role in the area of food and exercise, and watch helplessly as their child loses weight. In contrast, some parental systems become reorganized with one or both parents attempting to negotiate with the ill adolescent and otherwise try to activate their child's affect (e.g., "Can't you see that you are not eating enough? You are too smart for this. You have to eat!") in a desperate attempt to reverse the ED symptoms. Siblings often identify the ED and the lack of appropriate action early on and may take a more parental role in demanding that their sick sibling eat and that their parents "do something." In FBT, the therapist realigns parents and children into

their discrete roles in order to most effectively treat the anorexia. In addition, the provision of information about AN and its treatment is an essential component of empowering parents. Support and affirmation from the therapist are important, as well, as parents tend to doubt their efficacy in fighting the ED based on past struggles and perhaps even criticism from others. Finally, aligning the parents in their fight against the illness is a crucial principle of FBT. Both parents are asked to coordinate their efforts so that both are responding as similarly as possible to situations involved with the ED so as not to leave any "holes" for the anorexic behaviors to slip through. Inherent in this principle is the idea that, once parents have executed their responsibility to restore their child's weight and the ED has relented, the parents slowly return control over eating back to the healthy adolescent. Interventions for this principle include charging parents with the task of weight restoring their ill child; ensuring parents' synchrony in their efforts at weight restoration; giving siblings the role of being supportive of their sister or brother without being involved in the weight restoration efforts; and providing education, support, and affirmation for the parents' efforts.

Externalization of the Illness

The ED is conceptualized as an illness that has overtaken the adolescent, much like cancer overtakes an unwilling victim. This separation of the individual and the illness conveys the helplessness of the sick child against this pernicious disorder and allows the therapist and the family to recognize the suffering of the adolescent while fighting against the ED. This is a critical strategy in maintaining engagement of the adolescent such that the adolescent can feel that everyone is on his/her side in the midst of the fight against anorexia's tenacious drive toward dietary restriction. Through externalization of the ED, it is possible to hold the adolescent in high esteem while also creating a zero-tolerance policy in the home environment for the ED symptoms. The interventions used for this principle include (1) creating a visual representation of the adolescent and the ED that shows different degrees of overlap between "anorexic thinking" and the adolescent's self, showing that the "anorexic thinking" fully overlays the adolescent's thinking pretreatment but by Phase III are completely separated; (2) asking the patient to list things that the disorder has given to him/her and what it has taken away in order to further differentiate the adolescent's own needs and interests from the disorder's; and (3) modeling uncritical acceptance of the adolescent. This might entail reframing family members' statements that are critical of the adolescent's comments about food or weight to reflect the need to criticize the ED while supporting the adolescent.

Initial Focus on Eating Disorder Symptoms

A narrow focus of therapy is purposefully drawn during the early stages of FBT in order to affect behavioral change. The highly focused nature of FBT in the early phases can be a challenge to families that might expect to address more general contextual issues of the development of the ED right away. Also, this can be a challenge to therapists who have been trained in different theories of ED treatment because it is very tempting to address the broader psychological dilemmas. The dire circumstance of the adolescent's health, who is literally starving, and the risks of morbidity and mortality are highlighted to elicit an appropriate level of anxiety on the parents' part in order to motivate them to action. The targeted focus on disrupting symptoms of the anorexia, including dietary restriction, driven exercise, as well as bingeing and purging is paramount in the first two phases of treatment. In the final phase of treatment, greater attention can be given to the developmental processes and family functioning that was disrupted by the ED. Education regarding typical adolescent development is provided and the family is encouraged to consider ways that the AN interfered with key tasks of adolescence (e.g., development of identity, friendships, romantic relationships, plans for the future). A main intervention is optimizing the parents' level of anxiety in order to activate them to take on the onerous task of weight restoration. This is done partly through education on the physical risks of AN and by gently reflecting the lack of success of other efforts they have undertaken to treat the ED.

FBT is divided into three phases:

PHASE I: WEIGHT RESTORATION

The focus of Phase I is on having parents address the ED symptoms such that weight restoration is accomplished at a pace of approximately 1–2 pounds per week. The reduction of blame toward the parents as well as the separation of the illness from the adolescent are emphasized and parental anxiety is optimized in order to promote action. Parents are encouraged to work in concert to press their child in a compassionate and firm manner such that the child has no choice but to comply with meal expectations.

In the second session, the family is asked to bring a meal that will help restore their child's weight and then help their child to eat the meal. This meal allows for further evaluation of food-related habits within the home, family structure, particularly as it operates around the ED, and the parents' efforts at coaching their adolescent to eat, as well as the adolescent's reactions to these efforts.

The remainder of Phase I is devoted to interventions of provision of information, support, and affirmation; continued externalization of the AN; optimizing anxiety in parents to ensure appropriate actions are being taken; and the offering of supportive, consultative, and practical reflections regarding the efforts made by the family at addressing the ED behaviors. Specifically, each of these sessions is guided by weight status of the adolescent (gain, loss, maintenance), which sets the tone for the session. Multiple meals are reviewed in detail to ascertain the strengths and challenges facing families at specific times. For instance, barriers may include providing not enough calorically dense foods throughout the day, too much exercise, lack of parental unity, and accommodating the preferences of the ED. Strengths may include compassionate and tenacious expectations of meal completion by parents, supportive sibling relationships, and a clear separation of the ED and the adolescent such that positive support of the adolescent is evident.

Knowledge drawn from the Keys, Brozek, Henschel, Mickelson, and Taylor (1950) study is provided to families to help them understand the effect of starvation on depressed mood, heightened anxiety, social withdrawal, and obsessionality regarding food. Likewise, the Keys study helps to inform families regarding the reversal of these seemingly psychiatric issues through weight restoration. As adolescents gain weight during FBT, families often observe their child's mood and anxiety improving, greater interest in socialization, and reduced obsessionality regarding food. For some adolescents, additional psychotherapy is not needed, although for some who continue to experience high levels of depression or anxiety (which anecdotal data link to problems in these areas prior to the onset of the ED), additional psychotherapy might be recommended.

PHASE II: HELPING THE ADOLESCENT EAT ON HIS/HER OWN

Movement into Phase II is indicated when the adolescent is mostly weight restored, acquiesces to the demands of the parents regarding weight restoration efforts, and parents' feelings of competence regarding weight restoration are readily apparent. Phase II is characterized by continued attention to weight restoration as well as a new effort at slowly transferring control over eating back to the adolescent. As weight restoration becomes less challenging, other issues that have previously been postponed are brought forward to be addressed, such as returning to normative social activities (e.g., sleepovers, attending dances). The differences between the adolescent's own needs and ideas continue to be highlighted as the family is encouraged to examine relationships between adolescent issues and the development of AN in their adolescent.

PHASE III: ADOLESCENT ISSUES AND TERMINATION

Phase III begins when healthy weight has been achieved and efforts at self-starvation have virtually disappeared. Typical adolescent development is discussed and obstacles to key tasks in adolescence are explored. The theme of Phase III is to establish a healthy relationship with parents in which the illness is not needed or used to communicate. The therapist models problem solving around adolescent issues for the family and the family engages in a review of issues that may be affecting the patient. Common issues discussed include establishment of more appropriate family boundaries, planning for the future, and the need for parents to reconnect in a healthy way following a stressful time and to be prepared for their child's eventual departure from home.

IMPLEMENTATION OF FAMILY-BASED TREATMENT FOR ANOREXIA NERVOSA

FBT is designed to be implemented in 10–20 sessions over the course of 6 months to 1 year. FBT is most commonly provided in a conjoint format, where the adolescent is seen alone for 5–10 minutes and then the rest of the family is present for the duration of the session. Separate FBT has also been described (Le Grange, Eisler, Dare, & Russell, 1992), in which the adolescent is seen alone for half of the session followed by the parents being seen alone for the second half of the session, which may be more effective for families in which there is a high level of criticism expressed toward the adolescent (Eisler, Simic, Russell, & Dare, 2007). Sessions during Phase I are scheduled weekly and are slowly spaced out over the course of Phases II and III.

ROLE OF THE THERAPIST AND THE TREATMENT TEAM

The FBT therapist is asked to join with the family in a consultative, non-authoritarian role. Prescriptive advice is not given; rather, the family is encouraged to develop their own solutions and strategies in weight restoration, with the benefit of education by the therapist on relevant topics. One must have expert knowledge of EDs, basic knowledge of nutrition, and comfort with acting as treatment team leader and liaison among multidisciplinary professionals. Ultimately, the FBT therapist requires stamina to endure high levels of anxiety in clients and their families over many months. The FBT therapist is a mental health professional and acts in collaboration with a physician. The involvement of a child and adolescent psychiatrist is important in cases where co-occurring psychiatric illnesses are present.

Registered dieticians are helpful consultants to the treatment team, as well as the parents, if needed, during the weight restoration phase. However, unlike treatment for adults with AN, dieticians do not meet individually with the affected adolescent, nor do they provide meal plans. In each of the randomized clinical trials (RCTs) of FBT, dietitians were not utilized, so it is unclear to what extent a dietitian's involvement in FBT affects treatment outcomes.

EMPIRICAL RESEARCH SUPPORTING FAMILY-BASED TREATMENT FOR ANOREXIA NERVOSA

Since FBT was originally developed, RCTs have demonstrated its efficacy with adolescents ages 12–18 and a case study has indicated its efficacy with children younger than age 12 (Lock, Le Grange, Forsberg, & Hewell, 2006). Of the seven published RCTs for adolescent AN, six of them have employed FBT in one treatment arm in their comparisons (Eisler et al., 2000, 2007; Le Grange et al., 1992; Lock, Agras, Bryson, & Kraemer, 2005; Lock et al., 2010; Robin et al., 1999; Russell et al., 1987). Overall, results suggest that FBT is effective in weight restoration and that improvements are sustained over long periods of time. Approximately 60–70% of adolescents achieve weight restoration by the end of treatment and continue to improve at longer-term follow-up (Le Grange & Lock, 2005). Many of these studies compared FBT with individual psychotherapy and, while good outcomes can also be seen for the individual therapy treatment arms, FBT tended to help adolescents quicker and with less chance for relapse.

CASE STUDY: CHARLOTTE

The case selected for presentation was a study participant in a multisite, controlled trial involving comparing FBT with adolescent-focused treatment (AFT; Lock et al., 2010). Identifying aspects of the case, including descriptive information, clinical data, and session transcripts, have been altered significantly to protect the anonymity of the family.

Method

The therapist (A. C. D.) held a doctorate in clinical psychology and was a postdoctoral associate working under the supervision of Daniel Le Grange at the University of Chicago. The therapist's experience working with EDs at the point of seeing this patient was approximately 7 years in clinical and research settings. Specific to the treatment approach, the therapist had

participated in two, 2-day intensive training courses on FBT prior to seeing the patient. She also received weekly group supervision with the other study therapists from one of the study's principal investigators (D. L. G.) throughout the duration of the study to ensure fidelity with the treatment manual, adherence to the study protocol, and to address challenging clinical issues as they arose. Sessions were audiotaped for random review of the therapist's provision of the treatment.

Referral Information

The patient, Charlotte, was a 14-year-old girl who presented with a 7-month history of restrictive AN. Charlotte's parents had sought treatment for Charlotte due to concern over a 12-pound weight loss over the past 7 months, increasingly restrictive patterns in her eating, and driven exercise. Charlotte had been released from a local hospital 2 weeks prior to the initial evaluation following 6 nights on the medical unit for low heart rate. Related to her recent weight loss, she was experiencing hypothermia, fatigue, moodiness, and cognitive "fuzziness." Charlotte reported being very afraid to gain weight and felt particularly dissatisfied with her thighs. She denied loss of control with eating, self-induced vomiting, use of laxatives/diuretics, or use of diet pills. She endorsed driven exercise prior to her hospitalization. At the time of the initial assessment, Charlotte's weight and height, respectively, were 89 pounds and 5′2¼″ tall, placing her BMI at 16.2 (7.8th percentile). She had not had a menstrual period in the prior 5 months, which highlighted the extent to which Charlotte's malnutrition had affected her hormonal functioning. The physician who saw Charlotte in the days following her discharge from the hospital recommended that they seek FBT for AN and advised that Charlotte not return to running until her period had returned and her weight had improved.

Assessment and Procedures

The Schedule for Affective Disorders and Schizophrenia for School-Age Children (Orvaschel, Puig-Antich, Chambers, Tabrizi, & Johnson, 1982) was used to assess general psychopathology and the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993) was used to assess specific ED psychopathology. Standardized questionnaires were also administered.

Following baseline assessments, the patient was randomly assigned to FBT or AFT. Treatment consisted of 20 sessions, each 60 minutes in length, over a 12-month period. Patients were seen by a pediatrician with experience managing patients with AN and, if necessary, patients were seen by a child and adolescent psychiatrist in the clinic for medication management. The whole family was expected to attend each session.

Results

When Charlotte was interviewed, she responded in an irritable tone that she did not want to be at the clinic. She reported that she was brought to the clinic "because of an eating problem . . . I don't know . . . my parents think I lost a lot of weight." Charlotte's mother described their reasons for seeking treatment: "Charlotte has turned into a different person. She is constantly, constantly obsessed with not eating junk food and she has taken this running thing way too far . . . It scares me when I hug her and all I feel is bones."

Throughout the majority of the assessment, Charlotte was cooperative, but withdrawn and demonstrated intermittent eye contact. Her mood was sad and her affect was irritable. Charlotte appeared emaciated and was dressed neatly in fashionable clothes. When Charlotte's parents described their concerns, Charlotte's body became rigid and she glowered at them. Her parents appeared uncomfortable with her degree of apparent anger, sadness, and petulance. They were brusque with Charlotte if she was rude to the therapist, but otherwise appeared weary with and distressed by what seemed to be an established pattern of Charlotte's heightened irritability. Charlotte's mother was a graphic designer and was considered the "anchor" of the house due to managing family schedules and other household affairs. She appeared to have an anxious temperament, but generally possessed a calm, pleasant presence. Charlotte's father was an attorney and tended to work longer hours. He was affectionate toward his wife and two daughters, and also displayed a more serious side, appearing gruff at times, particularly during discussions of the ED. Charlotte's 12-year-old younger sister was energetic and cheerful by nature, but quite saddened by the changes she had seen in her sister. She had previously felt very close to her older sister and participated earnestly in sessions.

When the therapist met with Charlotte alone during the assessment, the therapist suggested that it might be very difficult to be at a therapist's office talking about issues that left Charlotte feeling confused, angry, and scared. Charlotte acknowledged this with a small nod. Charlotte was asked about her interests and social life. During this part of the interview, Charlotte's facial expression and voice softened. She appeared less irritable, spoke more softly, and occasionally smiled as she discussed how much she used to love spending time with her friends. She denied problems with depression or anxiety prior to her decision to lose weight and denied past dieting attempts.

Charlotte reported that she began to "eat healthier and exercise more" in an effort to improve her running performance for cross-country at the end of last summer. At the time, she weighed 101 pounds and was 5′2¼″ (body mass index [BMI] = 18.5; 42.8th percentile). This quickly evolved into restricting her food intake to a greater and greater extent until she

would not eat more than 800 calories/day. Charlotte cut out most snacks and reduced her portion sizes. She refused added fats (e.g., butter on bread, oil in cooking) and started to make her own versions of the meal at dinners. She also suggested changes to the family's food habits, including reducing overall use of meat in meals and limited fats and carbs. For instance, she was fond of a meal of grilled portobello mushroom on half of a whole-grain bun with a green salad and preferred for her family to serve this and similar meals at dinner. Her family did not challenge this at first because Charlotte stated that she was trying to eat healthier to maximize her running performance. Her parents had no experience with running and were not aware of Charlotte's calorie restriction at first.

Within several months of the initial dietary restriction, Charlotte began increased her running regimen to 20–30 miles/week and had difficulty sleeping if she could not run that day. She would also run when injured or sick. Running began to take precedence over social and family activities. She also had a calisthenic routine, including over 100 crunches, which she felt compelled to do every night before she went to sleep. Charlotte reported being motivated, in part, by a sense of competition with one of her friends. Charlotte reported being bothered by being "scared of eating" and felt that she was "obsessed" with food. Charlotte's family first noticed that something was wrong when they were on a trip to Florida approximately 2 months before she was hospitalized. Her mother reported that Charlotte was eating very little and looked emaciated in her swim suit. Particularly bothersome to Charlotte's family was their observation that she had transformed from being cheerful and easygoing to sad, irritable, and withdrawn. They forlornly remembered times prior to the development of the ED when Charlotte and her sister would make each other laugh in the evenings as they got ready for bed, stating that they had not heard Charlotte laugh in many months.

At presentation to the clinic, Charlotte was 5′2¼″ tall and 89 pounds, placing her BMI at 16.2 (7.8th percentile). Her BMI had historically followed the 45–55th percentiles, therefore she was 83.6% of expected body weight (EBW). Her current weight represented her lowest weight since the onset of the ED. Charlotte experienced menarche at age 12 and had irregular menstrual cycles (approximately every 45 days) for the first year, followed by more typical 28-day cycles in the first half of the most recent year. This history helped to establish that, when healthy, Charlotte experienced a regular menstrual cycle and that, in the wake of malnourishment, Charlotte's reproductive system had been biologically halted. Charlotte reported she had not had her period in the past 5 months. In the interview, the family noted that they understood the significance of this and, while Charlotte was initially embarrassed to talk about her menstrual cycle, especially in the presence of her father, the factual approach by the therapist and

Charlotte's parents in discussing menses as a sign of good health allowed for eventual comfort.

Charlotte's EDE global score at baseline was 3.5 (on a scale of 0–6, where 0 = no psychopathology and 6 = severe psychopathology), reflecting substantial ED psychopathology, especially given the degree to which adolescents with AN tend to minimize or deny symptomatology. When asked on the EDE, "In the past four weeks, have you spent much time between meals thinking about food, eating, or calories?" Charlotte responded, "I am pretty much always thinking about food." When asked for more detail, Charlotte replied that she sometimes got distracted in school by constant calculations of how many calories she had already consumed and how many she had left that day. When asked on the EDE, "Over the past four weeks, have you been dissatisfied with your shape?" Charlotte described feeling satisfied with certain body parts (e.g., her arms), but great unhappiness with her legs and particularly her thighs, which she perceived as "too wide" and "covered in cellulite." Charlotte remarked that she attempted to cover her thighs at all times so that she did not have to look at them. During the interview, she had a pillow over her legs. She noted that the negative thoughts of her thighs were very frequent and distressing to her. Charlotte was frightened during her recent hospitalization, but denied being worried about her currently low weight, saying that the doctors sent her home, so she "was fine" now.

Phase I (Sessions 1–11)

SESSION 1

Charlotte and all of her family members (father, mother, and 12-year-old sister) arrived on time for their appointment and were greeted in a grave manner. During the first 10 minutes alone with Charlotte, she was very resistant to being weighed and did not want her family to know her weight. She also did not want to talk about food or her eating habits in front of her younger sister because she did not feel that her sister needed to be involved in what she viewed as a private matter. The therapist gently urged Charlotte to step on the scale in order to check on her weight (weight = 88 pounds). The therapist validated that it might feel embarrassing to lay bare the difficulties that Charlotte had been facing over the past number of months and reassured Charlotte that even though at first it can be hard to speak openly about these issues, it would help Charlotte feel more understood and supported. This calmed Charlotte slightly and Charlotte agreed that no one really understood what she was experiencing.

Once the family joined the session, a history of the ED was taken, using a circular questioning approach in order to assess and emphasize the significant toll the ED had taken on the entire family. When hearing from

her younger sister how she missed Charlotte's good sense of humor, they exchanged smiles nervously for a brief moment and then Charlotte began to quietly cry. Charlotte explained that she loved her sister and felt upset because she did not like to think that she was hurting her sibling. The changes to Charlotte's behavior and personality over the past 7 months were used to differentiate the ED from Charlotte.

Agnostic View of the Cause of the Illness

FATHER: I think this whole thing started when Charlotte's cross-country coach told her she could really be a top runner. I mean, that was a compliment, but it really set Charlotte's brain off in the wrong direction, you know, making her really focus on exercising and eating differently.

THERAPIST: Yes, I can see how that might have been a powerful invitation for the eating disorder to climb on board. But it's hard—if not impossible—to ever track down exactly how an eating disorder started. It's a complicated equation.

MOTHER: I sometimes wondered if I might have done something—maybe we weren't paying enough attention to Charlotte. Or maybe she saw me watching what I was eating and decided that it was a good idea, too.

THERAPIST: It's easy to drift in that direction, blaming yourself or other people for what might have occurred. But we really don't have any good evidence to support that these things would cause an eating disorder. Obviously, there are a lot of teens who experience these things and they do not go on to have eating problems.

MOTHER: I guess you're right.

THERAPIST: In any case, it doesn't help to focus on the "how" or "why." Given the serious nature of Charlotte's situation, we need to act rather than reflect. There will be time in the future to think back on how the eating disorder developed in order to prevent it from affecting her ever again.

Externalization of the Illness

THERAPIST: (*to Charlotte*) Your relationship with the anorexia seems quite mixed. It's given you things . . .

CHARLOTTE: I'm a better runner now. I don't eat like such a pig.

THERAPIST: But I imagine that's not the whole story. Anorexia tends to take things away from people, too.

CHARLOTTE: What do you mean?

MOTHER: Well, Charlotte, I think she means that you've lost some positive things since you started with this eating disorder. Right?

CHARLOTTE: Well, I guess . . . I dunno . . . I guess I haven't been seeing my friends as much. My running takes a lot of time. And I have to go to these dumb doctor appointments now.

THERAPIST: I can see how both of those things are a loss—friendships and the freedom to go about your week without annoying appointments. To be honest, I see the eating disorder as being very different from you because you each want different things. (*Draws a Venn diagram with overlapping circles for "Charlotte" and "Eating Disorder."*) I think you were doing your thing in life and then the eating disorder slowly crept in and overtook what you normally wanted to do, like spend time with friends, and make you want to go out running instead, leaving the healthy part of you feeling a loss.

CHARLOTTE: (*Looks down; silence.*)

MOTHER AND FATHER: (*Nods heads slowly.*)

Initial Focus on Eating Disorder Symptoms

THERAPIST: It's been a difficult 7 months and you've seen Charlotte's weight drop and drop. In fact, today, she is down 1 pound from our evaluation meeting . . .

MOTHER: (*Looking at her husband and tears forming in her eyes*) Oh dear.

THERAPIST: I think it is safe to say that any other discussions about how this eating disorder evolved takes a back seat to helping Charlotte to restore her health starting with weight gain. Nothing has helped so far. It is critical to act now to stop this illness from taking away Charlotte's life.

Parental Responsibility for Weight Restoration

THERAPIST: In response to this crisis, Charlotte's best hope for recovery is through you (*turning to parents*). You have known Charlotte literally all her life. You love her more than any doctor or nurse could and you know what she needs. Also, I know that you are able to provide good nutrition for your kids. (*turning to younger sister*) You are a healthy girl and I know your parents have helped you grow in this way. (*turning back to parents*) So, you are the best people to weight-restore Charlotte.

FATHER: (*grimly shaking his head*) But how do we do this? We've tried everything.

THERAPIST: I will help you with this. I will walk with you through this and

be a consultant, of sorts. Between now and next session, just do what you can to keep Charlotte from losing any more weight. Is she still exercising?

CHARLOTTE: (*eyes welling up with tears*) The doctor told me I had to stop yesterday.

MOTHER: Yes, Charlotte is very upset about this. She really wants to be running.

THERAPIST: It is important to take a break from the running because it burns a lot of calories and it really has become part of the eating disorder at this point. We will start at our next session in a couple of days with finding the best ways for you to help Charlotte eat. As for [younger sister], do you remember what your job is?

SISTER: (*tentatively, in a quiet voice*) Yeah, to . . . support . . . her?

THERAPIST: Yes—you play a really important role for your sister. She will probably be feeling down a lot more, especially after meals. What could you do to cheer her up?

SISTER: (*tentatively*) Maybe tell her jokes?

CHARLOTTE: (*Giggles quietly through tears.*)

THERAPIST: (*smiling slightly while keeping a quietly serious tone*) Great. And are there things you used to like to do together?

SISTER: Yeah, we used to always watch our favorite shows after dinner. She doesn't really do that anymore.

THERAPIST: Well, how about you invite her anyway? I wonder if that could help?

SISTER: Yeah, I guess.

THERAPIST: There might be times when Charlotte might not want to watch TV, but I'll keep checking in with you and I'll encourage you to keep asking because I'd bet Charlotte will like to have those invitations.

SISTER: (*nodding*) Okay.

At the end of the session, plans for Session 2 (e.g., family picnic) were made, with the instructions given to the parents that they are to bring a meal for the family with food that will help to reverse Charlotte's starvation.

SESSION 2

Charlotte weighed 88.75 pounds, indicating a weight loss of 0.25 pounds between Sessions 1 and 2, which were 4 days apart. Following being weighed alone in the therapist's office, the therapist gathered with the entire family to begin the family meal. Charlotte's parents had been asked

to bring a meal that would help begin to reverse Charlotte's starvation, not checking in with Charlotte, but with each other to make the decisions. They were asked to bring a meal for their whole family, which was intended to be eaten in a room in the clinic that had a large, round table. Charlotte's weight was marked on a weight chart and compared with the previous weight from Session 1. The family was asked to begin their meal in the way that they normally would, with the therapist's goal being to observe the family process while eating meals. The family brought restaurant-prepared Caesar salads with grilled chicken for each person, with a breadstick on the side, and banana bread for dessert. Dressing came in a small container on each plate. Charlotte was offered a choice of lemonade, a box of juice, or water, of which she chose water. When asked how the parents had selected the meal for the evening, Charlotte's mother stated that the meal was chosen based on what Charlotte "used to like." The adequacy of this meal for the purpose of reversing the starvation was addressed as follows:

THERAPIST: Would you say that this is a typical dinner for your family and for Charlotte?

FATHER: This (*waving his hand over the table*) is more than Charlotte has eaten at one meal at a time. I mean, she's barely touched it, but if she were to eat it, this would be a lot. But before this eating disorder, this was typical.

THERAPIST: Okay, I see. What do you think about for the purposes of weight restoration? How does a salad with chicken, a breadstick, and banana bread measure up?

MOTHER: Well, I think because you are asking, it is maybe not enough . . . ? (*laughing nervously*)

THERAPIST: I think that this is a great start and would be good for weight maintenance in a healthy teen, but I want you to remember that Charlotte is literally starving. Are there small or big ways you can imagine making this meal a little more nutritionally dense?

FATHER: Well, we could have her drink milk or something more than water. She usually would have had milk with dinner. And I can imagine salads for dinner would be less dense than pasta and pizza and other meals like that.

THERAPIST: Exactly! That's good. It will be helpful to be thinking in that direction right now. (*Both parents nod, Charlotte is silent, with arms crossed and glaring at her plate.*)

Throughout the meal, Charlotte did not make any attempts to eat or drink and instead stared at her plate without speaking. She would occasionally nod or shake her head when asked a question about her eating.

During the meal, the therapist initiated a conversation about what mealtime was typically like at home. Charlotte's mother reported she was responsible for all of Charlotte's meals, and cited some success with getting Charlotte to eat by setting time limits ("the school bus leaves in 20 minutes") or indicating extreme frustration ("Charlotte, I am about to blow . . ."). When asked about what was typical eating at home for Charlotte prior to the eating disorder, Charlotte's mother described a pattern on weekdays of Charlotte and her sister pouring themselves a bowl of cereal and a glass of juice before school and, on weekends, Charlotte's mother would prepare pancakes or French toast. Charlotte tended to bring a packed lunch to school and brought a snack to eat before after-school sports or else made herself a snack at home on nonsport days. Dinners were typically prepared by Charlotte's mother and the family ate together each night, although several nights of the week, Charlotte's father's work schedule interfered with dinnertime. In the recent weeks, Charlotte's mother had tried to prepare a breakfast each morning for Charlotte, typically involving eggs, toast, and yogurt with juice. Charlotte's mother also recently began packing a hearty lunch for Charlotte, which Charlotte admitted that she had been throwing away. The therapist coached Charlotte's parents to regard deceitful behavior such as this as merely a common behavior for AN, rather than a sign of dishonesty in their daughter, and to work to prevent these situations from occurring by observing meals and snacks being consumed. Charlotte's parents firmly insisted to Charlotte that she eat a morning and afternoon snack, as this is what was recommended to her at the hospital, but her parents acknowledged that they could not enforce this because they were not there with her. Dinners were prepared as they had always been, but had become very tense and upsetting due to Charlotte's refusal to eat adequately and her parents' frustration at these meals.

In the session, after observing Charlotte's mother occasionally urging Charlotte to eat her meal and inquiring as to how similar or different everyone's behavior during the session was to typical meals at home, the therapist encouraged the parents to work in concert to urge Charlotte to eat. The therapist provided frequent supportive statements to the parents, and directed them to persistently press Charlotte to eat using a calm, warm, monotonous, "broken-record" style. As her parents attempted to have Charlotte eat a bite of chicken, both parents expressed appropriate caring and concern in their voices when telling her to eat the bite. Charlotte's mother more frequently took the lead and, although they were repeatedly encouraged to build off of each other's instructions to eat, Charlotte's father appeared frustrated with Charlotte, which she responded to by growing quieter and more reticent. After a few minutes, the therapist encouraged Charlotte's parents to sit on either side of Charlotte and to continue repeating their request in a firm but loving manner that she eat the bite of chicken. When both parents tried to put their arm around her, she

moved away. After resisting eating for 25 minutes, Charlotte finally gave in to their relentless encouragement. She yelled, "I HATE YOU!" and stuffed the piece of chicken into her mouth with her fingers while crying. At that moment, she appeared frantic and very upset; following eating the chicken, Charlotte looked exhausted and resigned.

Parental Responsibility for Weight Restoration and Externalization of the Illness

CHARLOTTE: (*weeping quietly*) Why did you make me do that? I hate you . . . I hate you . . .

MOTHER: I know you are upset, honey. (*Reaches out to stroke Charlotte's arm, who initially pulls back, but then relents and lets her mother touch her.*)

FATHER: (*in a warm and intense tone*) We love you, honey. We know that was hard.

THERAPIST: (*in a quiet, serious tone*) Charlotte, that was extremely difficult, I know. The eating disorder has really made it hard to eat foods that used to be so easy to eat. (*speaking to parents*) It is clear how strong the anorexia is, seeing how hard it was for Charlotte to have just one bite of chicken. I imagine you thought that the anorexia would never give in, especially knowing how hard these past meals have been.

FATHER: Yeah, normally, one of us would have gotten upset and left the table by this point.

MOTHER: I can't believe it took all of this time to eat one bite, though.

THERAPIST: It may seem like a small step, but you have just demonstrated that when the two of you are working together and not leaving any room for the anorexia to get out of eating, the anorexia will eventually give up. If you are able to do this meal after meal, the anorexia will really get the message that it can no longer torment Charlotte with its drive to restrict.

SESSIONS 3–11

The three main goals of the remainder of Phase I were to (1) keep the family focused on the symptoms of the ED, (2) maintain affirmation and support of the parents as they took on the very difficult task of weight restoring Charlotte, and (3) to enlist Charlotte's younger sister for support of her sister during this process. In each session, Charlotte's weight progress was shared and the family's efforts at bringing about weight restoration were the predominant topic of the session. Charlotte began gaining weight, typically 1–2 pounds per week, as recommended. Charlotte's parents were

encouraged each week and they reported their confidence building, even when difficulties presented themselves. Charlotte cried and became irritable at the start of most of the first six sessions, when she learned that she was gaining weight, but she grew increasingly acquiescent with regard to the expectations for weight increases as the phase progressed, presumably due to the consistent message that this was a central expectation for recovery. Specific meals were reviewed for content/amount of food and to determine what difficulties were being experienced during weight restoration. During the first several weeks of refeeding, meals were very difficult, although the first week was the hardest as Charlotte's parents worked out their plans for meals and how to handle the conflicts that would arise. Both parents took leave from work to be available at each meal and were present in order to create a powerful united effort. Charlotte refused to eat full meals in the first few days, yet her parents stayed with her for long periods of time at the table pressing her to finish. Charlotte's parents would not allow Charlotte to go to school until she was eating more adequately, which helped Charlotte to overpower her urges to restrict at times, given Charlotte's interest in not missing school. Over the course of Phase I, meals went from taking 1–2 hours to 45 minutes. Charlotte's resistance continued, but in more mild and quick-to-relent ways (e.g., asking repeatedly, "Do I have to eat all of this?!" to which her parents would frankly reply "Yes," without discussing). Education was provided throughout Phase I, including information on the unhelpfulness of "anorexic debate" (engaging with Charlotte in long conversations about the relative value of one food over another during mealtimes).

Key challenges faced by Charlotte's family included keeping her father involved with the mother in the weight restoration process, Charlotte's efforts at continuing to exercise secretly, and her resistance to going above 100 pounds. Charlotte's mother was able to work from home much of Phase I, so she was the primary parent planning and executing meals and snacks for Charlotte, while Charlotte's father worked up until dinnertime each weeknight (he changed his work schedule to accommodate being present for dinner all nights). To reduce the chance of Charlotte's mother becoming too fatigued and to present a unified front against the ED, the parents were encouraged to find ways to work as a "team." They were able to develop a system where Charlotte's father took more of a lead role with weight restoration at dinner and after-dinner snack. Both parents' styles were complimented for their "binocular vision" (Charlotte's mother was warmer and gentler while Charlotte's father was more frank and direct) and they were urged to be sure that, while their styles may differ, their ultimate message needed to be precisely the same.

In Session 4, it was revealed that the parents had heard Charlotte doing crunches in her room after bedtime. They were encouraged to develop a

plan for how to address this and it was decided that Charlotte could not be alone in her room until she got into her bed. At that point, she would be under observation by a parent such that Charlotte's mother would either be sure that Charlotte was sound asleep before going to sleep herself or else Charlotte's mother would sleep on the couch in Charlotte's room to block the behavior. The secret exercise ceased within two sessions. As Charlotte approached the 100-pound mark, she became more resistant at mealtimes by arguing more persistently about the size of portions. She admitted that she did not want to go above 100 pounds. The therapist and the parents reassured Charlotte that it was critical that she continue to improve her weight so that she could achieve full recovery. Her weight gain faltered for a session, but ultimately her parents were resolute that the AN would not be allowed to keep Charlotte at a suboptimal weight. Charlotte's period had stopped when Charlotte was approximately 96 pounds, so it was explained that Charlotte needed to be at least 96 pounds plus "a bit more" in order to menstruate regularly again. Specific weight ranges were not given. Once Charlotte acquiesced to her parents' demands that she weigh more than 100 pounds during Phase I, her resistance to eating decreased such that Charlotte was more able to participate in meals without great emotional distress.

Charlotte's sister and parents remarked at Session 6 (after 5 weeks of treatment) that Charlotte laughed during a meal at one of her sister's jokes. This was remarkable because each of the previous meals during treatment had been tense and without any expression of positive emotion from Charlotte. Over the subsequent weeks, Charlotte began slowly reconnecting with her sister and friends to spend time together again. Many meals were still stressful and difficult, but Charlotte was "coming back" as she gained weight. During the remainder of Phase I (10 weeks), Charlotte gained 12 pounds, approximately 1.2 pounds per week, placing her BMI at 18.2 (31.5th percentile) and 93% EBW. Her weight at session 11 was 101 pounds and she was 5′2¼″ tall.

Phase II (Sessions 12–18)

Sessions 12–17 took place approximately biweekly. The appropriateness of starting Phase II was indicated by Charlotte's relenting to her parents' demands to consume adequate nutrition for weight restoration, Charlotte's steady weight increase, and her parents' clear confidence that they successfully had taken charge of the ED. Phase II commenced highly anticipated efforts, on both the parents' and Charlotte's parts, to slowly transfer control over eating back to Charlotte. She had been eating lunch in the school counselor's office for Sessions 8–12 following successful weight gain up until that point and the assurance that the school counselor would be able

to monitor whether Charlotte ate all of her packed lunch. In Session 12, the therapist encouraged the parents to work together with Charlotte to determine what meals/snacks would be easier to start with first in returning control back to Charlotte. They decided to first allow Charlotte to eat lunch at school with her friend group, unsupervised, three days per week. The therapist considered with Charlotte's parents what they would do if Charlotte lost weight during this first week. Charlotte's parents were clear that they would be prepared to return to previous levels of oversight at any point, if needed. Charlotte successfully managed this first opportunity to eat independently and, as everyone became increasingly reassured that Charlotte would not struggle with the urges to give in to restriction, Charlotte was allowed to eat all lunches and after-school snacks on her own (although her mother continued to prepare the actual meal/snack in advance at first), as well as serve herself at dinner. This was expanded to Charlotte making her own breakfast and then choosing the content of her evening snack.

Parental Responsibility for Weight Restoration

THERAPIST: (*to Charlotte*) What would be a welcome change for you, in terms of eating more independently? Any meals that you would like to take more charge of, to start?

CHARLOTTE: YES! I am so sick of eating with [the counselor]! Can I *please* eat with my friends in the cafeteria? Please?

MOTHER: Well, you've been doing really well. I am pretty nervous, though. I mean, it was only a few weeks ago that we saw you hiding food in your sleeve . . . (*turning to husband*) what do you think?

FATHER: Yes, well, I think we might as well give it a try. What's the worst that could happen?

THERAPIST: Yes, that's a good question to ask. What would you do if you find out that Charlotte was not eating what you packed or her weight goes down next week?

FATHER: Well, we'd just go right back to having all of her lunches supervised.

MOTHER: (*thoughtfully*) Hmmm, it'd be hard to go backwards, but we know that we need to get in there quick if we see any signs of the "alien" [the term the family had begun to use when talking about the AN].

THERAPIST: I think that all sounds like a good plan. Charlotte, do you have any questions or concerns?

CHARLOTTE: No—I think it will all be okay.

While the focus on addressing ED symptoms continued to remain central in all of Phase II, the family was able to begin to address issues that had been previously postponed earlier in treatment. For Charlotte, she had been feeling pressured by her track coach to become one of the track stars due to what he had seen as her "great potential." Charlotte had lost interest in running during the course of treatment while she was prohibited from running at all (at first) and then in restricted amounts. At this point in treatment, she realized that she did not enjoy running that much and saw her drivenness to run as part of her ED. Instead, she was quite interested in her high school's noncompetitive Ultimate Frisbee team because she really liked the other girls on the team. The role of exercise and high school extracurriculars was discussed and Charlotte was encouraged to select activities that supported her mental and physical health. Charlotte continued to gain an additional 3.5 pounds over the 14 weeks of Phase II, placing her BMI at 18.9 (42.1th percentile) by Session 18. At that point, her weight was 105 pounds and she remained 5′2¼″ tall. Charlotte resumed menstruating when she was approximately 104 pounds.

Phase III (Sessions 19–20)

Entry into Phase III was marked by independent eating by Charlotte without any sign of the AN, and a progression into the typical challenges adolescence. At this point, issues could be discussed and parents respected the growing need for individuation and independence as long as Charlotte was able to progress unencumbered by the ED. An overview of the major tasks of adolescent development was presented and the family explored the ways in which AN had interfered with normal development. For instance, during the ED, Charlotte began to lose interest in her friends and felt that she had less in common with them, which was in stark contrast to her usual feelings of connection with her friends. She felt that they had become "boy crazy" and she did not have any interest in talking about dating.

Initial Focus on Eating Disorder Symptoms

THERAPIST: Anorexia tends to interfere with things adolescents normally do as part of development as they grow up. For instance, as I mentioned, an important task during middle adolescence—that would be about ages 14 to 16—is developing relationships with friends, platonically, as well as a growing interest in more romantic relationships.

FATHER: (*laughing, joking*) Oh no, let's not even talk about dating!

CHARLOTTE: (*embarrassed*) Dad!

THERAPIST: Charlotte, do you think the eating disorder held you back in any way in terms of friends or dating?

CHARLOTTE: Well, I definitely was not wanting to be around my friends much. And they are pretty boy crazy and that was the last thing on my mind.

MOTHER: Yeah, your mind was really focused on your eating and running.

THERAPIST: How has that changed?

CHARLOTTE: I definitely am more interested in hanging out with friends now. I think things are pretty much back to normal there.

THERAPIST: What about dating—do you have any interest in that?

Charlotte reluctantly admitted that she was interested in dating someone, but appeared quite nervous about bringing this up to her parents. The therapist encouraged Charlotte's parents to share their own experiences with entering the dating world and their own feelings about Charlotte beginning to date. They expressed relief that they no longer needed to argue over food intake and, instead, could focus on more usual teenage topics. Parents' expectations for limits to dating at Charlotte's age and how these limits would shift over time were discussed (e.g., group dates are okay sophomore year and individual dates would be allowed junior year). This session was tense, at times, when Charlotte appeared anxious about how her parents would respond to her interest in dating, but on the whole was marked by a sense of relief, warmth, connection, and earnest efforts at communicating.

The treatment progress was reviewed to ensure all principles of FBT had been integrated and to prepare for any potential recurrence of AN symptoms. Charlotte's parents agreed that they would stay vigilant about some of the ED's old habits, such as driven running and preferences for certain foods, as well as the more obvious signs of food restriction and weight loss. They felt confident that, if there were any sign of the ED, they would be able to interrupt it very quickly.

Charlotte's weight increased by 1.25 pounds over the final two sessions of treatment and, at the final session, Charlotte weighed 106.25 pounds at 5′2¼″ (BMI = 19.2, 43.3th percentile). At the end of treatment, Charlotte's EDE global score was 0.06, indicating that her symptoms were now well within the normative range. When asked on the EDE, "In the past four weeks, have you spent much time between meals thinking about food, eating, or calories?" Charlotte denied having this experience. She qualified her response by stating that she occasionally wonders about calories in a meal, but that this didn't distract her the way it used to. When asked on the EDE, "Over the past four weeks, have you been dissatisfied with your shape?" Charlotte stated that she "didn't really *love* [her] thighs, but didn't hate them either," and "just didn't think about it as much anymore."

Follow-Up Assessments

At 6-month follow-up, Charlotte weighed 111 pounds and was 5′3″ tall (BMI = 19.7, 46.9th percentile). Her EDE global score continued to reflect the absence of ED psychopathology (0.03). At 12-month follow-up, Charlotte weighed 115 pounds and was 5′3″ tall (BMI = 20.4; 52.8th percentile). Again, her global EDE score remained well within the normative range (0.19). This growth represented a significant change for Charlotte, as she grew 0.5″ and gained 8.75 pounds in the year following treatment. Her body type appeared much more like her mother's, which was slender on top with a more muscular lower body. She continued to be involved in Ultimate Frisbee and became a valuable player on her team. Charlotte reported liking the identity of being "athletic" and recognized that being too thin would be unhelpful in a sport that required strength.

DISCUSSION

This case of adolescent AN was relatively uncomplicated and was chosen in order to present the key principles and interventions of FBT in a clear and concise manner: agnostic view of cause of the illness, parental responsibility for weight restoration, externalization of the illness, and initial focus on ED symptoms. The ultimate goal of weight restoration was attained and Charlotte was able to resume normal adolescent development unencumbered by the ED. One aspect of the case worth noting is the achievement of effective weight restoration in the early weeks of treatment. Early response to FBT, particularly as measured by weight gain, can predict overall response. Using receiver operating curve analysis, a good outcome can be predicted if at least 3 pounds have been gained within the first 4 weeks of treatment (Doyle, Le Grange, Loeb, Doyle, & Crosby, 2010). Using this cut point of 4 weeks, 79% of responder and 71% of nonresponders could be accurately identified.

Four years later, the therapist heard from the family that Charlotte was enjoying her time at an out-of-state college and was in a serious romantic relationship. Her parents had not seen a return of the AN symptoms, but noted that they continued to cautiously watch Charlotte's food intake when she was home for school breaks. Although the clinical trial did not report on outcomes with regard to quality of life and achievement of development tasks, this case presents an example of how adolescents are able to get back on track with the typical activities of young adulthood.

There are other common presentations of adolescent AN not covered in this chapter. For adolescents with purging and/or binge-eating behaviors, parents are educated about these behaviors and are instructed to help prevent binge eating and purging from happening. In many cases,

the adolescent is motivated to cease these behaviors and will partner more readily with his/her parents in finding ways to block the ability to act on urges to binge–purge (e.g., a parent will sit with the adolescent for an hour after meals/snacks and restrict bathroom use in order to prevent purging). With adolescents who self-harm, parents are likewise educated about this behavior and are instructed to help prevent opportunities to self-harm through removal of common methods of self-harm (e.g., scissors, razors) and to limit time alone to reduce opportunities to cut. For adolescents who are experiencing significant anxiety or depression that interferes with functioning, a child and adolescent psychiatrist may be consulted for the possibility of medication use (e.g., selective serotonin reuptake inhibitor, anxiolytic). If depression or anxiety existed prior to the ED, individual psychotherapy for these issues following FBT would be indicated.

FBT should be considered for youth ages 18 and younger who are living at home with their parents and who have restrictive or binge–purge AN or a restrictive subtype of eating disorder not otherwise specified. A physician should determine whether the patient is medically stable enough for outpatient treatment prior to initiating FBT. There are no clear data to guide who may or may not respond best to FBT at this point in time. It appears that nonintact families and patients with high levels of obsessive–compulsive AN features tend to respond less quickly to FBT (Lock et al., 2005), but there is no empirical evidence to support that single-parent families are unsuccessful in FBT. It is unlikely that FBT will work well for families in which parents suffer from severe psychopathology (e.g., severe depression, active addiction to substances, psychosis) or in families in which parents are opposed to weight restoring their child. FBT may be more challenging in families in which there is a parent with an ED due to the concurrent struggle of the parent or it may help in that the parent might possess a better understanding of his/her child's struggles and be able to intervene more effectively. When abuse or neglect is present in a family, it is crucial to evaluate carefully the ability to keep the child safe and to prevent any possibility of additional abuse in the context of the treatment. When an adolescent is engaging in very dangerous behaviors (e.g., assault, active suicidality), it is critical to address these issues before proceeding with initiation or continuation of FBT.

Some common challenges that are experienced in FBT include parents who lack resources to take time off from work to assist with meal preparation and monitoring in the early days of refeeding (e.g., lower socioeconomic status families and single-parent families); families in which a sibling relationship is conflictual; families in which parents are very difficult to align in the aim of helping their sick child, such as in the case of a couple who has been considering divorce; families with divorced parents; and families in which one or both parents is highly critical of the patient. In the case of parents who are highly critical of the adolescent, it is suggested

that separate FBT is utilized (Le Grange et al., 1992), in which the adolescent is seen alone for half of the session followed by the parents being seen alone for the second half of the session (Eisler et al., 2007). In cases where there is conflict between spouses (whether they are divorced or married), efforts can be made to focus the couple on the need for their unity on just this issue (treatment of the ED), while giving them explicit permission not to address other areas of disagreement in their marriage. When there is an unsupportive sibling, it could be helpful to assess if this relationship has historically been unsupportive and, if so, one can consider limiting the use of the sibling for support while increasing attention to support by other siblings or friends during treatment.

It is important for us to advance this field further so as best to determine how this treatment works, and how best to match patient with various FBT adaptations. To this end, we need to conduct more systematic moderator studies of who responds best to FBT, as well as mediator and dismantling studies in order to better understand how FBT works and what elements are most effective.

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PART II

Cognitive Approaches

HEATHER THOMPSON-BRENNER

INTRODUCTION TO PART II

"Cognitive therapy" (CT) addresses the thought contents and processes that generate and maintain emotional distress via interactions among cognition, affect, and behavior. "Cognitive-behavioral therapy" (CBT) is a broader integrative approach (see Part V, "Integrative Approaches"), whereas CT focuses more narrowly and deeply on dysfunctional cognition (for fuller discussions of CT, see Beck, 1995; Dobson, 2012; Leahy, 2003).

Three important categories of cognitive content in CT are *schemas, automatic thoughts*, and *expectancies*. Schemas are an individual's set of general, foundational, personal core beliefs, developed over time, and necessary to the process of organizing information about the world. Schemas that are important to CT have been divided into three main domains, known as the "cognitive triad": beliefs regarding the self, the world, and the future (Beck, Rush, Shaw, & Emery, 1979). Schemas also play important roles in emotional reaction and information processing. Cognitive psychologists have repeatedly observed that schemas are relatively stable; people selectively perceive and interpret new information to confirm their schemas, even when those schemas cause distress (Dobson, 2012). Automatic thoughts refer to a different part of the information-processing model. Automatic thoughts are triggered by situations and mediated by schemas; they are frequently occurring cognitive aspects of "appraisals"; that is, they are cognitive aspects of the process of drawing conclusions about ambiguous stimuli that are congruent with underlying schemas.

Prior to therapy, these process may happen outside the patient's full consciousness and critical awareness. In CT, the patient may be asked to keep a "thought record," to help identify automatic thoughts; discussion of

automatic thoughts in session may help identify his/her relationships to core beliefs/schemas. CT therapists often teach patients about typical cognitive distortions, which are commonly said to produce "irrational" thoughts. Common distortions include "catastrophizing" (anticipating the worst possible outcome), "mind reading" (assuming one can perceive another's thoughts), "maximization" and "minimization" (overemphasizing negative or schema-confirming information and discounting alternatives), and "fortune-telling" (assuming one can predict the future). Patients in CT are encouraged to identify which cognitive distortions support the generation of negative automatic thoughts and the confirmation of core beliefs or schemas. Additionally, patients are taught to "restructure" these cognitions, and to generate less distressing, less distorted alternative thoughts. Some common strategies to restructure cognitions include the assessment of evidence for and against a thought, estimation of the true probability of a feared event, and examination of how others approach and interpret similar situations (see also Beck, 1995; Dobson, 2012; Leahy, 2003).

Though the dysfunctional thoughts that are the focus of CT are often described as "irrational," they might alternatively be described as "subjective," "promoting symptoms," or "generating distress." The information-processing model on which CT is based is not primarily concerned with the logical versus illogical, accurate versus inaccurate nature of thought. Though therapists may consider rational or accurate thinking to be aspects of psychological health, these are not the sole and primary goals of CT. For example, CT rarely addresses "irrational optimism" or "irrationally high self-esteem" because these schemas are less likely to produce psychological symptoms or distress. Furthermore, postmodern critiques of realism and objectivity have added complexity to our perspective on these concepts (e.g., Kvale, 1992).

Several additional cognitive concepts important to psychotherapy originate from social learning theory (Bandura, 1986). Expectancies are beliefs that reflect anticipation of future positive and negative consequences. Motivation is strongly influenced by expectancies regarding the outcome of behavior (Bandura, 1986). Therapy often includes identification of the expectancies that shape a patient's behavior: similarly to schema theory, above, expectancies may not be fully conscious, and may have to be tested and proven wrong to promote changes in behavior and emotion. Two types of expectancies that have proven particularly important to treatment outcome are expectancies regarding treatment itself (i.e., beliefs regarding whether treatment will be helpful to make important changes), and treatment self-efficacy (i.e., beliefs regarding one's own abilities engage in therapy activities) (Constantino, 2012; Kadden & Litt, 2011).

In the field of eating disorder (ED) treatment, cognitive interventions have rarely been tested separately from key behavioral interventions. (The historical and therapeutic importance of cognitive and behavioral therapy integration is discussed extensively in the introduction to "Integrative

Approaches.") Early in the modern history of ED treatment (1980s), Christopher Fairburn helped to define and reliably assess EDs, and at the same time produced a protocol for a CBT specifically for bulimia nervosa (BN). Fairburn and colleagues (Fairburn, 1983; Fairburn, Kirk, O'Connor, & Cooper, 1986) quickly amassed scientific support for the efficacy of CBT for BN relative to a purely behavioral treatment, and these findings were replicated and extended by other research groups. Optimism regarding a purely cognitive approach to EDs may also have been tempered by the obvious behavioral components of EDs.

CBT manuals include interventions to identify and restructure distorted cognitions that are common to EDs, such as cognitions about body image (e.g., "My thighs are too fat"), the importance of body size and shape (e.g., "Thin people are more successful and well liked"), and the importance of control over eating (e.g., "If I eat this, I will become fat"; "Disciplined people have self-control over their eating and weight"). CBT manuals also typically include some intervention for motivation. Other cognitive domains identified through research and addressed in some CBT manuals include perfectionistic attitudes toward achievement, schemas that support and reflect low self-esteem and depression, and automatic thoughts/core beliefs that promote avoidance and intolerance of emotion. Relevant interventions are described in other chapters in this book, including the chapters on exposure and response prevention for anorexia nervosa (AN) (Chapter 1, by Thompson-Brenner), CBT for night eating syndrome (Chapter 9, by Lundgren & Allison), enhanced broad CBT for complex BN (Chapter 10, by Thompson-Brenner, Shingleton, Satir, & Pratt), and dialectical behavior therapy for BN and major depression disorder (Chapter 11, by Segal, Ohler, Eneva, & Chen).

The identification of an individual's thoughts is crucial to understanding and changing behavior and affect across treatment approaches. Cognition, broadly, may be considered the primary topic of conversation in any psychotherapy, given that therapists and patients both process experience through thought and language. Therefore, attention is paid to cognition in all of the cases in the book, and efforts to identify and to restructure automatic thoughts and core beliefs—formally or informally—are arguably evident in all of the case reports. We have categorized two of the case reports as focused *primarily* on aspects of cognition, however. These are the chapters on motivational interviewing (Chapter 3, by Shingleton, Palfai, & Thompson-Brenner) and cognitive remediation therapy (Chapter 4, by Darcy, Fitzpatrick, & Lock), explained further below.

Motivational Interviewing for Eating Disorders

Motivational interviewing (MI) was developed to utilize collaboration between therapist and client as a means to highlight the client's intrinsic

reasons to change. MI was originally developed for clients with problem drinking, who are observed to be highly ambivalent regarding change (Miller & Rollnick, 2013). In any treatment population, however, these cognitive factors vary substantially, and show strong relationships to treatment persistence and outcome (Demmel, Beck, & Lammers, 2003). Clinical researchers increasingly recognize that all patients have obstacles to change as well as oscillating motivation throughout treatment, and that motivational enhancement may be of benefit to many patients. MI and its related adaptations have been studied with a very wide range of psychological and physical problems requiring behavioral change, with generally positive effects (Burke, Arkowitz, & Menchola, 2003; Miller & Rollnick, 2013).

There has been strong enthusiasm for using MI to help patients with EDs, given their ambivalent attitudes toward change and their variable insight, or "ego syntonicity" of symptoms (Treasure & Ward, 1997; Vitousek, Watson, & Wilson, 1998). Many ED patients seek treatment due to external pressures (e.g., family members, school faculty, sports coaches), and it seemed logical that enhancement of the patient's own motivations to change would be beneficial to treatment adherence and outcome. A number of recent reviews and opinion papers, however, suggest that the enhancement of personal motivation to change via MI in EDs may be more complex than originally thought. Among seven recent studies of motivational enhancement strategies, interventions for binge eating were observed to be more successful than interventions for the restrictive aspects of eating pathology (Knowles, Anokhina, & Serpell, 2013).

Clinical researchers in the area of MI have become creative in response to these observations. Many earlier motivational interventions were limited in scope, for example, utilizing only a few sessions prior to treatment. Increased success has been observed for motivational approaches that have increased intensity, and those that are combined with other psychosocial interventions with known efficacy. The case study presented in Chapter 3 is one such effort, in which MI was used to develop personalized motivational messages, which were then delivered by smartphone during the period when the patient attempted behavior change. The basic content of MI techniques' "spirit" remains relatively unchanged in their application to EDs. For example, the general techniques of open-ended questions, reflections, and "rolling with the resistance" (i.e., not engaging directly in challenging patients' expressions of desire not to change), are included in ED manuals in similar form to the original manuals (e.g., Price-Evans & Treasure, 2011). These theories and techniques are more extensively described in Chapter 3.

Cognitive Remediation Therapy

Cognitive remediation therapy (CRT) is very different from other cognitive psychosocial therapies, in that its target is neurocognitive functioning

processes as opposed to the content of cognition or the common thinking disortions described above. Like cognitive rehabilitation interventions, CRT addresses issues such as sustained attention, working memory, cognitive flexibility, anticipation and planning, and other aspects of executive functioning. The aims of CRT go beyond the aims of cognitive rehabilitation, however, in that CRT is used to support improvement in the symptoms of major mental/emotional disorders via the improvement of cognitive functioning. CRT was developed at King's College in London as a treatment initially for schizophrenia. Efficacious psychopharmacological treatments for schizophrenia did not fully address deficits in neurocognitive functioning, and these persistent deficits were in turn associated with limitations to overall improvement in global, social, and emotional functioning. Substantial evidence was collected supporting the utility of CRT with schizophrenia (Saperstein & Kurtz, 2013), leading to efforts to create versions of the treatment for other disorders in which impaired cognitive functioning appears to play a maintaining role (Bates, Buckman, & Nguyen, 2013; Bowie, Gupta, & Holshausen, 2013).

The possible application of CRT to cognitive functioning in AN was noted fairly quickly, due to the long history of research demonstrating specific cognitive issues in AN, such as cognitive rigidity, problematic habit learning, and specific deficits in social cognition (e.g., Tchanturia, Campbell, Morris, & Treasure, 2005; Zucker et al., 2007). Because individuals with EDs demonstrate substantial heterogeneity in their cognitive functioning, however, CRT for AN involves identification and remediation of issues specific to the client, conducted through problem-solving exercises. CRT for AN also includes the exploration of the patient's expression of problematic cognitive habits in his/her eating patterns, or how cognitive issues play a role in the maintenance of eating symptoms. A recent randomized controlled trial showed significantly better quality of life and improved ED psychopathology among patients who received CRT along with their treatment, compared with those who received treatment alone; it also demonstrated that individuals with particular difficulties in baseline neurocognitive functioning (specifically set shifting) benefited more from CRT than patients without these problems (Dingemans et al., 2014). The processes and principles of CRT for AN are well illustrated in Chapter 4 (by Darcy, Fitzpatrick, & Lock).

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CHAPTER 3

Enhancing Motivation via Text Messaging

An Adaptation of Motivational Interviewing for Eating Disorders

REBECCA M. SHINGLETON, TIBOR P. PALFAI, and HEATHER THOMPSON-BRENNER

> "If I knew I could eat a reasonable amount of food and not gain weight, I would say I am extremely ready . . . [but] if you were to tell me you are going to help me gain 5 to 10 pounds, I am not ready to do that, in all honesty.
>
> "I like sitting down at dinner and having a nice political or academic discussion with people or just hanging out with a group of people. And I don't do it anymore . . .
>
> "I believe that it is getting to a point that it is affecting my health, mentally and physically, and at the end of the day, I just want to be a healthy, happy person, and if I continue to travel this road it's not going to happen and I am not willing to let that happen anymore."

Motivational interviewing (MI) is a client-centered therapeutic style that aims to increase intrinsic reasons to change maladaptive behavior (Miller & Rollnick, 2013). While some patients may come to treatment due to external pressures (e.g., my husband will file for divorce if I do not change, my children are forcing me to get help), MI focuses on why the individuals themselves want to change. It is a collaborative process centered around

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Mr. Curtis is a disguised/composite portrait.

the ambiguity surrounding a client's next steps or low motivation to reduce problematic behaviors.

MI was originally developed within the substance use domain, but over the past few decades it has been applied to a wide range of behaviors (e.g., medication adherence, diet, exercise) with moderate efficacy (Burke, Arkowitz, & Menchola, 2003). Adaptations of MI (AMIs), defined as protocols that maintain the core principles of MI but include other non-MI interventions, have been developed for a variety of treatment settings and contexts (e.g., brief interventions in primary care settings, cultural adaptations, adding personalized feedback; Burke et al., 2003). Such adaptations suggest that the basic principles of MI can be effectively modified to accommodate diverse clinic and client needs.

Miller and Rollnick (2013) emphasize that the process of change is complex. An individual may feel ambivalent about change, that is, wanting to change at the same time as *not* wanting to change. For example, a client may say, "I want to stop drinking so I am not hungover at work, but I don't want to stop going out with my friends and having a great time," or perhaps in the case of an eating disorder (ED), "I want to be a healthy weight so I can go back to school, but I don't want to gain weight and feel fat." Understanding conflicting feelings about change is key to MI.

Miller and Rollnick (2013) describe four broad processes to MI: "engaging," "focusing," "evoking," and "planning." Engaging is the means to develop a working rapport between therapist and client. The therapist aims to build a trusting environment by listening attentively to the client's goals and values, and by avoiding presenting as the "expert." Focusing involves finding a mutually acceptable goal and provides direction for the session. Evoking focuses on helping the client articulate his/her intrinsic reasons to change in order to strengthen his/her motivation. Finally, planning emphasizes acting on the goals and changes discussed and may involve a specific plan that the client may use to reduce his/her problematic behaviors (Miller & Rollnick, 2013).

Multiple techniques have been developed to address the above components including open-ended questions, affirmations, reflections, and summaries (often referred to by the acronym OARS); avoiding therapist-driven direction; and exploring the patient's values and goals. In the engaging process, the therapist attempts to establish mutual trust and a working relationship by reflectively listening to and understanding the client's core priorities. When focusing, a list of change goals may be developed and/or the therapist may ask permission to offer advice to help orient a patient toward more adaptive goals. During the evoking process, the counselor focuses on eliciting "change talk," defined as statements by the client describing his/her desire or ability to change maladaptive behaviors and reducing "sustain talk," defined as statements by the client describing his/her desire to maintain problematic behaviors. This may be done by using a "readiness

ruler" (e.g., "On a scale of 0–10, how ready are you to change your behavior?"), discussing pros and cons of behavior change, continuing to explore goals and values, and using the OARS skills discussed above. Moreover, the therapist may instill hope by highlighting past successes and discussing the client's confidence in his/her ability to change. Planning is introduced when the therapist observes increased readiness for change, and may entail developing a change plan with discussion of how to implement the plan.

MI places a strong emphasis on the therapist's interpersonal style and respect for the individual client. Specifically, MI has been described as incorporating a "spirit" that involves both relational and technical components. The spirit is developed through the use of collaborating with the client, evoking intrinsic reasons to change, accepting ambivalence, and using compassion to support the client. More generally, it is essential that a clinician be aware of both the specific components of MI as well as creating an open, nonjudgmental environment.

MOTIVATIONAL INTERVIEWING AND EATING DISORDERS

Motivation is thought to play a key role in EDs given these individuals often exhibit low motivation to change maladaptive behaviors (Vitousek, Watson, & Wilson, 1998). The relapse rate is high for individuals with anorexia nervosa (AN; 30–50%; e.g., Bulik, Berkman, Brownley, Sedway, & Lohr, 2007) and full remission rates in randomized control trials are often cited around 40% for bulimia nervosa (BN; e.g., Fairburn et al., 2009). These numbers indicate that novel treatments are needed to improve the effect of treatment, and to help individuals with EDs reduce symptoms and maintain recovery.

MI for EDs has been examined in a small number of studies, primarily as an adjunct to other behavioral treatments (for a review, see Knowles, Anokhina, & Serpell, 2013). The studies involving AN-like populations have shown generally positive results with important limitations. For example, Wade, Frayne, Edwards, Robertson, and Gilchrist (2009) found that individuals who received MI were significantly less likely to drop out of treatment. For individuals with BN, Treasure and colleagues (1999) compared motivational enhancement therapy (MET) and cognitive-behavioral therapy (CBT) in a randomized control trial and found limited differences between the groups at termination. Most recently, Weiss, Mills, Westra, and Carter (2013) found greater completion rates (69% vs. 31%) in an intensive treatment involving inpatient and day-patient group programs in individuals with a range of EDs who received pretreatment MI as compared with a control condition.

Results from these studies suggest that AMIs can positively impact treatment and that they are worthwhile incorporating into treatment given

they can be applied across treatment settings and ED populations. But there is still a need for more efficacious AMIs to address ED symptoms and behaviors (Knowles et al., 2013). Specifically, all of the reviewed studies used MI in its standard face-to-face format, typically prior to treatment. Technology—such as phone and text contact—used as an adjunct to a traditional face-to-face MI may be considered a novel way to improve motivation and behavior change.

TECHNOLOGY WITHIN TREATMENT

Across treatment approaches and treatment targets, technology is increasingly being incorporated to improve accessibility and effect. One type of technologically enhanced treatment is ecological momentary interventions (EMIs), which have been the focus of a number of studies in different domains such as EDs, anxiety, and medication adherence (Heron & Smyth, 2010). EMIs are interventions that can be administered throughout the day or night, outside of traditional therapy sessions, most easily through the use of technology. Some of the benefits of EMI include the ability to extend therapeutic interventions beyond the therapy session and generalize therapeutic lessons to the real world. EMIs are easy to use in different settings and times, and can be easily tailored to the individual (Heron & Smyth, 2010).

One form of EMI is the use of text messaging via mobile phones. A number of studies have now used mobile phones as an EMI to promote positive behavior change (Krishna, Boren, & Balas, 2009). Within the EDs field, investigators have used text messaging primarily to address symptoms related to bingeing and purging. In two recent studies, text messages were used to monitor binge–purge symptoms and provide encouragement and personalized feedback. The researchers in both studies found participants reduced their ED behavior in the text message condition (Bauer, Okon, Meermann, & Kordy, 2012; Shapiro et al., 2010).

These research studies suggest feasibility and acceptability of and empirical evidence for using text messages within an ED population, though some limitations must be addressed. For example, in an earlier study with outpatients with BN, approximately half of the participants did not view the text message content as positive or helpful (Robinson et al., 2006). Moreover, text messages are typically short, limiting the amount of information that can be delivered at one time. Therefore, while technology may enhance a clinician's ability to extend lessons beyond a face-to-face interaction, it is important to consider what may be lost within a technology-based interaction compared with a face-to-face interaction. The aim of the current intervention is to maximize the benefits of technology by using text messages that are low cost and easy to use, and minimize the

risks by personalizing the messages using specific details described in the MI session and maintaining in-person contact weekly.

THE CURRENT STUDY

The primary aim of the current study was to test the effectiveness of a motivational interview-based intervention enhanced by text messages in individuals with EDs. The MI session was used to help the participant articulate his/her reasons to change. The text messages were created from the MI session material and were piloted as a means to remind the individual of his/her personal reasons to change in his/her natural environment during stressful moments (i.e., three times/day at mealtimes). The primary outcomes in the study were motivation to change, kilocalorie intake, and dietary restraint. Additionally, feasibility and acceptability were assessed.

In addition, this case explored the utility of message framing and congruency between the message frame and the individual's motivation orientation. Health intervention research has supported the benefit of both gain-framed messages (i.e., promoting the reward value of change; Rothman, Salovey, Antone, Keough, & Martin, 1993) and loss-framed messages (i.e., describing the negative consequences of failing to change; Kahneman & Tversky, 1979). Research in health promotion has found greater behavior change when motivation orientation is congruent with framing effects, that is, approach-oriented individuals are paired with gain-framed messages, and avoidant-oriented individuals are paired with loss-framed messages (e.g., Hevey & Dolan, 2013). In the study from which the following case study was taken, we investigated the role of both message frame and orientation congruency within the intervention.

Method

Participants were recruited via community and online postings for a motivational intervention study at an urban university treatment center. All procedures were approved by the Boston University Institutional Review Board. During the intake, participants provided informed consent and completed two semistructured interviews: the Structured Clinical Interview for DSM-IV Diagnoses (SCID; First, Spitzer, Gibbon, & Williams, 2002) and the Eating Disorder Examination (EDE; Fairburn, Cooper, & O'Connor, 2008), as well as a brief medical questionnaire. All participants were medically cleared by their primary care physician or a study-affiliated MD and denied being in concurrent treatment for their ED. Upon confirmed eligibility, the individuals completed a set of self-report questionnaires and participated in a motivational interview based on MI principles. The primary goal of this interview was to generate intrinsic reasons to overcome their ED.

These reasons were then translated into text messages. They were designed to be in "text-message format" (i.e., short, colloquial) and were timed to align with the participant's typical mealtimes. Text messages were designed in both gain and loss frames. Gain-framed messages highlighted potential rewards/gains one could achieve by reducing ED symptoms (e.g., "If you eat more, you will have more energy to hang out with your friends"). Loss-framed messages highlighted potential losses associated with maintaining one's ED (e.g., "If you continue to restrict, you will not have energy to hang out with your friends"). See Table 3.1 for case examples of messages. Following the motivational interview, participants received personalized text messages on certain 2-day periods (randomly chosen) throughout the next 2 weeks. Dietary restraint and motivation to change were measured daily on the individual's smartphone. Kilocalorie intake was measured using daily food records. During the 2-week text-message phase, participants were asked to check in with study staff weekly to review food records and obtain the participant's weight. At the end of the study, the participants completed an acceptability questionnaire and provided feedback about the intervention.

Assessments

Prior to the intervention, participants' eating symptoms were assessed via the EDE (Fairburn et al., 2008) and their DSM-IV Axis I comorbidity was assessed via the SCID (First et al., 2002). The main pretreatment and daily assessment of motivation was the self-report Anorexia Nervosa Stages of Change Questionnaire (ANSOCQ; Rieger, Touyz, & Beumont, 2002), a 20-item questionnaire assessing readiness to change behavior and recover from AN. There are three subscales (Weight Gain; Eating, Shape, and Weight Concerns; Ego–Alien Aspects) and one global scale that indicate the

TABLE 3.1. Text Message Examples

Gain framed	Loss framed
The ED does *not* = happiness—break the restriction cycle and increase happiness.	Being thin does *not* = happy—restriction and control hurts your mental and physical health.
Eating full meals and snacks will let you enjoy your social life.	Restricting during the day means less time and energy for your family/friends.
Reducing restriction during the day will help you concentrate on your job/studies—this means more room for your career!	Restriction during the day means you can't concentrate on your job and studies—this takes away from your career.

individual's stage of change. The ANSOCQ was collected prior to the motivational interview in person, and daily during the text-messages phases on the participants' smartphones. Daily ED symptoms were assessed using the Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 2008), the self-report version of the EDE. The Dietary Restraint subscale was adjusted to be smartphone compatible and measured symptoms on a daily basis (i.e., reformatted to ask if the participants restricted their food intake on a daily basis as opposed to within the past 28 days). The EDE-Q was collected upon confirmed eligibility and the Dietary Restraint subscale was collected daily during the text-messages phases on the individual's smartphone. The Behavioral Inhibition Scale/Behavioral Activation Scale (BIS/BAS; Carver & White, 1994) is a 20-item questionnaire developed to determine an individual's motivation orientation (approach vs. avoidant) and was collected upon confirmed eligibility. Finally, participants recorded their daily food intake via pen and paper during the text-message phase of the intervention.

CASE STUDY: MR. CURTIS

Mr. Curtis was a 32-year-old married Caucasian male who was a medical student when he presented to the clinic. Mr. Curtis called the clinic seeking help for his ED explaining his symptoms were "consuming his life." He had been struggling with an ED for several years but had not sought prior treatment or help. He was eager about the research and beginning treatment, but wary of opening up to someone about his problems and facing the unknowns related to change. He explained that he often had difficulty trusting people, which may have delayed his seeking treatment. Although therapy was a new experience, he reported that he felt comfortable with the clinician and was able to speak freely about his symptoms without feeling judged. Though cautious throughout the process, Mr. Curtis was forthright and open about his symptoms. He often responded to questions about his ED with a firm "Oh, yes," suggesting he resonated with how the symptoms were being described.

With regard to his clinical presentation, his body mass index (BMI) = 21.2 kg/m^2 at intake. He explained that he had lost over 40 pounds (lifetime highest BMI = 25.8) over the course of the past several years and was currently stuck in an eating-disordered cycle, with a strong desire to continue losing weight despite being normal weight. He endorsed significant dietary restraint as well as binge–purge behavior, and met diagnostic criteria for BN. His EDE scores indicated significant ED pathology with his global and dietary restraint scores above the clinically significant cutoff on both the EDE and EDE-Q. His self-reported motivation to change at baseline was 2.43 and 1.83 (contemplation stage) for the Eating, Shape,

and Weight Concerns subscale and Ego-Alien subscales of the ANSOCQ, respectively. For example, some of his responses included "Sometimes I think that I exaggerate the importance of my body shape or weight in determining my happiness" and "I have decided that I will try to change the feelings I associate with eating and not eating" on the Eating, Shape, and Weight Concerns subscale. On the Ego-Alien subscale, he reported that "I sometimes think that I may have certain emotional problems which I need to work on" and "I have certain problems in the way I approach life which I have decided to work on." Of note, while these answers demonstrate that he recognized the need for change, some of his answers indicated significant resistance to change (e.g., "There are certain foods which I strictly avoid and would not even consider eating"; "I would prefer to lose more weight"). He denied any concurrent or past therapy for EDs or threshold levels of the symptoms of other clinical diagnoses. He also denied any current or past psychotropic medication use. According to the BIS/BAS scales, Mr. Curtis's orientation was "avoidant," suggesting that he typically acted toward avoiding punishment as opposed to gaining reward. See Table 3.2 for baseline data.

This intervention and case study are atypical of MI, and psychotherapy in general, in that the interpersonal component of the intervention was only one session long, during the motivational interview at the beginning of treatment. Subsequently, the intervention was administered via smartphone and data were collected the same way. Therefore, to present this case, we will provide excerpts from the motivational interview transcript (with personal details changed to protect confidentiality), and then present the data for the EMI period that followed.

TABLE 3.2. Baseline Data for Mr. Curtis

Baseline measurement	Score
EDE Global	5.23
EDE Restraint	4.80
EDE-Q Global	5.09
EDE-Q Restraint	4.00
ANSOCQ	1.83
BIS (*z* score)	26 (1.97)
BAS (*z* score)	34 (–0.79)
BIS (*z* score)–BAS (*z* score)	2.76

Note. EDE, Eating Disorder Examination; EDE-Q, Eating Disorder Examination Questionnaire; ANSOCQ, Anorexia Nervosa Stages of Change Questionnaire; BIS/BAS, Behavioral Inhibition Scale/Behavioral Activation Scale.

Motivational Interview

Mr. Curtis arrived on time for his assessment. He expressed feeling slightly nervous about getting started, but was generally calm in demeanor. He was casually dressed, looking as if he had recently come from class. Throughout the assessment and motivational interview, he made appropriate eye contact and responded thoughtfully and in a direct manner, though as the interview progressed, the interviewer perceived a sad tone to his voice.

The goal at the start of the interview was to engage the client by gaining an understanding of the client's struggle with his ED and how it played a role in his day-to-day life. This information prepared the clinician to discuss why Mr. Curtis wanted to change and to highlight potential barriers to change. The clinician aimed to gather this information while staying true to the MI spirit by using open-ended questions and reflections.

THERAPIST: All right, so as I mentioned before, what we are going to be doing today is the motivational enhancement interview. To begin with, I'd like to get a general sense of what brought you in, what inspired you to call a few weeks ago?

PATIENT: Well, I um, I have been having eating issues for quite sometime, and I really feel like it is interfering with my life so much that I really have to gain control over it, and I need help to do that because I realize I can't do it alone.

THERAPIST: Hmm, and in what ways is it interfering with your life?

PATIENT: Um, I plan my social life around it. I have stopped going with friends and family members out to dinner because I don't want to be put in an awkward position with um, with the food. The view that I have of myself and my self-esteem I think at this point is so low that I just prefer not to be around other people. I prefer to just keep to myself.

THERAPIST: And that's connected to the eating issues?

PATIENT: Right, definitely my weight, the way I view my body, and I just feel like when I go out with people, they just want to go out to have dinner or drinks and it just puts me in an awkward position, and then I get tense and kind of angry, and my personality changes, and I know that is not who I am inside.

THERAPIST: So it sounds like the eating symptoms affect sort of how you view yourself as a person, your self-esteem, but also how you portray yourself to others when you are put in a situation with food.

PATIENT: Correct, um, I don't view myself in a very positive light and then in addition to that, I feel like it is a secret and I have to be very careful about the way I act when I am with other people, and I think that requires so much mental energy that I would just rather not be around

other people than have to keep hiding it or keep somehow pretending that there is no problem.

THERAPIST: It sounds like a real burden.

PATIENT: It is. It consumes my entire life. I think about it as soon as I wake up, I think about it all day, and it is the last thing on my mind when I go to sleep at night.

THERAPIST: And so when eating and related symptoms are in your mind and you are thinking about it all day, how does that impact your day-to-day functioning?

PATIENT: It is getting very difficult because I find my concentration is lacking in school. Um, I get distracted very easily because I'm thinking about what I am going to eat that day, what I am going to have for dinner, and it is just very difficult because it occupies mental space that should be occupied by my academic goals, I guess.

THERAPIST: So it is pushing those other goals out and taking up the space you would need to achieve those goals.

PATIENT: Well, I think at this point, um, in my career, that should be my primary focus, and it is not—it is an afterthought. My getting by and getting through on a day-to-day basis with the issues I have with food and with my self-esteem, and um, my physical appearance takes precedent over everything else including relationships, studying, preparing for class, um, and it makes me extremely nervous, and it makes me feel worse, which exacerbates the underlying issue because then I just feel even more guilty.

THERAPIST: What specifically makes you feel worse?

PATIENT: Just the fact that, I feel like, I am a strong person inside and you know, I know I am an intelligent person, and I just don't see why I am so weak that I can't overcome this and how I have become so weak that I have let it take control of my whole life, and I think I started thinking it was something I had control over, but in reality it controls me every single day.

THERAPIST: Mmm . . . and what symptoms take up the most of your time and are the most controlling?

PATIENT: I think just the constant fear of eating, like I am afraid to eat. And that is frightening to me. And I think I devote so much time to planning my menu and planning what I am going to eat, and then when I do eat, I feel extremely guilty about it, and then that consumes more time and more mental energy until I am exhausted.

THERAPIST: So it is like you started out with you, you trying to exert the control and have more energy by exerting control on it, and it has been

flipped over on its side almost, so the food has control over you and is sucking your energy away.

Throughout this first segment, the clinician and client were able to discuss how the ED was negatively impacting his life. First, the clinician began the interview with an open-ended question focused on what brought Mr. Curtis to seek treatment in order to gather information about goals and potential barriers as a means to engage him and understand his initial motivations for calling the clinic. The clinician also used reflections to demonstrate that she understood the complexities associated with his ED and elaborated on certain statements as a means to show empathy and help draw connections between his unhappiness and ED symptoms. By the end of this section, it was clear how the ED interfered with his life, but the issue of change or desire to change had not been directly addressed.

In order to begin addressing the concept of change and to evoke the patient's reasons for change, the clinician shifted gears in the following section and used the "readiness ruler." The goal of these exercises was to gain a sense of how ready Mr. Curtis was to make significant changes surrounding his eating symptoms.

THERAPIST: So if you were to think about change . . . how ready are you on a scale of 0 to 10, to change the way you eat to overcome these symptoms?

PATIENT: If I knew I could eat a reasonable amount of food and not gain weight, I would say I am extremely ready. If you were to tell me you are going to help me gain 5 to 10 pounds, I am not ready to do that, in all honesty. I weighed 148 pounds when I got on the scale this morning, and I was like blown away because right away I went into the mindset that you are doing all these things and nothing is working, so what is the next step? And that really scares me because I don't know what the next step is as far as weight loss or maintaining where I am. . . . I think my biggest fear with doing this and seeing a therapist is someone telling me I need to gain weight or I am going to gain weight. I think that would be too much too soon.

THERAPIST: So if there was no weight gain, on a scale of 0 to 10, where would you be?

PATIENT: Ten being absolutely ready, I would definitely be a 10.

THERAPIST: A 10. And how about if there were to be either uncertainty or weight gain—either weight maintenance or more uncertainty of whether you are going to gain, lose, or stay the same, where would you be on the scale?

PATIENT: See, that is frightening, and I honestly don't have an answer. I think I would be extremely willing to try it but as soon as I saw evidence that you know if I went up to 150 pounds trying it, then I might say this is not going to work. . . . I don't think I am going to be ready to gain weight at all.

THERAPIST: So it's interesting though, you said you would be willing to try, you'd be willing to take that first step, so it sounds like on that 0–10 scale, it is not necessarily a 0.

PATIENT: No, no, not at all.

THERAPIST: So, what makes it not a 0?

PATIENT: Because I think um, if I could maintain my weight and get healthy, then that is the priority for me. If I gained like a pound, then maybe we are going down to a 7, but I think maybe 2 pounds or more, we are going to be moving down that scale quite a bit to 0.

THERAPIST: So there is fear on one side, and this . . . well, this intense fear of eating and gaining weight, but also intense distress associated with not eating and fear of gaining weight.

PATIENT: Right. And I don't know which one is worse. I think either way I am consumed.

THERAPIST: Mmm. How confident are you that you can change your eating, or find a solution to this dilemma?

PATIENT: I am pretty confident that it will work because I made the decision to make it work. I am just afraid of the struggle it will be to make that a reality. And, that's why I am here . . . it's gonna be hard, and it is something I can't do by myself, I just can't.

THERAPIST: So how would you describe your motivation to overcome these symptoms?

PATIENT: I believe that it is getting to a point that it is affecting my health, mentally and physically, and at the end of the day, I just want to be a healthy happy person, and if I continue to travel this road it's not going to happen, and I am not willing to let that happen any more. I mean, I have worked very hard, I am going into a good career that I have spent a lot of money on, and what kind of doctor will I be if I can't even think about my patients' concerns because I am so concerned with myself?

THERAPIST: Mmm.

PATIENT: And I just can't do that anymore. . . . So I am motivated. It needs to happen.

In this section, the clinician used the "readiness ruler" to gauge different aspects of Mr. Curtis's motivation to change. It became apparent that

his motivation was contingent on not gaining weight, creating a difficult dilemma for him. The clinician explored this ambivalence and by the end of this portion of the conversation, the discrepancy between his current behaviors and goals and values (e.g., be a good doctor, friend, spouse), became salient and he began expressing change talk (e.g., "So I am motivated. It needs to happen").

Because the information gathered from his interview would then be used to create personalized text messages, directing the conversation in order to evoke specific reasons to change was an important goal for this interview. Therefore, the clinician continued with developing discrepancy exercises, specifically the decision balance, below. The primary aim of this exercise was to allow Mr. Curtis to write down what specifically motivates (i.e., pros of change and cons of not changing) him to change, while acknowledging that there are reasons to stay the same (i.e., pros of not changing and cons of changing) which may create ambivalence.

THERAPIST: So one thing I'd like to do is just plot out on paper the pros and cons of changing and not changing. Really explicitly discussing what is good and bad to both sides of the coin. But first, before we go into this, I want to get a sense of how you see change. What actual changes need to be made, what does change mean on this paper?

. . .

PATIENT: I think I need to change my social behavior, to realize I can go out with people and not be alone and that doesn't mean like I am going to go binge or not have a good time. Um, it means, changing how much time I devote to worrying about what I eat and what I don't eat and substituting something else in its place—that will be a positive change for me, like school, and don't get me wrong, I have done well in school, but—

THERAPIST: That is impressive if you are doing well on top—

PATIENT: I have done extremely well, so I can't say if you looked at my evaluations or academic records, you would see any problem at all. But then I think if I can be that great with this, how great could I be without it?

THERAPIST: Mmm, yeah.

PATIENT: So . . . I think that I am going to have to learn to trust people more and become more comfortable in talking to people about my problems instead of keeping them inside.

THERAPIST: Anything else?

PATIENT: I think that is it for right now.

The therapist directed Mr. Curtis to keep these in mind, and directed him to the decisional balance exercise (see Figure 3.1). He selected which quadrant to begin with, and generated the pros and cons for changing and not changing depicted in Figure 3.1. During the exercise, Mr. Curtis was able to articulate the positives and negatives associated with staying the same versus changing and ultimately develop a discrepancy between his actions and values. In this case, we can see that he valued himself and wanted to increase his self-esteem, but he was beginning to realize that engaging in ED behaviors was not an effective path to enhance his self-worth. However, from the discussion thus far, it was clear that Mr. Curtis was not connecting his restriction to his binge–purge behaviors. Given restriction may be a key behavior to change in order to reduce ED symptoms, the clinician realized that some psychoeduation about the nature of ED symptoms may be helpful. This leads us to the next segment of the interview during which the primary goals were to offer information that may be helpful for the client in conceptualizing his disorder. Throughout these sections, the clinician continued to ask open-ended questions while offering information. Moreover, she asked permission to offer information before beginning the psychoeducation segment of the interview. The formulation that follows is depicted in Figure 3.2.

	Pros	**Cons**
Change	• I could feel better. • I could have normal relationships with people. • I could become a stronger person: physically, mentally, emotionally. • Better able to cope with stress. • Improve my self-esteem.	• Have to trust an "unknown." • Have to go outside of comfort zone. • It may not work. • I may unearth new things I don't want to know.
No Change	• Don't have to fear failing. • Don't have to devote energy to others because by myself.	• Things stay the same—things won't get better. • Eating will continue to impact personal life. • Impact mental and physical health. • Dangerous to health. • Could lose relationships. • Negative feelings could get worse.

FIGURE 3.1. Decisional balance exercise.

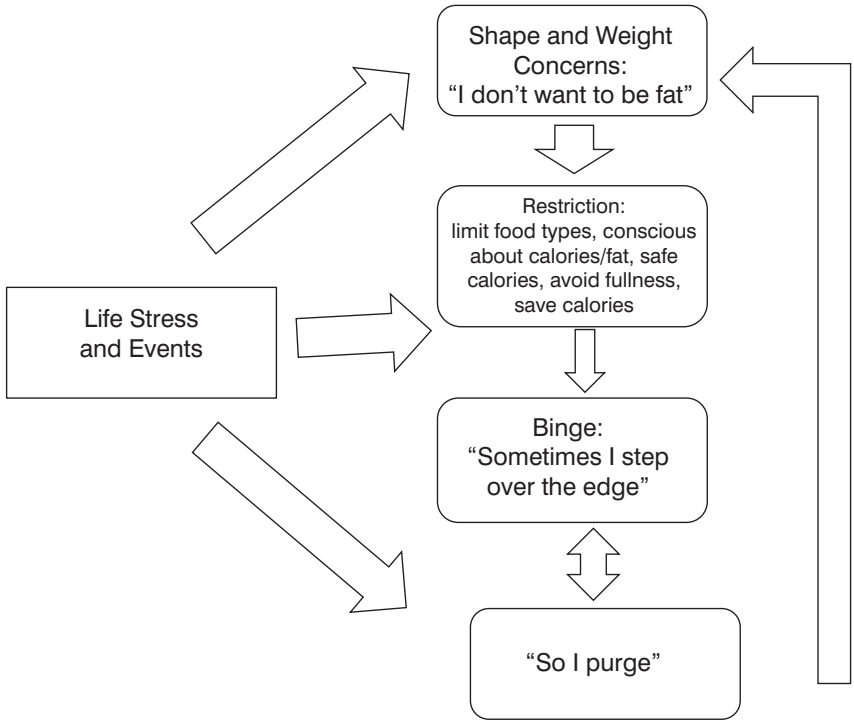

FIGURE 3.2. Personal formulation used for pyschoeducation.

THERAPIST: So when you defined change, changing social behavior, changing the amount of time dedicated to eating and trusting people, I was wondering if I might be able to offer you some information about the cycle of eating symptoms we often see.

PATIENT: Yup.

THERAPIST: Okay, I'm going to draw it out here. What would you say are the core reasons to trying to change your weight?

PATIENT: I don't want to be fat.

THERAPIST: Okay, so I am going to put that in a bubble, so "I don't want to be fat" is the direct quotation, and the more intellectual way we think of that it is "shape and weight concerns" concern with your weight—how your body looks on the outside, right?

PATIENT: Correct.

THERAPIST: Okay. And what do you do to address your fear of not wanting to be fat?

PATIENT: I try to be very restrictive about what I eat.

THERAPIST: Okay. . . . So there is this initial I don't want to be fat, so I am going to restrict what I eat, and be very controlling of portions . . . so how does this look?

PATIENT: Hmm, okay, I think I told you this last time . . . I am very consciousness about calories and fat, but yet I consume the same amount of calories and fat, just in a different form. Like one hamburger and a small fry just wouldn't do it for me and I know that, so I wouldn't even bother. But I would feel pretty full on a box of Raisin Bran, so that would be the safer alternative.

THERAPIST: Okay, so it is focused on controlling and being conscious of what you eat, and keeping these safe foods.

PATIENT: Right.

THERAPIST: Okay, so then you mention you step over the edge, what does that look like?

PATIENT: Well, like when I eat the entire box of Raisin Bran, which is 1,500 calories, which is not good on any level.

THERAPIST: So when you are unable to fit in this bubble (*points to restriction bubble on diagram*) here, it can lead to this bubble (*points to binge bubble on diagram*) and you eat the whole box.

PATIENT: Right, if I start to feel full and like I overate, then mentally I think, "Wow you really screwed up, so you better go binge because you shouldn't feel full." Like even if I ate a bag of carrots, and I felt like I was going to bust, I would be like, "You better go binge because if you feel full, then you really screwed up."

THERAPIST: So you try to avoid fullness here (*points to restriction bubble on diagram*), and if you have stepped over the edge to fullness, it equals a binge. Okay, what happens after the binge?

PATIENT: Then I feel guilty and I feel depressed because, it is really twofold. One, I feel guilty and upset because I allowed myself to become full or overeat and then two, I feel guilty and depressed because I couldn't control the purging, so it's kind of a double-edge sword.

THERAPIST: Hmm, so there is negative affect and you purge after that binge. You feel guilty after the binge and you feel guilty because you are full because you couldn't control this bubble (*points to restriction bubble*)?

PATIENT: Correct.

THERAPIST: Now has this solved this concern (*points to shape and weight concerns bubble*)?

PATIENT: No, because I still feel like my shape and weight are not where there should be.

THERAPIST: So there is this constant cycle that can be really difficult to control. So it starts out with "I don't want to gain weight, I don't want to get fat, I want to lose weight . . . anything related to shape and weight. Well, what am I going to do? I am going to restrict because that is how people lose weight—they diet." Unfortunately, this is a very rigid bubble, anything outside of this bubble leads us to a binge episode. You get negative affect: "I need to get this out of my system, and yet I still feel dissatisfied." Then you mention stress, life stress events can also impact these. So when you think about this cycle, have you ever thought about your symptoms in this format?

PATIENT: Not at all. I have never thought about them as a complete picture. And it makes so much sense when you draw it out. But I just don't know, like I go to bed at night with all of this on my mind and then when I wake up the next morning, it's like today you are going to change everything, and I do well until dinnertime. And then it all starts all over. This part (*points to binge–purge bubbles*), is about between 6:00 and 10:00 P.M. I have no problems whatsoever [before]. . . .

THERAPIST: Mmm. What is your eating like from breakfast to 5 o'clock—what is on your mind?

PATIENT: I eat very normal I think, but I am thinking about this (*points to restriction bubble*), so breakfast and lunch, I am not worried about what I am eating because it is okay, it is fine, but I am also worried about what I am going to do at dinner, what I am going to have. Like I have been restricting the amount of groceries I have on hand because I don't want them to be there because I don't want to eat everything. So the majority of my concern is at night because I know what happens. And I purposefully either go to bed earlier or I try not to be home, but it doesn't help anything, it just doesn't.

. . .

THERAPIST: So with those breakfast and lunches, are those in this circle (*points to restrictive bubble*)?

PATIENT: Oh yeah, but I can manage it for some reason. Well, in the morning I am usually in a hurry so I don't have time for all that bingeing and purging. . . . Lunch I am usually not at home, I am in a public place so I know I can't purge at all . . . I am very conscientious about that, like very restrictive. But at night I am safe and I can do what I want.

THERAPIST: And so when you are restrictive during the day, what do you mean?

PATIENT: I just really watch what I eat, I just do everything I can to save those calories and fat in case I binge later. It is almost like I set myself up to binge later.

. . .

THERAPIST: Well, it sounds like this breakfast and lunch are both here, all in this bubble (*points to restriction bubble*), it is all, just as you mentioned, setting up for here (*points to binge–purge bubbles*), and maybe that chicken and broccoli isn't enough for your body, or the egg white omelette, and it is within this restrictive limiting food calories bubble that brings you here at the end of the day. And this is sustainable up to a certain hour. . . . But unsustainable after. So if you think about change, where do you see the major change needing to happen?

. . .

PATIENT: Well I need to work on this (*points to restriction bubble*) and realize it is okay to have breakfast and it is okay to have a snack, and it's okay to have lunch. It is okay to have a regular meal. I just don't know how that is going to happen mentally, I don't know if I am ready for that, and that is what I need to work on. Because I know this (*points to binge–purge bubbles*) isn't right, and this is probably why I wake up in the mornings and I have to eat within 30 minutes because I am starving and I don't know, I just feel like I eat a lot here (*points to binge bubble*).

THERAPIST: I think recognizing this is your starting point, is the first step . . . because . . . is this (*points to restriction bubble*) working right now?

PATIENT: No—not at all.

THERAPIST: So if you think about targeting that bubble, why target it? What are the main reasons for wanting to stop this?

PATIENT: Because it isn't working. It is consuming my life, it is taking away things that I like for nothing. It is absolutely for nothing. I have no social relationships, I barely spend time with my spouse because I don't want to eat and be put in a position where I have to eat or explain why I am not eating, or whatever. And at the end of the day, it doesn't matter. It isn't changing how I see myself. I view myself mentally when I was 136 pounds and 186 pounds as the same person, nothing changed and that is what I don't understand. . . . I can honestly tell you know right now, at 148, I might as well weigh 300 pounds mentally, that is just the bottom line because nothing has changed.

THERAPIST: Just a lot of agony, it sounds like.

PATIENT: A lot of wasted time and a lot of wasted energy.[1]

At this point, the clinician was able to educate the client about how restriction may lead to bingeing and purging. The client was then able to articulate that restricting his food intake throughout the course of the day should

[1]See Figure 3.2 for visual representation of personalized formulation discussed above.

be his focus for change. The clinician helped guide Mr. Curtis by using open-ended questions to help him state the problem area (i.e., restriction) himself. This also allowed the clinician and client to begin planning how to begin the change process: by reducing restriction. The interview then concluded with the following conversation:

THERAPIST: I mean I can just hear the pain that this causes and the frustration of being 136 and being 186 and feeling the same way. That is frustrating and it all leads into this (*points to diagram*). And when you think about this, and you think about how motivated you are to change, where do you land on that scale now?

PATIENT: I have to change, that is the bottom line. Because this has taken so much away from me that I am never going to be able to get back, and I am not willing to give it anything else.

THERAPIST: Mmm, because it has taken so much.

. . .

THERAPIST: What does your life look like without an ED?

PATIENT: I think I would be much, much happier. And I hate to keep harping on the social aspect because I am not a partier, but I am a social person and I like having conversations with people. I like sitting down at dinner and having a nice political or academic discussion with people or just hanging out with a group of people. And I don't do it anymore. It hurts me inside because I know it is not the kind of person I am inside. It is stifling, you know a flower won't grow in a dark room.

. . .

THERAPIST: So it sounds like happiness, social life, dedication to school, your career, your spouse, all of those things have the potential to grow by knocking this off.

PATIENT: Yup.

THERAPIST: (*pause*) Is there anything else you want to add?

PATIENT: (*pause*) Not really, I think I am kind of spent.

At the end of the interview, Mr. Curtis was told that the interviewer would create personalized text messages from the information collected during the session. The text messages would begin within 2 days of the interview, and he would be asked to complete a daily questionnaire on his smartphone and pen/paper food logs. He was asked when he typically had meals so that the text messages could be timed appropriately. See Table 3.1 for examples of the text messages.

Mr. Curtis met with study staff weekly during the 2-week intervention phase to review his food records and weight. His weight remained

stable within a 2-pound range over the course of the intervention. At the end of the intervention phase, he completed a self-report questionnaire and provided feedback about the study. Below are his comments regarding the intervention.

Feedback

Mr. Curtis completed an acceptability self-report questionnaire and provided verbal feedback. He reported liking the intervention and finding it helpful. He noted he would recommend the intervention to a friend and would participate again. He said that his mood improved over the course of the 2 weeks and the text messages helped him be more conscious about his symptoms. When asked to provide critical feedback, he noted that some of the text messages were based on topics that "may require therapy" to help reduce the symptoms (e.g., "Loosening control over food will decrease stress and increase happiness!") and suggested increasing the interpersonal contact in the intervention. But, overall he found the protocol to be both acceptable and helpful.

Intervention Data

Mr. Curtis's motivation increased over the course of the intervention as compared with his motivation prior to the MI interview. His average post-intervention motivation level was at a higher stage of change, with a daily average of 3.45 and 3.38 (preparation stage of change) for the Eating, Shape, and Weight Concerns subscale and Ego-Alien Aspects subscale, respectively, so it had moved from the contemplation (considering change) stage prior to the interview to the preparation (getting ready to make active changes) stage over the course of the MI/text-message intervention. His motivation increased over the course of the 2-week intervention period, and of note, his motivation on the final 5 days of the study indicated he was in the "action" (making changes on a daily basis) stage regarding both subscales (see Figures 3.3 and 3.4). Although his motivation increased, Mr. Curtis did not report significant changes in his kilocalorie intake across the text-message portion of the study, though he noted his purging decreased over the course of the study. He also reported not desiring an empty stomach for shape/weight reasons, an aspect of dietary restraint he endorsed daily on the EDE at baseline.

As Figures 3.3 and 3.4 indicate, Mr. Curtis's motivation level remained high both on days when he received text messages and on the days when he did not receive text messages, as well as on days when he received both the gain-framed and the loss-framed messages.

Mr. Curtis reported liking the text messages and found them to be helpful reminders. Overall, he found the intervention to be very acceptable (average rating of 9.6 on a 10-point scale). He preferred the loss-framed

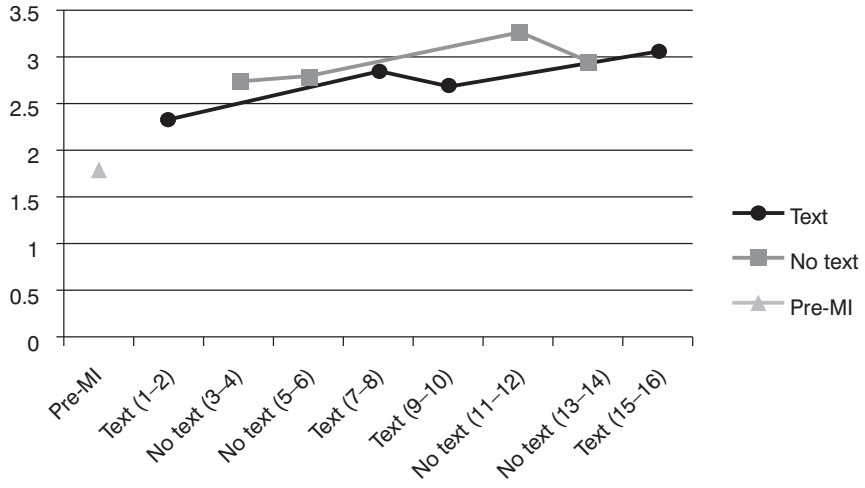

FIGURE 3.3. Motivation to change: Text messages versus no text messages. Numbers in parentheses indicate day of study. MI, motivational interveiwing.

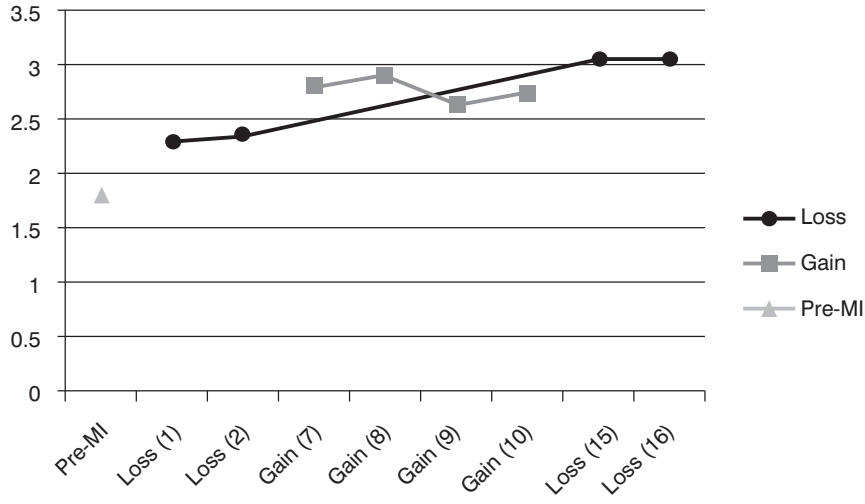

FIGURE 3.4. Motivation to change: Gain versus loss messages. MI, motivational interviewing.

messages, noting that they felt more powerful because they reminded him of potential consequences. He enjoyed the intervention and found it helpful, but he wished there was more personal interaction or connection. Feasibility was high, with greater than 90% compliance rate with nightly questionnaires and food records.

Discussion

Mr. Curtis's ambivalence toward change is clear throughout the MI interview. He struggled with his desire to overcome his ED, which caused significant distress and impairment. His goals surrounding his social relationships, family, and career clashed strongly with his fear of weight gain that could accompany the process of overcoming his ED. Ultimately, Mr. Curtis understood that the ED was not helping him achieve his goals and stated that he wanted to change. His self-reported motivation to change increased as evidenced by his increased score on the ANSOCQ (Rieger et al., 2002) motivation subscales. Prior to the interview his motivation was in the "contemplation" stage, suggesting he recognized that he had a problem and was considering changing. After the interview and during the intervention, his average motivation increased to the "preparation" stage of change, indicating he had started to take steps to prepare for change. In the final days of the study, his motivation indicated he was in the "action stage," suggesting he was making active changes toward healthier behavior.

Overall, the case illustrates how motivation and ambivalence can play a role in maintaining an ED. Although the participant found the MI interview to be emotionally straining, he explained that the session was helpful and that the text messages that were derived from the interview reminded him of why he wanted to change. He found them helpful and ultimately was able to begin preparing to face some of his fears regarding regular eating. MI has often been framed within the negative reinforcement literature (i.e., motivation to change is derived from dissatisfaction with one's present state) and therefore, it is not surprising he found the interview emotionally taxing, but researchers have also highlighted the positive emotions that derive from hope and desire to make change (Wagner & Ingersoll, 2008). These positive emotions were also apparent as we see Mr. Curtis explaining that his mood improved over the course of the 2 weeks and that he liked the MI/text-message intervention because they highlighted the positives that could come from change.

A few specific challenges relating to MI arose in the current study. First, engaging in the motivational interview may be difficult for the participant. It can be emotionally demanding to discuss why one continues to engage in maladaptive behaviors despite significant consequences. Multiple participants in the current study became tearful during the MI session and remarked on how the interview, though helpful, was more emotionally

challenging than expected. Second, the clinician may need to educate the client about his/her symptoms in order to help the client gain insight into what changes need to occur to overcome his/her ED. For example, in this case, Mr. Curtis was unaware of how his symptoms may be interacting. Prior to the interview, he did not connect restriction with bingeing and purging. The therapist used the cognitive-behavioral conceptualization of how bingeing and purging relate to restriction (Fairburn, 2008) to help educate the patient about his symptoms. As noted in the introduction, when the therapist offers information, it is essential to ask permission from the client in order to align with the MI spirit.

Important challenges also arose regarding the text messages. First, when using technology, there is an inherent loss of interpersonal contact. Mr. Curtis commented on this limitation, suggesting that the intervention could be improved by incorporating more personal contact. Second, some participants had strong reactions to the specific content of the messages. For example, one participant did not like verbatim phrases within messages because she felt like she was simply being reminded of how she thought. She preferred novel ideas (e.g., "Try a new hobby today!") to help her overcome her ED. In contrast, other participants liked the verbatim phrases because of the personal nature of the message and reminder of what needed to change. Therefore, in clinical practice, it may be wise to review specific message content to ensure positive reactions are maximized.

CONCLUSION

Addressing motivation in individuals with EDs can be an essential component of treatment. MI allows the client to articulate why he/she wants to change, though these reasons often seem to be lost when faced with eating day-to-day. This study provided clients the opportunity to discuss why they wanted to change using MI techniques, then reminded the clients of these personal reasons using text messages in real time. In the current case, Mr. Curtis's motivation increased steadily after the MI session and he found the text messages helpful reminders throughout the day. Future research is needed to continue enhancing the intervention, though these pilot data present promising results regarding MI and technology.

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CHAPTER 4

Cognitive Remediation Therapy and Cognitive-Behavioral Therapy for Anorexia Nervosa

ALISON M. DARCY, KATHLEEN K. FITZPATRICK, and JAMES LOCK

> "I was really nervous about having a daughter, it was like the amount of emotional responsibility to me was astounding. How was I going to protect her from everything? How was I going to help her? Guide her development into a healthy young woman while I was so fucked up?
>
> "I'm not that spontaneous, I mean I used to be spontaneous with the kids, you know . . . 'Let's do this, let's do that' or 'Let's make this, let's make that.' I wanted to be fun and I think I was fun with them but in my own self I don't like a lot of transition. I don't like things happening all of a sudden . . . I like things to be a certain way, not to the point of OCD or anything, but I'm not real flexible in a lot of ways.
>
> "With you I have released myself from the grip of fear and starvation and learned to lift the mantle of anxiety that shrouded my entire life."

Linda was a 50-year-old married woman and devoted mother to her three children. Physically small in stature, she appeared almost childlike when viewed from behind. Her small size belied an enormous strength of character, and a rational, sturdy personality. She despised the fact that, because of her size, people would at times pick her up as if she were a doll. Linda did not suffer fools. She was alert for and intolerant of "BS" of any kind, and politely made this clear to her therapist on their first meeting. Linda was an extremely thoughtful person; she often brought mementos with her to therapy, and approached decisions pertaining to her children with immense compassion and scientific

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Linda is a disguised/composite portrait.

precision. Among her many talents, she was a gifted writer with a great capacity for humor with those whom she was confident took her seriously.

• • • • • • • • • • • • •

Cognitive remediation therapy (CRT) represents a new approach to the treatment of anorexia nervosa (AN) that has emerged from a growing literature suggesting that adults with AN have specific neurocognitive inefficiencies that underline their clinical presentations and potentially, their tendency toward chronicity. Specifically, adults with AN demonstrate an overly detailed cognitive processing bias at the expense of perceiving the gestalt (Roberts, Tchanturia, & Treasure, 2012) and difficulties shifting set quickly and efficiently (Roberts, Tchanturia, Stahl, Southgate, & Treasure, 2007). These neurocognitive characteristics manifest during the illness as rigid, rule-bound, and detail-focused cognitions, beliefs, and behaviors. While set-shifting inefficiency has not yet been robustly replicated among younger patients with shorter illness duration (Fitzpatrick, Darcy, Colborn, Gudorf, & Lock, 2012), suggesting that length of illness makes these problems worse, problematic global processing has been observed among adolescents with AN, relative to healthy controls. In addition to these problems occurring as a result of the illness state, they also appear to persist after weight restoration (Tchanturia et al., 2004) and are observable in healthy sisters (Roberts et al., 2012). Thus, both central coherence difficulties, and to a lesser extent, set-shifting problems have been proposed as endophenotypes of AN (Roberts et al., 2012), in addition to being maintaining factors.

COGNITIVE REMEDIATION THERAPY FOR ANOREXIA NERVOSA

The basic premise of CRT is to provide an opportunity for patients to explore and practice specific cognitive skills in the hope of improving neurocognitive function. For the treatment of AN it may also facilitate engagement in the therapeutic process (Lock et al., 2013). Originally, CRT techniques were developed in the 1920s for patients with head injuries, but they are now used successfully for a variety of disorders. CRT for AN was developed by Tchanturia and colleagues (2008; Tchanturia, Campbell, Morris, & Treasure, 2005) at King's College London, and was adapted by Lock and Fitzpatrick at Stanford University (see Lock et al., 2013). CRT for AN consists of 45- to 50-minute sessions that can be applied flexibly according to the setting. Sessions consist of several exercises within each task domain along roughly the following sequence: (1) presentation of the task, (2) guided reflection on the process of task completion and strategy employed (metacognition), (3) experimenting with alternative strategies and task practice, and (4) behavioral generalization to day-to-day life aside from eating disorder (ED)–related behaviors.

A major principle of the treatment model is the emphasis on process and simultaneous de-emphasis of outcome. This can be challenging for perfectionistic individuals, and is facilitated by the therapist adopting an experimental and fun approach to the tasks and the therapy. So as not to undermine this attempt, food choices or ED-related symptoms are explicitly not explored and must be constantly reshaped by the therapist if raised by the patient.

After several sessions, "behavioral tasks" designed to facilitate generalization of *in vivo* task practice to everyday life are introduced and the patient is encouraged to think of a task he/she can do at home. The manual offers a list of example tasks that both patient and therapist can choose from, with the explicit instruction to "practice seeing how you react to change." Table 4.1 shows some examples of tasks from each domain, how they are used to explore thinking style, and between-session behavioral tasks.

COGNITIVE REMEDIATION THERAPY AS AN ADJUNCTIVE OR INTEGRATED INTERVENTION

Tchanturia and Lock (2011) have argued that CRT may be a good preparatory or adjunctive treatment, and that particular attention should be paid to the combination of CRT and cognitive-behavioral therapy (CBT). While CBT remains a reasonable candidate for the treatment of AN, and those who remain in treatment appear to benefit from it, efforts to test it empirically have been hampered by large dropout rates (Lock et al., 2013). Conventional CBT faces many challenges with AN patients. A solid therapist–patient collaboration can be difficult to establish because behavioral treatment goals such as reducing restriction and exercise, weight gain, and introduction of feared foods may be divergent from patient goals. The cognitive restructuring elements of CBT require flexibility in thinking, the ability to take an alternative perspective, and perception of the "bigger picture" when evaluating different courses of action—skills that are challenging for some with AN, in part due to characteristic neurocognitive functioning. CRT may offer a nonthreatening space to practice some of the skills for later engagement in CBT, allowing an opportunity to establish a therapeutic relationship and model a productive working therapeutic collaboration, thereby potentially increasing adherence to treatment.

Notable and unique features of CRT are its acceptability to seriously and chronically ill adult patients who demonstrate a refractory course and are often considered to be too ill to engage in psychotherapy. Tchanturia and colleagues developed and refined the therapy and have conducted case series demonstrating the feasibility and acceptability of CRT in an acute inpatient setting including with individuals who are chonically ill and very low weight (Tchanturia, Davies, & Campbell, 2007; Tchanturia et al.,

TABLE 4.1. Examples of Tasks from Set-Shifting and Coherence Domains in CRT

Task	Process	Example difficulty	Example practice	Example behavioral generalization
Stroop[SS]	The patient is presented with a sheet of paper that has color words written in different (mostly divergent) colored ink and instructed to switch back and forth between reading the words and reading the color of the ink in which they are written as the therapist says "Switch."	Patients are often thrown by the interruption of the "switch" command. They typically have difficulty switching and remembering which rule they are on.	The patient moves a pencil back and forth as a visual cue to help him/her remember which rule he/she is following. He/she realizes this is burdensome.	The patient generalizes his/her difficulty to moving to a new house and the experience of taking the wrong route home after dropping his/her children to school. He/she decides to experiment with wardrobe to observe what change feels like.
The Main Idea[CC]	The patient is presented with a piece of text (e.g., newspaper article, letter). and asked to extract the main idea from it.	Individuals with AN often provide overly detailed summaries, finding it difficult to be succinct or process the gestalt of the piece.	To free him-/herself from the need for precision, the patient imagines what title a movie producer might choose for the piece if it were the basis of a screenplay.	The patient generalizes this challenge to his/her tendency to be overly detailed when retelling events. He/she decides to make a conscious effort to be succinct in one conversation.
Illusions[SS]	The patient is presented with a visual illusion and is asked what he/she sees. He/she is encouraged to see both images and then switch back and forth between them.	Patients often have difficulty seeing a second image, perseverating on the first.	The patient is encouraged to turn the page upside down and think about other things that the image could look like.	The patient generalizes to his/her home décor that never changes and decides to change furniture around in his/her apartment to see how long it takes to get used to it.
Maps[CC]	The patient is presented with a map of a downtown area and asked to provide a route that would be suitable for bicyclists.	Patients get particularly stuck where there is ambiguity (e.g., where there is no bike path).	Different scenarios with the same map, such as describing to a blind person where to go.	The patient takes an alternatigve route while driving to work.

Note. SS, set-shifting task; CC, central coherence task.

2008; Tchanturia, Whitney, & Treasure, 2006; Whitney, Easter, & Tchanturia, 2008). CRT has also demonstrated feasibility and acceptability in a group format and with adolescents; in general, these studies have observed improvements in neuropsychological task performance between baseline and posttreatment on set-shifting and global processing style with small to large effect sizes (see Tchanturia, Lloyd, & Lang, 2013). In the only published randomized treatment trial employing CRT, 46 adults with AN were randomized to receive either 2 months of CRT followed by 4 months of CBT (CRT + CBT) or CBT alone (Lock et al., 2013). Since CRT is hypothesized to facilitate engagement in treatment, the primary outcome of the trial was attrition. The CRT/CBT treatment group had lower attrition in the first 2 months (13%) compared with CBT only (33%), supporting the hypothesis. In addition, there were neurocognitive improvements in the CRT/CBT arm but not in CBT only, with medium to large effect sizes, though these improvements were not sustained past the initial treatment period. The study supported the feasibility of CRT as an adjunctive treatment to CBT.

Though the combination of CRT and CBT makes clinical sense, the specific mechanisms have yet to be elucidated, and it is not clear how best to combine the treatments. The literature on adults with EDs suggest that neurocognitive problems are better conceptualized as relative inefficiencies rather than deficits. Since CRT therapies were originally designed for those with neurocognitive deficits, further attention is needed as to whether and how remediation interventions may help highly educated, highly functioning patients with AN.

The following case describes the integration of CRT with CBT for a 50-year-old patient with chronic and refractory AN. The primary aim of this report is to demonstrate the multiple ways that CRT can have therapeutic utility aside from practice of the skills themselves, vis-à-vis both as a means of reframing change and novelty as positive and inherently beneficial, and in the formation of the therapeutic relationship. We also aim to demonstrate the therapeutic style and atmosphere of CRT during the session. Finally, we hope to demonstrate how CRT may be integrated into CBT, and how complementary and distinct the approaches are in practice.

CASE STUDY: LINDA

Method

Design

We conducted a naturalistic, mixed quantitative–qualitative case study of CRT/CBT. The quantitative data available consisted of body mass index (BMI) and have been presented elsewhere (Safer, Darcy, & Lock, 2011). However, the heart of the study is the clinical qualitative description of the case and the demonstration of a CRT session. In this chapter we describe

each session of CRT and we have chosen a single session—Session 5—to demonstrate by transcribed excerpts how CRT is utilized with a patient prior to fully using CBT.

Participants

THERAPIST

The therapist in the study was a Caucasian, 30-year-old psychology post-doctoral fellow with 3 years of clinical experience in ED. The therapist had attended a CRT training workshop and had used CRT with adolescents. The therapist received supervision for the CRT part of treatment from a pioneer of the treatment approach, and CBT supervision was provided by a leading expert in the field of ED treatment.

PATIENT

Linda was a Caucasian, articulate 50-year-old woman with a long-standing history of ED and depression. Linda was a master's-level employed teacher and mother of three children to whom she was very committed. She was an extremely bright, capable, no-nonsense sort of woman, married to an academic architect for over 30 years. Linda described having had undiagnosed problems with eating beginning in her late teens. She first sought treatment at the age of 39, when she experienced an acute episode, losing approximately 13.6 kg in 3 months. She was hospitalized in a medical unit when her weight dropped to 34 kg (BMI = 15.7) and attended an intensive outpatient treatment program for 6 weeks. She then attended weekly therapy sessions followed by 5 years of monthly supportive psychotherapy sessions. However, she was unable to maintain her weight above 85% of the ideal for her height since her hospitalization. Linda had a significant trauma history, with an attempted abduction and rape at age 13, and rape at age 17. Her parents divorced when she was 3 years old and her mother remarried. The relationship between Linda and her stepfather was strained, and she described him as rejecting and cruel at times. Linda's relationship with her mother was also somewhat strained. She described her mother as a positive woman though "vain" and "obsessional" about her appearance. Linda spoke about wanting to disappear as a child. Her father suffered from alcohol dependence and depression and completed suicide when Linda was 9 years old. In her early 20s, Linda married an architect much older than she. She experienced relatively few ED symptoms until her daughter entered adolescence and began to self-harm, which "brought it all back." She reported starting to restrict her diet with the intention of becoming "really healthy," losing significant amounts of weight. At the time of presentation to our clinic she was partially weight restored (just under 85% ideal body weight), though her pattern of eating was extremely restrictive

(e.g., one slice of bread and cheese for lunch, three to four grapes, one piece of chocolate). She did not want to accept that she had a diagnosis of AN, feeling that it was "silly" for a woman her age. She was extremely self-critical and spoke about critical "voices" from her childhood. However, she had excellent insight and a good self-concept in terms of her work and career and though ambivalent, was motivated to change.

In terms of neurocognitive style, Linda valued order and predictability in life from a young age. She adopted the role of responsible caregiver to her younger siblings in response to her mother's parenting style that she described as haphazard and sometimes chaotic. This cognitive style was reinforced by trauma incidents that left her feeling vulnerable and out of control. She believed this also contributed to her attraction to her husband, who appeared aloof and distant. While she valued order, she also enjoyed challenging herself mentally and enjoyed learning music and exploring other creative avenues.

Assessments

As per the CBT protocol, the patient's clothed weight (without shoes and jacket) was taken at the start of each session. In addition, the patient was asked to bring to each session daily monitoring sheets recording all intake, binge-eating episodes, purging episodes, exercise, and the context in which they arose.

Recruitment Procedure

Linda contacted the clinic after participating in a mixed-methods study of perspectives of treatment and recovery. Since outpatient CRT was a completely novel treatment approach for AN, Linda was recruited as a pilot to help answer specific questions about how best to combine CRT and CBT. She was screened for eligibility by the research team and allocated the therapist at random from a pool of four. Prior to the start of therapy she signed an informed consent form to participate in the study and to have therapy sessions filmed. The therapist videotaped each session, and recordings were checked for treatment fidelity. Sessions were conducted normally with no interference from the research team, and the therapist was instructed only to adhere to the principals of the therapeutic approach while using clinical judgment to appropriately integrate with CBT.

Results

In this section we provide the context of the case in terms of logistics, therapeutic relationship, and therapeutic process. We provide excerpts from one session to illustrate CRT in practice and discuss them in detail. Finally, we

describe the integration of CRT with the CBT phase, and pertinent events from CBT followed by presentation of results related to outcome.

Context of Case

LOGISTICS

The therapist and Linda saw each other for a total of 54 sessions over a period of 2 years. Since Linda was enrolled in a research study there was no charge for treatment. The first eight sessions were primarily focused in CRT, with the first 10 minutes or so of the session reserved for history taking, discussing the goals of therapy, and discussing the formulation followed by about 45 minutes of CRT. Despite weekly weighing, weight was not discussed until the CBT phase of treatment. The only instruction that the patient was given in terms of weight during the CRT phase was to try not to lose any weight.

THERAPEUTIC RELATIONSHIP

Linda and her therapist established a mutually respectful and collaborative working relationship from the beginning. They both clearly valued the relationship, and the intensity of the relationship persisted despite some small gaps in treatment due to travel. On their fourth meeting, Linda described how she had previously not been ready to fully engage in therapy and had told respective therapists "what they wanted to hear." The patient had worked with a CBT therapist years before who had focused mainly on reducing her sense of responsibility for the sexual assault she had experienced at 17 years old. She recalled that this work was successful. However, she felt the therapist had little experience treating EDs and she felt somewhat misunderstood in this regard. Linda volunteered for this treatment study because it was a completely novel approach and said she wanted to help with the treatment effort. She noted early on that she had few expectations with respect to the therapy and was ambivalent about treatment goals, though she expressed extremely positive feelings regarding the therapy relationship.

Process Data

The first session comprised relatively brief introductions with the majority of the session turning to CRT. The purpose of the CRT was explained in terms of a "brain gym" model, akin to exercising the body for optimal performance. The patient was shown a picture of the brain and was told that the exercises were specifically for addressing difficulties in the prefrontal cortex area (executive functions). Postsession therapy notes described

Linda's sensitivity to perceived failure at tasks and her high expectations. She reported her annoyance at not being good at tasks that she felt she should be good at, though she was not one to "freak out" if things were not done properly. The therapist also noted how stuck she could become, particularly when discouraged. This was evident during the Stroop task, where switching was particularly challenging and Linda became confused around which rule to follow. She stated she found the task "annoying." However, the therapist noted that after being stuck Linda could get back on track quickly, and the illusions task—a visual switch task—was also noted as a major strength.

In the second session, the therapist noted that Linda was more relaxed and appeared to be having fun. She was less concerned with rules and performance across all tasks and appeared to enjoy them. She recorded a dramatic drop on the time spent on the Stroop task and noted that she appeared to be less concerned with the rules and would continue anyway, despite uncertainty around which rule she should be following. This session consisted almost entirely of CRT.

Linda was late for her third session and appeared frazzled and frustrated, reporting a difficult week. This session started with 15 minutes of discussion and history taking. Linda spoke about her relationship with her husband, and a rift that had occurred prior to her hospitalization. She also spoke about a tendency toward dissociation and her lack of understanding of why she experienced significant AN thinking. She spoke of her motivation for enrolling in the study, saying that the fact that it was research made it easier for her to seek treatment. The majority of the session consisted of CRT tasks throughout which Linda's self-criticism was evident. She spoke about being "plagued" by a slight inaccuracy on the line-bisection task and queried whether the erasers missing from the pencil tops were purposely removed. The therapist responded that the erasers had indeed been removed for the reason that outcome did not matter and was distracting, lightheartedly tearing up the page to demonstrate.

In Session 4 Linda spoke about her depression symptoms in more detail and the formulation and goals of therapy were discussed. She spoke about her concern that she could not easily disentangle the AN voice from the rational one when she perceived things to be outside of her control, and that her magical thinking scared her. CRT was conducted for the majority of the session comprising about 50 minutes of the session. The idea of behavioral tasks was introduced, and the therapist suggested Linda might try tasks that tap into some of the work done in CRT in a more realistic context.

Presented here are excerpts from the fifth session of CRT. Session 5 was chosen because there were opportunities to discuss progress and learning from previous sessions as well as review homework tasks for the first time. The session was transcribed verbatim. The first part of the session was used for history gathering, discussion of the goals of therapy, and the

formulation. As in all previous sessions, there was no blending of the CRT part of the session with the CBT-focused discussion; rather, it was explicitly stated: "Okay. Shall we do some of these tasks now?" Excerpts were chosen to emphasize specific characteristic aspects of CRT that are unique to the approach, including both their presentation and execution.

EXCERPT 1: A SET-SHIFTING TASK

In this excerpt, Linda is presented with a variation of a Stroop task that uses numbers instead of words and colors. For this task, large numbers are composed of smaller, different numbers, and the task comprises four trials. The first two trials consist of reading the small and then the big numbers until the end of the page, and for the final two conditions the patient is asked to switch between reading the small number and then the large number whenever the therapist says "Switch." The final trial comprises increased frequency of switching. In previous sessions, Linda expressed a strong dislike for numbers and discussed how it affected her performance on tasks that involves them. The Stroop task is generally very challenging and in previous sessions Linda had difficulty remembering which rule she was on. This excerpt demonstrates the flow of task presentation, metacognitive discussion, reflection on strategies employed in previous sessions and learning over time, and behavioral generalization.

THERAPIST: Okay . . . I have one of these [Stroop] tasks for you again but instead of words they're numbers, and I'm really interested to see how this goes again. What I'd like you to do for the first trial is read the big number that's written with the small numbers so what you're reading is the big number. So you'll start here and move across until you get to the end of the page and read them as quickly as you can without skipping any and without making mistakes.

LINDA: Say the numbers . . . 3 6 9 2 . . . sorry I'm having trouble seeing that. . . .

THERAPIST: No, it's okay.

LINDA: 3 6 9 5 0 . . . 9 . . . oh, 3 2 8 7 4 9 3 6 . . . Why is this so difficult? . . .

THERAPIST: Great!

LINDA: It's the sharp edges.

THERAPIST: Well, that's great. Now what I'd like you to do is read the small number that composes each of the big numbers; you don't have to read each one, just say what it is right across until you reach the end.

LINDA: 9 5 9 3 8 3 7 9 3 0 4 5 4 3.

THERAPIST: Excellent. Okay. So now what I'd like you to do is start off reading the big numbers like you did in the first trial, then when I say

"Switch" you're going to read the small numbers and switch back and forth when I say "Switch" until we reach the end. [They work to completion of the task, gradually shortening the intervals between switch commands.] Well, how was that?

LINDA: A little difficult because some of them are just hard, my eyes are not seeing them as easily as I thought.

THERAPIST: I noticed that yeah, it was hard for you to see some of them . . . how did you work it out? How did you make out which number it was?

LINDA: I just tried to make it into a normal curve.

THERAPIST: Ah, that's clever.

LINDA: For some reason I was having trouble with even the 2, I was having trouble with that. I had to sort of, I had to, you know, not stare so much at it but just look at the shape and just sort of soften it a little bit.

THERAPIST: Ah, clever.

. . .

THERAPIST: And which trial was hardest for you and which one was easiest?

LINDA: Well, the very first one was difficult, ah, because I started to panic a little not being able to see the numbers and I guess the first time I was switching I was nervous about not being able to do it.

. . .

THERAPIST: I was thinking of other tasks where we've used numbers that have kind of been a little bit more challenging, so I was interested to see how this would go.

LINDA: Well, when I first saw the numbers I thought, "Ah, great" (*sarcastic*). . . . Then I thought it's an image thing rather than a computational—

THERAPIST: So that made you feel more . . .

LINDA: Then it went through my brain more quickly.

THERAPIST: Okay.

LINDA: It's like, well then, I'll be able to read these numbers . . . Then when I was not able to read a couple I was like, "Wahhhhh!"

. . .

THERAPIST: How did you read out the small number; what was your strategy for that?

LINDA: I just stuck to like the middle line, you know, just going straight to the middle, something in the middle.

THERAPIST: So it made you focus on something.

LINDA: It made me focus on something preferably in the middle so as not to distract myself.

THERAPIST: Hmm. So is that similar to anything you do? Like would you use that kind of a strategy in any other aspect of your life, maybe in, I don't know, something to do with work or something you do—

LINDA: Well, I often try and break things up into manageable, you know, try and see something small to stop from being overwhelmed, you know. I do that a lot. You know if I panic, it's because of something being too big or a range of things being too many . . .

THERAPIST: Can you give me an example?

LINDA: Well, if I have, you know, back-to-back things happening. I've got to write two or three reports, I've got to pick up my computer, I have to and I try and prioritize and . . . or I'll say to myself, "Okay, you've written this type of report before, you know it's going to take a couple hours so you know to do that and you know the other one's not due until tomorrow so you can do that tomorrow morning." You know, I'll just try and break it up into, you know, or if I'm really sweating over a big task, I'll break it up into small pieces to just write the intro first . . .

THERAPIST: And it helps to keep it from being overwhelming.

LINDA: Yeah, because if I look at the whole thing, you know, it's scary.

THERAPIST: That's great! Sounds like you've got a really effective strategy there, that's really important.

EXCERPT 2: A CENTRAL COHERENCE TASK

In this excerpt, Linda is asked to read a letter and summarize it briefly. This requires a balance between capturing essential details while keeping the "bigger picture" in mind. The difficulty of the task for individuals with AN who tend to get lost in the detail is demonstrated.

THERAPIST: Now I would like to do this [different task] again. Feel free to draw all over the page, and again, you're just going to summarize the key idea from this letter in one or two sentences.

LINDA: Well . . . um . . . somebody's organizing a party, it's unclear as to whether . . . it's a letter to somebody who is being invited to a sweet 16 party, um, she's enclosing everything that's needed in the invitation directions . . . ah, she's asking for an RSVP, she seems very, very anxious about making sure that the party is being RSVP'd, and being very gracious saying what's going to be at the party and what the restrictions are for the guests and also how people should dress and also where they can find accommodations.

THERAPIST: If you were this person sending the letter and you wanted to just convey that in a text message, which confines the words considerably, what would you say?

LINDA: Um . . . well, um, here is the invite (*laughs*) and in the invite of course there's going to be directions and RSVP. So here is the invite, RSVP by December 9, I might stress that because I'm so anxious about it, ah, and then like, family welcome, um, tell me numbers or whatever—give me numbers, formal attire, accommodations possible, or possible accommodations for guests.

THERAPIST: Do you ever send texts?

LINDA: Yeah, well, yeah, if I sent a text it would be really kind of difficult.

THERAPIST: Are your texts long or do you send like . . . you know, are you good at the abbreviations?

LINDA: I'm getting better at abbreviations. My original texts used to make my daughter really laugh because I think . . . they are very long. I'm getting to learn to say just, you know, abbreviations. It's harder for older general persons. It's hard to squish words down . . .

THERAPIST: So now your text messages are getting shorter?

. . .

LINDA: I'm getting better at that but it's challenging.

THERAPIST: And I bet it is challenging. But I'd love you to do a few really, really short ones, and let me know how you get on because, you know, like last week when I gave you a list of behavioral things to do, that's exactly what we want. We want things to be uncomfortable and a bit of a challenge because we want to know, how do you get your mind in gear to shorten it, you know? It requires a lot of a suppression of something.

LINDA: I'm doing a lot of that right now. My son is arranging this party, and I know about it, and usually when my family comes, I organize every family reunion there has ever been and I am, you know, I am the one who hosts people and organizes stuff, and for me to not be any part of the organizing? The only thing he told me to do is to give him a bunch of songs that he will burn onto a CD, I think I told you, and um, give him a few addresses for people that I might invite that he would not know and I hear all these things like he's ordered this, he's booking food from here, and it's like I should . . . and so, don't you think . . . It's not that I want to micromanage everything he's doing, I want to help. I feel guilty! Just . . . someone's throwing me a party and I'm just going to sit here and let him run it? It drives me nuts, I keep wanting to help in some way.

THERAPIST: So how are you stopping yourself from helping?

LINDA: Well, it's been difficult. I already said, "Here's the list of songs but I'm afraid it's going to take a long time to burn," and he was like "No," and then I said, "Here are some e-mail addresses but don't feel compelled to invite too many people and you know if you need money for blah blah blah" and he's like "You know what, Dad and I are already talking." (*Laughs.*) It's more of that really than micromanaging. I don't care what happens. I just feel mortified that people are working and planning and traveling and everything on my behalf.

THERAPIST: So it's getting used to somebody or people making a huge big deal of you.

LINDA: Absolutely, absolutely. It's okay if I make a big deal of them. But boy, is it stressful, takes getting used to so many people making a huge big deal [of me]. It's stressful.

THERAPIST: Well, I don't know if I have anything in my red folder that's going to help you there (*both laughing*). Except I imagine it is the same as putting yourself in a different gear, I guess.

Linda's difficulty summarizing the information succinctly led the therapist to suggest another way to approach the task, that is, communicating in a text message. After presentation of the stimulus and task practice, there was a discussion around how the task relates to everyday tasks. In this case, the extrapolation is quite literal and the conversation is about texting and the level of discomfort that ensues. However, once the therapist suggests that completion of the task may incorporate flexibility and inhibition, the patient begins to talk about a completely different experience that she sees as requiring some inhibition on her part. The example is discussed in detail, but ultimately the therapist attempts to bring it back to the mechanics of thought, rather than content.

EXCERPT 3: FLEXIBILITY AROUND HOW EACH TASK IS USED IN COGNITIVE REMEDIATION THERAPY

The therapist presents a visual illusion as a visual switching task, in which the participant is required to find the alternative illusory image. This task is typically challenging for people with AN because they tend to become "stuck" on one image. However, Linda consistently completed this task with ease, regardless of the level of difficulty that was presented. Given that there is no need for task practice, the following discussion becomes metacognitive in focus very quickly:

THERAPIST: How about this, what do you see here in this image?

LINDA: Frog here and horse head there.

THERAPIST: Which one did you see first?

LINDA: The horse. Well, when you slid it across I saw the horse and then I saw this part, which looked like frog, and I thought, aha, some sort of reptile.

THERAPIST: So did you see both images right away?

LINDA: Yeah, as soon as I picked it up I saw the frog.

THERAPIST: No difficulty flicking between the two images?

LINDA: No.

THERAPIST: That's great . . . It was really interesting from this point of view because every picture I've put in front of you you've been able to see both images instantly and move between the two images really easily, and you said that you actually place a great importance on being able to see other people's point of view, you know, particularly the mothers of the kids that you work with. So I thought that that connection was really interesting. But are there other ways, have you thought of any other ways that even visually you need to switch back and forth between different things that you feel that you're good at?

. . .

LINDA: I can think outside of the box and I can be creative in certain ways but I'm actually kind of very . . . ah, not regimented, but I like things to be "just so" and I don't like a lot of . . . I'm not that spontaneous. I mean I used to be spontaneous with the kids, you know, "Let's do this, let's do that," or "Let's make this, let's make that." I wanted to be fun and I think I was fun with them, but in my own self I don't like a lot of transition, I don't like things happening all of a sudden . . . I like things to be a certain way, not to the point of OCD [obsessive–compulsive disorder] or anything, but I'm not real flexible in a lot of ways . . .

THERAPIST: So I know last week when we talked about the geometric shapes you spoke about your mosaics, how are your mosaics going?

LINDA: Well, I was away for a week but I'm hurrying up on them now, I'm planning to start back on them now. Mosaics are a good reflection on how I like things to be orderly and even when I doodle, you know how people doodle, I doodle a lot of geometric doodling and stuff. You know, it's just like everything, there's certain safety in geometric stuff because . . . it's predictable.

THERAPIST: Are there any ways that you think you might be able to semi-comfortably push those boundaries a little bit?

LINDA: Well, it depends on in what context . . . I used to be excruciatingly shy, and having kids made me have to be more out there, you have to talk to other kids' parents . . . and when I went back to school I had to give presentations and class presentations, all that sort of excruciating

things, you know, I had to present things that I wasn't comfortable doing and so, you know, so that sort of thing, based on shyness, I've pushed the boundaries again and again. I've had a job the last 3 years in a certain school that I thought was going to stay the same, and then another choice came along and it sounded more ideal than what I had and I had the choice about whether to do that, so I really struggled with, "Do I stay in the safe familiar situation that I'm in now?" or "Do I go for this other site, school site you know . . . with different case load of kids, different teachers, everything, and a different boss and a boss that had a reputation for being tough?" I had an instinct that it might be better but I was very nervous about changing willingly and voluntarily changing my situation. And I did it, and it's turned out to be a fantastic year. And so it was a big deal for me because I was, I was taking a risk.

THERAPIST: Yeah, of course!

In this excerpt the idea of change is introduced and framed as a goal in and of itself for the CRT phase of treatment. Importantly, this discussion does not take place in the context of ED symptoms and is thus light and candid. In linking strategies used to complete this task to those used in everyday life, the therapist revisits a previous example given by the patient in a former session (being able to see two different perspectives easily), and asks the patient for a new example that might tap into a different mode (visual switching). Even though the therapist is asking about more literal analogies to this task from the patient's everyday life, the patient uses the task as a starting point to discuss a more abstract example and thus conversation becomes metacognitive in focus as soon as the patient thinks in these terms. There are no right or wrong answers or tangents in CRT; the tasks can be used as a starting point to discuss the patient's mechanisms of thinking as in this example, or for task practice and experimentation with alternative strategies.

EXCERPT 4: INTRODUCING BEHAVIORAL GENERALIZATION OF TASKS ("HOMEWORK")

In this excerpt, which follows on from the previous one, the idea of intentionally trying new things to provide skill and strategy practice in between sessions is introduced. This excerpt also demonstrates the therapist's role in keeping a metacognitive focus, and redirecting away from ED material.

THERAPIST: Well, what I'd love [you] to do is introduce the smaller types of changes.

LINDA: Like not eating cheeseburgers. (*Laughs.*)

THERAPIST: Well, maybe nothing like that yet. (*Laughs.*)

LINDA: Hey, I actually split a cheeseburger with my husband on a holiday except I cut and he took, so I didn't cut exactly in the middle, and when he wasn't looking I kept moving it over.

THERAPIST: But that's pretty good though, that's pretty good.

LINDA: I know! I haven't had a cheeseburger in years.

THERAPIST: Well, how did you feel afterward; how did it feel during?

LINDA: I had to look around and not think about what I was eating. I ate a few fries too.

THERAPIST: So maybe next time you could actually try not to be so somewhere else?

LINDA: The thing is if I had really been in the moment eating that burger, it would have been a different result, all that grease and the meat, because when I cook anything with beef I get the leanest beef possible; I drain it, I blot it, everything.

THERAPIST: Well, I don't mean anything with food, not yet, I mean like in other things, like changing the ring tone of your phone. Like when you're doing mosaics I know you were saying that you always do geometric shapes, how would it be if you maybe start off with a small one that's not so symmetrical and geometric that kind of experiments with curves and swirls and you know . . .

LINDA: I've been thinking about adding something curvy . . . I'm working on a piece right now but I could experiment within that piece.

THERAPIST: Exactly, experiment! That's really what it's about—experimenting—and you know, doing stuff that's outside what you would do usually.

LINDA: The comfort zone . . .

THERAPIST: Outside the comfort zone and pay attention to how that feels, and I'm not saying that you know, you have to concentrate on how uncomfortable it is, but as an independent observer of yourself kind of think about what's going on in your brain as you're going, "This is weird! This is weird!" but [ask] "Is it okay?" "How comfortable am I?" "The longer I stay there, does it get harder or easier?" Things like that. What do you think?

Linda brings up an eating example but does so in a way that acknowledges that this does not constitute a "smaller" task. Instead of immediately redirecting the conversation, the therapist instead allows her to bring up the example that she wishes to share, but only in the context of exploring the experience of novelty and pushing boundaries of comfort, retaining the focus on the process rather than content of thoughts and behaviors.

There is an opportunity to explicitly encourage Linda to postpone the food and eating-related tasks, emphasizing that tasks should be only minimally challenging at this point in therapy to allow for the experience of novelty and change in a nonthreatening context. However, that eating-related challenges will be discussed in the future is implied. The therapist encourages Linda to observe the process of thought and suggests some questions she may ask herself while engaging in the task. Linda suggests a process of experimentation and this is encouraged, setting the ideal tone of the exercise.

EXCERPT 5: BEHAVIORAL TASK REVIEW

In this excerpt, a list of suggested activities that was provided in the previous session is reviewed with Linda and she is encouraged to come up with her own examples. Linda reported choosing to do tasks that were uncomfortable for her, for example, to watch TV that would bore her or music that she usually finds "excruciating." If this were CBT, we may explore how the patient's choice of tasks was setting herself up for failure. In CRT however, success or failure in the task is dependent on having attempted a task and observing that process, regardless of outcome. Similarly, Linda describes being concerned about what other people would think of her choice to change her font, and again, while this content would have been an obvious discussion point in CBT, the therapist instead confines discussion to how this task felt. This is facilitated by the use of humor in the session. The therapist can joke with Linda, acknowledging the content of the thoughts, but does not explore it in any detail, moving straight to suggesting an alternative task that may not trigger the same response. A collaborative and potentially therapeutic relationship is obvious in this excerpt. Linda appears comfortable to explore her own thinking patterns with the therapist, and they joke and laugh together frequently. The therapist suggests that she will attempt a set-shifting task too, providing a sense of shared experience. The use of humor sets a tone of playful exploration, which allows for the therapist to be quite didactic and prescriptive without being overbearing or pushy.

LINDA: Yeah. I mean I've tried a few things on the list there already.

THERAPIST: Cool! Do you have the list with you?

LINDA: I mean, I have the list with me. I did write a couple of things down or I put a dot [beside the tasks I tried]. Okay, I did try a new makeup, I did try watching a new TV show. (*Laughs.*) I'm really fussy about TV.

THERAPIST: Oh so that was a big one! How was it?

LINDA: Boring.

THERAPIST: Okay.

LINDA: I did listen to a new CD.

THERAPIST: How was that?

LINDA: A little excruciating because it was some sort of electronical stuff.

THERAPIST: Well, maybe [next time] something that you think you might like.

LINDA: I'm pretty flexible about music because we're music people in the family.

THERAPIST: Okay, well, I know the TV show was boring but more to the point, how was it sitting down and saying "I'm going to watch something new"? How was that?

LINDA: I felt like it was a waste of time.

THERAPIST: Did you?

LINDA: Yeah.

THERAPIST: I'd like you to do things that you don't think are a waste of time because I think you'd probably have a better [time].

LINDA: Yeah, I know what you mean, it's not actually watching TV.

THERAPIST: It's more just getting used to being outside of that comfort zone.

LINDA: I did change the font on my computer for a day; that was very difficult.

THERAPIST: I imagine that would be. How was that? What did you change it to?

LINDA: To hot pink! (*Laughs.*)

THERAPIST: Did anybody say anything?

LINDA: Yeah a couple of people said "What's up with the pink font?" I was like; "Gee I eh . . . just thought I'd try . . . " (*Laughs.*)

THERAPIST: Well, was it very uncomfortable?

LINDA: It just seemed really silly, like I was in high school or something, when we used to do these things.

THERAPIST: Did you not like that?

LINDA: It was okay. I was more concerned with how people would perceive me more than anything else. Like you know "What's the matter with her, it must be middle age." (*Laughs.*)

THERAPIST: "She'll be on a motorbike next."

LINDA: Right! Right! (*Laughs.*)

. . .

THERAPIST: Sure. I was thinking about instead of writing in a journal, do you have a planner that you use or something?

LINDA: Mmmhmm.

THERAPIST: Well, what if you were to . . . we could kill two birds with one stone here, maybe sum up your day in one word, on each day.

LINDA: As long as it's not positive affirmations; I can't stand those. (*Laughs.*)

THERAPIST: No, no. Because it's hard, you know we were talking about the economy of language and trying to get your text messages in one word or a title for your day, if your day was some sort of . . . a chapter of a book, what would the chapter be called, you know?

LINDA: Well, it's a big difference between one word and a title.

THERAPIST: Yeah. Well, is one word too difficult?

LINDA: Well, I'm just going to end up saying "Okay." (*Laughs.*) . . . Because if it's good and bad I'm going to try and get a mean.

THERAPIST: Yeah, I don't mean a judgment, I'd like to . . . maybe if you could stay away from a judgment—not good, bad, or indifferent—but something like, yesterday . . . think . . . well, how would you summarize yesterday? You were flying yesterday, weren't you?

LINDA: Yeah, I was traveling.

THERAPIST: So the word yesterday might have been "Air" or "Traveled" or something like "Journey."

LINDA: Yeah, "Journey Home."

THERAPIST: See, "Journey Home" would be a great title of a chapter. What do you think?

LINDA: I could try!

THERAPIST: Try, sure, try, and if you come back to me next week and tell me I'm completely nuts that's fine, but sure, we'll give it a go anyway . . . The thing is about these, just feel free to come up with your own things. You know if you can think of stuff that you're going to do yourself that practice allows you in a safe way to step out of your comfort zone a little bit, it doesn't have to be food related. It can be, but it doesn't have to be, and I mean ideally start off with things that aren't. But you'll know yourself what is your comfort zone and what is slightly outside that; you're just going to push the boundaries a little bit. I was just thinking, yesterday when I arrived here I thought "I park in the same spot every day and I don't even realize," and I thought "Jeez, next time I'm going to park somewhere else," because I can't be asking you to do these things if I don't do them myself.

As the therapist inquired about which tasks the patient had attempted, there was a strong theme emerging in relation to the decisions around the tasks that had been chosen. At first the therapist was trying to elucidate what the experience of change had been like for the patient, rather than the content of the experience itself. Just as they were getting to that, the patient brought up the example of font color and again the therapist was faced with trying to reshape the experience from one that was considered adolescent to one that is inherently useful. She used humor to diffuse the negativity with which the patient viewed the outcome of the tasks. However, while the therapist is trying to provide examples as a way of communicating the point of the exercise, in this case the suggestion of the journal-titling exercise is more prescriptive than CRT is intended to be. Ideally the CRT therapist should allow the patient to think of examples to facilitate his/her own metacognitive reflection on strategies he/she would like to try or practice and consolidate his/her own learning about the value of doing so.

TRANSITION TO COGNITIVE-BEHAVIORAL THERAPY

During Session 6, the final session of CRT, both Linda and her therapist discussed what they had both learned from the previous five sessions, constructing a shared list and discussing how it may be applied in both CBT and in life in general. Linda reported seeing the value in trying new things and pushing boundaries, and found it interesting and useful to observe what the process of change feels like. She also reported that she felt she had the tools to recover. The therapist noted her observations around her relative strengths: particularly her mental agility, her ability to see different perspectives, and her willingness to experiment and explore deeply. They discussed together the ways in which even simple tasks could become more challenging in the face of discouragement and high expectations. Linda reported that she liked the CRT sessions, though she was happy to move to the CBT phase of therapy.

Bringing forward the sense of curiosity and experimentation that both Linda and her therapist had taken around CRT tasks and homework was discussed. Indeed, this approach to CRT homework tasks was often brought up in the context of CBT tasks (e.g., "Try and think of this in the same way that you approached changes to everyday things in our earlier sessions"), and as evidence of the ability to increase a sense of self-efficacy in accomplishing them (e.g., "We know you have the tools to be able to do this differently, we've both seen that"). In addition, observations that the therapist had made during the CRT phase, but not shared, were brought up during the CBT phase. For example, the patient's tendency to choose difficult tasks to complete that threatened to undermine her chances for success, or her tendency to avoid choosing self-soothing tasks from the

list (e.g., purchasing a new body care product) because they felt indulgent. In addition, the CRT phase provided information on the kinds of strategies that were employed to accomplish certain tasks and their relative efficacy under specific conditions. For instance, the detrimental effect of self-criticism and negative emotion on Linda's ability to complete CRT tasks reinforced the CBT model and was used to reduce self-blame for perceived failures, since it could be recalled in the context-objective observations of neutral tasks.

Linda worked hard throughout the course of CBT, completing detailed food records and making changes that were discussed in therapy. She also disclosed deeply during the course of treatment. She reported using food and eating as a means of coping with anxiety and depression. She also reported some dissociation during purging episodes, and occasional use of alprazolam with alcohol to intentionally "numb out." Early in the CBT phase of treatment, she described being faced with the realities of her disorder for the first time via monitoring of daily intake. Furthermore, ritualized patterns of behavior such as using the same bowl to eat from during every meal began to be challenged. While she continued to work hard, her depression began to worsen and after about 12 sessions Linda disclosed suicidal ideation with some dissociation and was beginning to contemplate a plan. The therapist referred her for pharmacotherapy evaluation and she was given a course of mirtazapine that caused her to gain weight. While she was told that she would probably gain about 3–4 pounds (1.36–1.81 kilograms) and then stop, she was not sure whether to trust her treatment team. However, she committed to continue with treatment and continued to work toward full recovery until it was felt that she could maintain her progress without further psychotherapy.

Outcome Data

Figure 4.1 demonstrates change in weight throughout the course of treatment. Time-series autocorrelation analysis revealed a significant difference in the slope of weight change during the CRT phase than the CBT phase ($r = -.94$; $p < .001$).

At the end of CRT therapy, and at the start of CRT, Linda wrote to her therapist:

> "When I innocently walked in that first day I definitely signed up for a more complex and arduous task than I'd expected! As the few sessions progressed I thought maybe we'd continue with few more blue–green–red paper tasks and maybe some eventual chit-chat about needing to eat more! Instead, with your guidance, I find myself swept up in facing my disorder head on—with a raw honesty and 'dissection'

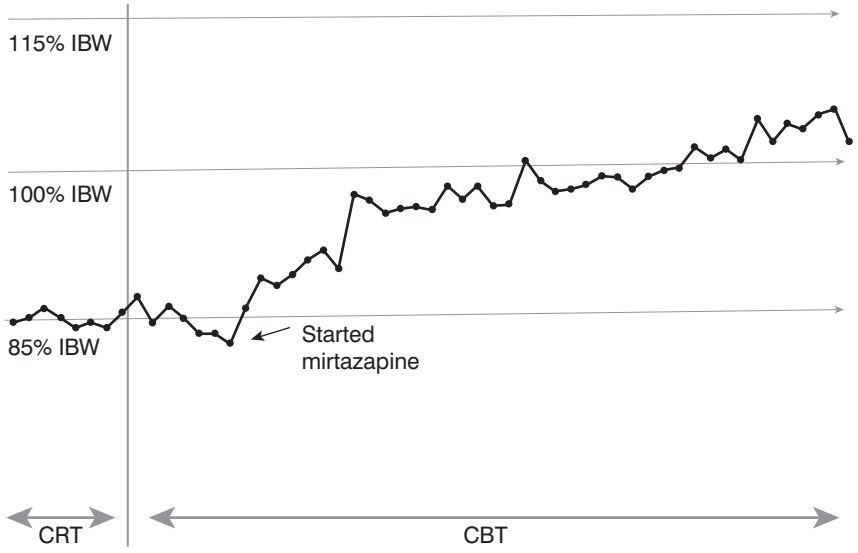

FIGURE 4.1. Weight change over the course of treatment. The *y*-axis shows weight (in pounds) plotted against percentage of ideal body weight (IBW) and the *x*-axis shows all 54 sessions with the first point being the patient's baseline weight, followed by the cognitive remediation therapy phase (CRT) and the cognitive-behavioral therapy phase (CBT).

of the deeper emotional, physical, and mental states that are essential to unraveling the painful onion layers in order to examine, and finally 'purge'—ha! ha!—this demon from my psyche."

DISCUSSION

In this case of a successful psychotherapy with an intelligent and insightful 50-year-old woman with AN, we feel that the integration of CRT with CBT was largely beneficial with mostly positive effects. CRT in this case appeared to serve two major functions: facilitating the establishment of a collaborative therapeutic relationship and promoting change.

In CRT, change is both explicitly and implicitly promoted. We feel that this case demonstrates the potential of CRT to specifically address chronicity by consistently presenting change (practicing different cognitive strategies) and moving outside one's "comfort zone" (practicing strategies that are challenging) as the ultimate goal of this phase in treatment. CRT very explicitly introduces these concepts through its emphasis on metacognition

in addition to providing an opportunity to practice the cognitive skills required for such change and accommodation. The neutral nature of the material provides more freedom to explore these concepts and skills, since the subject matter is not emotionally loaded as weight, shape, or eating-disordered subjects would be and thus less likely to illicit a defensive or avoidant response, while allowing the patient to experience success. The experience of success is constantly reinforced by an emphasis on process rather than on outcome. In this context, the "worst" that can happen is that the areas in which the patient struggles become highlighted, and information on the relative usefulness and limitations of various strategies is collected for later use in CBT.

In addition, the case report illustrates how CRT can be useful for highly functioning neurocognitively intact individuals, something that has rarely been addressed in the literature. In this case, CRT was used to gather data about her cognitive style and was recalled in CBT. For example, Linda's tendency to undermine her success by her choice of task was often discussed, as was her meta-observation of how dysfunctional her self-criticism could be. In this sense, even though she could accomplish tasks with relative ease, Linda used her experience of the CRT tasks analogously. Being able to practice the tasks and experience success at attempting different strategies despite their discomfort reinforced the idea in Linda's mind that she did in fact have the skills required to change. Linda explicitly stated this during a conversation about whether she wanted to learn to manage her disorder, or aim for full recovery. Importantly, through observation of cognitive skill, this self-efficacy was evidence based. This learning is an opportunity that rarely presents itself in traditional therapies, since targeting the ego-syntonic symptoms straightaway is more likely to be met with doubt, resistance, and avoidance, even when they are an explicitly stated goal of therapy.

It has been argued and demonstrated that the neutral material is readily understandable and engaging and sufficiently gentle to be useful to very underweight patients who are not usually considered able to effectively engage in psychotherapy (Tchanturia et al., 2007; Tchanturia & Lock, 2011). In this outpatient setting, the ease with which a collaborative therapeutic relationship was established in CRT is a feature that makes it compelling as an adjunctive therapy for patients with chronic AN. While the therapist observed that the patient appeared to be uncomfortable, self-critical, and needing reassurance in the first session, by the second session she noted that the patient was far more at ease with the therapy and the therapist, and appeared to be having fun with the tasks. The patient's expectations of therapy in the first session were undoubtedly informed by her extensive previous experience of both supportive psychotherapy and CBT (for depression). So to attend a CRT session, with its neutral subject matter, disregard for outcome, and playful therapeutic stance of the therapist, may

have facilitated an important "clean slate." It is essential that the therapist foster a light, experimental, and playful setting to maximize engagement. As soon as patients understand that the result of their performance does not matter, they are free to explore how they think, behave, and problem solve in the world, and to assess the effectiveness of their current strategies, without self-criticism or judgment.

The excerpts presented here demonstrate laughing and joking between Linda and the therapist, but the session is collaborative and nonetheless productive. Linda's unsolicited post-CRT communication, sent within the first few sessions of starting CBT, demonstrates not only her regard for her therapist but in mentioning CRT ("I thought maybe we'd continue with a few more blue–green–red paper tasks . . . ") we feel it also suggests that CRT may have featured in the establishment of this relationship.

These two major functions of CRT make it an ideal preparatory intervention for CBT. In addition, behavioral tasks between sessions and their *in vivo* review groomed the patient for later, more arduous CBT homework that Linda diligently completed throughout. However, there were other subtle ways that CRT was brought forward to CBT. CRT tasks were remembered in analogous terms ("This is just like when you were doing those line-bisection tasks"), as an archive of information on strategies themselves, circumstances under which they could be optimally used, and for confidence building by reminding the patient of her self-efficacy in having the tools required to change. In this case, CRT was also used in CBT to negate some of the self-criticism and shame associated with the illness. Reflecting on some of the characteristic ways of thinking in relation to symptoms helped reframe problems as structural (e.g., "Your brain has not been wired this way"), while at the same time fostering change by providing psychoeducation on neural plasticity (e.g., "But the good news is, you can change it!").

Limitations

This case report demonstrates that CRT can be useful in the outpatient treatment of an older adult with long-standing AN as a preparatory adjunctive treatment with CBT. It is obviously impossible to generalize from one case the usefulness of an approach with a similar population. As much as we have argued for the potential usefulness of CRT with chronic patients, the benefit may have come from the fact that CRT is a novel treatment in and of itself, rather than providing any additional benefit. While we do not have any neurocognitive data to demonstrate neurocognitive change over time, and this was a major limitation, this has been demonstrated with medium to large effect sizes in other studies of individuals with comparable features (e.g., Tchanturia et al., 2007).

Implications for Research and Practice

In sum, CRT may be a useful preparatory treatment for CBT among older patients with AN. Aside from the neurocognitive benefits that have been demonstrated in other studies, we argue that its usefulness with individuals with long-standing illness may reside in its ability to promote change and in the establishment of a collaborative and therapeutic relationship. While some of the features of CBT—such as history taking and discussion of the formulation—can take place within a CRT session, the CRT component is explicitly separated. However, much of the learning and insight can be brought forward into CBT proper.

Since the functions of CRT here are slightly different from the focus of therapy, future case studies should be conducted to examine how CRT may function with patients with shorter illness duration (e.g., children and adolescents) or with a different disorder (e.g., bulimia nervosa).

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PART III

Affect-Based Approaches

HEATHER THOMPSON-BRENNER and ALICE LOWY

INTRODUCTION TO PART III

There are many diverse approaches to addressing the emotional problems characteristic of mental disorders. Theories of psychotherapy process directly addressing affect are highly distinct and include, for example, the provision of support, encouragement to express or experience emotions, interpretation of emotional conflict, development of new coping mechanisms, or confrontation of avoided or unconscious affect. The two main historical schools of therapy that first focused on direct access to affect were psychodynamic psychotherapy and existential–humanistic therapies, which have given rise to more contemporary affect-focused approaches.

Psychodynamic Psychotherapy

Psychodynamic psychotherapy has a long history, and has come to encompass a large set of theoretical perspectives on the development and treatment of emotional disorders beyond the scope of this introduction. Though psychodynamic psychotherapy has well-developed cognitive and relational components, it has also closely focused on the role of affect. Each of the major schools of psychoanalysis has added unique and important observations and interventions regarding affect. "Ego psychology" was the direct descendant of Freudian psychoanalysis, particularly influential in the United States in the 1950s–1970s. Ego psychology focuses on the "defenses" that the psyche employs to manage negative affect, in the pursuit of the "pleasure principle." Negative affect is seen to stem from

many sources, including relational frustration, intrapsychic conflict, and self-representations. Psychoanalytic and psychodynamic psychotherapy suggest that the observation and exploration of certain patterns of affect—such as intense affect, avoided affect, or affect that seems to be missing or unconscious—leads to the development of insight and better awareness and regulation of emotion (see Spezzano, 2001). Different approaches to psychodynamic psychotherapy emphasize different interventions, such as the pursuit of shifts toward and away from intense affect (and the defenses one employs to maintain avoidance); emphasis on the relationship between the patient and the therapist (which produces intense experiences of affect); or a focus on historical or current relationships and patterns of behavior in which long-standing emotional/relational patterns are enacted.

In psychodynamic psychotherapy, symptoms are seen to play a function in the regulation of emotion that is not entirely conscious. Patients may be aware of the motivation to engage in symptoms for affect regulation purposes, such as binge eating when they are in distress or restricting when they are stressed, but the more significant underlying motivations and conflicts, stemming from developmental history, which predispose them to have overwhelming emotions under certain circumstances, are seen to be incompletely understood prior to therapy. The development of insight into these patterns, more mature defenses, new self-concepts, and new patterns of interpersonal relations are seen to result from the exploration of the relationship among affect, symptoms, and personal history in psychodynamic psychotherapy.

Emotion-Focused Therapy

Emotion-focused therapy (EFT) is a complex, integrative approach that combines aspects of person-centered, gestalt, experiential, and existential therapy with emotion, cognitive, attachment, interpersonal, psychodynamic, and narrative theory. It initially emerged as a response to Western overemphasis on cognition and behavior, as EFT emphasizes the primary influence of emotion on people's thoughts and behaviors. EFT theorists, therefore, believe that in order to achieve cognitive or behavioral changes, we must first accept and change our emotions that motivate these thoughts and behaviors. Emotions are believed to be innately adaptive and connected to our most essential needs, thus communicating these needs and intentions to others. Emotions influence not only our sense of self but also our interactions and relationships with others. When individuals avoid negative emotions in fear of their impact, it can become problematic for both themselves and others. One of the most central beliefs in EFT is that patients can only begin to change once they can accept and experience their emotions. The primary goal of treatment is to help patients develop emotional competence and eventually transform their maladaptive emotion responses so that they

can learn to tolerate previously avoided emotions (see Greenberg, 2009, for a fuller discussion of EFT).

In order to facilitate emotional competence, EFT therapists encourage their patients to remain focused in the moment and allow all emotions to arise, regardless of whether they are adaptive or maladaptive. Congruent with the view that emotions serve as guides to our most authentic selves, patients are viewed as experts on their own experiences throughout the therapeutic process. EFT therapists, therefore, help patients learn to identify, experience, accept, regulate, explore, make narrative sense of, transform, use, and flexibly manage their emotions. The key elements in the therapeutic process are developing an empathetic relationship between therapist and patient, exploring the origin and dynamic of the patient's emotional experiences, allowing and accepting all emotions, and becoming aware of interruptive processes that prevent the patient from accessing these emotions. One of the primary goals in EFT therapy is to encourage the patient to access new emotions in order to transform maladaptive emotions, as well as to reflect on these emotions to create new narratives. Therapists specifically work with clients to become more "emotionally literate" in order to effectively communicate their central needs, goals, and concerns (Greenberg, 2009).

Affect-Focused Approaches and Eating Disorders

There are several reasons why theories of psychotherapy that emphasize emotions may have received limited research attention in the field of eating disorders (EDs) to date. First, psychodynamic psychotherapy has a controversial history within the field of EDs. Therapists who treated EDs early in modern history, such as Hilde Bruch, like most other therapists of the time, were highly aware of the importance of affect and the negotiation and function of affect within complex family systems. Throughout the study of EDs, it has been repeatedly observed that eating symptoms serve an emotion regulation function; binge-eating and purging symptoms are often observed to occur in response to negative affect, and restricted eating is observed as an avoidance reaction to ward off emotional experience and distress (e.g., Crosby et al., 2009; Gale, Holliday, Troop, Serpell, & Treasure, 2006; Nordbo, Espeset, Gulliksen, Skarderud, & Holte, 2006). It has been strongly debated whether this negative affect is largely the result—rather than the cause—of core eating symptoms; however, they likely have a reciprocal relationship (Harrison, Tchanturia, & Treasure, 2010). Similarly, psychotherapy for EDs is expected to reduce negative affect as one aspect of outcome. However, whether that negative affect must be addressed directly in treatment, or whether negative affect improves as a result of addressing cognitive, behavioral, or relational symptoms, is also a matter of debate and research (Harrison et al., 2010).

Psychodynamic Psychotherapy and Eating Disorders

The different versions of psychodynamic psychotherapy that have been tested in research trials with EDs have been named, described, and performed quite differently. One psychodynamic treatment may be narrow in focus and address primarily the use of symptoms to avoid emotions and the expression of avoided emotions, while another may promote "free association" and open-ended discussion of wishes, fantasies, and dreams. In general, the broader the treatment, the less specific positive outcomes are observed. In some clinical trials, the "psychodynamic" treatment that was tested was developed as a control for the "active" ED treatment, and suffered from having important aspects of psychodynamic psychotherapy (e.g., a focus on understanding the function of symptoms) banned from psychodynamic treatment practice, ostensibly to make the treatments more distinct (e.g., Garner et al., 1993). Several studies that did not constrain the psychodynamic treatment in this way observed better or comparable global outcome to cognitive-behavioral treatment (CBT), but still lesser change in ED symptoms (see Thompson-Brenner, Pratt, Satir, Shingleton, & Richards, 2013; Thompson-Brenner, Weingeroff, & Westen, 2008). The treatment trial from which the case in Chapter 5 (by Lunn, Poulsen, & Daniel) was drawn had the type of outcome pattern just described. Poulsen and colleagues (2014), reported that in their large-scale trial comparing short-term CBT for BN to long-term psychodynamic psychotherapy for bulimia nervosa (BN) found similar good outcomes for general functioning, but better outcomes for BN in the CBT group. Nonetheless, there were many patients who benefited in many ways, of which the case described in this volume is clearly one example. Additional outcomes that might be expected to show specific benefit in the psychodynamic group—such as the constructs of "mentalization" or "reflective functioning" described at length in the chapter—have not yet been published.

Emotion Acceptance Behavior Therapy for Anorexia Nervosa

Emotion acceptance behavior therapy (EABT) is based on theory, observation, and patient report that a key function of anorexia nervosa (AN) symptoms is the avoidance of affect. The strategies included in EABT include affect-tolerance strategies from the theories cited above, as well as more modern syntheses of these approaches such as acceptance and commitment therapy (based on CBT and existential–humanistic theories; see Hayes & Lillis, 2012; Schneider & Krug, 2012) and the Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders (see Barlow et al., 2010). In EABT, AN symptoms are viewed as a means to cope with emotions that are otherwise difficult for patients to recognize and accept.

EABT specifically targets not only the patient's AN symptoms but also emotional avoidance and disconnection from the rest of the world. This approach combines behavioral and psychotherapeutic techniques in order to increase a patient's emotion awareness and decrease emotion avoidance, as well as facilitate the patient's reconnection with enjoyable activities and relationships. It focuses primarily on helping patients relate their emotion avoidance to their AN symptoms, so that they can ultimately learn new techniques to cope with emotions that were previously too difficult to accept. In addition to carefully monitoring restriction and weight restoration, EABT emphasizes the connection between the AN symptoms and the patient's overall emotional functioning. EABT posits that as a patient becomes more aware and accepting of difficult emotions, AN symptoms will decrease, as is demonstrated in Chapter 6 (by Wildes, Marcus, & McCabe).

Other chapters in this book demonstrate different ways that attention to affect can play a role in evidence-based treatments for EDs, particularly in Part V, "Integrative Approaches." Dialectical behavior therapy for BN and major depressive disorder, enhanced broad CBT for complex BN, and adolescent-focused therapy for AN all have interventions explicitly for affective experience or affect regulation. The particular affective targets/interventions, and the schools of psychotherapy from which they most closely derive, are described in the introduction to Part V.

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CHAPTER 5

Psychoanalytic Psychotherapy for Bulimia Nervosa

SUSANNE LUNN, STIG POULSEN, and SARAH I. F. DANIEL

"It's just like, sometimes I think, why do people have to comment on me? I'm not commenting on people . . . Why do you have to sit and talk about how much I've had put in my breasts? That isn't anybody's business. Those are my breasts, I mean, it's those kinds of things, right? I really feel at the moment, I just can't take it, I become. . . . Urrgh, I can feel, it's really bothering me at the moment, it's not usually as bad as this. But I really can't bear it at all.

"Now I don't have any excuse for eating, there isn't any stupid jerk that stands there and threatens me all the time, so I can think,'Now I have to comfort myself by eating.' There isn't any excuse for it anymore now. I mean, I'm without excuses. And it's probably that that's so hard for me to accept, that it's myself that does this to me, right?

"I get a lot of stuff that's just bottled up inside because I don't have anybody . . . but I have, right here, you're the only person that I ever, I can tell you everything . . . And I also trust that you don't judge me, I have the impression, I've had that with some other psychologists, they judged me and they looked at me in a strange way or said stuff that didn't fit with who I am. If you say something that doesn't fit with who I am, I'll tell you."

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Joyce is a disguised/composite portrait.

Psychoanalytic theory and psychoanalytic psychotherapy have had an important position in the field of eating disorders (EDs). Consonant with early psychoanalytic theory, EDs were originally understood as stemming from conflicts over sexuality and aggression (e.g., Waller, Kaufman, & Deutsch, 1940). In the following decades the formulation of EDs came to include problems in the development of identity in the context of relationships (e.g., Palazzoli, 1978; Sours, 1980). The influential clinician and theorist Hilde Bruch (1973) suggested that individuals with anorexia nervosa (AN) had trouble developing a coherent and independent sense of self individuated from their families. Many of the later psychodynamic approaches to EDs were inspired by her work, regardless of the researchers' or clinicians' specific theoretical orientation (e.g., Crisp, 1980; Goodsitt, 1997).

Psychoanalytic influences on the theory and treatment of EDs began to decline in the 1990s, particularly in research contexts. Psychoanalytic ideas nearly disappeared from ED congresses and in ED journals, as psychoanalytic clinical research did not keep pace with the field. In clinical settings, however, psychodynamic treatments still played an important role.

The case presented in this chapter was one of 70 participants in an randomized controlled trial comparing psychoanalytic psychotherapy (PPT) and cognitive-behavioral therapy (CBT) for bulimia nervosa (BN) at the University Clinic, University of Copenhagen, Denmark (Poulsen et al., 2014). The background for this study was (1) the gradual disappearance of psychoanalytic approaches from the field of ED research; (2) the fact that even the most well-established evidence-based treatment, CBT, only showed full recovery rates of 30–50% (Wilson, Grilo, & Vitousek, 2007); and (3) that no evidence showed that well-conducted PPT was less effective than other treatments. The few studies that had examined PPT (in various forms) showed mixed results (Bachar, Latzer, Kreitler, & Berry, 1999; Fairburn, Kirk, O'Connor, & Cooper, 1986; Garner et al., 1993), and no studies had compared a longer-term PPT for BN with CBT.

THE CONCEPTION OF PSYCHOANALYTIC PSYCHOTHERAPY

The PPT used in this trial was developed by the two first authors (Lunn & Poulsen, 2012) and specially tailored to clients with BN. The therapy was manualized. However, acknowledging that clients with BN are a very heterogeneous group (Lunn, Poulsen, & Daniel, 2012b) representing various levels of personality organization, different pathways to bulimia, and different psychodynamic functions of the bulimic symptoms, a flexible approach on part of the therapist was built into the manual. Likewise, the psychotherapy did not adhere to one specific psychoanalytic formulation of BN but represented a more generic view integrating different approaches in

a conceptualization of EDs as a set of strategies to regulate affects (Clinton, 2006; Fonagy, Gergely, Jurist, & Target, 2002).

The therapy was based on general principles for PPT. It was defined as a nondirective therapeutic method aiming at reducing suffering, relieving specific symptoms, and promoting development and growth in the client (Steiner, 1989). The overall psychotherapeutic goal was to help the client to acknowledge and integrate unconscious, split-off, or disavowed aspects of her experience and to identify mechanisms obscuring such material (McWilliams, 2004). The psychotherapeutic procedures were specified in the following way:

1. The dialogue should be *unstructured* in the sense that the client should not be guided but invited to talk as freely as possible.
2. The therapist's *attitude* toward the client should be characterized by a nonbiased, nonfocused, and empathic way of listening (cf. Freud's concept of "evenly suspended attention," 1912; Kohut's "empathy," e.g., 1959; and Stern's "affective attunement," e.g., 1985).
3. A particular focus was the *therapeutic relationship*, conceived in terms of the concepts of *transference* and *countertransference* (e.g., Etchegoyen, 2005; Gabbard, 2001).
4. The task of the therapist was to facilitate the client's capacity to experience, identify, and express inner feelings, fantasies, and thoughts; to mirror what was going on in the client and between the two of them; and to find a way to communicate this to the client that made the intervention understandable to the client.
5. The *interventions* should be in the form of the most common psychoanalytic interventions, that is, clarification, confrontation, and interpretation (Gabbard, 2004), but also affirmation in the sense of consolidating the client's experiences and establishing meaning (e.g., Killingmo, 1995).

Besides these general specifications, the therapy was adjusted to clients with BN. The therapist attempted to neither focus too much on the bulimic symptoms nor to neglect them. The aim was to try to involve the client in a mutual reflection on the symptoms and to create a mental place that made it possible to talk about them not only as irrational acts that had to be stopped, but as psychological phenomena carrying an important meaning and function for the client.

The intended mechanisms of change were as follows:

1. Common therapeutic factors:
   - Creation of a secure place with a firm and predictable frame and continuous sessions over a considerable span of time.
   - Creation and consolidation of a therapeutic alliance.

2. Mechanisms related to affect recognition, tolerance, and regulation:
   - Focusing on affects and expression of feelings.
   - Exploration of attempts to avoid distressing thoughts and feelings.
   - Helping the client to put feelings into words.
   - Helping the client realize that bingeing and purging are rooted in feelings and mental states that can be identified and reflected upon.
   - Helping the client develop his/her capacity for reflection on self and other.
3. Change mechanisms related to the transference–countertransference relationship:
   - Identification of recurring themes and patterns and connecting these to past experiences. This was considered essential to change in self-understanding, which in part was considered essential to change.
   - Focusing on the therapeutic relationship including intersubjective moments occurring between client and therapist that could create new interpersonal experiences (cf. the concept of the "corrective emotional experience"; Alexander & French, 1946).

KEY THEORETICAL CONCEPTS

A number of assessment instruments measuring psychoanalytically informed, empirically supported concepts relevant to psychopathology, outcome, and the therapeutic action are presented in the following case. These included the assessment of *attachment style* and *reflective functioning*.

In the field of ED research, attachment style has been shown to predict psychotherapy outcome, and is suggested to be an important target of intervention (e.g., Maxwell, Tasca, Ritchie, Balfour, & Bissada, 2014; Tasca, Ritchie, & Balfour, 2011). The assessment of attachment status using the Adult Attachment Interview (see "Methods" section) includes not only the content of interview material concerning the quality of relationships, but also ratings of the speaker's current state of mind regarding attachment, including how well the speaker is able to organize his/her thoughts when emotional material regarding early relationships is activated. Incoherence and vagueness are understood to reflect the disorganizing nature of strong emotions in those who are insecurely attached; raters closely attend to whether attachment narratives are rational and sensible, are contradictory or consistent across the interview, and are specific and detailed versus

vague and impressionistic (Hesse, 2008). As we show in this case, it is possible for the attachment category (e.g., secure, insecure/preoccupied, insecure/dismissing) to remain the same over the course of therapy, but for the coherence of personal narrative and intensity of emotion concerning attachment to change.

Reflective functioning is a related construct, which represents the operationalization of the capacity to mentalize. Recently, PPT has been usefully informed by the theories of "mentalization" and "mentalization-based treatment" (see Bateman & Fonagy, 2010). Mentalization is the process of developing a coherent sense of one's own and others' subjective states. Difficulties in mentalization are seen as core features of borderline personality disorder, in which preoccupied attachment issues, traumatic experiences, and dysregulated emotion continuously disrupt the development and functioning of mentalization (Bateman & Fonagy, 2010). PPT, in which patients experience and discuss poorly understood and dysregulated emotional experiences, is currently understood to have the improvement of the capacity to mentalize as one mechanism of treatment action.

PPT has been shown to improve both attachment status and reflective functioning/mentalization, and changes in these areas have been associated with changes in both mood/anxiety and personality disorders (Bateman & Fonagy, 2009; Levy et al., 2006; Maxwell et al., 2014). Psychotherapy that includes the features listed above, among these the promotion of insight into emotional experiences and relationships, including the relationship with the psychotherapist, has attachment and reflective functioning/mentalization as intended targets, as well as mechanisms of change. In this case, we hope to demonstrate how long-term PPT promoted changes in these areas.

Two other psychoanalytic concepts discussed in the case are *projection* and *projective identification* (Ogden, 1979). In PPT and psychoanalytic research, projection is understood as a defense against unacceptable negative emotions (and other self-states) by ascribing the emotion (or self-state) to another person or external entity. For example, when individuals who have borderline personality are angry, they may feel afraid that other people have malicious intents toward them. Projective identification designates a process between two individuals, in which the person who is receiving the projection (e.g., is being blamed) comes to identify with or experience his/her own version of some of the emotions (or self-states) that are being projected. In psychotherapy with patients who are observed to project their negative self-states, therapists attempt to use the negative feelings they may have toward the patient or the therapy in order to understand the patient. The therapeutic approach, simply stated, is to bear those emotions, process them (internally or externally) as maturely as possible, and assist the patient in the process of understanding and accepting them.

METHODS

The measures used in the RCT were the following:

The Present State Examination, short version for clinical use (PSE; SCAN Advisory Group, 1994), is a structured interview assessing ICD-10 diagnostic criteria for a wide range of psychiatric syndromes. The authorized Danish translation of the PSE was used in the study.

The Eating Disorder Examination (Version 14.4) (EDE; Fairburn & Cooper, 1993) is a structured interview with 33 items assessing DSM-IV diagnostic criteria for EDs. In addition to the diagnostic items, the EDE contains four subscales (Restraint, Eating Concern, Shape Concern, and Weight Concern) measuring various aspects of the core psychopathology of EDs.

The Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996; Main, Hesse, & Goldwyn, 2008) is a semistructured interview with 20 questions and standardized probes. The interviewee is asked about the relationship to childhood attachment figures and attachment-related topics such as separations, being ill, losses, and so on, are systematically explored. The interview is transcribed verbatim and rated on 16 nine-point scales. Based on the ratings, interviews are assigned to one of five major categories: *secure, insecure/dismissing, insecure/preoccupied, unresolved*, or *cannot classify*. Interviews classified as unresolved or cannot classify are also given a secondary classification as secure, dismissing, and/or preoccupied (Hesse, 2008). In the present study, the AAI was administered by a postgraduate psychology candidate who was trained and supervised by a certified AAI coder, and coded by a certified coder.

The Reflective Functioning Scale (RF; Fonagy, Target, Steele, & Steele, 1998) is an operationalization of the mental processes underlying the capacity to mentalize. It is coded from the AAI interview by assigning different ratings to the interview answers depending on their level of reflection. An overall rating falling between –1 and 9 is given, with –1 referring to a bizarre or systematic rejection of any attempts at reflection and a score of 9 signifying an exceptional sophistication in the understanding of complex mental states across contexts. A score of 5 indicates an ordinary understanding of one's own or other's mind and a score of 3 indicates a naive, simplistic, overanalytical, or hyperactive RF.

The Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) is a structured interview assessing DSM-IV diagnostic criteria for personality disorders, conducted by trained psychologists.

The Symptom Checklist–90—Revised (SCL-90-R; Derogatis, 1994) is a 90-item self-report symptom inventory, measuring psychological symptoms and psychological distress. The global measure used in the study is

referred to as the Global Severity Index (GSI). The Danish cutoff scores for clinical caseness are 1.08 for women and 0.87 for men (Olsen, Mortensen & Bech, 2006).

The Inventory of Interpersonal Problems—Circumplex (IIP-C; Horowitz, Alden, Wiggins, & Pincus, 2000) is a 64-item questionnaire assessing interpersonal difficulties where items are rated on a Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). The Danish version of IIP was translated into English and subsequently adjusted in agreement with L. Horowitz.

The Beck Depression Inventory–II (BDI-II; Beck, Steer, & Brown, 1996) is a 21-item self-report instrument that asks clients to rate different depressive symptoms on a 4-point scale. Scores are summed to give a total score that may range from 0 to 63, 0–13 indicating minimal depression, 14–19 mild depression, 20–28 moderate depression, and 29–63 severe depression.

Session Ratings. After each therapy session the client completed a short four-item questionnaire ("I experienced the session as fruitful," "I experienced the session as difficult," "I felt understood by my therapist," and "I trusted my therapist"), rated on a scale from 1 to 7, with higher scores reflecting more agreement.

Session Notes. After each session the therapist wrote down a comprehensive report of the therapeutic dialogue as well as an overall impression of the session including therapist countertransference feelings.

The Client Experience Interview (Poulsen, Lunn, & Sandros, 2010) is an expanded version of Robert Elliott's Client Change Interview Schedule (1996). After an initial open question, where the client was asked to speak freely about her experience of the therapy, the interview contained questions about the experience of the therapist, expectations about therapy, changes in the client after therapy and the possible causes for these changes, and helpful and hindering aspects of therapy. The interview was audiotaped.

Procedures

The randomized controlled trial took place in a university outpatient clinic. Following assessment for inclusion/exclusion criteria, all clients completed assessments pretreatment, after 5 months of treatment, and 24 months after beginning treatment. Clients meeting the inclusion criteria were randomly assigned to the two treatments with block randomization.

Client and Therapist

The client, Joyce (a pseudonym), selected for the present study represents both an extreme case because she had a particularly traumatic background

and very severe BN, and because she—somewhat unexpectedly—recovered fully with regard to bingeing and purging. She was selected for this case study in order to get a deeper understanding of factors contributing to the positive outcome. The therapist was a 55-year-old woman with a full psychoanalytic training and many years of experience in clinical work with EDs.

Treatment

Due to the research frame of the therapy, the duration and frequency of the therapy was fixed in advance to 2 years with a weekly session.

Data Analysis

Five sessions were selected to illustrate the therapeutic process and its development: Sessions 1, 30, 34, 46, and 47. We selected (1) sessions from the beginning, the middle, and the end of the therapy; and (2) sessions that were characterized by changes in the client's experience of the therapeutic relationship. Sessions 46 and 47 were selected guided by the session evaluation forms and the therapist's notes that pointed to a sudden increase and subsequent fall in the client's experience of the sessions as difficult and consonant observations by the therapist. Session 34 was selected because it seemed to have been the most difficult session for the client according to the session ratings.

The Client Experience Interview was analyzed by the two first authors who listened through the interview and produced a consensual description of the case (see Lunn, Poulsen & Daniel, 2012a).

CASE STUDY: JOYCE

The Client

Joyce was a woman in her mid-20s with a rather impressive appearance. She was very tall, had long (extended) blond hair, tattoos and cutting scars on her arms, and a notably curvaceous figure. Her problems with eating dated from early childhood and developed into anorexia nervosa in her teens and later into serious bulimia with frequent binges and purges, the latter supplemented with intensive exercise and laxatives.

Joyce had an extremely traumatic background. Her parents divorced in her first year of life and she was raised by a violent and sexually abusive mother who was at times addicted to alcohol and drugs. She only saw her father once a week. Joyce was the mother's only child, and they lived an isolated life with little contact to the outside world. According to Joyce's description, her mother had a serious mental illness, which was later

diagnosed as schizophrenia. At the age of 15, Joyce ran away from home and lived a rather turbulent life, with multiple unstable relationships and chaotic living situations. However, she finished high school and succeeded in getting training and employment in a security firm. At the time of entering the therapy, she lived with a criminal biker with whom she had a violent relationship, and she mutilated herself in addition to the bulimic symptoms.

Based on the first meetings, Joyce gave the impression of a borderline personality with an enormous inner emotional pressure that was acted out in different kinds of impulsive behavior and left little place for self-reflection and mentalization. However, she seemed to have some psychological-mindedness, or interest in her internal experience, nurtured by a strong will to survive. Since her youth, Joyce had been in treatment several times and when she was referred to a female therapist she exclaimed, "I have worn down more than a dozen female therapists." She reported having more distant and negative relationships to women than to men but this did not affect the choice of therapist.

Symptoms

The client's results on the different measures at intake, at 6 months and 24 months, are reported in Table 5.1. At baseline, she fulfilled the criteria for BN as well as borderline, paranoid, and obsessive–compulsive personality disorders. Her score on the GSI of the SCL-90-R was elevated, as were the scores on all subscales except Somatization, Obsession–Compulsion, and

TABLE 5.1. Baseline, 6-Month, and 24-Month (Termination) Assessment Scores

Measure	0 months	6 months	24 months
Binges, previous month	100	204	0
Purges, previous month	105	56	0
EDE, global score	4.98	5.20	3.68
SCL-90-R, GSI	1.70	2.02	1.41
IIP	2.02	1.28	1.20
BDI-II	31	35	31
AAI	Unresolved/ preoccupied	Preoccupied/ unresolved[a]	Unresolved/ preoccupied
RF	3	3	5

Note. EDE, Eating Disorder Examination; SCL-90-R, Symptom Check List–90—Revised; GSI, Global Severity Index; IIP, Inventory of Personality Problems; BDI-II, Beck Depression Inventory–II; AAI, Adult Attachment Interview; RF, Reflective Functioning Scale.

[a]When the score on the unresolved scale is 5.0 (maximum 9.0), coders can choose unresolved as either a primary or secondary category.

Psychoticism. Her score of 3 on the RF represented questionable or low reflective functioning.

After the 2 years of treatment, Joyce had completely stopped bingeing and purging. Her interpersonal problems were markedly reduced, particularly those related to friendly dominant and friendly submissive behaviors measured on the scales Intrusive, Self-Sacrificing, Overly Accommodating, and Nonassertive (see Figure 5.1). Her psychological symptoms and psychological distress as measured by SCL-90-R were also reduced even if

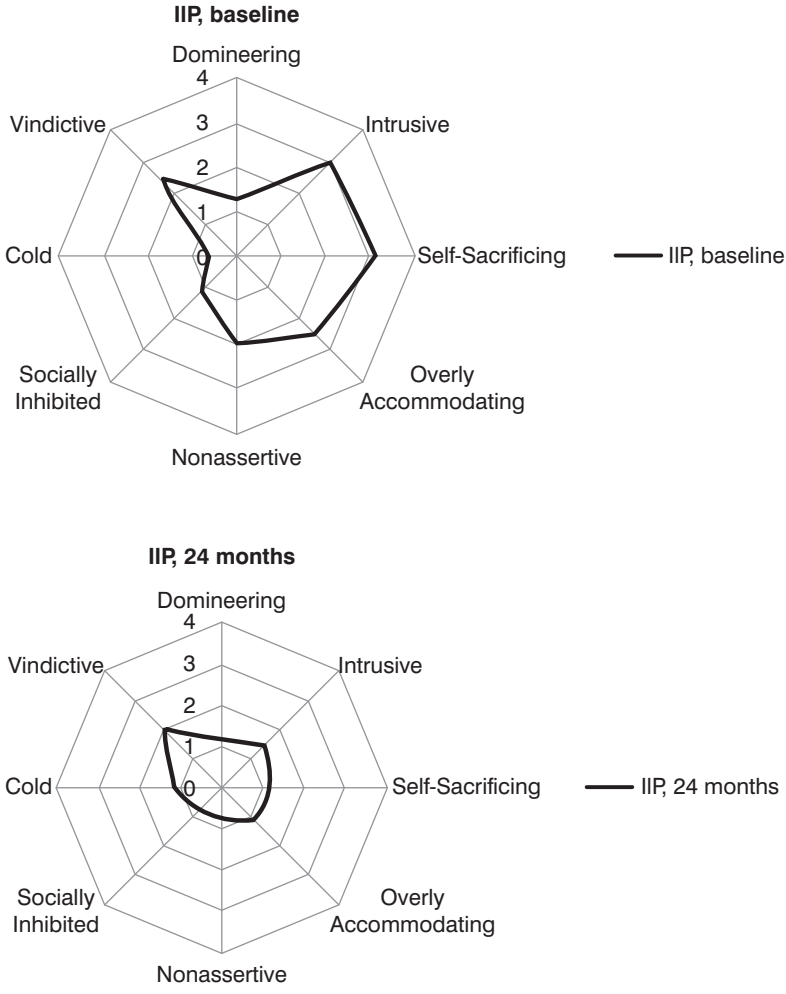

FIGURE 5.1. Inventory of Interpersonal Problems (IIP) before and after treatment.

remaining at a clinical level, while her BDI-II score did not change. It must be noted though that at 18 months, the BDI-II score was 7 (in the subclinical range), which was also reflected in much lower expressed negative affect in sessions at that time. Accordingly, the higher value at 24 months might be understood as distress that occurred in the context of the termination of the treatment and current relationship issues (explained further below), leading to depressive symptoms at that particular time.

As seen in Table 5.1, there was no categorical change in Joyce's attachment pattern from 0 to 24 months. However, there was a notable qualitative change. The interview conducted at intake was marked by the description of the highly traumatic relationship with the physically and sexually abusive mother. Overall, the interview was characterized by an unresolved and preoccupied state of mind with respect to attachment because of lengthy intrusions of traumatic material and frequent preoccupied anger in relation to the mother, revealing that Joyce was still emotionally entangled with her past attachment history. At 24 months, her attachment was again classified as unresolved/preoccupied, but the coder noted the presence of a degree of balance in descriptions and an understanding of the consequences of experiences, which rendered the interview surprisingly coherent given the extremely traumatic experiences described.

The improvement in Joyce's condition is more clearly apparent in the RF scores derived from the AAIs. The rating increased from the low score of 3 in the pre- and midtreatment ratings to a score of 5 in the posttreatment interview, indicating a coherent model of mind, although a relatively simple one. This change is illustrated by Joyce's different answers to the question, "Are there any other aspects of your early experiences that you think might have held your development back, or had a negative effect on the way you turned out?" at baseline and at termination (24 months).

Baseline Response

"Well, my relationship to food and all those problems related to defecation has been a problem. When you eat food, normally you have to go to the bathroom. I couldn't go to the bathroom when I was small. And often I had a real pain in my belly and thought, my mother, then she thought it was so gross when I then got to go to the bathroom, and she scolded me because—so I have always found it hard getting to the bathroom, always. I felt it was disgusting when I was at the bathroom, I feel it's gross and I can't relate to it. In spite of taking laxatives until I nearly puke, I can't deal with it, I think it's so gross. . . . And it's definitely had an effect on me . . . And then also in relation to food, right? I mean, the thing about food being the only thing I could control, in relation to her . . . "

Termination Response

"Um, nothing apart from the thing about being beaten and sexually abused and that, I feel that the only, the only place I actually find my real self-esteem is by having sex, I mean with the one I love . . . the approval I get there, I hardly can describe it, and when I don't get it, it really brings me down . . . I think it's got a lot to do with the fact that it's that kind of attention I've had when I was a child, and that then later on, I could control the men by being sexually active you could say, and by wanting it, and then I've had some approval through that . . . but I realize that if it goes on like that, then [my partner and I] won't stay together because then I really can't sustain my self-esteem, then I'd rather be alone, and not count on getting that approval from him, right, so I think that has had a big effect on me."

Though both answers reveal ongoing pain associated with the experiences in her childhood, her first answer to this question focuses exclusively on concrete bodily dysfunctions, especially problems with constipation. There is no reflection on her actual relationship with her mother, who appears as a criticizing object in the background, or her own specific emotions. The first response lacks coherence, is disjointed, and is confusing to the reader/listener. Her second answer involves the sequelae of sexual abuse, and a coherent, though painful, account of how this has influenced her relationships with men. Particularly, the last part of the answer indicates a development of her capacity to reflect upon herself, that is, her fragile self and her need for approval.

Client Session Evaluations

Figure 5.2 gives a clear indication of development in the client's experience of the sessions. The sessions from the first half of the therapy give a fluctuating impression with some sessions experienced as very difficult, others not at all, some sessions experienced as clearly rewarding, others more moderately, and some sessions in which Joyce felt highly understood by her therapist, in others just understood. Unlike this turbulent picture, Joyce's experience of the last part of the therapy seems to have been more stable. The figure also indicates which sessions to choose for a more qualitative exploration (cf. "Data Analysis" section).

Course of Treatment

Joyce stayed in therapy through the 2 years she was offered, attending 65 sessions. For the first 9 months of the treatment she attended every session, except for a few cancellations. This was followed by a period of several

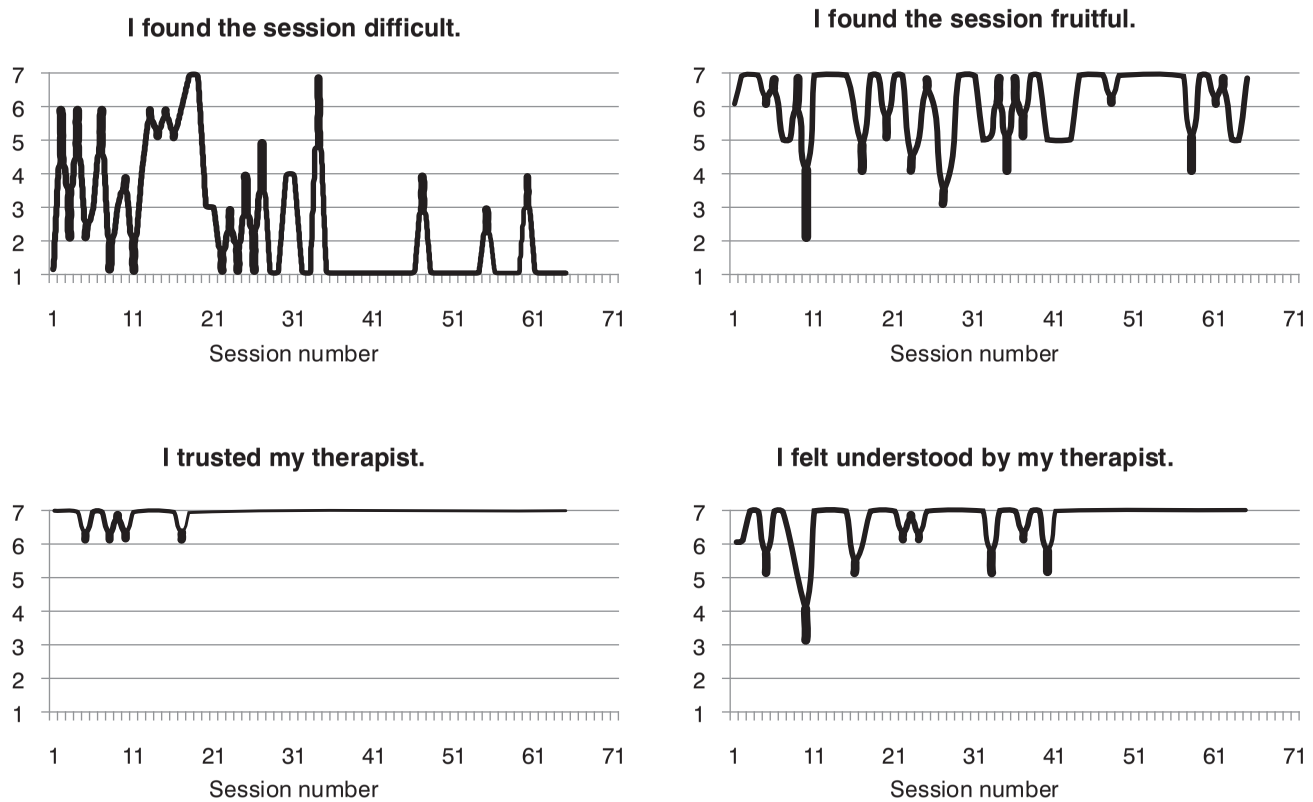

FIGURE 5.2. Client session ratings. Higher scores reflect more agreement.

months when it was difficult to make appointments due to an unstable period in her life with a shift in work and a breakup in her love relationship. For the rest of the 2 years she came regularly.

Through the whole treatment period, the surface content of the sessions was her eating problems and her relationships, especially to men and in a more indirect way to her mother. However, there was a considerable change in how and how much she talked about these problems, in who she mostly talked about, in how the therapist experienced the relationship with her, and in how she acted in her outer life.

In the beginning of the therapy the therapist felt quite overwhelmed and confused in the sessions. Joyce talked nonstop about the problems she experienced in all areas of her life. In her narrative, the problems were entangled and described in a crude language and in a concrete and private way that did not take into account that the listener was not familiar with the people she talked about. She tended to place the responsibility for her problems outside herself, on her mother, on people looking at her in strange ways, and not least on her relationship with her boyfriend who was described in aggressive narrations of how abusive, violent, and awful he was at times, interspersed with sudden descriptions of him as attentive and sweet. Often she quoted a dialogue, shifting between her and her partner's statements as if she could remember far back exactly what had been said. In this period of the therapy, the therapist had the impression of being used as a container into which a lot of painful, undigested emotions and sensations were dumped.

The session content and interventions selected below will attempt to demonstrate how Joyce's thought process and conversation surrounding difficult emotional experiences became more coherent and organized (i.e., the development of mentalization), how she became better able to express genuine emotion without defending against it by distorting her experience or blaming others, and how her description of relationships (including with the therapist) developed more positive themes.

The very first session of the therapy illustrates how Joyce felt threatened by other people in general and how her intense negative emotions felt intolerable to her. Joyce's thoughts were disorganized and seemed at times incoherent to the therapist, who had the impression that Joyce, metaphorically speaking, seemed to "vomit" an undifferentiated and unmetabolized substance of bad experiences through her speech.

JOYCE: At the moment I am in a situation that is a bit warped, right? Because I have a lot of absence from work, right? Because of my stomach, because I have really been vomiting blood, so I have been at the hospital, umm, because it is completely fucked up—the system, you know. So right now I am in such a tight squeeze with everything. And then I have my ex-boyfriend . . . [who] is not so much an ex. . . . He

opened a brothel in January and I could not stand it. That's also where the eating disorder has really escalated, right? Because these girls they just look much better than I had imagined, I thought hookers were such ugly ones and then I found out that some of them were much better looking than I and thinner . . . and then it is obvious that I feel like nothing, right . . .

In this session she also "warned" the therapist by telling about all her previous female therapists who had not helped her and had tried to make her change her appearance and style. Likewise, she talked about how other people commented on her appearance and had intentions to change her:

JOYCE: It's just like, sometimes I think, why do people have to comment on me? I'm not commenting on people. . . . Why do you have to sit and talk about how much I've had put in my breasts? That isn't anybody's business? Those are my breasts, I mean, it's those kinds of things, right? I really feel at the moment, I just can't take it, I become. . . . Urrgh, I can feel, it's really bothering me at the moment, it's not usually as bad as this. But I really can't bear it at all.

At this moment the therapist tried to engage Joyce in a reflection, to demonstrate how she might use the sessions to promote more understanding of her role in interpersonal interactions:

THERAPIST: Is there something about you as well that invites comments from other people? Or, I mean, is there something about you that allows it? . . . Because it might also be important and part of what we could look at here, if there is something that makes people overstep your boundaries . . . ?

JOYCE: Absolutely. But then it's, that people have said stuff like, "then you can just stop having your nails done," "then you can just stop getting tattooed," "then you can just . . . " Why? Why can't I be me? Then you can respect that I'm me. Because, when some fat lady sits there, sits downing Mars bars and pizzas and stuff, then nobody walks over to her and says, "You're so disgusting, what are you doing, why are you eating all that stuff, lose some weight for God's sake," nobody does that.

Nine months into treatment, Joyce was still talking in the same manner but it did not fill up the entire session. At this time a certain pattern between Joyce and the therapist began to emerge, repeating itself over several sessions. In the beginning of a session, Joyce was usually upset, crying, complaining about how much she had eaten, how much money she

had used, how her boyfriend had tempted her by putting lots of sweets in front of her and how her bulimia never had been as bad as now. The therapist gradually felt more and more incompetent and useless, as the session progressed, and guilty for not being able to help. However, during each session and across multiple sessions marked changes took place. Joyce pulled herself together, stopped crying, adopted a more optimistic view, and eventually wondered how it could be that, when in therapy, she felt quite differently. She noted that in therapy she felt better after talking about her problems, and had difficulties in understanding how miserable she had just felt. In her therapy notes, the therapist described countertransference feelings of being useless and overwhelmed by Joyce's complaints and how she was amazed by the shift in Joyce's state from when she entered until she left the room.

In Session 29 (10 months into treatment), this pattern, according to the therapist's notes, seemed to culminate. At that time, Joyce had quit a job that she hated and found a new one with which she was more satisfied. Even more important, she had succeeded in leaving her boyfriend. Nevertheless, she appeared to feel almost more desperate. She began to cancel her sessions and while the purging episodes were reduced, she had a disturbingly high number of severe bingeing episodes.

After stopping cancelling, the therapist experienced that the therapeutic alliance was slowly reestablished and the therapeutic dialogue in Session 30 and onward indicated a dawning understanding of Joyce's acute desperation and a plausible reason for the increased pressure on the therapist.

THERAPIST: Is it much worse right now?

JOYCE: (*crying intensely*) It's probably because it's all there is, there's nothing else that I can substitute it with, now I realize it's the food, right? . . . I don't know what to do, I don't know. . . . I eat a-a-all the time, there are no breaks at all. I don't sit even 1 hour without food, I really don't. I mean it's insane, really. . . . But now I just can't substitute it with something else, now this is the largest problem I have. I mean, there isn't some boyfriend that's hitting and hitting me or some boss who's totally fucked up that persecutes me.

THERAPIST: Now you're hitting yourself all the time.

JOYCE: There's no change in this. . . . Now I don't have any excuse for eating, there isn't any stupid jerk that stands there and threatens me all the time, so I can think, "Now I have to comfort myself by eating." There isn't any excuse for it anymore now. I mean, I'm without excuses. And it's probably that that's so hard for me to accept, that it's myself that does this to me, right?

THERAPIST: We talked about it when you were together with Leon . . . as if you knew yourself that when you are with him he's kinda like a buffer,

so that you can direct your anger and your frustration toward him, and when he's not there, then you direct it toward yourself . . . you are angry, you have a lot of aggression inside and the way you handle it is to eat all the time. Then in periods you can direct it toward something else. If you get into some conflicts . . . [you can] get someone else to direct it toward you.

JOYCE: Right.

The therapist's interventions captured Joyce's need of an external bad object to hold responsible for her misery. When such an object, such as her boss or her abusive boyfriend, was not available, her misery—and consequently her bulimic episodes—increased. The therapist did not, however, interpret that the therapist may have had the same function. Neither did the therapist realize the mechanisms through which Joyce changed from being in a terrible state in the beginning of a session to leaving the room optimistic and relieved. Based on the therapy notes it seems as if Joyce projected her emotions "into" the therapist, and that these were experienced in the therapist as feelings of incompetence and uncertainty about her possibility for helping Joyce. However, this possible projective identification was not consciously realized by the therapist at this stage, but has only become apparent in retrospect.

In the subsequent sessions, Joyce's complaints about the bulimic symptoms continued. However, she talked about the symptoms in two very different ways, even within the same session. On the one hand, she talked about the bulimia as a kind of physical dependency and as a way of soothing herself. On the other hand, she explored how she used her symptoms in relation to others. The therapist's reactions also fluctuated, but momentarily she experienced a new feeling of compassion and empathy with Joyce.

In Session 34 (11 months into treatment), a session that Joyce experienced as especially difficult (see Figure 5.1), she began to talk of her need of control and to connect this to her experiences with her mother and her boyfriends.

JOYCE: You know, I'm afraid of myself, right? I realize that now, right? I've been afraid of my mom, and John and Chris and Carlos and Kevin and Leon and probably Peter as well. I've been afraid that they would hit me, all of them, I've been afraid that they would let me down or been afraid that they would cheat on me or something, right? But what it really comes down to is that I'm afraid of myself, right? When I wake up, I'm afraid of myself.

THERAPIST: And what you're afraid of is . . . that you go berserk on your own body.

JOYCE: Right. That I can't control it. I haven't got anybody to place it on anymore, I'm afraid of myself you know.

THERAPIST: You keep on exposing yourself to what your mother has exposed you to, right? What I'm trying to say is that when you were a child, then you couldn't control how your mother treated you and your boundaries were overstepped all the time. . . . But now, it's as if that now you're your own bad mother. I mean, you go on, one way or another attacking your body and—

JOYCE: —myself . . . Yeah, it's as if I love to suffer, right? It really is. Then I find a boyfriend that I know will let me down or beat me or something, right?

THERAPIST: It's as if you have to expose yourself to something that's madly unpleasant all the time.

JOYCE: Well, that's what I know about. I don't know anything else. I don't think I would believe it if it was good, right? I think that's why. I'm so suspicious of things. So I am afraid when things go well . . .

THERAPIST: It sounds as if there is always something unpredictable, right? . . . It should be so nice or it could be so nice and the next second it turns out that it was just a lie and it was something else entirely. And he [the boyfriend] was not nice at all. So when you don't have such an external bully, . . .

JOYCE: Then I do it myself.

Later in the session, the therapist goes on talking about Joyce's need for control.

THERAPIST: Mmm . . . it's as if you're all the time, one way or another, fighting something uncontrollable. And in the beginning, then it was your mother that was uncontrollable, . . . you say that she changed, that she could be nice and then all of a sudden it was something else, completely . . .

JOYCE: Right.

THERAPIST: Uncontrollable. So she must have, in a way she must have given you an extreme need for control. For being able to control something. For having somewhere in this world where you were in charge.

JOYCE: Right, I controlled my food, that was the only thing I could control. And my homework, right, my school. I was really into that as well . . . So that and the food, I was in charge of that myself.

In this session, the therapist felt that Joyce received the therapeutic interventions in a new way. She did not just say yes to please the therapist, rather her yes expressed that she felt genuinely understood by the therapist.

In the following sessions and through the remainder of the therapy, a change in the therapeutic atmosphere took place. Technically expressed, it appeared that Joyce began to "withdraw" some of her projections, that is, she could experience current negative emotions as having their source in her self rather than blaming other people, and could admit her own share in her conflicts with others. This change became increasingly obvious in relation to a new man with whom she engaged. Since he was not violent, Joyce's own contribution to the arguments she had with her new boyfriend were much more evident. In this relationship, it also became clear how dangerous it was for her to be close to and dependent on another person, and how vulnerable, insecure, insufficient, and inadequate she felt. This dynamic was expressed clearly in Session 46:

JOYCE: I don't know how to feel good, apparently. I behave in a way that he can't accept and it's very hard to relate to, to have to realize, that I have some problems . . . I have always been able to think, "Yeah, right, but you beat me" or "You cheat on me" or . . . I couldn't kinda turn it around in my head and like take responsibility for the things I really knew were my problems. And right now, I don't have anything to use against Peter.

. . .

JOYCE: It's really hard for me to understand that he does want me. It's really hard. I don't understand it, I can't comprehend it in my head. There is something that kinda puts a stop to . . . It's like, [I believe] it really has to end with him leaving, he hits me in the head, he's out of here, he leaves and fucks a thousand girls.

THERAPIST: Then the worst-case scenario is fulfilled.

JOYCE: Then it's fulfilled, right, that's really what part of me is waiting for if I have to be totally honest, that's really what I'm waiting for. . . .

THERAPIST: Are you pushing things a little bit in that direction as well?

JOYCE: Absolutely, 100%. I do, when I have an argument, I push it to the limit.

With the help of the therapist's interventions, Joyce realized that to be close to her new boyfriend was such a burden for her that she used all kinds of means to force him into becoming a new bad "object," creating a relationship that fit the pattern to which she was accustomed. Consequently, she reacted with a combination of triumph and relief if she, for instance, succeeded in catching him telling a lie. In this position, where she was in the right, she felt invulnerable and released from her feelings of inferiority.

Aspects of this pattern unfolded particularly clearly in Sessions 46 and 47 in which Joyce talked about her boyfriend's anger because of her own

lying. Gradually, Joyce and the therapist focused on Joyce's own tendency to tell lies and her use of lying to manipulate other people's impression of her, and to maintain an idealized picture of herself. The therapist commented on an event where she thought that Joyce had lied to the therapist as well, which initially aroused great anger in Joyce and an impulse to never turn up again. However, the relationship survived and although she continued to perceive her boyfriend to have deceiving intentions, she worked hard to be more honest toward him and gradually developed a more mentalizing and self-reflective stance. Interestingly, she also stopped bingeing and purging around this phase of the therapy.

Session 47 illustrates a marked change in Joyce's way of dealing with her problems. Instead of acting out in the session by talking of her self-destructive acts nonstop, she starts in the following way:

JOYCE: I don't know what's happening to me [therapist's name], I really don't know, I've been thinking about the thing about me lying a lot, I've really thought about it since last week and . . . I see it clearly in myself, I don't even think about lying . . . I just do it like this. (*Snaps her fingers.*)

She continued talking about how difficult she felt it was to reflect upon and change herself:

JOYCE: But I just think there are many, many things I have to learn in a very short time, and as I said to him today, I'm not sure I can handle it all at once . . . I just don't feel good enough for him. . . .

. . .

JOYCE: And all those things I have to take responsibility for. . . . Fuck how easy it has been . . . just to find a boyfriend who beats you up and cheats on you and then you can just think about how fat and disgusting you are and when you're going to eat the next time . . . It's 40 times easier living like that. I really see that now, and that just may be the reason I want to run away from him. . . . Because then I can go on with my life . . . where you just . . . don't have to relate to. . . . (*Sniffs.*) I can't deal with it.

During this phase, Joyce also seemed to become very dependent on the treatment (Session 46):

JOYCE: This is the only place I can relax, and I can feel it when I haven't been here a while . . . I get a lot of stuff that's just bottled up inside because I don't have anybody . . . but I have, right here, you're the only person that I ever, I can tell you everything. . . . And I also trust that

you don't judge me. I have the impression, I've had that with some other psychologists, they judged me and they looked at me in a strange way or said stuff that didn't fit with who I am. If you say something that doesn't fit with who I am, I'll tell you.

However, due to the design of the research project, the therapy had to stop after 2 years. This limited time frame probably influenced the last part of the therapy. According to the therapy notes, Joyce continued to struggle with her relationship with her new boyfriend. At the same time, she continued to fight against her wish to become really close to somebody and she never fully gave up her attitude of being strong, independent, and able to cope all by herself. At the end of treatment, she still had a relationship with her new boyfriend and was expecting their baby. However, she had distanced herself from him as well as from the therapist. Concerning the symptoms, she had stopped bingeing and purging.

Client Experience Interview

The client interview portrays Joyce's conscious experience of the therapy, the therapist, the therapy process, the outcome, and her expectations of the treatment. As it appears below, the information obtained by the interview both supplements and confirms the impression derived from the transcripts and the therapist's session notes.

Regarding her expectations of the therapy, Joyce had high hopes and was highly motivated but also had low expectations because of her earlier relatively negative experiences with therapists. In the interview, she stated that these low expectations were not confirmed. The therapist did not try to change her appearance, and she appreciated that the therapist had reacted constructively when Joyce had expressed dissatisfaction with the therapy or with the therapist herself. Furthermore, having had a good experience with a female therapist had helped her trust women outside of the therapy. She also expressed that the therapist had made her realize that she had a lot of negative feelings toward other people and had helped her reflect on these negative feelings in contrast to her earlier therapists, whom she felt she could manipulate all too easily.

Regarding the therapy, Joyce stated that she felt good about the therapy and experienced it as a secure and stable breathing space where she allowed herself to cry. She described the continuity of the therapy as a wake-up call in the sense that attending the sessions week after week made it impossible for her to deny that "everything was going to hell." Two experiences were of special significance. One concerned the therapist's capacity to admit and correct a failure. Once the therapist's office phone rang in the middle of a session, which Joyce found very disturbing. However, the therapist acknowledged that it was a mistake and prevented it from happening

again. In the other significant experience, the therapist confronted Joyce with her lying not only outside of but also in the sessions. This turned out to be a turning point. Initially, Joyce became angry and the two of them struggled with that for some sessions. But subsequently, Joyce became more honest and tolerant of her self-perceived failings. However, she stated that she missed a more directive therapeutic style and concrete tools to help her with the bulimic symptoms.

She described her benefits from the therapy in the following way: "I feel better, I have become stronger, I feel that I am okay the way I am, and do not need to be perfect"; "I became strong enough to leave my boyfriend and stay single for a period"; "I have found a new boyfriend who does not beat me"; "I feel more confident with women"; "Christmas is no longer a huge problem"; "My relationship to my aunt [the only female relative she is in contact with] is much better"; and "I have realized that I love my father." At the same time, Joyce described her mood as "more gray" than earlier where she alternately felt happy and exalted and depressed.

DISCUSSION

The client in this case study recovered fully from severe bulimic symptoms, which were her reason for contacting the University Clinic. In addition to this, she developed in other important ways. Her interpersonal problems, measured quantitatively as well as qualitatively, were markedly reduced. She had fewer conflicts with others, she was happier at work, she developed more trust in women and a closer relationship with her family, and she succeeded in leaving a violent and criminal boyfriend and to establish a more healthy relationship with another man with whom she expected a baby. Her attachment pattern remained unresolved/preoccupied but there was a notable development in the coherence of her descriptions and understanding of the consequences of her traumatic experiences. This was validated by an improved reflective functioning.

The main question for this discussion is how to understand the positive outcome of the therapy. Which factors contributed and which mechanisms of change seem to have been active? In other words: How did the client, the therapist, the relationship between them, the specific kind of therapy, and therapy external factors contribute? These questions are related to the discussion in the field of psychotherapy research regarding the relative importance of common factors and specific techniques for outcome (Wampold, Ollendick, & King, 2005).

Beginning with the specific technique, the listening and containing therapeutic attitude characteristic of PPT apparently was of great benefit to the client. For a long period, the therapist made herself available for Joyce's

incoherent, concrete, and undifferentiated speech about her bad experiences. The therapist understood her role to be a "container" for the client's projective identification, meaning that the therapist allowed Joyce to express her rage and terrible fear of others through her blame of others, without criticizing or correcting her, and gradually Joyce was able to recognize and accept those emotions as her own. Though this was an implicit process between patient and therapist, there are clear signs that it was a great relief for Joyce. In the client experience interview, Joyce described the therapy as a secure and stable breathing space where she allowed herself to cry.

Another important aspect appears to have been the reflective nature of PPT. During the process, the client was helped to recognize her feelings, especially her negative feelings toward other people, and her attempts to avoid them, to put feelings into words, and to reflect on them to a higher degree. This involved making a connection between the bulimic symptoms and present and previous relationships, such as the danger involved in expressing negative feelings in her chaotic childhood relationships. Likewise, an understanding of the bulimic symptoms as an acting out of aggressive feelings toward others and herself emerged. She also began to realize how she manipulated other people in order to transform especially her actual boyfriend into a bad object and to control other people's impression of her by lying.

Multiple mechanisms may have contributed to this change in her self-understanding. In the client interview, she underlined that attending the sessions week after week for 2 years made it impossible for her to avoid acknowledging her own part in and responsibility for the conflicts in which she was involved. Another change mechanism concerns the function of the therapist. As it appears from the transcripts from the first session, the client did not really respond to the therapist's interventions in the beginning of the therapy. What seemed to be of importance was the availability of the therapist. Later, 9 months into treatment, this was still the case. However, at this stage the therapist had a much more difficult time bearing the role of being available; based on the therapy notes it appears that the therapist struggled with self-reproaches and feelings of incompetence and uselessness, which were understood by the therapist as countertransference reactions, that is, as a result of the patient's unconscious projections and the therapist's identification with the projected.

More than halfway into the therapy, the atmosphere in the sessions changed and the client became more receptive to the therapist's interventions. This is reflected in the session transcripts by more pauses in the client's speech and more active interventions from the therapist. In these interventions, the therapist mirrors and adds to the client's understanding, as in the interaction about Joyce's ambivalent wishes for her boyfriend to be good and bad, and how she pushed him to the limit in order to fulfill the worst-case scenario. Both the client and the therapist experienced the therapist's

confrontation of Joyce—as in the interactions regarding her dishonesty—as very important, and the confrontation of the possibility that she lied in sessions seemed crucial as well. As appears from the extracts from Session 47, a substantial change in her way of dealing with her problems followed. In the client interview, Joyce stated that the therapist's confrontation was important because it demonstrated that she could not manipulate the therapist, in contrast to earlier therapy experiences.

Besides the change mechanisms specific for PPT, client and therapist characteristics and the therapeutic relationship are essential factors that contribute to outcome (Norcross & Wampold, 2011). In this study, the client's motivation may have had a major influence. In the client interview, it appeared that she was highly motivated. Her will to quit the bulimic symptoms and to get a better life was also evident for the therapist and for those who interviewed her. The therapist's training, her long experience with EDs, and her age may have been positive factors. The therapy relationship developed in a very positive way. The client reported that she trusted the therapist from the very beginning, partially because the therapy was part of a research project. During the therapy this external reason for her trust developed into a more genuine trust in and respect for the therapist, which may have facilitated her increased dependency on the therapist in the last part of the treatment. The therapist's countertransference feelings also developed during the process. From being rather overwhelmed by the client's traumatic background as well as by her spectacular appearance and crude language, followed by feelings of incompetence, she increasingly felt sympathy and empathy for her. She really liked the client and it appears from the therapy notes and parts of the transcripts, which due to space limitations have not been included, that a certain characteristic humor and way of talking developed between the two of them, which facilitated the client's ability to talk about her traumatic experiences and the therapist's ability to listen to them.

Factors external to the therapy may also have contributed to outcome. During the treatment, the client developed a relationship with a man who seemed to be much healthier than her former one. This relationship had a great influence on her and made it possible to work with reaction patterns in the therapy that until then had been in the background and somewhat masked by the former boyfriend's violent behavior. However, the therapy had, without doubt, helped her to leave the first boyfriend. This was also the case with her pregnancy. She recovered from her bulimic symptoms before her pregnancy but the pregnancy probably made her more resistant to relapse. Both Joyce and her therapist were concerned whether she would still be without symptoms after the child was born. However, 5 years after terminating treatment, when she met with the therapist to give permission to write this case story, she was still completely free of bingeing and

purging episodes. At that time she was in a new relationship, but she and the child's father were managing to be successful parents together.

PRACTICE AND RESEARCH IMPLICATIONS

One important consideration is the generalizability of these data: Is the outcome of this case a more or less understandable exception, or is it validated by other cases? The answer to this question is both yes and no. In the randomized clinical trial in which the study is nested, CBT turned out to be more efficient than PPT (Poulsen et al., 2014). However, very rewarding therapies may be hidden behind what appears as poor outcome cases in a randomized controlled trial. This was confirmed by a case study including five of the patients who received PPT (Lunn et al., 2012a). Four of these patients had profited a lot and pointed to the importance of the length and continuity of the therapy, the reflective nature of the approach, and the nonjudging and containing attitude of the therapist. Apparently, the plasticity of the approach made it possible to adapt the therapy to the individual client's needs and personality. Thus, it turned out that the clients experienced the therapeutic process in very different ways: one patient praising a more nonverbal and nonintrusive process, another a more rational and verbal one as if the patient were going to learn a new alphabet, and yet another a more confrontative therapeutic style. This finding was in accordance with the guidelines of the manual in which different approaches to different levels of personality organization were described (Lunn & Poulsen, 2012a). The case study also showed that it was a challenge for the clients to find their way in this kind of psychotherapy due to its unstructured nature and lack of more active interventions like education about food and weight and concrete strategies to deal with urges to binge. Hopefully, an ongoing qualitative exploration of the outcome of the 70 cases included in the randomized controlled trial will contribute to a more elaborated discussion of the mechanisms of change in PPT with bulimic clients and the challenges inherent in this approach.

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CHAPTER 6

Emotion Acceptance Behavior Therapy for Anorexia Nervosa

Jennifer E. Wildes, Marsha D. Marcus, and Elizabeth B. McCabe

The absence of evidence-based treatments for older adolescents and adults with anorexia nervosa (AN) is one of the most serious issues in the eating disorders (EDs) field. Although structured behavioral interventions provided in intensive settings (e.g., inpatient, day hospital) are effective at improving weight and reducing aberrant eating behaviors in the short term, 30–50% of individuals who receive intensive treatment for AN relapse or require additional hospitalization in the year following discharge (Carter, Blackmore, Sutandar-Pinnock, & Woodside, 2004; Treat, McCabe, Gaskill, & Marcus, 2008). Efforts to develop outpatient interventions for older adolescents and adults with AN have been similarly disappointing, with no treatment showing consistent benefits across studies (Bulik, Berkman, Brownley, Sedway, & Lohr, 2007). Given the morbidity and potential chronicity associated with AN in adults (Keel & Brown, 2010), there is a critical need for the development of novel treatments that are both acceptable to patients and effective at ameliorating AN symptoms.

Emotion acceptance behavior therapy (EABT) is an outpatient psychotherapeutic intervention designed specifically for older adolescents and adults with AN. The principles of EABT derive from empirical work on the psychopathology and treatment of AN, clinical experience, and the general psychotherapy research literature. Specifically, EABT is based on a conceptual model that emphasizes the role of anorexic symptoms in facilitating

All personal information has been altered to protect confidentiality. The case of Carrie is a disguised/composite portrait.

avoidance of emotions. As shown in Figure 6.1, the EABT model postulates that people with AN often are characterized by individual features, such as inhibited or harm avoidant personality traits and problems with anxiety and mood disturbance, that shape their experience of emotion as aversive and uncontrollable. This negative experience of emotion results in "emotion avoidance," that is, the desire to avoid experiencing or expressing physical sensations, thoughts, urges, and behaviors related to emotional states. Anorexic symptoms (e.g., extreme dietary restraint; purging; excessive exercise; ruminative thoughts about eating, shape, or weight) are hypothesized to serve the function of facilitating emotion avoidance by (1) preventing patients from experiencing emotions and (2) reducing the intensity and duration of emotional reactions.

In the early phases of EABT development, we conducted a series of focus groups with older adolescents and adults with AN, and their feedback helped to shape the tenets of the EABT model. Below are two representative quotes from focus group participants:

> "So to just focus on the anxiety, just focus on the depression, just focus on the eating disorder, you can't. They're all tied up in one. [The eating disorder] is a way of calming myself because I know I can do something and when you're so starved, all you can think about is food and body image. You can't think about a lot of other things that are making you so anxious, you can only think about that."

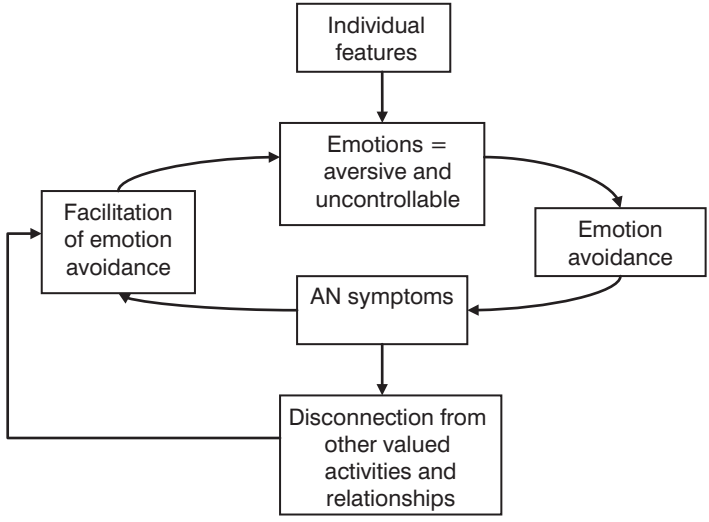

FIGURE 6.1. EABT model of emotion avoidance in AN.

> "There's just a lot of new things and I felt like this part of my life is ending, and the next part of my life hasn't started yet and I couldn't really deal with the anxiety of what's next, when is it going to happen, what am I going to do, and the eating disorder, it gave me something to do, it gave me something to think about. It's very calming, it's very relaxing. I mean . . . you're counting sit-ups and crunches, it's calming, it fills up your mind, you don't need to think about what's going on. If you're counting calories, you don't have to think about what's going on. If you're sitting in a restaurant and analyzing every option on the menu, then you don't have to interact socially. You can remove yourself from uncomfortable situations. The eating disorder isn't comfortable in itself, but it comes to replace some of those things."

SUPPORT FOR THE EMOTION ACCEPTANCE BEHAVIOR THERAPY MODEL

Several lines of work provide support for the associations among individual features, emotion avoidance, and AN symptoms outlined in Figure 6.1. Indeed, close observers of ED psychopathology long have noted that individuals with AN have difficulty construing or tolerating emotions (e.g., Bruch, 1988; Schmidt & Treasure, 2006; Slade, 1982). Furthermore, several theorists have postulated that abnormalities in fear conditioning and discomfort experiencing novelty or change may signal an "emotional endophenotype" (Treasure, 2007, p. 216) of AN characterized, in part, by phobic avoidance (Kaye, 2008; Strober, 2004; Treasure, 2007). Finally, some scholars have speculated that dietary restraint serves an anxiolytic function for individuals with AN, which could play a role in the expression and maintenance of symptoms (Kaye, 2008; Strober, 2004).

Empirical research by our group and others provides further support for the EABT model. For example, in a sample of 75 AN patients ages ≥ 17 years, we showed that emotion avoidance is present in individuals with AN, and found preliminary support for the idea that emotion avoidance helps to explain the relation of depressive and anxiety symptoms to AN psychopathology (Wildes, Ringham, & Marcus, 2010). Similarly, in an experimental study of the association between negative emotions and ED symptoms in patients with AN, we found that individuals randomized to a negative mood induction had an increase in negative affect from pretest to posttest that was accompanied by significantly greater increases in ED cognitions than were exhibited by individuals randomized to a neutral emotion condition, who had no changes in negative affect or ED cognitions (Wildes, Marcus, Bright, & Dapelo, 2012). Studies that have assessed AN patients' perceptions of the functions served by disordered eating symptoms have reported that the illness helps affected individuals to avoid or

control emotions (Gale, Holliday, Troop, Serpell, & Treasure, 2006; Nordbo, Espeset, Gulliksen, Skarderud, & Holte, 2006; Serpell, Treasure, Teasdale, & Sullivan, 1999). Finally, research has documented a broad range of emotional difficulties in individuals with AN, including deficits in emotion recognition (Harrison, Tchanturia, & Treasure, 2010), attenuated emotional expression (Davies, Schmidt, Stahl, & Tchanturia, 2011), and alexithymia (Kessler, Schwarze, Filipic, Traue, & von Wietersheim, 2006).

EMOTION ACCEPTANCE BEHAVIOR THERAPY

The EABT model assumes that emotion avoidance leads to two main problems for individuals with AN. First, although AN symptoms may be effective at reducing emotions in the short term, over the long term, efforts to avoid emotion may have the paradoxical result of increasing the frequency and intensity of emotional reactions. A large empirical literature has documented that attempts to avoid internal stimuli (e.g., emotions, thoughts, physical sensations) are largely ineffective and often result in more (not fewer) unwanted experiences (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996; Moses & Barlow, 2006). Thus, in their efforts to avoid emotion, AN patients may find themselves trapped in a cycle of emotional vulnerability, avoidance, and disordered eating. Second, because patients spend so much time focused on AN symptoms, valued goals in other areas of their lives often are neglected. As one of our focus group participants put it:

> "When I'm at the end of my recovery and at like the highest weight, I'm freaking out inside and everyone's like, 'Oh, you're getting better, you're getting better' and you're like no, because right now this is being taken from me and I have nothing else."

Accordingly, the primary treatment targets in EABT are (1) AN symptoms, (2) emotion avoidance, and (3) disconnection from other valued activities and relationships.

To address these treatment targets, EABT combines standard behavioral interventions that are central to the clinical management of AN (e.g., weight monitoring; prescription of regular, nutritionally balanced eating) with psychotherapeutic techniques designed to increase emotion awareness, decrease emotion avoidance, and encourage resumption of valued activities and relationships outside the ED. EABT is heavily influenced by "third-generation" behavior therapies (Hayes, Luoma, Bond, Masuda, & Lillis, 2006), such as acceptance and commitment therapy (ACT), dialectical behavior therapy (DBT), and mindfulness-based cognitive therapy (MBCT). Third-generation behavior therapies are similar to traditional behavioral and cognitive-behavioral approaches in that they share a commitment to

the use of empirically supported behavior change strategies (e.g., exposure, behavioral analysis); however, these newer methods are distinguished from earlier approaches by an increased emphasis on the context and function of psychological phenomena, as opposed to altering symptom form. Thus, EABT focuses on helping patients to identify the functions served by AN symptoms, including the connection between AN symptoms and emotion avoidance, and to adopt alternative strategies (including cultivating a willingness to experience/tolerate uncomfortable emotions and other avoided experiences) in the service of reconnecting with other valued activities and relationships (Hayes, Strosahl, & Wilson, 1999; Linehan, 1993).

EABT is divided into three phases, but content across therapy sessions is overlapping, and the phases are not intended to be distinct. All sessions include a weight and symptom check-in, review of the past week from the patient's perspective, and validation of the patient's concerns about gaining weight and reducing ED symptoms. As in other manualized treatments for AN, a major aim of EABT is to assist patients in achieving and maintaining a healthy body weight and sustaining normal eating. However, because individuals with AN often are ambivalent about relinquishing ED symptoms, the initial focus of symptom management is on weight stability (i.e., preventing further weight loss) rather than weight gain.

EABT session frequency and treatment length are tailored to specific patient needs. All patients attend therapy twice weekly for the first 4 weeks. If a patient achieves weight stability or weight gain after 4 weeks of EABT, he/she steps down to once-per-week therapy, which lasts for a minimum of 28 weeks. If a patient loses weight during the first 4 weeks of EABT, twice weekly sessions continue until weight stability or weight gain are achieved. Moreover, if, at any point during EABT treatment, a patient loses weight or increases other ED behaviors (e.g., binge eating, purging) for 2 consecutive weeks, twice-weekly sessions are resumed until symptomatic stability returns. Finally, patients attend therapy sessions every other week for the last 8 weeks of treatment. Specific therapeutic strategies employed during each phase of EABT are outlined below.

Phase I

The initial sessions of EABT focus on orienting the patient to treatment and building a therapeutic relationship. A major aim of Phase I is for the patient and therapist to develop a shared understanding of the patient's illness with a particular emphasis on the relation between ED symptoms and the patient's experience of emotion. The EABT model is introduced, and the patient and therapist work together to develop a personalized model that reflects the patient's history, symptom functions, and values. The ultimate goal of this assessment is for the patient and therapist to establish a conceptualization linking the patient's AN symptoms to emotion avoidance

and illustrating how these behaviors have served to disconnect the patient from other valued activities and relationships. Based on this information, the patient and therapist collaborate to set treatment goals for (1) weight gain/reduction of ED symptoms, (2) acceptance of emotions and other avoided experiences, and (3) participation in other valued activities and relationships.

Phase II

The focus of Phase II is on helping the patient meet EABT treatment goals using psychotherapeutic techniques adapted from third-generation behavior therapies. As described above, third-generation approaches emphasize "contextual and experiential" (Hayes, 2004) change strategies such as mindfulness, acceptance, and contact with the present moment, as opposed to techniques focused on changing the form of problematic internal experiences (e.g., modifying dysfunctional thoughts about eating, weight, and shape). Thus, if a patient reports being unable to eat at a meal because he/she feels anxious and fears that "If I start eating, I won't be able to stop and I'll get fat," EABT employs mindfulness strategies to help him/her observe, describe, and tolerate the feelings, thoughts, and physical sensations related to this experience, rather than behavioral experiments or cognitive restructuring focused on challenging the validity of the patient's predictions. Similarly, graded exposure may be used to help the patient increase willingness to enter situations that provoke aversive emotional reactions (e.g., social settings) or to address concerns more directly related to disordered eating (e.g., anxiety-provoking physical sensations such as bloating or feeling too full). Finally, self-monitoring is employed to help patients identify links between AN symptoms and emotional reactions or disconnection from other valued activities and relationships.

Phase III

As is the case in other manualized interventions, the final phase of EABT focuses on consolidation of gains, continued practice of behavioral strategies, and planning for the end of treatment. The patient's personalized model of AN is reviewed and updated, and plans for continuing acceptance and value-based living are discussed. For example, if the patient has identified that his/her ED has interfered with the valued domain of parenting (e.g., because he/she is unable to participate in family meals or spend time with the family due to ED behaviors such as excessive exercise), then he/she might be asked to prepare a list of goals for the coming month, 3 months, and 1 year focused on reconnecting with his/her children. These goals might include activities designed to increase time spent with the patient's children (e.g., instituting a family "game night," or reading together on a

regular basis), as well as a commitment to decrease or eliminate behaviors that interfere with parenting (e.g., limiting exercise to no more than 30 minutes per day). Finally, the patient and therapist collaborate to develop a personalized plan for relapse prevention based on the course of therapy.

RESEARCH ON EMOTION ACCEPTANCE BEHAVIOR THERAPY

Results from two uncontrolled case series provide preliminary support for the utility of EABT in the treatment of older adolescents and adults with AN. In the first of these studies, we treated five patients with AN (median age = 25 years; range = 17–43) using an abbreviated (24-session) treatment manual to evaluate the acceptability and preliminary efficacy of EABT (Wildes & Marcus, 2011). Four patients (80%) completed at least 90% of the scheduled therapy sessions (i.e., ≥ 22 sessions), and participants and therapists generally reported satisfaction with EABT. In addition, three patients showed modest weight gains and improvements in depressive and anxiety symptoms, emotion avoidance, and quality of life (Wildes & Marcus, 2011). Subsequently, we conducted a second uncontrolled case series in a larger sample (n = 24) of patients with AN ages ≥ 17 years (M [SD] = 26.8 [11.6] years) using a modified EABT manual in which we (1) expanded the treatment from a 24-session intervention conducted over 22 weeks to a minimum 40-session intervention conducted over 40–52 weeks; (2) developed additional strategies to help therapists and patients establish goals for normalized eating and weight gain, understand the relation between emotion avoidance and ED symptoms, and link treatment goals more closely to the resumption of other valued activities and relationships; and (3) built additional flexibility into the treatment protocol to enable therapists to increase session frequency and treatment length based on individual patient needs. Results provide further support for the potential utility of EABT.

Specifically, of the 24 individuals who initiated the expanded protocol, 13 (54.2%) completed the intervention. Of those who did not complete treatment (n = 11, 45.8%), the majority dropped out (n = 8); one patient was withdrawn because of medical instability, and two were withdrawn due to increases in comorbid psychopathology requiring inpatient treatment. Analyses using the full sample (n = 24) documented significant improvements in weight, body mass index (BMI), cognitive correlates of disordered eating, depressive and anxiety symptoms, emotion avoidance, and quality of life from pretreatment to posttreatment that were maintained at 3- and 6-month follow-ups (Wildes & Marcus, 2012). Finally, outcomes following EABT were comparable to results reported for other recently developed psychotherapeutic interventions for AN, such as enhanced cognitive-behavior therapy (CBT-E; Fairburn et al., 2013) and the Maudsley model for the

treatment of adults with AN (MANTRA; Wade, Treasure, & Schmidt, 2011). We conclude from these findings that EABT may have utility for a subset of individuals with AN, although treatment engagement and retention remain a significant challenge.

In the case report that follows, we describe the course of treatment for a participant in the second EABT case series described above. Specifically, we present subjective information from the patient and the therapist, as well as objective data regarding the participant's clinical status at pretreatment, posttreatment, and 3- and 6-month follow-ups. Our purpose in presenting this case is to illustrate therapeutic strategies typically employed in EABT and highlight the intended mechanisms of action, so that clinicians will be able to incorporate EABT principles into the treatment of older adolescents and adults with AN.

CASE STUDY: CARRIE

Patient Characteristics

At the initiation of treatment Carrie was a 28-year-old white, married homemaker who completed 3 years of college, and was the mother of two elementary school–age children. She resided in the small town in which she was raised, and maintained frequent contact with a large extended family. On initial assessment, Carrie met criteria for AN, binge eating/purging subtype, and reported a 14-year history of ED symptoms. She had a BMI of 18.1. Carrie had concurrent major depressive disorder and social phobia and a history of substance use disorder (cannabis, opioids). Nevertheless, she had had no prior mental health treatment of any kind.

The immediate precipitant to seeking treatment for her ED was the reemergence of long-standing marital issues, which were exacerbated by Carrie's body image concerns, and affected her willingness to be intimate with her husband. In the context of increasing marital conflict, Carrie resumed severe restriction of food, self-induced vomiting, and compulsive daily exercise with consequent weight loss. During this time she recalled thinking, "There is something wrong with me, why can't my husband see it?" Finally, Carrie disclosed to her husband her history of drug abuse, the extent of her ED symptoms, and doubts about the future of the marriage. Carrie and her husband explored treatment resources, and Carrie began EABT in October 2010.

Therapist Characteristics

The therapist was a senior doctoral-level clinician experienced in the treatment of EDs. She had expertise in CBT, DBT, and family therapy for EDs, but no prior experience delivering a manualized intervention in a research

study. The therapist received EABT training prior to work with Carrie, and participated in group supervision throughout Carrie's treatment to ensure adherence to the principles of the intervention.

Structure of Treatment

Carrie received 42 sessions of EABT conducted over a period of 42 weeks. She and her therapist met twice weekly for the first 4 weeks of treatment, during which time Carrie gained 2.2 pounds. As her weight gain was within acceptable limits, Carrie stepped down to once-per-week therapy sessions for the next 30 weeks followed by every other week sessions for the final 8 weeks of treatment. She also received medical monitoring (i.e., assessment of weight and vital signs) from a nurse or nurse practitioner at each appointment and met monthly with the study physician to ensure medical stability. Carrie received two sessions of nutrition counseling with a registered dietitian.

Phase I

As noted, the goal of the first phase of EABT is the development of a shared understanding of the illness, which emphasizes the relationship between the symptoms of AN and the experience of emotion through an explanation of the EABT conceptual framework (Figure 6.1) and the creation of a personalized model. Carrie found this exercise particularly useful, perhaps in part because she had not had previous psychological treatment. She and her therapist also discussed the EABT weight gain goal early in treatment, which was based on a minimally adequate BMI of 19.5 (for Carrie this was a body weight of 122.5 pounds). To achieve this goal Carrie and her therapist developed an individualized weight gain protocol for a weekly weight gain of 0.25 pounds (see Figure 6.2). Although Carrie did not express distress about the agreed-upon rate of weight gain, she was much less comfortable about the notion of attaining a body weight of 122 pounds. However, the importance of establishing and maintaining an adequate body weight was an integral part of the treatment.

Carrie and her therapist created a detailed history and timeline of symptom onset to develop a comprehensive understanding of the relation between the emergence and maintenance of ED symptoms and her experience of emotion. In turn, Carrie was able to identify how ED behaviors served to distance her from valued activities and relationships. The process of gathering the history also afforded opportunities to highlight the relevance of the theoretical framework of EABT, offer emotion regulation education, provide in-the-moment instruction on emotion identification, and introduce the use of alternative strategies (skills) for managing the emotions elicited by her recollections.

One of the major goals of EABT is to help patients reconnect with valued life aspects that are unrelated to weight, shape, and eating. However, it is difficult for people to participate fully in valued activities and relationships while they are underweight. Maintaining a low body weight (defined as a body mass index [BMI] < 19.5 kg/m^2) is associated with poor concentration, irritability, low mood, obsessional thinking, social withdrawal, and sleep difficulties (among many adverse effects), all of which can impair a person's interest in and ability to connect with other important aspects of his/her life. Thus, a critical component of EABT involves helping patients to achieve and sustain a healthy body weight.

Directions: EABT weight gain goals are based on a targeted BMI of 19.5. BMI is determined by calculating the ratio of your height to your weight, squared. By recording your height and your current weight, we can determine what your BMI is now. We can also use your height to determine what your targeted weight goal should be in order to attain a BMI = 19.5. Your weekly weight goal will vary depending on your current weight. However, in most cases, the weekly weight goal in EABT will be no more than ½ pound per week.

(Therapist and patient will fill in the following information together):

Height: *66.5 inches*

Current weight: *113.4 pounds*

Current BMI: *18.0*

Weight required for BMI = 19.5: *122.5 pounds*

Target weight – current weight: *122.5 – 113.4 = 9.1*

Weekly weight goal: *0.25 pounds* for *40* weeks

FIGURE 6.2. EABT individualized weight gain protocol.

Carrie identified the onset of ED symptoms in the spring of her freshman year of high school following rejection by a potential boyfriend. She felt dissatisfied with her body, and although she was in the healthy weight range, she began to restrict her intake, increase her exercise, and misuse diuretics. Carrie became increasingly unwilling to eat in front of others, with an increasing focus on diet and exercise. During the rest of high school Carrie eliminated red meat from her diet, stopped eating lunch at school, ignored comments from family about her eating, and became increasingly preoccupied with food and weight.

Carrie was involved in a monogamous relationship throughout most of high school and planned to marry her high school boyfriend after graduation. Toward the end of her senior year, however, she began to consider alternatives to what she and others had long considered would be her path in life. She decided that she did not want to be in a serious relationship, did

not want to be married, and instead wanted to be a college student. Carrie ended the relationship with her boyfriend and enrolled in a branch campus of a large university several hours away from home.

During her first semester at school she gained 10 pounds. She described "hating" the weight gain and promptly lost the weight when she returned home. By the middle of her sophomore year she became bored with life on the small campus so decided to transfer to another university and commute from home, which she did throughout the remainder of her sophomore and part of her junior year. Restless, and still uncomfortable, Carrie transferred to yet another college where she resided on campus.

Carrie's ED worsened during her sophomore and junior years of college, and she was struggling academically as well as socially. Carrie was restricting calories severely, started self-induced vomiting and ephedra use, and exercised up to 2 hours per day. Her lowest BMI was 17.4. During this time she also began to use alcohol more frequently and started experimenting with drugs. She decided to take a semester off from school and return home. While home, Carrie narrowed her social circle to a small group of high school friends and her boyfriend, with whom she would frequently use alcohol and drugs, and ultimately was using heroin daily. As her drug use intensified, her ED symptoms lessened. She described this time as the "worst part of my life."

When she was 21 years old, Carrie met her future husband, Robert, at work and quickly stopped using drugs. She endured a 2-week period of heroin withdrawal and ended her drug use without medical intervention. Carrie did not tell Robert about her prior drug use. After 6 weeks of dating they decided to live together. Carrie acknowledged that although she and Robert had common interests and he possessed characteristics that she wanted in a partner, they did not really know each other and she was uncomfortable in the relationship. Her eating-disordered thoughts and behaviors resumed. Two months later she was pregnant. At first, Carrie reported feeling "terrified" and "locked in," but ultimately was able to focus on the health of her coming baby. Carrie stopped smoking and ate a healthy diet, gaining about 25 pounds during the pregnancy. She had a normal pregnancy and delivery. Carrie lost all of her pregnancy weight within 2 weeks postpartum by severely restricting her food intake, exercising, and smoking cigarettes.

The year following the birth of Carrie's son was emotionally and interpersonally difficult. The relationship with Robert faltered, and she felt increasingly "trapped" in the relationship and by her responsibilities. Concurrently, Carrie experienced an exacerbation of ED behaviors. She intensified her restricting and exercise behaviors and resumed self-induced vomiting. Over time, some of the interpersonal, financial, and other stressors lessened, her feeling of being trapped diminished, and the couple decided to marry. Her focus on body shape and weight lessened, she discontinued purging behavior, ate more normally, and gained weight.

Then, Carrie became pregnant with her second child, and this stress coupled with unexpected demands to provide care for a psychiatrically ill extended family member, exacerbated her body image concerns. After a second normal pregnancy, Carrie resumed ED behaviors postpartum, and quickly lost the 25 pounds she had gained. Shortly thereafter, Carrie required surgery for a knee injury that probably was related to intense treadmill exercise. The postsurgery period was characterized by intense pain, nausea and vomiting, use of pain medication, and the loss of 15 pounds in a short period of time. Family members expressed concern about the weight loss, but Carrie was pleased with it, and made no effort to gain weight. Her weight did improve when stressors lessened, though.

Over the course of the next several years Carrie was occupied with parenting her two small children and household responsibilities. Life stressors were minimal and she was relatively weight stable, although body image concerns persisted and seemed to worsen over time. In response, Carrie gradually intensified exercise to the point that she was exercising vigorously by running or doing aerobic activity for about 45 minutes 4–5 days per week.

Immediately prior to initiating EABT, long-standing marital issues had resurfaced. Carrie finally disclosed her history of drug abuse, the extent of her compulsion to exercise and restrict her intake, and expressed her doubts about herself and the future of the marriage. She and her husband decided to seek help, and Carrie entered treatment.

As noted, the detailed discussion of Carrie's ED and the context in which it occurred was extremely useful to her as she had rarely considered the history of her symptoms or discussed her disorder. Furthermore, the explication of the course of her symptoms provided the opportunity for Carrie and her therapist to identify the particular individual factors that promoted the expression of her ED. Specifically, Carrie identified a family history of anxiety, mood disorders, and probable EDs. In addition, she described herself as anxious and self-conscious, with a marked tendency to be passive in interpersonal relationships. With regard to emotions, Carrie reported that she learned "to keep her feelings to herself," and not to "open up," even to family members. Carrie acknowledged that she was uncomfortable with either positive or negative emotion, and that she habitually avoided conflict by "keeping the peace" and "not venturing outside of my comfort zone." Thus, Carrie was able to recognize her history of emotion avoidance and its implications in precipitating and maintaining ED behaviors.

Carrie and her therapist also worked to identify the relation between her ED symptoms and disconnection from valued activities and relationships. Carrie was able to recognize that she had been unable to function socially or academically during college, and had restricted her social circle, making few new friends, and becoming socially isolated. Carrie's ability to

form a coherent narrative that tracked the association of her vulnerability factors, personality style, emotion avoidance, and interpersonal context was a revelation to her and paved the way for marked progress (see Figure 6.3 for a copy of Carrie's personalized EABT model).

Skills for identifying, managing, and tolerating emotions are introduced in Phase I of treatment and practiced increasingly during Phase II. Early in Phase I it became evident that Carrie was not accustomed to observing her emotional states and did not have a vocabulary for describing her emotions. She tended to think about and describe in nonspecific terms (e.g., "bad in my head") what she and her therapist later identified as emotions, which often were associated with physical sensations such as "heavy," "bloaty," "thighs touching," and "upset stomach." Mindfulness skills, in particular the importance of noticing and naming emotions without trying to avoid or change them, were introduced early in the history-gathering process and used during all phases of treatment.

An example of the use of mindfulness skills is illustrated by the following anecdote. Early in treatment, as she and her therapist reviewed the previous week, Carrie reported that after the previous session she could not stop thinking about the fact that she had gained weight (⅖ pound) and felt "heavy" and "bad in my head." Her therapist reminded her that the content of the last session had focused on what she described as the "worst part of my life." Together, Carrie and her therapist examined the possibility that uncomfortable emotions were generated by recalling this period and that focusing on the negligible weight gain may have served the function of avoiding the feelings associated with painful memories. Carrie accepted the notion postulated in the EABT model that engaging in ED thoughts and behaviors enabled her to avoid the experience of uncomfortable emotions and thus served a mood regulating and protective function. Carrie was very receptive to the practice of mindfulness skills in session for the purpose of identifying and labeling the emotions that were generated by recalling specifics of her history.

Phase II

To reiterate, there is no clear demarcation between the phases of EABT, but the emphasis in Phase II shifts from relationship building and creating a personalized model of the ED to the applications of this understanding to the individual's current life situation and the practice of skills to decrease emotion avoidance. For instance, continued practice of mindfulness skills helped Carrie to identify and understand emotions and the behaviors generated by the emotions. For example, Carrie often would describe herself as feeling "heavy," when in fact she was feeling anxious. Feeling "heavy" led to weight loss behaviors that in turn, effectively mitigated her anxiety and thus served to maintain the ED. As Carrie became more skilled at

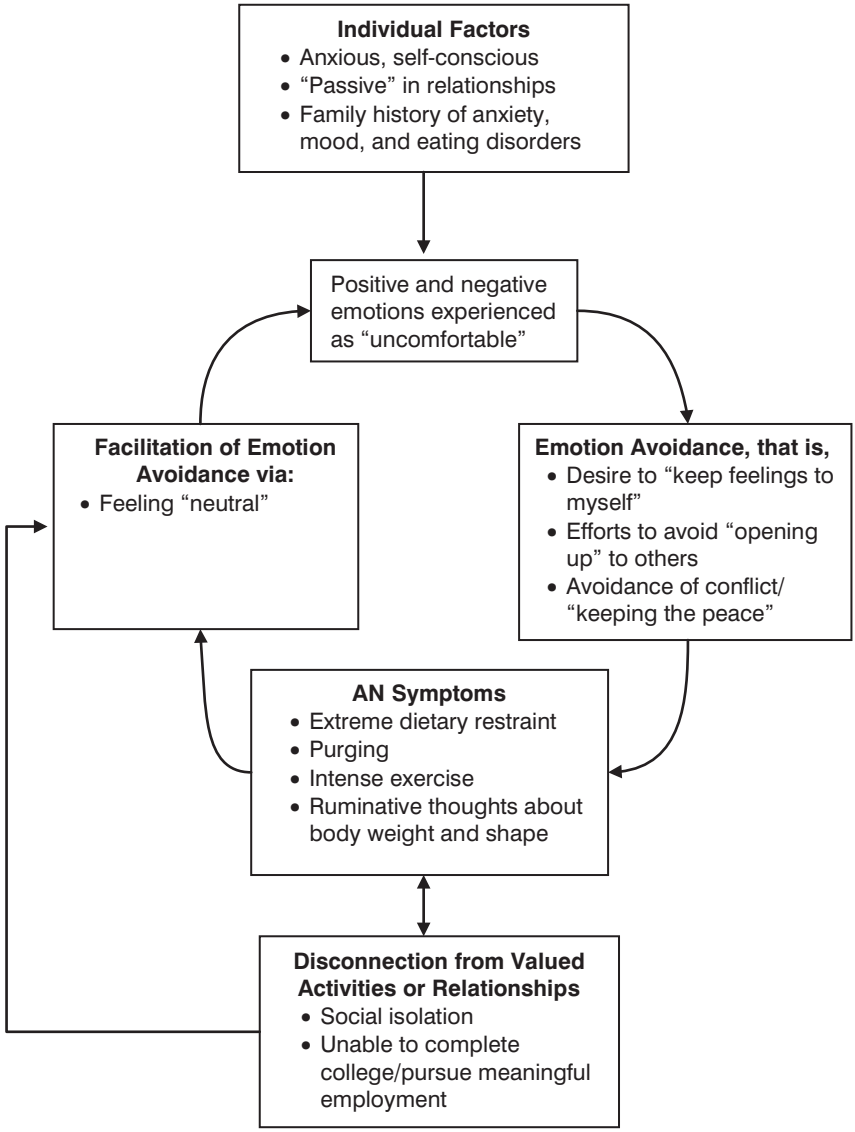

FIGURE 6.3. Carrie's personalized EABT model.

recognizing and labeling emotions, alternative strategies such as the use of emotion regulation and distress tolerance skills were introduced as adaptive alternatives for managing anxiety.

As described, all EABT sessions began with a weight and symptom check conducted by the nurse or nurse practitioner and documented on a one-page form, which was then reviewed by Carrie and her therapist. During Phase II, these data provided an excellent opportunity to identify and observe emotion and to use distress tolerance skills to address the uncomfortable affect associated with being weighed and weight gain. For the most part, Carrie was weight stable or gained a small amount of weight during treatment. There were, however, two incidents of marked weight loss between weekly sessions that provided the opportunity to understand an additional aspect of the function served by ED behaviors.

For example, Carrie had an unanticipated opportunity to accept a part-time job, which she took without having the opportunity to discuss her feelings in session. Carrie lost 4 pounds during her first week of work. During the subsequent EABT session Carrie and her therapist were able to identify the emotions associated with starting the job. Although the idea of working was appealing (e.g., would help her to feel productive and earn some money), the thought of working triggered strong feelings of anxiety, a lack of confidence, and self-doubt. Carrie was able to observe and describe her physical sensations and thoughts, and to identify an increase in anxiety occurring prior to and while at work. Importantly, she was also able to recognize that she immediately started to restrict her food intake and increase her exercise, which served to mitigate the uncomfortable feelings. Carrie was able to notice and label the increases in anxiety and practice using distress tolerance skills (e.g., cultivating willingness and radical acceptance, as described in the DBT treatment manual; Linehan, 1993) to manage the discomfort while attending to her work responsibilities. Carrie was very pleased to have new tools to identify and cope with uncomfortable emotions, and was also able to generate practical problem-solving strategies to ensure adequate food intake while at work.

Carrie became increasingly skilled in the use of mindfulness skills (observing and describing events, thoughts, and feelings in a nonjudgmental fashion) in combination with attempts to reconnect with valued domains (e.g., social relationships, work, and school). She also came to recognize that her persistent negative self-talk—that is, negative self-judgments regarding her appearance, performance as a mother and wife, and lack of accomplishment (e.g., "I'm disgusting," "I'm getting bigger," "I'm a bad mother," "I should do more")—was affecting her mood and behavior on a daily basis. As she became increasingly aware of the pervasiveness of her negative self-statements, Carrie observed that her son was evidencing a similar lack of confidence and self-esteem, and concluded that

she was modeling these behaviors for him. Without trying to dampen or change these thoughts, she was able to self-monitor negative judgments and comparisons, and became increasingly attentive to their negative effect on her mood, assertiveness, and interactions with others. Consistent with the EABT emphasis on valued activities and relationships, Carrie and her therapist used her concern regarding what she was modeling for her son and her desire to help him overcome his difficulties to facilitate her recognition that her thoughts need not affect her behavior, and she was increasingly able to model self-confident behavior.

Body image dissatisfaction and distortion were additional intervention targets. Because Carrie's body image was a source of considerable distress and a trigger for ED behaviors, it was addressed consistently throughout treatment using a variety of mindfulness, distress tolerance, and acceptance skills. For example, Carrie's body image–related distress increased in response to a planned vacation and the perceived necessity of wearing more revealing, close-fitting clothes (e.g., bathing suits, shorts); thus, Carrie and her therapist agreed to add an exposure intervention as a means of helping her to tolerate anxiety related to body image in the service of enjoying a vacation with her husband and sons. Carrie participated in developing a hierarchy of anxiety-inducing clothing ranging from sleeveless tops at the lower end of the hierarchy to two-piece bathing suits at the top (see Figure 6.4 for a copy of Carrie's exposure hierarchy). During the period prior to the vacation Carrie gradually progressed through the hierarchy, completing exposures both at home and in session and learning to tolerate and accept the progressive increases in anxiety without resorting to extreme dietary restraint, excessive exercise, or self-induced vomiting. Carrie deemed the exposure practice successful, although she lost 1.8 pounds over the period of 6–8 weeks. Nevertheless, she did not resort to severe restriction or experience a marked weight loss during this time. Moreover, Carrie reported subsequently that body image concerns did not influence her mood or behavior while on vacation, and she was able to wear clothing that previously would have caused distress and preoccupation with her appearance. Carrie's weight at the session following the 2-week vacation had increased by 3.4 pounds and represented her highest nonpregnancy adult weight.

Phase III

Unfortunately, however, in the week after her return from vacation Carrie lost 6.2 pounds. Over the course of the remaining seven sessions, half of which occurred at 2-week intervals as per Phase III of the EABT protocol, Carrie was able to restore a positive weight gain trajectory; however, she succeeded in gaining only 2 pounds. The weight loss occurred in conjunction with a suicide attempt by a family member and substantial changes to her daily routine. Although Carrie denied intentionally restricting her

Valued domain: *Social relationships/family.*	
Immediate goal: *Enjoy beach vacation with husband and sons without perseverating on body shape/weight or avoiding (e.g., staying in condo while family goes to the beach).*	
Hierarchy of exposures:	
Fear rating	**Item of clothing**
0	Sandals
0	Cover-up dress
2	Capri pants/long pants
2	Tank tops/T-shirts
4	Sundress
4	Skirts—knee length or flowy
6	Gym shorts—elastic waist/loose fit
6–7	Last summer's shorter, open-back, dressier tank tops
8	Miniskirts, jeans
9	Jean shorts/khaki shorts
10	Bathing suit—two-piece

FIGURE 6.4. Carrie's exposure hierarchy.

intake, she did acknowledge being less focused on eating well and less attentive to her emotions. The inability to regain to her previously achieved weight suggests continued, but not unexpected, difficulty eating and gaining weight in the context of intense and uncomfortable affect.

Nevertheless, Carrie was pleased with her treatment experience. As she prepared for discharge, Carrie and her therapist reviewed her progress including increased awareness of emotional states and her ability to tolerate associated discomfort, effective use of skills, improved body image and self-esteem, and weight gain. Carrie also identified situations that increased her vulnerability to relapse, especially those related to her marriage (e.g., pressure from her husband to "do more" around the house, intimate situations). Carrie was able to acknowledge her accomplishments and recognize her progress. Still, Carrie continued to endorse concerns about marital issues, and her therapist provided a referral to a marital therapist.

Objective Outcomes

Carrie completed study assessments conducted by a member of the research team who was not involved in her treatment before and after EABT, and

at 3- and 6-month follow-ups. Primary outcomes included weight gain and improvement in BMI pre- to posttreatment and at 3- and 6-month follow-ups. Carrie completed interviews and questionnaires to assess changes in ED symptoms, emotion avoidance, depressive and anxiety symptoms, and quality of life over the course of the study.

ED symptoms were measured using the Eating Disorder Examination (EDE-16.0D; Fairburn, Cooper, & O'Connor, 2008), a clinician-rated instrument that evaluates the severity of ED behaviors (e.g., binge eating, self-induced vomiting) and the cognitive correlates of disordered eating on four subscales (Restraint, Eating Concern, Shape Concern, and Weight Concern). For example, one of the items on the EDE Restraint scale asks, "Over the past four weeks have you tried to follow certain definite rules regarding your eating, for example, a calorie limit, preset quantities of food, or rules about what you should—or should not—eat or when you should eat?" At pretreatment, Carrie reported following dietary rules every day, whereas at posttreatment she denied having any strict dietary rules.

Emotion avoidance was assessed using the Acceptance and Action Questionnaire (AAQ; Hayes et al., 2004), a nine-item self-report measure of "experiential avoidance," that is, "the phenomenon that occurs when a person is unwilling to remain in contact with particular private experiences (e.g., bodily sensations, emotions, thoughts, memories, behavioral predispositions) and takes steps to alter the form or frequency of these events and the contexts that occasion them" (Hayes et al., 1996, p. 1154). For example, one of the items on the AAQ reads, "I'm not afraid of my feelings," to which Carrie responded "Seldom true" at pretreatment (indicating that she often feared her feelings) and "Almost always true" at posttreatment.

Depressive and anxiety symptoms were assessed using the Beck Depression Inventory–II (BDI-II; Beck, Steer, & Brown, 1996) and the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988), respectively, both 21-item self-report questionnaires. The BDI-II measures the severity of vegetative symptoms (e.g., sleep disturbances) and cognitive aspects of depression (e.g., feelings of worthlessness and guilt) during the past 2 weeks. For example, at pretreatment Carrie endorsed "I feel more worthless as compared to other people" on the BDI-II, but this decreased to "I do not feel I am worthless" at posttreatment. The BAI evaluates somatic aspects of anxiety (e.g., dizziness, heart pounding), focusing on the past 7 days.

Finally, quality of life was documented using the Eating Disorder Quality of Life Questionnaire (EDQOL; Engel et al., 2006), a 25-item self-report measure that evaluates the degree to which ED symptoms have interfered with functioning in four domains during the past 30 days: psychological, physical/cognitive, financial, and work/school. For instance, one of the psychological domain items asks, "How often has your eating disorder

TABLE 6.1. Changes in Study Outcomes from Pretreatment to 6-Month Follow-Up

Outcome	Pretreatment	Posttreatment	3 month follow-up	6 month follow-up
Weight (pounds)	113.6	119.2	112.0	117.4
Body mass index	18.1	19.0	17.8	18.7
EDE Global score[a]	3.0	1.7	2.3	2.4
BDI-II total score[a]	32	6	6	7
BAI total score[a]	28	2	11	6
AAQ total score[a]	46	34	27	38
EDQOL total score[a]	1.1	0.9	0.5	1.0

Note. EDE, Eating Disorder Examination; BDI-II, Beck Depression Inventory–II; BAI, Beck Anxiety Inventory; AAQ, Acceptance and Action Questionnaire (measure of emotion avoidance); EDQOL, Eating Disorder Quality of Life Scale.
[a] Higher scores indicate greater impairment.

made you feel odd, weird, or unusual?" to which Carrie replied "Often" at pretreatment and "Rarely" at posttreatment.

A summary of Carrie's research assessment results is provided in Table 6.1, and documents that she achieved a minimally adequate body weight, decreased depressive and anxiety symptoms and emotion avoidance, and improved quality of life during treatment.

DISCUSSION

In summary, we think EABT is a promising approach for the treatment of AN in adults. Strengths of the intervention include a theory-based model of AN vulnerability, the incorporation of evidence-supported strategies to decrease emotion avoidance and increase connection to valued activities, and integration of an individualized weight gain protocol designed to restore adequate nutrition and acceptable body weight. Nevertheless, more data are needed, and preliminary findings, though promising, do not suggest that EABT is superior to other interventions.

The case material presented in this chapter does, however, illustrate the potential utility of EABT, particularly the use of the personalized history to identify individual vulnerability factors, and the environmental and interpersonal context in which ED symptoms occur and persist. The personal history data also were pivotal in helping Carrie to understand the function of AN symptoms in helping her avoid distressing feelings and cope with adversity. Six-month follow-up data indicated that Carrie was able

to maintain improvements in body weight and ED symptoms, as well as symptoms of depression and anxiety.

We do not know why some adults with AN responded well to EABT, while others dropped out or were withdrawn from the intervention. None of the typical moderators of treatment outcome (e.g., age, duration of illness, restricting vs. binge-eating/purging subtype) were significantly associated with outcome, although this might have been a function of the small sample size in our case series. In addition, dropout occurred at multiple points during treatment, ranging from the first week to the 17th week. We suspect that some patients simply were not ready for the demands to increase emotional experiences while normalizing eating and gaining weight. Although the EABT therapists worked hard to help patients identify and focus on valued domains that were more important than the ED (or emotion avoidance), in some cases, this proved ineffective. In addition, some patients reported that they were unwilling to continue gaining weight after reaching a personally defined threshold for health (e.g., BMI > 18) and exited treatment at this point.

Identifying and intervening with treatment "nonresponders" is a significant challenge in working with adults with AN, many of whom have been ill for a very long time. If a clinician intervenes too early or aggressively, there is a risk that the patient might flee treatment altogether. Alternatively, there is little benefit to be had in watching a patient decline symptomatically even if he/she reports that therapy is helpful in other areas (e.g., psychosocial functioning). As we move forward with EABT, we are considering novel ways in which to define treatment nonresponse in an effort to determine when and how to intervene to increase treatment efficacy. For example, an adaptive study design might examine the utility of providing adjunctive treatment (e.g., therapy groups, meal support, medication) to EABT "nonresponders" using two definitions of nonresponse (e.g., one based on weight gain in the first 4 weeks of treatment and the other based on weight gain in the first 8 weeks of treatment). An adaptive study design also could be used to evaluate the utility of decreasing treatment intensity (vs. the standard EABT protocol) for treatment responders.

We remain impressed by the extent to which emotion avoidance is salient to individuals with AN. Regardless of whether they completed EABT, participants in our case series almost uniformly endorsed a desire to avoid emotional states and the thoughts and physical sensations that accompany them. Moreover, although "negative emotions" such as sadness, anger, and anxiety were most likely to be described as aversive, a significant minority of individuals reported a desire to avoid strong positive feelings (e.g., happiness), preferring to exist in a "neutral" emotional state. Interest in the link between emotions and AN symptoms has increased significantly since we first began developing EABT, and recent work suggests

several potential avenues for expanding or modifying the EABT model. For example, qualitative data indicate that specific emotions (e.g., sadness) may be linked to particular ED behaviors (e.g., extreme dietary restraint) (Espeset, Gulliksen, Nordbo, Skarderud, & Holte, 2012). Thus, patients may need to be helped to identify the emotions that are most likely to trigger certain ED symptoms, and develop skills to manage these feelings without resorting to anorexic behaviors.

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PART IV

Relational Approaches

HEATHER THOMPSON-BRENNER and ALICE LOWY

INTRODUCTION TO PART IV

Interpersonal problems are central to the developmental history, current experience, and symptom maintenance of eating disorders (EDs). Because this book focuses on evidence-based and empirically supported treatments, there are many interesting approaches that are not represented here. However, two relationally focused approaches to therapy—cognitive-behavioral couple therapy and interpersonal psychotherapy—have an extensive empirical support, and interesting, well-demonstrated clinical applications to EDs.[1] There are many important relational aspects of treatments discussed in other sections of the book, notably in the psychodynamic psychotherapy case (Chapter 5, by Lunn, Poulsen, & Daniel); in the introduction to Part V, "Integrative Approaches"; and in the dialectical behavior therapy (DBT) case (Chapter 11, by Segal, Ohler, Eneva, & Chen).

Psychodynamic/psychoanalytic theory has placed relational development at the center of development, including the development of emotional disorders. "Object relations" theory describes the centrality of the relationship to the primary caregiver to the development of positive emotional experience and later interpersonal relationships (e.g., Kernberg, 1984), and

[1]Another important example is the work of Giorgio Tasca regarding psychodynamic–interpersonal group therapy for binge-eating disorder (see Tasca et al., 2011; Tasca, Balfour, Presniak, & Bissada, 2012). The case presented in Tasca and colleagues (2011) is a particularly good comparison to the other cases in this book, and is highly recommended as a complement to the cases included here.

"attachment theory" research has traced the relationship between earlier and later interpersonal patterns and to psychotherapy outcome (see Levy, Ellison, Scott, & Bernecker, 2011). "Self psychology" focuses closely on the early mother–child relationship as the origin of an individual's sense of self and well-being (see Wolf, 2002). In the psychodynamic/psychoanalytic theory of treatment, the relationship between the patient and the therapist has a crucial role, as the therapist helps the patient develop insight through observing the characteristic ways the patient perceives and interacts with the therapist: the "transference." The case in this book focuses on the process of "mentalization," or the ability to make sense of one's own mind and the minds of others. The case material illustrates how the relationship between the therapist and the patient was central to the processes of developing improved mentalization, insight in general, and ED symptom remission. The therapist's ability to follow the patient carefully and gently without provoking the patient's sensitivity to criticism, the therapist's ability to tolerate her own confusion as well as the patient's confusion in the context of intense and at times irrational-seeming emotion, the therapist's interest in discussing and understanding aspects of all the patient's relationships including those that were disturbing (e.g., abusive, masochistic), and the actual quality and positive nature of the basic relationship between the patient and the therapist—all seem crucial to the patient's productive therapeutic experience, in contrast to less positive therapy experiences she described from the past.

The introduction to Part V, "Integrative Approaches," includes a description of the importance of the therapeutic alliance and essential therapist characteristics, regardless of psychotherapy approach. The extensive literature on "common factors" indicates that a positive therapeutic alliance includes basic patient–therapist agreement regarding the goals and tasks of therapy, as well as a generally positive emotional bond (Bordin, 1979). The large majority of research studies suggest that the early therapeutic alliance is positively associated with good treatment outcome (Horvath, Del Re, Fluckiger, & Symonds, 2011). Treatment studies also suggest that therapists must show basic levels of attention, empathy, and positive regard (Stricker, 2010). Even data from "e-therapies" suggest that the treatment alliance is related to outcome (Sucala et al., 2012). Therefore, it could be concluded that all effective psychotherapy includes a relational component.

Though the approaches described in this book have widely varying emphasis on relationships as a mechanism of change in emotional functioning, it is evident throughout the casebook that the relationship between the therapist and the patient is crucial to the therapy process. The cases in Chapter 7 (by Tanofsky-Kraff, Shomaker, Young, & Wilfley) and Chapter 8 (by Fischer, Kirby, Raney, Baucom, & Bulik) posit that changes in relational functioning may play a primary, causal role in recovery from EDs. In Chapter 1 (by Thompson-Brenner; exposure and response prevention for

AN) and Chapter 4 (by Darcy, Fitzpatrick, & Lock; cognitive remediation therapy), the theories pose a more distal role for relationships, as the central tasks of therapy are difficult behavioral and cognitive tasks. In the psychotherapy process transcripts from these cases, however, the crucial role of the therapy relationship is evident. The therapist in both cases is highly aware of the actions, feelings, and thoughts of the patient, helping her to articulate and manage difficult experiences, and helping her to remember how she has succeeded at similarly difficult tasks in the past.

In Part V, "Integrative Approaches," and particularly the case of DBT in Chapter 11 (by Segal, Ohler, Eneva, & Chen), the relationship between the therapist and patient in each case is crucial and complex. In the case of DBT, the authors explain the importance of an explicit contract between the therapist and patient, in which therapist and patient are considered equals. The therapist agrees to try to help the patient, and explicitly recognizes that the patient did not cause all her own problems; the patient agrees that getting better is her own responsibility. Crucially, the therapist and patient agree that the client "cannot fail" in treatment. These agreements regarding their relationship—which some patients and therapists return to many times in treatment—allow the relationship to survive some of the most difficult aspects of the intense connection between therapist and patient. This is shown when the patient has overwhelming negative affect and the defenses characteristic of borderline personality disorder—namely, the tendency to harshly blame herself or to harshly blame someone else for the pain that she feels. In the DBT case material, it is also manifestly clear how important the therapist's validation of the patient's feelings is to the connection that they feel, and the patient's willingness to work further to understand and change her behavior. The therapist's intrepid cheerleading is crucial to keeping the patient aware of her successes, avoid harsh self-criticism and a hopelessness state, and stay motivated to continue her hard work in therapy. Without the work of having established a solid and trusting relationship, these interpersonal interventions would not be effective, and the therapy would not be successful.

Relationship-Focused Psychotherapy and Eating Disorders

Clinicians and researchers have observed that patients with ED often experience significant strain in their interpersonal relationships, which often contributes to the development and maintenance of the ED. Individuals may view their ED as a means to cope with their interpersonal problems, as their own behaviors seem easier to control and can provide a sense of comfort when they feel isolated. A cycle may develop in these cases, as the interpersonal issues within the family can trigger a problematic eating behavior, which then isolates the patient and exacerbates the original

issues. Other research has documented the importance of attachment style to ED symptoms and treatment response (Tasca et al., 2011). Many clinicians support the utilization of relationship-focused psychotherapy, such as cognitive-behavioral couple therapy and interpersonal psychotherapy, as they specifically target the relational issues that interact with the psychological symptoms (see also Tasca et al., 2012).

Cognitive-Behavioral Couple Therapy

Cognitive-behavioral couple therapy was originally developed to address relationship problems through attention to the specific behavioral, cognitive, and affective factors that are associated with couples' distress (Baucom & Epstein, 1990). In recent years, however, clinical researchers have observed that clients with severe DSM-IV Axis I disorders—such as AN, posttraumatic stress disorder, and obsessive–compulsive disorder—experience problems in intimate relationships, and that relationship factors in turn influence the outcome of treatment for Axis I disorders (Boeding et al., 2013; Monson et al., 2012). As Chapter 8 (by Fischer, Kirby, Raney, Bulik, & Baucom) details, Uniting Couples in the Treatment of Anorexia Nervosa (UCAN) was developed for the dual purposes of promoting better relationship satisfaction in couples where one partner has AN, and for using the couple's relationship to support and promote recovery for the individual with AN.

Cognitive-behavioral couple therapy emphasizes the interaction and interplay of a couple's behaviors, cognitions, and affects. For example, the behavioral factor of *communication* interacts with the cognitive factor of the *inferences* that a partner draws from that communication (and other behavior), and affective factors such as *anger* influence the inferences drawn and the behavioral response (Baucom & Epstein, 1990; Epstein & Baucom, 2002). These interactions can be very complex. Therapists help couples identify five major types of cognitions regarding relationships/partners that have a strong influence on a couple's satisfaction: assumptions, standards, attributions, expectancies, and perceptions (Baucom & Epstein, 1990). The range of behaviors that affect marriage satisfaction—and therefore are the focus of cognitive-behavioral couple therapy—is very broad; however, communication is particularly emphasized, along with behaviors that are observed to lead to negative attributions, negative affects, or additional dysfunctional behavior (Epstein & Baucom, 2002). Cognitive-behavioral couple therapy attends to four particular aspects of affect in relationships: (1) positive and negative emotions toward the partner and relationship, (2) each individual's own awareness of his/her emotional state and the factors that caused the emotional state, (3) effective expression of emotions and empathic listening to emotional expression, and (4) types and intensities

of affect that can interfere with positive relational functioning (Baucom & Epstein, 1990; Baucom, Epstein, Kirby, & LaTaillade, 2010).

The exact mechanisms by which improved couple functioning may promote the recovery of one partner from AN are theoretical, but several possible pathways have been posited. As the authors describe in Chapter 8, an individual's desire to recover from AN may be lower than his/her partner's desire for him/her to recover, and therefore the partner's effective communication regarding the reasons to change may be beneficial. The authors posit that couples are able to promote recovery in two specific ways: by reducing the "cloud of secrecy" that surrounds AN and bringing symptoms into the open, and by promoting teamwork to solve specific problems in the process of recovery (see Chapter 8). The authors also suggest that couples' distress (common to couples where one partner has AN) serves as a source of stress that may exacerbate AN symptoms, and reducing that stress has a general positive effect on recovery. These principles are well illustrated in Chapter 8.

Interpersonal Psychotherapy

Interpersonal psychotherapy (IPT) is a time-limited approach that focuses on the interaction between an individual's emotional and relational functioning (see Weissman, Markowitz, & Klerman, 2007, for a fuller discussion of IPT). IPT was initially developed for patients with major depressive disorder; however, it has since been adopted for other disorders, as well. This approach is theoretically based on the concept that psychological symptoms have multiple genetic and environmental causes, and it is therefore important that patients understand how these symptoms interact with their interpersonal relationships. IPT specifically refers to psychological issues in an interpersonal context of development: (1) emotional, cognitive, and physical symptoms; (2) social and interpersonal factors in the person's life; and (3) enduring patterns within the person's personality. Rather than attempting to treat certain aspects of a patient's personality, IPT therapists recognize them as a reflection of the disorder itself and attempt to understand these patterns in relation to the patient's overall emotional and interpersonal functioning. Additionally, IPT focuses on the current problems in a patient's life rather than exploring underlying issues from the past. The main purpose of treatment is to encourage patients to cope with their interpersonal problems in the moment, which will consequently improve their overall affect and help them become more self-reliant. IPT specifically aims to reduce symptoms and help patients deal with aspects in their lives that are associated with these symptoms.

In IPT, the therapist initially works with the patient to identify a focal relational problem that most prominently contributes to the client's

symptoms, including complicated bereavement, interpersonal role disputes or transitions, and interpersonal deficits. Once they have targeted the issue, the therapist and patient establish a treatment contract, which concretely presents the formulation and direction of treatment. The therapist's main role is to help patients explore their own options, rather than providing solutions for them, as well as help them analyze how certain relationships may affect their symptoms. One of the most important objectives of IPT is analyzing and improving communication techniques with people who are important in the patient's life, as effective communication is often difficult for the patient and can greatly affect their general interpersonal skills. It is imperative that therapists provide their patients with psychoeducation about the disorder, so that the patients can understand their symptoms and work toward effective ways to cope in the future. Symptom assessment is maintained throughout treatment as a means to evaluate progress with both the therapist and the patient. Although IPT is a time-limited approach, it has proven to yield significant improvements in both interpersonal and emotional functioning with patients that remain engaged throughout treatment (see Weissman et al., 2007).

IPT has repeatedly demonstrated efficacy for treating bulimia nervosa and binge-eating disorder (see Wilson, Wilfley, Agras, & Bryson, 2010). Chapter 7 (by Tanofsky-Kraff, Shomaker, Young, & Wilfley) describes a new adaptation of IPT for girls at risk for obesity due to their binge eating. It is adapted both for the younger population and for use in the "at-risk" population. The chapter clearly describes the history of IPT for EDs and the adaptations for this group.

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CHAPTER 7

Interpersonal Psychotherapy for Eating Disorders and the Prevention of Excess Weight Gain

MARIAN TANOFSKY-KRAFF, LAUREN B. SHOMAKER, JAMI F. YOUNG, and DENISE E. WILFLEY

OVERVIEW OF INTERPERSONAL PSYCHOTHERAPY

"There's a boy in my grade who teases me about my weight. Sometimes it really bothers me. I yell at him—like, really yell at him—but he still keeps on annoying me."

"When I eat a lot, more than I should, usually it happens after school lets out, when I'm home and I'm feeling bored or irritated."

"I feel sad often, about something that happened at school or a fight with my mom, or my weight or how much I've eaten gets me down."

Interpersonal psychotherapy (IPT) is a brief, time-limited therapy that focuses on improving interpersonal functioning and, in turn, psychiatric symptoms (Freeman & Gil, 2004; Klerman, Weissman, Rounsaville, & Chevron, 1984). IPT's central mechanism involves relating psychiatric symptoms to interpersonal problem areas and then developing strategies for dealing with these problems. IPT was developed for the treatment of unipolar depression (Klerman et al., 1984). As befits its name, IPT is grounded

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Jane is a disguised/composite portrait.

in the hallmark interpersonal theories underscoring that interpersonal functioning is a critical component of psychological adjustment and well-being (Klerman et al., 1984). The interpersonal relationships relevant to IPT encompass an individual's entire social network, including his/her nuclear family, as well as the extended family, friendship network, school or work situation, and neighborhood or community context. Importantly, the IPT theoretical model acknowledges a two-way, bidirectional relationship between interpersonal functioning and psychosocial problems. Difficult interpersonal experiences are theorized to precipitate psychopathology, and conversely, psychopathology may result in impairments in one's ability to interact effectively with others (Klerman et al., 1984). IPT makes no assumptions about the causes of psychiatric problems, but assumes that the development and maintenance of psychiatric symptoms occur within a social and interpersonal context. The IPT model also assumes response to treatment is highly influenced by significant relationships.[1]

The Interpersonal Psychotherapy Model of Eating Disorders

A strong body of research evidence links difficulties in interpersonal functioning with eating disorders and eating disorder symptoms such as binge eating (Fairburn et al., 1998; Fairburn, Welch, Doll, Davies, & O'Connor, 1997; Wilfley, Wilson, & Agras, 2003). The interpersonal theoretical model of binge-eating posits that social problems are a key trigger of binge-eating episodes (Rieger et al., 2010). According to this framework, problematic interpersonal interactions generate negative feelings, which in turn precipitate out-of-control overeating as a coping mechanism to reduce negative affect—at least temporarily (Rieger et al., 2010). Ultimately, binge eating worsens negative mood and is often accompanied by feelings of guilt over eating, shame, and disgust with one's self (Haedt-Matt & Keel, 2011). As a result, a problematic cycle develops wherein binge eating worsens interpersonal problems by increasing social isolation and exacerbating difficulties in interpersonal relationships, which in turn promotes additional episodes of binge eating, thereby creating and/or maintaining the eating disorder (Rieger et al., 2010). IPT supports individuals in acknowledging and expressing painful affect, in an effort to assist them in developing more effective, alternative strategies for managing negative feelings without turning to food. IPT reduces eating disorder symptoms by supporting the use of healthy interpersonal skills that can replace maladaptive behaviors and promote a more positive self-image.

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[1]Extensive information on IPT for depressive disorders, detailing empirical background, theoretical foundation, and strategies and techniques, are fully described in a comprehensive book (see Weissman, Markowitz, & Klerman, 2000).

Evidence Base for Interpersonal Psychotherapy for Eating Disorders with Binge Eating

Bulimia Nervosa

Based on extant randomized controlled trials for the treatment of bulimia nervosa (BN) in adults, individual cognitive-behavioral therapy (CBT) is often considered the first-line treatment of choice for individuals with BN (Wilson, Grilo, & Vitousek, 2007). Although fewer studies have examined IPT for BN, existing data suggest that individual IPT is an efficacious treatment for BN as well. Currently, IPT is considered a viable alternative to CBT for the treatment of BN (Wilson et al., 2007). IPT is the only psychological treatment for BN that has demonstrated long-term outcomes that are comparable to those observed in CBT (Wilson & Shafran, 2005). All published controlled studies of IPT for BN have been conducted in comparison to CBT and in adult samples. In initial reports, CBT and IPT produced similar short- and long-term remission in binge eating among adults with BN (Fairburn et al., 1995; Fairburn, Peveler, Jones, Hope, & Doll, 1993). In a subsequent multisite study comparing CBT and IPT for the treatment of BN, Agras, Walsh, Fairburn, Wilson, and Kraemer (2000) found that at the termination of treatment, adults receiving CBT reported significantly higher rates of abstinence from binge eating and lower rates of purging compared with IPT. However, by 8- and 12-months following treatment, outcome no longer differed significantly; adults with BN who received CBT maintained their progress or slightly worsened, whereas individuals who received IPT experienced slight improvements in binge eating and purging over the long-term follow-up period.

The initial positive effect observed for CBT compared with IPT in this study may be partially explained by a lack of focus on eating disorder symptoms in the research version of IPT for BN. This version focused almost exclusively on remediation of interpersonal problems, with limited work explicitly linking such problems to eating disorder symptoms. In contrast, CBT for BN explicitly works with clients on altering negative cognitions about shape and weight and changing behaviors that promote binge eating and compensatory behaviors. In both treatment arms, individuals' expectations of improvement were positively associated with better outcomes (Constantino, Arnow, Blasey, & Agras, 2005). Interestingly, despite the slower response time of patients in IPT compared with CBT in the multisite study, those receiving IPT rated their treatment as more suitable and expected greater success than those receiving CBT, suggesting that the interpersonal focus of IPT may resonate with individuals with BN. As IPT iterations for BN evolve, incorporating a more explicit linkage between interpersonal problems and eating disorder symptoms during treatment delivery might be expected to produce a more rapid symptom response.

Binge-Eating Disorder

IPT delivered in a group format was developed for adults with binge-eating disorder (BED) by Wilfley and colleagues (1993; Wilfley, MacKenzie, Welch, Ayres, & Weissman, 2000). Clinicians are often struck by the chronically unfulfilling relationships among adults with BED, and research findings support the centrality of interpersonal problems for BED symptoms (Blomquist, Ansell, White, Masheb, & Grilo, 2012). Utilizing a group format for the delivery of IPT offers a number of unique therapeutic strategies for addressing interpersonal problems. Foremost, the group setting is viewed as a "live" social network—a milieu designed to decrease social isolation, support the formation of new relationships, and serve as a model for initiating and sustaining relationships outside of the therapeutic context (Wilfley, Frank, Welch, Spurrell, & Rounsaville, 1998). Individuals with BED commonly experience shame and self-stigmatization with respect to binge episodes and excess body weight, which very likely contribute to the maintenance of the disorder. Group therapy offers a radically altered social environment for individuals with BED, who tend to keep shameful eating behaviors hidden.

Data indicate that IPT is more effective at reducing binge eating than either a wait-list control (Wilfley et al., 1993) or a behavioral weight loss treatment (Wilson, Wilfley, Agras, & Bryson, 2010). Compared with CBT (group form or guided self-help), IPT has demonstrated similar significant reductions in binge eating and associated psychopathology in both the short term and long term (1–2 years) (Wilfley et al., 2002; Wilson et al., 2010). Interestingly, the IPT group demonstrated a pattern of improvements in eating disorder symptoms over a longer term (4-year) follow-up period, whereas the CBT group reported a worsening of symptoms, suggesting good maintenance of change for adults with BED who are treated with IPT (Hilbert et al., 2012). Notably, patients rate IPT as most acceptable relative to other modalities, and the dropout rate is significantly lower in IPT compared with the other interventions (Wilson et al., 2010). For patients initially presenting with high levels of disordered eating behaviors and cognitions and low levels of self-esteem, IPT produces greater reductions in binge episodes compared with either CBT guided self-help or behavioral weight loss (Wilson et al., 2010). Thus, IPT may be particularly efficacious for those with exacerbated psychopathology.

INTERPERSONAL PSYCHOTHERAPY FOR THE PREVENTION OF EXCESS WEIGHT GAIN AND EATING DISORDERS

Although most existing research on IPT for eating disorders has been conducted with adult samples, we believe that IPT may be particularly suitable

for overweight adolescents who experience eating disorder symptoms and are at elevated risk for the development of a full-syndrome eating disorder (Tanofsky-Kraff, Wilfley, et al., 2007). Children and teens with excess body weight experience frequent teasing, social isolation, stigmatization, social rejection, and compromised interpersonal functioning compared with normal-weight youth (Hayden-Wade et al., 2005; Pearce, Boergers, & Prinstein, 2002; Strauss & Pollack, 2003). Not surprisingly, overweight youth experience poorer social functioning and negative feelings about themselves regarding their body shape and weight than youth who are not overweight (Fallon et al., 2005; Schwimmer, Burwinkle, & Varni, 2003; Striegel-Moore, Silberstein, & Rodin, 1986).

The most prevalent eating disorder symptom among overweight youth is "loss of control" (LOC) eating, a term we and others have utilized to refer to both objective binge-eating episodes as well as subjective binge-eating episodes. Whereas objective binge eating refers to classic binges—overeating with LOC—subjective binge eating refers to eating characterized by feelings of lack of control over any amount of food (i.e., not necessarily unambiguously large). Overweight youth who report even infrequent episodes of LOC eating (e.g., one episode per month) appear to experience more difficulties on many various indicators of psychosocial functioning than overweight youth who do not experience this eating pattern (Tanofsky-Kraff, 2008). Compared with youth without LOC, youth with LOC are at much greater risk for developing partial- or full-syndrome BED over time (Tanofsky-Kraff et al., 2011), for gaining excessive body weight and fat as they grow (Tanofsky-Kraff et al., 2006; Tanofsky-Kraff, Yanovski, et al., 2009), and even for developing risk factors for cardiometabolic disease such as higher triglycerides and visceral body fat (Tanofsky-Kraff et al., 2012). Although the mechanisms linking LOC eating to these adverse weight and metabolic outcomes are not entirely understood, it is likely due to eating patterns characterized not only by LOC but by a pervasive pattern of overall overeating (Hilbert, Rief, Tuschen-Caffier, de Zwaan, & Czaja, 2009) and overconsumption of energy-dense, highly palatable sugary foods (Tanofsky-Kraff, McDuffie, et al., 2009). Thus, therapeutic interventions for reducing LOC in youth prior to the development of BED may prevent the development of the full-syndrome eating disorder, as well as obesity and its associated metabolic problems.

IPT for the prevention of excess weight gain (IPT-WG) is a group program designed to reduce LOC eating in adolescents in an effort to decrease its associated excess weight gain and to prevent the development of BED. Consistent with interpersonal theoretical explanations of binge eating, IPT-WG assumes that dysfunctional or inadequate interpersonal interactions trigger LOC eating episodes. Specifically, interpersonal problems are thought to lead to negative emotional states, which in turn prompt LOC eating in an attempt to cope with negative feelings. By improving

interpersonal problems among girls with LOC, IPT-WG seeks to reduce the negative emotions that facilitate LOC eating patterns and ultimately to decrease or eliminate LOC episodes.

Only one randomized controlled study on IPT-WG has been published. In this pilot study of 38 adolescent girls who were at risk for adult obesity, IPT-WG was both feasible and acceptable (Tanofsky-Kraff et al., 2010). These results also provided preliminary data that, compared with a standard-of-care health education program, IPT-WG produced greater reductions in LOC eating episodes and resulted in less than expected BMI growth 1 year following the intervention. A well-powered randomized controlled trial is currently under way examining the efficacy of IPT-WG for preventing excessive weight gain and BED in adolescent girls at risk for adult obesity and BED (*ClinicalTrials.gov* ID: NCT00680979).

CASE STUDY: JANE

Method

We describe here a completely disguised case example utilizing IPT-WG in Jane, a teenage girl at risk for adult obesity and BED. Jane is a 13-year-old, non-Hispanic black girl who was volunteering for a research study in which girls at risk for adult obesity and BED were randomly assigned to take part in a 12-week IPT-WG or a health education group program. The recruitment materials were directed at parents of girls who were concerned that their daughter was gaining too much weight. To be eligible for the study, all girls were ages 12–17 years, had a body mass index (BMI; kg/m^2) between the 75th and 97th percentiles for their age, and were in good general health other than possibly being overweight or obese. Also, to be included in the study, all girls reported at least one recent episode of LOC eating. Although many girls in the study had subthreshold psychiatric symptoms and endorsed concerns about their body shape and weight, any girl who met criteria for a full-syndrome psychiatric disorder was excluded from participating in the program and referred for treatment.

At an initial screening, Jane was interviewed about her eating and body shape and weight concerns, and potential mental health problems necessitating different treatment. Her weight, height, and percent body fat were measured. On a series of questionnaires, Jane described her mood, depressive symptoms, anxiety, interpersonal functioning, and eating behaviors. Her mother also reported on her own and her child's eating behavior and general adjustment. To monitor changes in Jane's psychosocial adjustment, LOC eating, and weight trajectory before and after the intervention, these assessments were repeated at the end of the group program, 6 months after the program, 1 year after the program, and 3 years after the program.

Jane was randomized to participate in the IPT-WG group program. IPT-WG blends and extends upon two previously developed IPT manuals: interpersonal psychotherapy—adolescent skills training (IPT-AST) developed for the prevention of depression (Young & Mufson, 2003), and group IPT for BED developed by Wilfley and colleagues (2000). IPT-WG shares a number of core features with each of these IPT adaptations and also contains some unique elements. Like both previous programs, IPT-WG is a brief, time-limited and manualized intervention delivered in a group setting. Whereas IPT-AST comprises eight group sessions and group IPT for BED involves 20 sessions, IPT-WG consists of 12 group sessions. In addition, and in concert with group IPT for BED, there are three individual sessions—an initial 1.5-hour individual session with the therapist to assess interpersonal problems and to establish goals for therapy, and two brief 15-minute individual sessions halfway through the therapy and at the termination of the therapy to reinforce work on goals. At the initial individual session, the rationale for the program is reviewed, rapport is built, and an "interpersonal inventory" is conducted with the adolescent to learn about her social network and any difficulties in important relationships, particularly difficulties that are linked to problems with negative mood and LOC eating. As in most adaptations of IPT, the adolescent's interpersonal problems are conceptualized into one of four problem areas: (1) interpersonal deficits, which apply to those individuals who are either socially isolated or who are involved in chronically unfulfilling relationships, that are frequently the result of poor social skills; (2) interpersonal role disputes, referring to conflicts with a significant other such as a parent, sibling, or peer, that emerge from differences in expectations about the relationship; (3) role transitions, which refer to difficulties associated with a change-in-life status such as a change in schools, graduation, moving, or parental divorce; and finally, (4) grief, which is identified when the onset of the symptoms is associated with either the recent or past loss of a person or a relationship. In contrast to adult IPT programs such as group IPT for BED, adolescent programs like IPT-AST, and consequently IPT-WG, infrequently encounter youth with grief, and furthermore, typically refer such youth to alternative therapies, particularly when the loss is of a core family member. Therapeutically, young people with such a major loss could be expected to have difficulties in groups of adolescents talking about problems with parents or siblings. Making use of this framework for defining one or more interpersonal problem areas, IPT-WG focuses on identifying and changing the maladaptive interpersonal context in which LOC eating has developed and been maintained.

Similar to all versions of IPT, group IPT-WG is divided into three phases: (1) initial, providing the rationale for the approach and developing rapport among group members; (2) middle, the work phase during which members share personal relationship experiences and learn new

ways of communicating; and (3) termination, preparing to say good-bye and planning for continued, future work on goals (Weissman et al., 2000). Throughout the entire course of the intervention, participants are encouraged to link their interactions and mood to their eating patterns.

Jane's IPT-WG group included five other girls, ages 12–17 years, in the group that shared similar characteristics of being at risk for adult obesity and BED. The group was facilitated by two therapists: a psychologist with a doctorate in child clinical psychology and a graduate student working on her doctorate in clinical psychology. Both leaders had considerable experience running groups and working with adolescents with eating and weight problems.

Results

Baseline, Pregroup Individual Assessment

At the baseline, pregroup assessment, Jane met criteria for inclusion in the trial. She was 13 years of age, endorsed LOC eating, and had a BMI at the 97th percentile relative to other girls her age. Other than being obese, Jane was physically healthy and had no major medical problems. Jane endorsed current elevated depressive symptoms—a total score of 24 on the Beck Depression Inventory (Beck, Steer, & Brown, 1996)—but she denied current or past major depressive disorder or any other psychiatric disorder currently or at any point in the past. She had no prior experience with therapy or psychotropic medication. Jane's mother's report of her daughter's internalizing and externalizing symptoms fell within the normal range on the Child Behavior Checklist (Achenbach & Elderbrock, 1991).

Jane's primary presenting problems centered upon LOC eating episodes and concerns about her weight. She reported experiencing her first LOC episode in childhood, at age 7, at the same time that she remembered becoming overweight. Notably, over the past 1–2 years as she entered early adolescence and transitioned to middle school, she started to experience LOC episodes with increasing frequency and began to experience distress over such episodes. Jane reported that she often snacked or ate too much in response to feeling down or depressed. On the Eating Disorder Examination (Fairburn & Cooper, 1993) interview, she described significant body weight and body shape dissatisfaction, endorsing feelings of shame and embarrassment when wearing clothes that showed her shape, and considerable distress when she became aware of her body, when viewing her image in a mirror, for example, or when showering, weighing herself, or shopping for clothes: "Shopping is always so depressing. My mom and I went to the mall on Saturday so that I could get some new shorts, and it was just so awful. I didn't want to try anything on, and my mom got so annoyed. I mean, she was annoying me! Nothing was going to fit me right, so I didn't

even see the point." Jane was not currently dieting but had made several brief, unsuccessful dieting attempts over the past 1–2 years by "counting calories," "eating diet foods," and "eating frozen meals." She denied current or past attempts to control her weight with unhealthy or extreme weight control behaviors.

Interpersonal Inventory

At a pregroup individual meeting with the therapists, Jane presented as friendly and engaged. She was talkative and eager to describe her relationships, her mood, and eating. Jane's social network included her immediate family. She came from an intact family, living with both biological parents and a younger sister, Mary, who was age 9. Jane reported a somewhat distant relationship with her father: "I'm not all that close to my dad. I mean, I like him. He works a lot. I just don't see him very often. We have things in common. Sometimes we go for a hike together, but we haven't done that in a while." Jane thought that her father somewhat favored her younger sister. She wished that she was closer to her father: "I don't really tell him things. Like, I *can* talk to him, but . . . it seems lately we don't talk very much." Jane described a conflictual relationship with her mother. Her mother, who herself was obese and described her own difficulties with binge eating at the baseline assessment, reportedly also worked long hours and was frequently tired and stressed. Jane said that she and her mother argued frequently. Most of the arguments with her mother involved conflicts over Jane wanting to do things with peers: "I just like to get out of the house. I get down when I sit around the house and my mom won't take me anywhere." She wished that her parents would let her spend more time with her friends. She reportedly was not close with her younger sister, Mary: "We don't get along very well. We fight about stupid stuff."

Jane listed three friends in her social network. Two friends were from elementary school and currently did not attend the same middle school as Jane. When Jane started middle school, her family relocated to a different neighborhood and she did not know many people at her new school. Jane was in seventh grade—the second year of middle school. She had had difficulty making new friends. She had one friend at school "who I can kind of talk to," but she did not get together with this friend outside of school very often. She did not see her friends from elementary school very often, and she wished that she could see them more frequently. According to Jane, "My mom *never* wants to take me anywhere. She says she's too tired and stuff. And I'm not allowed to go places on my own." Jane really enjoyed taking dance classes, for example, or walking around the mall or going to the movies, but reportedly she rarely was able to do these activities because of difficulties arranging for a parent to take her. Jane also experienced teasing and was the victim of some verbal bullying at school. There

was one boy in particular who said cruel things about her weight and her appearance. This year, he was in one or two of her classes and bothered her somewhat regularly.

At the initial pregroup individual meeting with Jane, the therapists introduced the IPT model:

> "For many kids that we work with, they tell us that they have a bad interaction with someone—like a fight with their mom or someone at school giving them a hard time about their weight—and they feel really badly about that, and then find themselves—at some point, it could be right away or later in the day—eating a lot of food, especially foods that aren't so healthy, and feeling like they can't control their eating. Is that something that you've ever experienced?"

JANE: Definitely. Like, this week my mom and I were arguing (*tearful*) and I found myself in the kitchen eating.

THERAPIST: Sounds like you know exactly what we're talking about. On that particular day, what time of day was it? What were you arguing about?

JANE: It was around 6:00 and my mom had just gotten home from work. I was asking her if I could get a ride to go to the mall with my friends, and she like blew up at me.

THERAPIST: What did she say?

JANE: She was all like "I'm tired, Jane, and I'm not going to talk with you about this right now." She never lets me go anywhere!

THERAPIST: What happened next? You said you found yourself in the kitchen.

JANE: (*Crying*) I was like, "WHATEVER," and went to the kitchen and ate some chips. I had like the entire bag.

THERAPIST: What else?

JANE: I also had a granola bar and some cookies.

THERAPIST: How were you feeling after the fight with your mom, before you started eating?

JANE: I was really angry.

THERAPIST: Any other feelings?

JANE: I also was a little depressed.

THERAPIST: I can see how that must have felt really bad. How about after you were done eating?

JANE: I don't know. I wasn't really paying attention.

THERAPIST: Sometimes kids tell us that they "zone out" when they're eating.

JANE: Yeah.

THERAPIST: One thing we're going work on in the group is to encourage you to pay attention to how you're feeling, especially when you notice that your eating feels out of control or when you have a fight with someone, like your mom. What happened after you were done eating? Did you and your mom ever talk again about going to the mall or about the fight?

JANE: No. That's usually what happens. We just go our separate ways. I just went to my room and listened to music, did my homework.

THERAPIST: It sounds like you and your mom had this fight about the mall, you felt angry and depressed, and then you found yourself eating a lot in a way that felt out of control. That's exactly the kind of thing we're going to be working on in the group.

Although Jane's interpersonal problems could be conceptualized as falling into a number of interpersonal problem areas, the therapists viewed her primary interpersonal problem area as a role dispute given the emphasis Jane placed on her relationship with her mother. However, the group leaders were cognizant that she was also struggling with a role transition because of the recent change to a new school and increasing isolation from peers, and due to conflict with parents around transitional issues, namely, independence. Jane and her parents, particularly her mother, were having difficulties communicating around conflicts and negotiating Jane's new role as a teenager. Jane desperately wanted to have more friends and to be able to spend time with peers outside of school. Her interactions with her parents were not effectively supporting this developmental transition. It was notable that although Jane experienced LOC eating as a child, it was not until conflicts with her mother escalated during early adolescence that the LOC became more frequent, increasingly out of control, and accompanied by negative affect and marked dissatisfaction with her appearance.

After a brief break to consider the information that Jane provided during the interpersonal inventory, the therapists reconvened with Jane and asked her what she thought of the following goals:

"It sounds like working out a better way to deal with conflicts with your mom would really help you to feel better and in turn, to decrease the times that your eating feels out of control. Is this something that you'd be willing to work on in the group? Do you think that that goal would be helpful?"

Jane agreed that working on finding better ways to communicate with her mother would be a helpful goal that she was willing to work on. As a second goal, the therapists offered:

> "It also sounds as though you would like to work on your friendships. Specifically, increasing the amount of time you spend with friends outside of school and also, forming some new friendships at school. The hope is that this would help you to get the support you need from people your own age; we expect that this would help to improve your mood and also lessen your loss of control eating. What do you think of that goal?"

Jane was enthusiastic about both goals. However, she was skeptical that her mom would allow her to spend more time with her friends. The therapists encouraged her to keep an open mind. They reiterated that the focus on the group program was to help her to improve her relationships so that she would feel better more of the time and be less likely to have LOC eating. The therapists also told Jane some guidelines for the group; namely, that the more sessions she attended and the more she participated in the group, the more she would get out of the program. Jane was also advised that there would be things to work on outside of the group—so-called "work at home," and that the more she practiced these assignments, the more likely she would see improvements in her relationships, her mood, and her eating.

Initial Phase of Group Intervention (Sessions 1–3)

The initial phase of group program involved three sessions. Jane attended all three of these sessions. In the initial sessions, introductions were made among the two therapists and the six teenage girls and guidelines for the group were established (e.g., confidentiality and its limitations, speaking to others respectfully, arriving on time to group). The girls were primarily early adolescents—ages 12–13—and they were very talkative. The therapists worked to encourage rapport while simultaneously keeping them focused on the intervention material. All six of the girls seemed eager to be in the group and to get to know one another. The therapists' observations of Jane in a group setting with other girls her age was clinically informative and revealed information that was not apparent in the pregroup individual meeting. While Jane appeared highly motivated to connect to the other girls in the group, she demonstrated some social deficits with her peers. For instance, she was so eager to participate that she frequently interrupted others to talk about herself. Her speech and laughter were occasionally louder than that of other group members. Also, the other girls did not always relate to Jane's interests. It became clear that Jane would benefit from learning more effective communication skills and ways of relating to others her age. In these initial, more structured sessions, the IPT rationale for the intervention was reviewed. Several semistructured activities were conducted with the group to provide psychoeducation on risk factors for excessive weight

gain; to review the interpersonal model connecting relationships, feelings, and LOC eating; to set the groundwork for communication analysis; and to learn key communication skills.

Taken from IPT-AST for the prevention of adolescent depression, communication analysis is the process of analyzing the "he said, she said" of an interpersonal exchange. Girls were taught that what they say (i.e., the content of their speech) and how they say it (e.g., their tone of voice) affects how the other person will respond and the course of the interpersonal interaction. Once the girls understood this concept, specific communication skills were introduced and explained as tools for altering the course of interactions with others in a way that they can get what they desire (within reason!) from a particular interaction. Example communication skills include using "I" statements to express feelings (e.g., "I feel really disappointed that you can't drive me to the mall" vs. "You never drive me to the mall. I hate you!"), choosing the right timing to have a conversation (i.e., when you and the other person have had time to calm down and think through your thoughts and feelings vs. in the heat of the moment), and putting yourself in the other person's shoes (i.e., understanding and communicating the other person's perspective in a conflict). In the initial phase, these concepts were taught generically and in the subsequent phases of the group, the girls were encouraged to apply these skills to working on their own individualized goals. Jane participated actively in these activities and readily grasped the material that was presented.

Middle Phase of Group Intervention (Sessions 4–9)

Beginning with Session 4, the group shifted to assisting group members in sharing recent interpersonal interactions from the past week that were relevant to their goals. Jane had excellent attendance, missing only one of the six middle phase sessions. During this phase, group members are encouraged to talk about conflicts or difficulties with others, the effect on their mood, and changes in their eating patterns. Role plays—acting out interactions that the girls had in their own environments in the group setting—are used for two purposes: (1) to review an interpersonal interaction that took place, both to see what may have gone wrong and also, perhaps what went well as the girls learn to improve their communication skills; and (2) to plan for future, more effective interactions by practicing how they might interact differently with someone, what they will say and how to say it.

Jane made progress on both of her goals. With respect to her first goal of improving communication skills with her mother, Jane made a number of important changes by applying the communication skills learned in the group. Foremost, choosing the right time to approach her mother was central to a successful interaction. With the feedback of other group members, Jane realized that talking to her mother right after she came home from

work—when her mother was very tired and worn out from the day—was unlikely to be effective. Instead, she attempted to talk to her mother on the weekend, to schedule a time to talk to her mom, and to ask her mother with advanced notice if she wanted her mother to take her somewhere as opposed to asking at a moment's notice. Jane also learned to pick a time to have a conversation when she could prepare herself to stay calm as opposed to getting very upset and worked up. Role-playing the conversation and how it was likely to unfold in the supportive context of the group helped Jane to feel prepared and less anxious in approaching her mother to ask for assistance with transportation or other things that she wanted. By using these skills, Jane reportedly succeeded in obtaining her mother's help to drive her places. This helped with her second goal of spending more time with friends as well.

Through the course of the middle phase of therapy, Jane disclosed to the group that her mother would sometimes make comments to Jane about her appearance during heated arguments. In one poignant session, she shared with the other girls: "Last week, my mom was yelling at me in the evening because I was watching TV and she said I needed to go to bed, but I hadn't finished my homework. My mom said, 'You are a horrible girl' (*crying*)."

Another group member: That is so mean.

THERAPIST: How did that make you feel, Jane, when your mom said that to you?

JANE: I felt really, really sad.

THERAPIST: Do you think your mom knows how much that hurt your feelings?

JANE: No. She was so mad that I hadn't gotten my homework done and was watching TV. *She was also probably annoyed because she was tired and wanted to go to bed and I needed her help with my homework*."

THERAPIST: Let's do a "communication analysis"—a play-by-play—of exactly what happened. You were watching TV, why don't we start there.

JANE: I was so tired when I got home from school, I just felt like watching TV—I was sort of dozing in and out on the couch.

THERAPIST: What did your mom say exactly? Let's act it out so we can really get a picture of what happened.

JANE: "Jane, you need to get up off the couch and go to bed." It was around 9:30, I think. And I said, "Well, I haven't done all my homework yet, I can't, and you need to help me with my math worksheet (*in a complaining and demanding tone of voice*)." And my mom said, "Jane,

this is ridiculous. You should not have turned the TV on before you got your homework done." She got really mad and was yelling at me some more.

THERAPIST: What was your mood like then? Your mom's mood? What was said next?

JANE: Well, I was pretty grumpy. I'm not the nicest person when I'm just waking up. My mom was like, "You could at least be pleasant if I have to help you with your work." And then I said, "It's not my fault—I hate school! This sucks." I was pretty much pouting. I also was exhausted so I looked and felt awful. I guess I was pretty cranky. After I said the part about "this sucks," that's when she said I was horrible.

THERAPIST: I can understand how that would be a very hurtful comment. Do you think she meant that you were acting in a horrible way—not really that you were a terrible person?

JANE: Yeah, probably. But that's not what it came out like at the time.

THERAPIST: How do you think she would respond if you were to tell her how much that hurt your feelings?

JANE: I don't know.

In the remainder of this particular session with Jane, the therapists worked with her—utilizing input from the other group members—to appreciate Jane's own contribution to the negative interpersonal exchange and to see the value in having a follow-up conversation with her mom about this event. Since Jane's conflicts with her mother frequently involved one or both of them saying hurtful things in the heat of the moment, with no follow-up, the therapists encouraged Jane to share her feelings with her mother in a way in which her mother was likely to be receptive. Using communication skills such as putting herself in the other person's shoes (e.g., "I'm sorry, mom, about the other night. I should have told you that I needed help with my work earlier, and I know you must have been feeling tired and ready to go to bed"), the group helped Jane to generate a script for talking to her mom, and the therapists asked Jane to try it out as "work at home." Jane was anxious about talking to her mother and put off the conversation for several weeks. The brief, individual midgroup meeting provided a perfect opportunity for the therapists to praise Jane on the work she had already accomplished and to encourage her to try out this additional conversation with her mother.

In the final session of the middle phase of the group, Jane reported that she had spoken to her mother. They had a very positive conversation in which Jane told her mom that the specific comment her mother had made that evening really hurt her feelings. Her mother responded positively

by telling Jane that she didn't really mean what she had said and that she wanted to work with Jane on fighting less often. Her mother didn't enjoy their fights and felt badly when things were said that neither of them really meant. Jane felt anxious before the interaction, but she felt really positive after the conversation. In contrast to times of conflict with her mother, Jane had no episodes of LOC eating after the exchange. The therapists praised Jane for the excellent work she had done in trying out a new way of communicating. Importantly, the therapists pointed out to Jane and the other group members that by communicating with her mother more positively, she felt better and felt more in control over her eating.

Jane's second goal was to spend more time with friends outside of school and to develop new friendships. The group setting was an excellent environment for Jane to practice more effective ways not only of seeking support from others but also in providing support to others her age—important interpersonal skills for developing the more intimate friendships that characterize adolescence. As the middle phase of the group progressed, Jane made considerable strides. Her interpersonal skills within the group context became increasingly more effective. For example, the therapists were able to redirect Jane to provide supportive feedback to others, drawing on how she could connect from her own experiences, as opposed to turning the conversation exclusively to focus on herself:

ALEXIS [another group member]: . . . So, I really want to visit my dad's house this weekend, but I also want to spend time with my friends. Stephanie invited me to spend the night at her house and we really want to go see that new Robert Pattinson movie together. My dad doesn't understand. He's going to get really, really mad if I tell him that I don't want to come over . . .

JANE: (*interrupting*) I want to see that movie! I liked the last one that he was in. Aaah . . . he is so cute.

THERAPIST: Jane, you've also had some difficulties talking to your parents about wanting to do things with a friend, rather than staying at home with the family. Putting yourself in Alexis's shoes, how do you imagine that she is feeling?

JANE: Stressed. You really want to go to the movie, but you're also worried that you're going to let your dad down.

ALEXIS: Exactly. I am really stressed.

THERAPIST: It often can be hard for families to adjust to teens wanting to spend more time with their friends—which is a very normal thing for someone your age. Let's talk about what you want your dad to know, Alexis, and how you might be able to communicate that to him in a way that he's most likely to understand.

Throughout the middle phase, Jane became increasingly better at commenting on others' experiences within the group in a way that offered emotional support to others and fostered connecting with other girls her age. The therapists pointed out this development out explicitly to Jane and to the group as a whole:

> "Part of becoming a teenager involves becoming closer to your friends. As a group you all have really become closer in here with each other and done a great job at sharing personal things with each other, as well as supporting each other. These are important skills that you can apply outside of the group as well to forming closer friendships."

In working on her second goal, the therapists, as well as the group as a whole, encouraged Jane both to make specific plans with her friends from elementary school whom she rarely saw, and also to work on becoming closer to one to two friends at her new middle school. Using the group context, the therapists helped Jane to role-play reaching out to a newer friend to make plans outside of school. During the middle phase of the group, Jane reported that she was successful at both of these "assignments." She went a dance class with one of her longtime friends, and she got together to see a movie with a newer friend.

Termination Phase of Group Intervention (Sessions 10–12)

The termination phase is characterized by reinforcing skills learned and progress made during the middle phase and preparing girls to continue to work on their goals after the program ends. Jane attended all three sessions during the termination phase. One of the key themes for Jane was that she could extend new communication skills practiced with her mother to conflicts at school. For example, through the course of the therapy program, Jane described a number of negative interactions with a boy who was teasing her about her weight at school. In response to this interpersonal stressor, Jane typically responded ineffectively by becoming very angry and yelling at the bully, which was serving to reinforce his teasing her. Learning to regulate her emotions more effectively, which she had learned by working on heated conflictual interactions with her mother, Jane learned that being less responsive or even ignoring the bully's comments served to diminish their frequency considerably. The therapists helped Jane to make these links, and the group members were invaluable in offering their own advice, as many of these girls had also dealt with bullying at least at some point in their lives. Also, although her relationship with her father was not an explicit goal, Jane had reported initially that she wished that she could spend more time with him. During the termination phase, Jane had begun to take an occasional hike on the weekends with her father, an activity that

she enjoyed immensely and which they had not done together in quite some time. Jane felt very positive about all of these changes.

The individual postgroup session provided an opportunity for the therapists to reinforce the themes from the termination phase. Specifically, the therapists praised Jane for her significant progress on her goals. They also pointed out that the goals are "works in progress" and that she will have to—and is fully capable of—continue to use the skills she learned to deal with conflicts with her mother and to develop and maintain closeness in her friendships. Another essential element of this individual session was to reinforce the connections between interpersonal relationships and eating behavior:

THERAPIST: How have the changes you've made in your relationships affected your eating patterns?

JANE: I think I eat more normally.

THERAPIST: What do you mean?

JANE: Well, since I've been feeling better—you know, less depressed, and also less mad—I don't eat because I feel those ways.

THERAPIST: That's really great. When you feel better, your eating is more healthy. And you've been feeling better because of the terrific work you've done over the past few months on improving how you get along with the important people in your life—like your mom—and also getting the support you need from people your own age, like finding time to spend with friends outside of school.

JANE: Yeah (*smiling*).

THERAPIST: You've done an incredible job in the group, and it is clear that you have developed the key skills that will serve you well in your future interactions and relationships.

Discussion

Jane returned for all follow-up assessments that were scheduled as part of the randomized controlled trial. The follow-up visits spanned from immediately after the group ended to 3 years following the intervention. Immediately following the 12-week group program, Jane reported a similar frequency of LOC eating episodes—approximately two per month over the past 3 months—relative to her baseline assessment. Yet, she no longer endorsed associated distress about these episodes. By 6 months after the intervention, her LOC episodes had decreased significantly, to only one in the previous 3 months. This low frequency of LOC eating, as well as the absence of associated distress about such eating episodes, persisted at the 1-year follow-up and even at a 3-year follow-up assessment. Jane

reported that she no longer felt distressed about her eating and no longer ate in response to depressive symptoms or stress. Likewise, in contrast to her reported elevated depressive symptoms prior to the intervention, she reported no depressive symptoms at the follow-up assessments, including through the final 3-year follow-up (Beck Depression Inventory total score of 3 or 4, indicative of no depression, at each follow-up).

After the intervention, Jane's body weight gain trajectory was significantly less than expected. She started out with a BMI at the 97th percentile for her age. Her weight gain stabilized such that she dropped to the 94th percentile, and she remained at the 94th percentile throughout the 3-year period following the intervention. Although Jane remained overweight, she was no longer in the obese category and it is important to point out that the intervention achieved its intended goal for body weight—the goal of IPT-WG is prevention of excessive weight gain, not weight loss. Indeed, an adolescent at the 97th percentile is likely to increase her BMI percentile over time. Also, quite notably, with this weight stabilization, Jane's body image improved dramatically. As described earlier, she started with very high concerns about body shape and weight. Following the intervention, immediately and even through 3 years later, she no longer reported body dissatisfaction: "I feel pretty good about myself. I'm happy with how I look."

Taken together, Jane illustrates a successful case example of IPT-WG both for the prevention of excessive weight gain and for the prevention of BED. Prior to participating in the intervention, Jane had many characteristics that would put her at particularly high risk for continuing to gain excessive weight with growth and for developing BED. She was obese, she reported frequent LOC eating episodes, and she experienced elevated depressive symptoms, which in some research studies, also appear to be a risk factor for excessive weight gain (Pine, Goldstein, Wolk, & Weissman, 2001; Roberts & Duong, 2013; Rofey et al., 2009) and for binge eating (Spoor et al., 2006). Jane also described interpersonal patterns that often characterize obese adults with BED. She had high levels of conflict with a parent, which frequently triggered depressed mood states, and in turn, LOC eating episodes. She also was socially isolated and had some difficulties maintaining and developing friendships. One can imagine a scenario in which these symptoms continued to persist, LOC episodes—rather than decreasing—increased in their frequency, and Jane continued to gain too much weight as she entered adolescence. In such a scenario, body dissatisfaction would almost certainly increase, and one might also anticipate that Jane would be at risk for developing exacerbated problems with her mood and depressive symptoms. From the framework of an interpersonal theoretical account of LOC eating, interpersonal problems, negative emotions, LOC eating, and the accompanying shame and low self-worth that accompany it would create a very problematic cycle. We believe that intervening

with teenagers such as Jane, before this cycle has a chance to proliferate, provides an optimal window for prevention of excessive weight gain and BED. Although preliminary evidence exists to support the efficacy of IPT-WG for decreasing LOC episodes and for preventing excessive weight gain (Tanofsky-Kraff et al., 2010), additional research is necessary before these positive findings can be generalized.

POTENTIAL CHALLENGES

In the illustrated case example of IPT-WG, the adolescent readily grasped and could relate to the interpersonal model of LOC eating. In our experience running IPT-WG groups with teenagers, a minority of adolescents have difficulty applying this model to their eating episodes. It is possible that these teens experience different triggers of LOC eating episodes. For example, youth will report that they overate with a sense of losing control at a birthday party or other social event in which they experienced positive affect preceding and following the eating episode; they deny any negative interpersonal stressor that triggered that problematic eating behavior. Although in some cases, this account may be valid, it has more often been our experience that once youth increase their awareness of their feelings when LOC episodes occur and begin to pay more attention to interpersonal events, they often do identify some social and affective discomfort of which they were not previously aware. Indeed, this fits with the "numbing out" experiences described by children with LOC episodes. Said differently, many youth report that they are not aware of their feelings, how much or what they are eating, or in some cases, even their surroundings, when LOC episodes occur (Tanofsky-Kraff, Goossens, et al., 2007). In cases in which youth are skeptical of the interpersonal model, often the first goal is to increase their awareness of feelings and interpersonal events when LOC eating occurs. In addition to working on linking eating and affect on a weekly basis as the intervention progresses, the group setting itself also provides a very nice opportunity for these teenagers to learn about the experience of LOC eating from their peers. Often by the middle to end of the program, youth who were initially skeptical of the interpersonal model can apply it to their experiences. At the same time, by focusing primarily on interpersonal relationships, even youth who cannot explicitly link their relationships or moods with their eating patterns have the potential to benefit. Almost all adolescents can identify some aspects of their relationships that they would like to improve.

Another therapeutic challenge of a completely different nature is when teenagers bring in interpersonal stressors that are particularly challenging. In the majority of cases in our samples of prevention-seeking youth (i.e.,

that exclude youth with full-syndrome major psychiatric problems), learning new interpersonal skills can lead to marked improvements in interactions with significant others, and in turn, these changes can significantly improve their mood and eating behavior. In the case example of Jane that we presented, both of her parents were very responsive to the attempts that Jane made at improving her interactions with them. However, some youth have interpersonal situations that are not as easily addressed in a short-term intervention. One example is a parent with a major mental illness who is unlikely to respond positively or effectively even if the teenager were to employ new interpersonal skills with perfection. In such cases, the work often turns to assisting the adolescent with identifying alternative sources of support in which he/she can have his/her needs met and accepting the limitations of the parent or significant person. Such work, understandably, may take longer than a brief, time-limited intervention permits. These cases may benefit from referrals for individual therapy upon the conclusion of the group program, particularly if limited improvement is observed in mood and/or LOC eating problems.

FUTURE RESEARCH DIRECTIONS

The IPT-WG program was developed originally for adolescents at risk for excessive weight gain and BED. We are currently adapting IPT for delivery to preadolescents using a family-based approach. This is an exciting opportunity to intervene with youth during middle childhood, when, for many children, episodes of LOC begin to emerge. Many of our adolescents in IPT-WG describe interpersonal problems with parents or other family members. Involving family members in the intervention itself provides a potential opportunity to practice parent–child skills "live" as opposed to the peer-to-peer role plays in IPT-WG. Although research has yet to explore the potential for IPT to contribute to weight loss among overweight youth at risk for BED, investigating IPT as an adjunct to behavioral weight loss treatment is a potential avenue for future study. Given the limited effectiveness of weight loss programs, developing targeted therapeutic approaches is essential. It is possible—and worthy of study—that IPT may be helpful in improving eating patterns and facilitating healthy weight loss among overweight and obese youth who experience LOC eating patterns.

CONCLUSIONS

IPT is an empirically supported therapeutic approach that resonates with clients with eating disorders, as well as therapists who treat such patients. Our preliminary clinical research endeavors suggest that IPT presents a

potentially valuable approach to helping youth who may be at risk for binge-eating problems and excessive weight gain. Further research, capitalizing on the foundation of effective treatments for eating disorders in adults, is needed with children and adolescents.

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CHAPTER 8

Integrating Couple-Based Interventions into the Treatment of Adult Anorexia Nervosa

A Case Example of UCAN

MELANIE S. FISCHER, JENNIFER S. KIRBY, THOMAS J. RANEY, DONALD H. BAUCOM, and CYNTHIA M. BULIK

> [Treatment has] really been a lifesaver. It helped me realize that other people were involved in this, and other people were feeling the effects of it, not just me. It took [the eating disorder] out of the center role, knowing who all it was hurting. And so now we communicate better, well, we are still kind of working in couple therapy. But I think it helped Steve separate the disease from me, and I really appreciated that. But, I guess basically in a word it just, it really, it's still there, but even now when my "evil twin" gets tweaked a little bit about things, I can see now what is at stake. And that keeps me from falling back into it. And I don't want that to ever happen again.
> —LAURA, about her experience of UCAN treatment with her husband, Steve

Family members of patients with anorexia nervosa (AN) find themselves in a challenging situation. They see their loved one suffer and face grave physical and psychological consequences of the disorder, yet patients are seemingly unable to recognize the seriousness of the illness and the low body weight and are ambivalent about recovery. In this context, families are often unsure of how to help. At the same time, treatment researchers developing approaches for adolescents with AN have long recognized that the family can be an important resource for recovery. In the past decade,

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Laura and Steve is a disguised/composite portrait.

family-based treatment, or the "Maudsley method," has received strong empirical support for adolescents with AN (Eisler et al., 1997; Eisler, Simic, Russell, & Dare, 2007; Lock, Couturier, & Agras, 2006; Lock, Le Grange, Agras, & Dare, 2001). Family-based treatment for adolescent AN does not prioritize the usual foci and methods of family therapy, but rather focuses strongly on empowering the parental figures to work together to refeed the underweight adolescent until independence can slowly be returned to the patient as recovery progresses (Lock et al., 2001).

Treatment of adults with AN—like treatments for adults with other disorders—has focused largely on individual therapy. However, the evidence base for treatment in adults with AN is weak, and effective treatment options remain limited (Berkman et al., 2006). At least two misconceptions have contributed to the general preference for individual therapy for adults with AN to date. First, a common belief is that individuals with AN do not enter into committed relationships, although empirical data suggest that this is not the case (Maxwell et al., 2011). Second, there is a misconception that AN is confined to the teenage years—a myth that has also been thoroughly debunked by several studies (Bulik et al., 1999; Heavey, Parker, Bhat, Crisp, & Gowers, 1989; Hoek & van Hoeken, 2003; Keith & Midlarsky, 2004). Furthermore, understandably, the usual models of family-based treatment—in which it is assumed that there are parental figures who should appropriately assume power and control within a family structure—are not developmentally appropriate for adults with AN (Bulik, Baucom, Kirby, & Pisetsky, 2011).

Given that AN strikes across the lifespan, and given that individuals with AN enter into relationships at a rate similar to that of individuals in the general population, it is essential to understand the interpersonal context of AN in adults and address it in treatment accordingly. Additionally, because the AN symptoms often include lack of recognition of the severity of illness and low weight, and ambivalence about recovery, it may be particularly important to include significant others who might support recovery and increase motivation to change (Bulik, Baucom, & Kirby, 2012b; Lock, 2002; Treasure, Gavan, Todd, & Schmidt, 2003). We have previously described the relationship context of AN and the difficulty that patients and partners face in various areas of relationship functioning in detail (Bulik, Baucom, & Kirby, 2012a; Bulik et al., 2011, 2012b); yet, a brief mention of several areas of relationship concern are worth noting. For example, in addition to disordered eating, a considerable number of patients with AN experience problems with sexual functioning and discomfort with affection (Pinheiro et al., 2010; Raboch & Faltus, 1991), significant levels of relationship distress (Van den Broucke, Vandereycken, & Vertommen, 1995a, 1995b; Woodside, Lackstrom, & Shekter-Wolfson, 2000), and more negative communication than nondistressed couples without AN (Van den Broucke et al., 1995a). In spite of these interpersonal complications, partners also have the potential

to be a strong source of support for individuals with AN. Consistent with this perspective, Tozzi, Sullivan, Fear, McKenzie, and Bulik (2003) found that among women recovered from AN, relationships were the most frequently cited factor contributing to recovery.

OVERVIEW OF UNITING COUPLES IN THE TREATMENT OF ANOREXIA NERVOSA

Given the interpersonal aspects of AN noted above, it is reasonable to explore the involvement of partners in treating adults with AN. Our treatment program, Uniting Couples in the Treatment of Anorexia Nervosa (UCAN; Bulik et al., 2011, 2012b), is a couple-based intervention that addresses the above challenges. UCAN integrates cognitive-behavioral therapy (CBT) for AN and cognitive-behavioral couple therapy (CBCT; Epstein & Baucom, 2002) in order to capitalize on supportive relationships within the family (i.e., the partner) in a developmentally appropriate fashion. UCAN is not designed to be the sole line of intervention; rather, it is offered as an augmentation treatment along with patient-focused individual CBT, nutrition counseling, and medication management, providing the multidisciplinary care that meets the needs of the patient given the severity and complexity of AN. CBCT targets relationship functioning by teaching partners communication and problem-solving skills, helping to enhance understanding of relationship interactions, and addressing emotions in an adaptive manner (Epstein & Baucom, 2002).

Therapists should have a good understanding of the model of relationship functioning in the CBCT model, including behavioral, emotional, and cognitive factors, and be able to elicit information from the couple accordingly to formulate a case conceptualization that incorporates the most important couple patterns, individual characteristics, and broader environment as they deal with AN. A cornerstone of CBCT in UCAN is communication skills training in emotional expressiveness and decision-making skills (for a more detailed description of communication training, see Epstein & Baucom, 2002). Therapists should also be familiar with techniques to heighten and contain emotions in session as needed, as a safe atmosphere will be critical for the couple to optimally benefit from UCAN. Interested readers may refer to Epstein and Baucom (2002) for a detailed discussion of CBCT, and Baucom, Epstein, Kirby, and LaTaillade (2010) for an introductory overview.

Preliminary results of our pilot study of UCAN are very promising in terms of weight gain and a low dropout rate (Bulik, Baucom, Kirby, & Pisetsky, 2012). The purpose of this chapter is to demonstrate possible mechanisms of change and core interventions in UCAN with a systematic

case study of the first couple that completed this treatment program, Laura and Steve. We propose that the effects of UCAN are due to treatment procedures facilitating three broad mechanisms of change—two focal to AN, and one addressing broader relationship functioning.

Mechanisms of Change Focal to Anorexia Nervosa

A common characteristic of AN in general and especially in a relationship context is the "cloud" of secrecy, deceit, and withdrawal surrounding the disorder. This can result from the patient's wish to (1) keep the partner unaware of the problem or the magnitude of eating-disordered behavior; (2) avoid pressure from the partner to make changes related to eating; or (3) avoid other situations that are often uncomfortable for individuals with AN, such as physical intimacy. Some partners encourage the patient to change eating-related behaviors and beliefs in spite of the patient's resistance, whereas other partners avoid and withdraw if they do not know what to do, thereby inadvertently supporting or exacerbating secrecy and withdrawal (Schmidt & Treasure, 2006). Therefore, *bringing AN out in the open to be addressed by the couple rather than being a solitary and secretive disorder* is a crucial mechanism of change employed in UCAN (mechanism 1).

Second, partners are brought into the treatment in a very specific way. UCAN interventions *help the couple to work as a team in a variety of ways to address AN* (mechanism 2). For example, this could involve planning meals together, deciding what they will do when the patient has an urge to purge, or agreeing upon ways to handle family gatherings such as holiday meals, which are typically difficult for the patient. Having a partner on one's side can provide the support and confidence to endure difficult times and make necessary changes.

Mechanism of Change Focusing on the Couple's Broader Relationship

As we have described in more detail elsewhere (Bulik et al., 2011), relationship difficulties can serve as a chronic stressor further exacerbating AN, and AN can be a stressor negatively impacting relationship quality. With most psychological disorders, living with a high level of stress likely exacerbates the disorder and contributes to relapse (Whisman & Baucom, 2012), and characteristics of distressed relationships such as criticism and hostility have repeatedly been shown to negatively impact individual functioning and relapse in the expressed emotion literature (Hedlund, Fichter, Quadflieg, & Brandl, 2003; Hooley, 2007; Le Grange, Eisler, Dare, & Hodes, 1992). Therefore, we address overall relationship functioning within UCAN when

needed in order *to reduce relationship distress as a chronic source of stress for the patient in order to facilitate recovery from AN* (mechanism 3).

UCAN TREATMENT PROCEDURES

A detailed description of all treatment procedures and interventions is beyond the scope of this chapter and can be found elsewhere (Bulik et al., 2011, 2012b). Therefore, we focus on the major interventions and how they relate to the mechanisms of change, in order to provide a context for the case study and illustrations discussed below.

Psychoeducation

In the first phase of treatment, psychoeducation about AN and the recovery process is discussed with the couple tailored to the specifics of each patient. The therapist provides information about the core symptoms of AN such as fear of weight gain and restricting, and the patient and partner are asked to each share their experiences of the symptoms. This intervention serves several purposes. First, partners often know very little about AN, and it is difficult for the couple to work together if they lack a shared understanding of the disorder and its role in the relationship. For the patient, seeing the partner learn about the disorder and feeling understood can relieve isolation. Psychoeducation also can help to externalize the disorder from being an inherent part of the patient, allowing the couple to work together as a team against a common concern. Psychoeducation is a crucial step in beginning to bring AN out in the open (mechanism 1) and sets the stage for the partner to be a well-informed, sensitive member of the recovery team (mechanism 2). Furthermore, if the partner is able to correctly attribute symptoms and behaviors to AN (rather than an inherent trait of the patient), this may increase understanding, decrease relationship distress in the partner, and reduce conflict, criticism, and hostility (mechanism 3).

In Laura and Steve's case, there had been many discussions about Laura's AN, with many of these conversations leaving both partners frustrated. For example, Steve did not understand how Laura could be so dissatisfied with her body and see herself as overweight when she was (objectively) at a healthy weight for her body. He stated that he "just didn't get it," and Laura strongly agreed. Discussion of psychoeducation concerning negative body image, including body distortion and body dissatisfaction, proved very helpful for both partners. Steve discussed this often confusing AN symptom with the therapist and received validation of his confusion, freeing him to be more flexible in his thinking and allowing him to understand,

if not agree with, a perplexing AN symptom. Laura was taken out of the role of convincing Steve she really did experience her body this way—a positive change for both partners.

Communication Training

Couples are taught communication skills to help them share their thoughts and feelings with each other, along with strategies for making effective decisions. These are skills that are taught to a broad range of couples in general couple therapy (Epstein & Baucom, 2002), but in the current context, the application of these skills involves couples' conversations about the eating disorder (ED). More open, skillful communication about AN between the partners counters secrecy surrounding AN (mechanism 1), enables the couple to work together more effectively to address AN-related issues as a team (mechanism 2), and may also contribute to improvements in the couple's overall relationship quality (mechanism 3). Discussing these issues related to AN helps the partner understand the patient's experience better and builds empathy. It is crucial that partners learn to respond in a nonpunishing manner even if what they hear is difficult to understand or relate to, in order to create a safe, reinforcing environment for the patient to talk about his/her experiences. This can be particularly difficult for couples in UCAN, as their experiences and perceptions of reality can differ so drastically. In the case of Laura and Steve, this was a significant source of conflict for the couple. Steve viewed Laura as "beautiful" and would frequently tell her so. Laura would experience these comments as Steve being wrong or dishonest with her, which led her to discount his compliments and left both partners feeling frustrated and misunderstood.

Addressing Eating-Disordered Behaviors

A substantial proportion of the treatment is spent helping the couple to address eating-disordered behavior in a practical way. The partner helps to arrange the environment for healthful eating, exercise, and other relevant behavioral patterns, such as planning eating together, addressing concerns around eating in public, and moving from unhelpful couple interaction patterns (e.g., partner trying to monitor and control patient's eating behaviors) toward more appropriate strategies (e.g., problem solving together around how the couple will respond if the partner notices ED behaviors). For example, Laura and Steve worked together to decide whether to reintroduce "binge foods" into the house so that Laura could increase her tolerance of being around these foods without binge eating.

Overall, maximizing the couple's teamwork (mechanism 2) provides the support for the patient to continue with treatment in the face of difficult

and distressing treatment procedures. The partner learns how to support the patient during frightening challenges but also holds the patient accountable. The commitment and support of the partner may help some patients to traverse periods of intense ambivalence that otherwise can lead to dropping out of treatment.

Discussing Body Image Concerns

Individuals with AN often have distorted views of their bodies, such as being convinced that they are significantly overweight even when medically underweight. Such distorted views are among the most difficult symptoms of AN for partners to understand. Within UCAN, partners learn how to "agree to disagree," rather than trying to convince the patient that he/she is not overweight, which can create a wedge between the partners. Eventually, the patient can learn to express body image concerns and receive emotional support from the partner during these times of distress (mechanisms 1, 2, and 3).

Sex and Affection

Couples' sexual relationships and affection are often areas of significant difficulty when AN is present. For the patient, body dissatisfaction can lead to feelings of shame, disgust, and discomfort with being touched, which can be further exacerbated by problems in sexual functioning secondary to malnutrition. Partners may feel rejected and not understand why the patient is withdrawing from sexual intimacy and physical affection. Addressing these difficulties and working toward a mutually satisfying physical and sexual relationship, UCAN not only targets improved relationship satisfaction (mechanism 3) but also serves as another avenue to counter the pattern of withdrawal and isolation around AN (mechanism 1).

Relapse Prevention

In the final sessions of treatment, the therapist and couple discuss what to expect for recovery, remaining areas that need to be addressed, and how the couple will continue to work on the areas described above as a team. What is unique in this context is that these discussions explore possible slips and relapses focal to (1) the patient's eating-disordered behaviors and related symptoms, as well as (2) the couple's approach to addressing the disorder. Thus, the couple might address how they will discuss their concerns if the patient returns to restricted eating, rather than avoiding the issues as a couple, which they did in the past. For example, Laura and Steve discussed how they would handle situations in which Steve suspects that

the ED is driving particular behaviors (e.g., wanting to exercise), but Laura perceives the behavior to be healthy.

Below is a description of one couple that received UCAN, Laura and Steve, along with a discussion of how the proposed mechanisms of change were incorporated into this couple's treatment.

CASE STUDY: LAURA AND STEVE

Method

Participants

THERAPIST

Dr. Kirby, a Caucasian 32-year-old female clinical psychologist, was the UCAN therapist for this couple. Dr. Kirby had an extensive background in couple therapy and individual psychopathology, having worked closely for over 10 years with Dr. Baucom, one of the coauthors on this paper and an expert in couple therapy. Prior to her participation in this investigation, Dr. Kirby received additional training in the treatment of EDs and AN from Dr. Bulik, a coauthor on this paper and an established clinician and researcher in this domain.

UCAN COUPLE

Laura and Steve presented for treatment, eager for help with Laura's ED. Both partners were Caucasian, college educated, and worked as professionals, with Laura being in her early 40s and Steve in his late 30s. Laura was short in stature, which contrasted notably with Steve's much taller, larger body type. Both partners were warm, friendly, and talkative. They had been married for 15 years, had two children, and been together for nearly 20 years when they began UCAN treatment. They were very committed to each other and to raising their children. Despite the love and commitment they felt toward one another, they described struggling to connect emotionally and to refrain from arguing about a range of domains, most frequently Laura's ED and managing the demands of raising their children, taking care of the home, and their busy work schedules. These arguments would often involve raising their voices and making hurtful criticisms and judgments. Laura and Steve found this pattern very distressing as it contrasted greatly with their personal values of creating a loving, positive environment for their family. Apart from arguments about overt ED symptoms such as restricting and binge eating, Laura and Steve had never talked about some of the more internal, private experiences Laura had surrounding the ED, such as the extent of her body dissatisfaction and shame about her other

ED-related behaviors. This often left the couple feeling distant from each other, and Steve struggled greatly to understand why Laura could not simply quit her eating-disordered behavior.

Laura presented to the UCAN treatment trial after undergoing weight restoration in a variety of treatment programs for AN of the binge–purge subtype, including residential treatment. Each of these treatments was disruptive to the family with Steve having to take on a full load of parenting and caregiving tasks alongside his full-time employment. The children feared for their mother's life, never knowing whether she would return from the hospital alive. Steve had been supportive of her recovery along the way, but he struggled with each slip and relapse because he was afraid that they were "going back to square one" or that "treatment isn't working." The costs of these various traditional treatments placed huge financial pressure on the family that would lead to fights and make Laura feel selfish about getting help and being unemployed. Laura often recalled how wrenching it felt to leave her boys when she was being admitted to treat a problem that she felt she brought on herself, and that feeling "it's all my fault" magnified her sense of guilt and ever-present shame. Throughout this process, her husband's efforts to be supportive, while well intentioned, left her feeling even more alone in her disorder.

When she started UCAN, although weight restored, Laura continued to experience urges to restrict and self-harm, significant body dissatisfaction, and general low self-esteem. She also reported almost daily experiences of loss of control over eating (subjective binge episodes) in the past month, which was very distressing to her. Prior to her enrollment in UCAN, Laura had also received individual CBT, followed by group dialectical behavior therapy. She was monitored for 5 years by a psychiatrist, and at admission into this study, she was taking Lamictal (lamotrigine), Wellbutrin XL (bupropion hydrochloride, extended release), Zoloft (sertraline), and Focalin XR (dexmethylphenidate hydrochloride, extended release). She continued with individual CBT and outpatient psychiatric care while participating in the UCAN couple treatment.

Procedure

ASSESSMENT AND TREATMENT

After the couple consented to treatment, they were assessed by trained clinicians who were not part of the treatment team, using structured clinical interviews and self-report measures. Assessments took place prior to treatment, at the end of treatment, and at follow-up 3 months after the treatment. The couple received 20 conjoint UCAN treatment sessions, each lasting 60–75 minutes. All sessions were audio- and videotaped for study and supervision purposes. Dr. Baucom reviewed all sessions, which were

then discussed in a weekly group supervision context, including Drs. Kirby, Baucom, and Bulik, along with other staff members. After treatment and follow-up were completed, Laura and Steve were contacted by Dr. Bulik, who explained the purpose and content of the current case study, and both partners consented to the use of their data and session recordings for this case study.

SELECTION OF VERBATIM MATERIALS

Session excerpts were selected to demonstrate core interventions and proposed mechanisms of change after a review of treatment documentation and audio/video recordings of the sessions. Sessions were transcribed by an undergraduate research assistant and checked for accuracy by a clinical psychology graduate student (M. F.).

ANALYSES

When adequate information was available, clinically significant change analyses were applied as described by Jacobson and Truax (1991). Clinically meaningful change was defined by crossover from the clinical into the normal range (cutoff point *c*; Jacobson & Truax, 1991). The reliable change index (RC; Jacobson & Truax, 1991) was calculated if possible; the RC indicated whether change is beyond what would be expected by chance based on error in measurement. If cutoffs and the RC could not be calculated due to a lack of psychometric studies providing norms for a given scale, descriptive data for a qualitative comparison are provided. Detailed information regarding what samples from the literature were employed in calculating clinically significant change and reliable change are available from the authors.

Measures

EATING DISORDER SYMPTOMS

The Eating Disorder Examination (EDE; Fairburn, Cooper, & O'Connor, 2008) is a standardized interview assessment used to assess ED pathology and establish a diagnosis. The EDE provides a global score as well as scores on four subscales: Dietary Restraint, Eating Concern, Shape Concern, and Weight Concern. The interview assesses a wide array of ED behaviors such as restricting, binge eating, and purging, as well as frequency or intensity of psychological symptoms such as fear of weight gain, feeling fat, importance of shape and weight for self-evaluation, guilt about eating, and discomfort with seeing one's own body.

RELATIONSHIP MEASURES

Self-report measures were used to assess global relationship satisfaction as well as specific aspects of relationship functioning, such as sexual satisfaction or specific communication behaviors known to be associated with relationship adjustment. The goal was to obtain a comprehensive picture of different aspects of the couple's relationship, including domains that are particularly important and related to AN (e.g., sexual functioning). The Dyadic Adjustment Scale–4 (DAS-4; Sabourin, Valois, & Lussier, 2005) is a widely used valid and reliable measure of relationship satisfaction, and is a useful measure to detect changes in relationship satisfaction over the course of treatment. A version of the Brief Index of Sexual Functioning (BISF; Mazer, Leiblum, & Rosen, 2000; Taylor, Rosen, & Leiblum, 1994), revised for the purpose of our treatment outcome study (R-BISF), was used to measure the frequency of sexual thoughts/desire and activity, arousal, pleasure during sexual activity, and problems affecting sexual functioning in both partners.

Aspects of communication behaviors were assessed with both self-report and observational measures. The Problem-Solving Communication subscale of the Marital Satisfaction Inventory Revised (MSI-R; Snyder, 1997) was used to assess self-reported quality with this type of communication. Given that helping the couple to work as a team against AN is a major goal in UCAN, the couple's satisfaction with their ability to problem solve together was an important construct to assess. While self-report measures provide important information, it was also of interest whether observable communication behaviors would shift. The Couples Interaction Rating System (CIRS; Heavey, Gill, & Christensen, 2002) is an observational coding system assessing whether partners engage, avoid, or withdraw, accept, and attempt to influence each other, based on 10-minute conversations the couple completed at each assessment point. For these videotaped interactions, the couple was asked to share their thoughts and feelings about an aspect of the patient's AN. The CIRS allows one to compute total demand and withdraw scores.

TREATMENT EVALUATION FROM THE COUPLE'S PERSPECTIVE

The couple completed a 10-item service evaluation questionnaire designed for our investigation at the postassessment. Responses are made on a 4-point Likert scale in response to questions such as "How would you rate the quality of UCAN?" and "To what degree did UCAN help you and your partner support each other through the anorexia nervosa experience?" In addition, we have included verbatim transcripts of the couple speaking about their experience with UCAN, which will be used to illustrate the couple's perspective.

Results

Discussion of Treatment for Laura and Steve

COUPLE PRESENTING COMPLAINTS

At the outset of UCAN, Laura and Steve described experiencing a number of challenges relative to Laura's AN. More specifically, Steve reported that not being able to "control" the disease or the treatment was very difficult for him because he was a "fixer." Despite his extensive efforts, he could not help Laura to see how wonderful and beautiful she is. He described "hating the disease" and, as a result, lashing out at Laura due to his frustration that she was not improving quickly enough. Laura reported that she knew Steve thought highly of her, but his glowing evaluations of her did not conform to her reality; therefore, she did not trust his expressions toward her. They also had extensive financial difficulties due, in part, to Laura's AN treatment and recent loss of employment secondary to AN. More broadly, the couple reported notable difficulty in communicating effectively about Laura's AN.

INITIAL PHASE OF UCAN TREATMENT

Early treatment work with Laura and Steve included a number of treatment goals: (1) ensuring the couple had a consistent and accurate understanding of AN, its treatment and recovery process, and both partners' personal experience of the disorder; (2) building the couple's understanding of how they interacted adaptively and maladaptively around Laura's AN; (3) enhancing the couple's communication patterns both in sharing thoughts and feelings and decision-making domains; and (4) helping the couple begin to use these enhanced communication skills around their experience of Laura's AN.

The early treatment goals described above reflect the proposed central mechanisms and key interventions of the UCAN treatment. Initial UCAN sessions were spent assessing Laura's AN-related thoughts, feelings, and behaviors, along with her overall low self-worth. In addition, clear psychoeducation detailing the full array of AN symptoms that Laura experienced (e.g., restricting, binge eating, purging, self-harm, body image distortion, visiting pro-ana websites, ritualistic eating) and the variable nature of the course, treatment, and recovery process from AN were presented in a manner that engaged both partners and addressed Steve's concerns that Laura was not progressing quickly enough. By providing this information to the couple jointly and engaging in shared dialogue, a safer context was created for Laura to disclose her AN-related experiences and for Steve to more effectively understand Laura's struggles. In this way, detailed and tailored psychoeducation helped to bring Laura's AN out of "hiding" (mechanism

1) and provided Steve with a better appreciation of the breadth of AN-related symptoms. This set the stage for them to work more effectively as a team in the UCAN treatment (mechanism 2).

COMMUNICATION TRAINING

To bolster the couple's ability to work as a team (mechanism 2) and have a more satisfying relationship overall (mechanism 3), the next phase of UCAN treatment addressed the couple's communication. These sessions introduced the couple to well-established communication guidelines regarding (1) how to be open and share their emotional experiences with each other in a subjective, effective manner, as well as how to listen actively to each other; and (2) how to make decisions effectively as a team (Epstein & Baucom, 2002). The therapist worked hard to help Laura share her feelings more freely and to assist Steve in accepting and trusting Laura's disclosures—communication strategies that were quite challenging for both of them. The following transcript reflects one of Laura and Steve's early, in-session discussions of Laura's struggles stemming from AN and illustrates the therapist working to foster Laura's disclosures by shaping Steve's responses. At this point, the couple had been introduced to the communication guidelines for sharing thoughts and feelings conversations, and the therapist continues to help the couple use the guidelines throughout. Here, the focus includes remaining in the respective roles (speaker/listener), for the listener to focus only on understanding and accepting what the speaker is saying and reflect this understanding by summarizing the main points.

LAURA: . . . But I also feel very humiliated when I don't have a job because of the reasons that I don't have a job. (*Looks down.*) I'm embarrassed that three times now I've screwed up. (*Looks up.*) And I feel like a failure to you because I'm not pulling my weight financially and you're having to do that. And it's frustrating to me that the issues that I'm causing for the family and for you are tangible because there is no money coming in. Therefore all that entails is tangible, and you can see it. But all of the other problems that are extremely important about the rest of our lives, and what my responsibilities are going to be, aren't as tangible. And you can't see what's in my head, you can't see how I'm, what I'm up against and what I am trying to surmount. Because, it's not a tangible thing. It's not like I've broken my leg and you can see that I can't work. Okay? And I also feel frustrated when I feel like my saying that it is difficult for me to overcome some of these things is automatically taken as if I'm embracing the disease and I can't work and I'm disabled. That's not what I'm saying . . . My efforts are probably not as fast as you, you need them to be, but I am trying. My goal is to find some way that I can take care of my responsibilities without

going nuts and be able to take care of the kids, you, the house, everything, *and* work and keep my stability. And I know what doesn't work anymore. And trying to do everything and be all to everybody does not work with me. I can't; that's just not something I can carry well. It's not my strength.

. . .

THERAPIST: . . . Steve, what are some main things that she is telling you? I know that there was a fair amount in there, but tell her what she is telling you. Not whether or not you agree with it or disagree with it, or comment on it.

STEVE: (*to therapist*) I hear what she is telling me. It's not that I don't agree or disagree.

THERAPIST: Yes, but tell her what she is telling you.

STEVE: (*to Laura*) I hear what you're telling me. I hear that you say that.

THERAPIST: (*interrupting*) What is that?

STEVE: I hear you say that . . . agree that you're, that that is frustrating for me and stuff. And I agree. (*Sighs and stops.*)

THERAPIST: What's it like for her? How is she doing with this?

STEVE: (*to therapist*) She's not doing well with it. Okay (*to Laura*), and I understand that you aren't doing well with it. Okay? . . . (*to therapist*) It's hard because you say you don't have to agree with it, okay? It's not that I don't agree with what she said; it's that I don't believe it.

THERAPIST: Mmm, that means you're, that's the part about working on accepting it. That's it. It's good that you're articulating that because it's important for us to know. . . . The other point that I think is a really valuable one is what you are saying about trust. You know that in terms of things that either Laura has said or done in the past or whatever or the eating disorder and the patterns you guys have gotten into, that it is hard for you to believe or know what you can believe . . .

STEVE: It really is.

THERAPIST: But you know what you told me last time was that you don't check, you don't follow her to the bathroom anymore. That you're not checking on her food intake anymore because you're letting go of some of that.

STEVE: Yeah (*foot twitching*).

THERAPIST: And maybe this is going to be . . . the next step in that? When she's telling you this is my internal experience, and this is not the eating disorder talking, this is me talking about my battle with the eating disorder, and my work on trying to make a healthy life for me and you and the family. This is it. I think maybe the next step is you practice believing that.

STEVE: That's going to be hard. (*Folds arms behind head.*)
THERAPIST: I know, I know, but, look, we can do it in little bits, you know?

This transcript reflects how the UCAN treatment utilized communication training as a key process by which the couple was assisted in discussing AN and bringing it out in the open (mechanism 1) and enhancing their ways of communicating and relating more broadly in the relationship (mechanism 3). The goal was not that the couple be in agreement or that each person only communicated positive statements to the other individual; instead, it was critical that the couple be more open and honest with each other in a respectful manner regarding the AN and its implications. More specifically, the therapist worked with Steve to summarize what Laura was saying (active listening) without judgment in order to help him truly hear what she expressed, and to provide Laura with a positive experience of feeling heard following her self-disclosure, which was extremely difficult for her. It took Steve several attempts to be an effective listener due to his hesitance to trust Laura's perspective as genuine rather than distorted by AN. With the therapist's direction and encouragement and the benefit of their strong rapport, Steve continued his efforts and was eventually successful. Laura needed to experience Steve understanding and respecting her inner experience despite his having challenged her perceptions in the past. These communication targets relative to the AN (Laura sharing her feelings more openly and Steve accepting her feelings as being genuine) continued to be a goal of treatment throughout UCAN.

ADDRESSING EATING-DISORDERED BEHAVIOR

Building on the communication training, the next phase of UCAN treatment focused on helping Laura and Steve approach specific AN-related challenges as a team (mechanism 2), utilizing their developing communication skills. They discussed developing a plan for food purchase and preparation, creating a more relaxing mealtime environment at home, eating out socially in a way that was less stressful for Laura, and incorporating higher-risk foods back into the home. All of these domains pertained to Laura's urges to restrict, binge, and purge. These conversations allowed Laura to continue being open about her ED (mechanism 1) while Steve worked on being supportive and nonjudgmental in response; thus, the couple developed collaborative approaches to aid in Laura's recovery (mechanism 2).

BODY IMAGE CONCERNS, SEXUALITY, AND AFFECTION

The final domains that the couple addressed in UCAN related to Laura's highly negative body image, the struggles the couple had with their physical

relationship, and their difficulty communicating effectively around these domains. Laura felt reluctant to share the extent of her body dissatisfaction and negative self-image, which in part was due to Steve's responses that she was "beautiful; the most wonderful woman in the world" and he "couldn't understand why she didn't just see that." Laura also reported having little interest in being sexually intimate. Steve described feeling as if he was negotiating to have sex with Laura and was consistently rejected by her. Both partners described that they generally avoided discussing these topics.

By helping the couple discuss their experiences relative to Laura's body image and their mutual desire for a more satisfying physical relationship, Laura's AN-related struggles were brought out into the open again (mechanism 1), the couple began to feel more connected as a team against the ED (mechanism 2), and this connection and ability to communicate more effectively around previously difficult topics spilled over into a broader sense of feeling closer and more hopeful as a couple (mechanism 3). These influences can be seen in the following transcript, in which the couple had just concluded a discussion of the difficulties in their physical relationship (i.e., Steve desiring more physical affection with Laura, Laura's worry that affection would lead to greater sexual intimacy, which she did not currently desire due to her negative self-image and overall high stress and anxiety). The therapist checked in with both partners regarding their thoughts on just having had this conversation—one they would usually avoid [note Steve's greater support of Laura and more effective listening within this transcript relative to the transcript above, which occurred much earlier in therapy]. This exchange led the couple to discuss topics about intimacy and sexuality that they had never discussed with each other in the 20 years they were together. The interlude was a turning point in therapy, especially for Steve, who felt he had gained a whole new appreciation of who his wife actually was.

THERAPIST: It's a lot, isn't it? How are you doing talking about all this?

LAURA: I feel like I'm gonna puke. (*Buries her face in her hands.*)

THERAPIST: Okay.

STEVE: Why? I mean . . .

LAURA: I don't mean that I want to puke, I just feel gross.

STEVE: I know, I know. You just feel gross, but you wanna know what I think? I think you're doing great. Ha ha, honestly.

THERAPIST: Tell her a bit more about what it's been like for you.

STEVE: It's the most I've ever heard you talk about this, and . . . (*Hesitates.*)

THERAPIST: And? What is that like for you?

STEVE: And it's like there's lightening; it makes me feel good; it makes

me get to know you in ways that I've never known you before, and I thought I knew you. We gotta do this again.

. . .

THERAPIST: Here's the thing that I want us to really look at, and then we'll bring this session to a close and we'll take a break. Okay? You've started, you two together have been sharing different feelings, complex feelings, uncomfortable feelings, and you've really taken that lead in there, Laura, and shared all that. And what I really want . . . Steve to say again, what it was about what you just shared, about what it's like for you to hear this from her. (*to Laura*) Because it's hard, I know there's that part of you that just wants to "Oh, stop, close it down, run away." This is uncomfortable, and you are really in there, coming through the other side of this conversation. And Steve wants to tell you how much this means to him that you did that. And I want you to hear that and then we'll wrap up, okay? Can you do that? Okay. So you were doing it, you were right there.

. . .

STEVE: All right, I love you; I do love you. This is great, okay? This is great because I'm getting to know you in ways that I never knew you before, and we've been together for 18 years. And I've never heard you talk about this. . . . The one thing I want you to understand, I hope that you've always known, is that I'm safe. I'm not gonna be judgmental with you about stuff. . . . I really do wanna know your feelings. She's right about that, like we've said, you don't have to agree with my feelings, just like I don't have to agree with yours. You don't have to agree with my feelings, but I am biased, and I do think you are a beautiful and loving and caring, kind hearted girl. (*Reaches over and pats her knee.*) I love you.

LAURA: (*Looks down, tearful.*) I love you too.

. . .

THERAPIST: What is it that you want him to know about how you're feeling about him?

LAURA: (*crying)* That I love him. . . . You know, I've always wanted somebody like this.

This transcript illustrates the significant progress the couple made during the UCAN treatment. Laura shared intimate feelings with Steve that she had previously kept to herself, thus bringing her AN-related struggles of a negative body image and fears/discomfort with intimacy out into the open (mechanism 1). Steve responded to Laura's disclosures in an affirming and supportive manner, accepting her feelings as being hers and legitimate, and not something he therefore evaluated as being "true." In this way, he

reinforced Laura's openness and vulnerability, and the couple was much more aligned in addressing the difficulties in their physical relationship (mechanism 2). The couple also experienced this greater connection and sense of teamwork in a manner that extended beyond the realm of the ED to improve their relationship as a whole (mechanism 3).

BRINGING TREATMENT TO A CLOSE

In their final UCAN session, Steve and Laura reflected on their experience in UCAN and progress they had made as a couple. Laura stated that she felt good that they had learned to make decisions, and "now they are the team they always were but couldn't be," and she learned that understanding Steve's feelings about intimacy were very important. Steve said he learned to "listen, listen, listen," about the importance of wanting to be heard, and that he did not have to agree with Laura's feelings but needed to acknowledge them. The couple was very appreciative and noted that they felt more united in their work against the ED and more connected and satisfied with their broader relationship.

Outcome Measures

Tables 8.1 and 8.2 show Laura and Steve's scores on the outcome measures and indices of clinically significant change on measures for which adequate normative data were available. These empirical findings largely reflect the more subjective presentation of the case described above. At the beginning of the UCAN treatment, Laura's weight had been restored, and she maintained her weight over the study period. Laura's score on the Eating Restraint subscale of the EDE dropped from pretest to 3-month follow-up and went below the cutoff into the normal functioning range. Changes on all other EDE scores were not reliably different from what might be expected by chance, and the scores continued to be not significantly different from typical scores of patients with current AN, despite improvement from post to 3-month follow-up (see Table 8.1). It is notable that the greatest improvement was seen on the Restraint subscale, which reflects the frequency of behaviors such as restricting overall intake, avoiding certain foods, following strict dietary rules, and fasting. For example, at follow-up Laura reported that she had not skipped any meals in the previous 4 weeks, while this was nearly a daily occurrence prior to treatment. With many patients, symptoms such as preoccupation with food and calories, importance of shape and weight for self-evaluation, body image distortions, and fear of weight gain (Eating, Shape, and Weight Concern subscales) take longer to remit. These findings indicate that Laura was continuing to make great progress during UCAN and at follow-up on her eating behaviors, but continued improvement was still needed in other areas.

TABLE 8.1. Scores and Change Indices for ED and Relationship Outcomes

Scale (possible range)	Pre	Post	Follow-up	Reliable change from pre?	Passed cutoff[a]?
EDE: Global Score	3.92	4.05	2.96	No	No
Restraint	3.93	3.80	1.40[b]	Yes (follow-up)	Yes (follow-up)
Eating Concern	3.60	3.40	2.40	No	No
Shape Concern	4.75	5.00	4.63	No	No
Weight Concern	3.40	4.00	3.40	No	No
DAS-4 (0–21)					
Laura	11	16[b]	n/a[c]	Yes (post)	Yes (post)
Steve	11	17[b]	19[b]	Yes (post and follow-up)	Yes (post and follow-up)
MSI-R[d]					
Laura	72	69	58	Yes (follow-up)	No
Steve	66	63	45[b]	Yes (follow-up)	Yes (follow-up)
CIRS Demand (1–9)					
Laura	3.67	n/a[c]	2.00[b]	n/a[e]	Yes (follow-up)
Steve	5.83	n/a[c]	4.25	n/a[e]	No
CIRS Withdraw (1–9)					
Laura	3.56	n/a[c]	0.83[b]	n/a[e]	Yes (follow-up)
Steve	2.33	n/a[c]	1.17[b]	n/a[e]	Yes (follow-up)

Note. EDE, Eating Disorder Examination; DAS-4, Dyadic Adjustment Scale–4; MSI-R, Marital Satisfaction Inventory Revised; CIRS, Couples Interaction Rating System.
[a]Cutoff *c* (Jacobson & Truax, 1991).
[b]Score in normal functioning range.
[c]Missing data.
[d]Problem-Solving Communication subscale (*T* scores).
[e]RC could not be calculated because test–retest reliability was not available for this measure.

In terms of relationship functioning, both Laura's and Steve's scores on the DAS-4 (overall relationship adjustment) increased beyond what would be expected by chance, and both crossed over into the range of nondistressed couples well past the cutoff of 13, indicating high relationship satisfaction. Quite notably on the item level, both partners reported an increase in overall happiness on the DAS-4 from pre to post ("Please indicate the degree of happiness, all things considered, of your relationship"), and both partners responded to the question "Do you confide in your mate?" with "More often than not" (point 4 on a 6-point scale) at pre, and with "All of the time" (point 6 on a 6-point scale) at post. Scores on measures of important communication behaviors improved as well, most crossing into the

normal range: Self-reported problem-solving communication improved and observed demand–withdraw communication behaviors decreased, indicative of more constructive communication (see Table 8.1).

R-BISF scores (sexual functioning) for both Laura and Steve are shown in Table 8.2. Both partners demonstrated a slight increase in scores, but it is notable that Laura's scores continued to be fairly low, while Steve reported considerably higher sexual satisfaction and functioning. Of note, the dimension with the largest increase in scores from pre to follow-up for Laura was "Pleasure/Orgasm," indicating that sexual activities had become more enjoyable for Laura, even though other indicators such as frequency of sexual thoughts or fantasies and desire or frequency of becoming aroused (dimensions 1 and 2) had not changed (see Table 8.2). This pattern of results suggests that Laura did not focus on sexual thoughts and feelings a great deal even at follow-up, yet she enjoyed their sexual interaction more when it did occur.

Treatment Evaluation from the Couple's Perspective

UCAN EVALUATION QUESTIONNAIRE

Laura's and Steve's evaluation of UCAN on the evaluation questionnaire was very positive, with all responses being the highest or second highest on a 4-point scale, resulting in an average rating of 3.7 from Steve and 4.0 from Laura. Thus, both partners were very satisfied with the intervention. For example, both partners rated the overall quality of UCAN as "excellent," and both said that UCAN helped them to deal with AN "a great deal" more effectively (each rating 4 out of 4). In response to the question whether UCAN has met their needs, Steve responded that most of his needs had been met (rating 3 out of 4), and Laura responded that almost all of her needs had been met (rating 4 out of 4).

INFORMAL FEEDBACK FROM THE COUPLE

Laura and Steve were very interested in helping to promote UCAN and volunteered to share their experience with a professional audience. Along with Laura's quote at the beginning of the chapter, they shared the following comments years after the treatment had ended:

STEVE: And there is a massive amount prior to UCAN, there is a massive amount of mistrust on my part, okay? "She's going to the bathroom; she's going to purge. I've got to stop this; I've got to do something," okay? And I would literally follow her to the bathroom. And what UCAN did was, UCAN taught us to therapeutically be able to communicate, to list the thoughts and feelings about what is going on. And be

TABLE 8.2. R-BISF Total and Subscale Scores for Laura and Steve

Dimension (possible range)[1]	Time point	Laura	Steve
Composite (–16 to +75)	Pre	7.08	46.20
	Post	16.42	45.83
	Follow-up	n/a[2]	53.98
D1 Thoughts/Desire (0–12)	Pre	3.25	9.00
	Post	2.75	9.00
	Follow-up	3.75	10.25
D2 Arousal (0–12)	Pre	1.00	4.00
	Post	1.00	4.00
	Follow-up	2.00	4.00
D3 Frequency of Sexual Activity (0–12)	Pre	6.00	3.00
	Post	4.00	3.00
	Follow-up	7.50	8.50
D4 Receptivity/Initiation (0–15)	Pre	3.00	15.00
	Post	4.00	15.00
	Follow-up	5.00	11.00
D5 Pleasure/Orgasm (0–12)	Pre	3.00	12.00
	Post	9.00	12.00
	Follow-up	9.00	12.00
D6 Relationship Satisfaction (0–12)	Pre	1.00	10.00
	Post	4.00	10.00
	Follow-up	4.00	11.00
D7 Problems Affecting Sexual Function (0–16)	Pre	10.17	6.80
	Post	8.33	7.17
	Follow-up	n/a[2]	2.77

R-BISF, Revised Brief Index of Sexual Functioning.
[1]Higher scores indicate greater satisfaction/higher functioning for D1–D6; higher scores on D7 indicate greater impact of problems.
[2]Scale score could not be calculated due to missing data.

able to get the trust factor back to where I trust Laura enough now for her to say, "Hey, there is a problem; I need help. Let's talk about this."

LAURA: And he'll come back with, ya know, "Okay you're saying that you are feeling fat; let's talk about it, or that must really be awful to feel that way," or whatever, and I'm just kind of, like, taken aback. (*Laughs.*)

Summary of Case Study

Laura and Steve presented to UCAN as a loving and caring couple that were experiencing significant distress due to Steve's worry and frustration surrounding Laura's AN and its treatment, their difficulties communicating about and addressing Laura's AN in an effective manner, and more broadly their intense arguments and feelings of disconnection. Through their participation in UCAN, the couple gained a shared understanding of AN and what to expect in the recovery process, they brought the AN out of "hiding" through numerous and repeated discussions of both partners' experiences of AN and how it impacted them as a couple (mechanism 1), and they learned how to work more effectively as a team in Laura's recovery process (mechanism 2). Also, more broadly, Laura and Steve discovered that they could experience negative emotions with each other and face difficult experiences together as a couple (i.e., as evident by their discussions of the challenges in their sexual relationship), using their relationship as a source of support during these trying times (mechanism 3). These learned experiences are evident in the couple's participation in the UCAN treatment sessions and transcripts provided in this paper specifically, the couple's disclosures following their UCAN participation, their self-report measures, and observed communication behaviors. In all these ways, the experiences and progress of Laura and Steve as shown in the qualitative data and empirical findings exemplify the proposed mechanisms put forth in the UCAN treatment.

DISCUSSION

The case study of Laura and Steve is included to provide a richer, more detailed, and firsthand account of how one couple benefited from the UCAN treatment. While demonstrating how the treatment can be adapted to the needs of the specific couple, it is important to understand that these intervention strategies can be implemented quite differently with other couples. For example, whereas Steve was quite eager for Laura to alter her eating-disordered behaviors and strongly encouraged such change, other partners might be more reticent to encourage such changes. Reasons for such reluctance might include (1) partners having a perspective that asking

the person with AN to make changes demonstrates a lack of empathy for how difficult such changes would be, or (2) partners being generally quieter and less assertive in the relationship more broadly, thus requesting very little change from the person with AN in any domain of the relationship. For these couples, a major theme of treatment includes encouraging and supporting the partner in facilitating behavior change for the person with AN. This might include, for example, (1) psychoeducational efforts that emphasize the importance of both partners working together, (2) encouraging changes in multiple domains related to the ED, and (3) initiating problem-solving discussions of how the partner might facilitate and encourage behavior change related to the eating-disordered behavior.

On the other hand, other couples demonstrated greater relationship distress and expressed high levels of negativity toward each other. For these couples, communication training emphasized how to interact and communicate in more positive and less destructive ways and how to make certain that broader relationship concerns did not compromise the couple's focus on the ED. Instead, working together as a team on an issue of importance to both of them (i.e., AN), at times had a broader impact of improving their overall relationship functioning. Thus, our experience to date is that these treatment strategies can be adapted successfully to working with a wide range of couples that vary in terms of individual characteristics, general relationship functioning, and specific patterns of eating-disordered behavior and couples' responses to those AN-related behaviors.

IMPLICATIONS FOR PRACTICE AND RESEARCH

The intent of this case study is to provide a somewhat detailed description of our UCAN treatment, but it also is important to consider UCAN within the broader context of treatment for adult AN. We developed his treatment due to the limited success of existing treatments. Our belief is that current treatment strategies should not be abandoned, but they can be strengthened potentially by considering additional important factors in these patients' lives. Integrating couple-based interventions into the treatment seems appropriate given the demonstrated efficacy of family-based interventions for adolescents with AN. UCAN is a developmentally tailored family-based treatment for adults. As a result, UCAN should be viewed as an augmentation approach, whereby our couple-based intervention is integrated into a multidisciplinary treatment strategy enhancing individual therapy, medical management, and nutritional counseling. In developing the specific couple-based intervention exemplified in the current paper, we adapted treatment principles from CBCT, which has a strong base of empirical support for treating relationship distress and a wide range of types of psychopathology and health concerns (Baucom, Kirby, & Kelly, 2009).

Our initial trial of UCAN suggests that including a partner in treatment might be quite helpful in assisting the person with UCAN in terms of gaining weight and lowering dropout from treatment (Bulik et al., 2012). However, further evaluating the efficacy of this intervention awaits empirical verification. At present, we are engaged in a randomized controlled trial to investigate this question. In particular, we are exploring whether it is preferable to focus all interventions on the patient alone, or whether in addition to individual treatment, some psychotherapy sessions should be allocated to working with the couple as a unit as described in this paper. Along with establishing the overall efficacy of the intervention, we hope to provide initial data regarding the proposed mechanisms of change discussed above and whether UCAN is particularly helpful to certain couples. We are cautiously optimistic that integrating these two fields of treatment research—a multidisciplinary, cognitive-behavioral approach to treating adult AN and treatment strategies derived from CBCT—can help us make much needed progress in treating this complex and debilitating disorder.

AUTHOR NOTE

Melanie S. Fischer and Jennifer S. Kirby contributed equally to this manuscript and share the role of first author. Donald H. Baucom and Cynthia M. Bulik are Codirectors of the UCAN treatment program and contributed equally to this manuscript.

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PART V

Integrative Approaches

HEATHER THOMPSON-BRENNER

INTRODUCTION TO PART V

Concepts in Psychotherapy Integration

An "integrative approach" to psychotherapy is not simply a combination of different interventions. Given the large number of defined and overlapping psychotherapy methods, and the many specific interventions included in any therapy, it is easily possible to include many different approaches in one treatment or even one session. In fact, therapists regularly perform single actions that could be interpreted as representing multiple interventions from different theoretical points of view. The fact that psychotherapy approaches could be combined haphazardly, imprudently, or even inadvertently highlights the importance of theoretical and evidence-based rationales for clinical decision making. The selection of interventions from distinct approaches is commonly called "eclecticism," whereas the term "integration" is reserved for combinations that are theoretically coherent and carefully coordinated.

There have been several major efforts at psychotherapy integration with lasting effects on the field. One such effort was the systematic integration of psychodynamic theory and learning theory (e.g., Dollard & Miller, 1950; Frank, 1961; cited in Stricker, 2010). As this effort progressed, the integration of psychodynamic and behavioral interventions was seen to have synchronistic and reciprocal benefits; behavior change led to additional insight, and insight led to additional behavior change (Stricker, 2010). Another major effort in psychotherapy integration began in the 1970s, when behavior therapists recognized the limitations of learning theory in the context of the

"cognitive revolution" in psychology. Cognitive and behavioral approaches have been so thoroughly integrated in recent decades that the titles of current treatment manuals, research journals, and professional associations commonly include the terms together (see Stricker, 2010). Other important efforts at integration include the thoughtful additions of optimistic, value-driven, and emotionally expressive aspects of humanistic/existential and person-centered approaches with psychodynamic and behavior therapies, which have been criticized as mechanistic or objectivistic. Recently, therapists have witnessed the powerful effect of integrating Eastern approaches to emotion regulation and personal growth—such as mindfulness, acceptance, and meditation—to the Western approaches (see Hayes & Lillis, 2012). Stricker, a prominent psychotherapy integrationist, suggests the key domains in psychotherapy integration can be remembered using the acronym "ABCDEF," which stands for "affect," "behavior," "cognition," "dynamics," "environment," and "fysiology" (2010).

The terms "integrative psychotherapy" and "integrative approach" have even higher thresholds for definition and clarification. A truly integrative psychotherapeutic approach has articulated principles and defined interventions, intended for use together or for application under different conditions (Stricker, 2010). Recently, clinical researchers have been creating treatments that have "modules" of intervention for different aspects of disorders, which may be utilized and adjusted according to patient characteristics and therapy progress (e.g., Barlow et al., 2010).

Common Factors across Therapeutic Approaches

The evidence supporting certain "common factors" characteristic of all effective forms of psychotherapy could be interpreted to mean that all therapy is to some extent integrative. The following therapeutic elements are generally agreed to be necessary regardless of specific psychotherapy approach (see Stricker, 2010).

1. A positive alliance between the therapist and patient, which includes an adequate level of agreement upon the goals and tasks of therapy, as well as a positive emotional bond (Bordin, 1979).

2. Some form of exposure to the difficulties that the patient has experienced previously, followed by some form of corrective emotional experience. In cognitive-behavioral therapy (CBT), for example, exposure to anxiety-provoking stimuli may take place in session; habituation and/or new learning experiences are produced through successful exposure with response prevention and cognitive restructuring, and those "corrective" emotional experiences yield lower levels of anxiety. In a comparable but highly distinct process in transference-focused psychodynamic psychotherapy, patients might be exposed to versions of their long-standing patterns

of affect and defense in intimate interpersonal relationships through enactment in the relationship to the therapist, these transference experiences and their interpretation lead to additional insight and the provision of a different model of relationships, and patients develop new flexibility in affective functioning and self–other relationships.

3. Most approaches to psychotherapy consider "expectations for positive change" from the therapist and the client as necessary conditions for positive change.

4. Therapists across orientations are observed to have certain beneficial qualities such as attention, empathy, and positive regard.

5. All therapeutic approaches include some rationale or explanation for the patient's problems, which at some point is provided to the patient.

6. All beneficial therapies are said to include some systematic therapeutic procedures; free-form relational interactions, though quite possibly beneficial, do not earn the label of "psychotherapy."

Common factors research therefore suggests that beneficial psychotherapeutic approaches all have a relational component (the conditions and experience of the therapist–patient relationship), a component combining behavior and affect (exposure to prior difficulties and a corrective emotional experience), and multiple cognitive components (positive expectancies for treatment, an explanation of the client's problems, and a concept of the therapeutic process). Though common factors theory and research is relatively well accepted across psychotherapy researchers from various orientations, different researchers overtly disagree about the most beneficial methods to promote improvement in each area, the mechanisms of action associated with each area, and the relative importance of each component. It is also not clear to what degree the therapist and patient must share views with each other; studies suggest that therapist and patient may have diverging views of the beneficial aspects of therapy (e.g., Lilliengen & Werbart, 2010).

Common factors research provides a rationale for why efforts at integrating eclectic approaches may make logical sense, but in practice are often less efficacious than expected. Eclectic approaches and complicated combinations of interventions deriving from different schools of thought may challenge the coherence of the psychotherapy rationale, positive patient expectations, and patient mastery over particular emotional domains. For these reasons, researcher and clinician caution is merited, and the maxim that "less is more" may sometimes apply.

The importance of the common factors has been supported in eating disorders (EDs) research, and can be seen in every chapter of this book. However, only a few chapters include descriptions of treatment that meet the requirements for psychotherapy integration as described above.

Integrative Approaches Tested with Eating Disorders

To date, integrative approaches to the treatment of EDs have not generally shown better overall effects than focused treatments, although there are signs that the integrative treatments tested to date may have better effects for patients with certain characteristics. In general, the treatments described in this section—enhanced, broad CBT; dialectical behavior therapy (DBT); and adolescent-focused therapy (AFT) for AN—have typically not demonstrated substantially better long-term effects overall than the comparison treatment groups in clinical trials (e.g., Fairburn et al., 2009; Lock et al., 2010; Safer, Robinson, & Jo, 2010). However, evidence suggests that patients with additional complexity and severity may show specific benefit from integrative approaches that include interventions for their complex or severe problems (Fairburn et al., 2009; Thompson-Brenner, Pratt, Satir, Shingleton, & Richards, 2013). The individual patients described in the following chapters clearly demonstrated objective improvement over time concurrent with the application of an integrative treatment, and the evidence from these cases is offered for the reader's independent consideration. Brief descriptions of the three approaches to psychotherapy integration included in this volume are provided below.

Cognitive-Behavioral Therapy for Eating Disorders

We have included two chapters on CBT for EDs that are integrative to different degrees. Chapter 9 (by Lundgren & Allison), on CBT for night eating syndrome, illustrates a classic cognitive-behavioral approach to a relatively recently defined disorder. The authors clearly explain how particular dysfunctional thoughts, such as thoughts that *night eating is necessary* to fall back asleep, to assuage physical hunger, or to reduce a negative emotion, are both the cause and the effect of the behavior of night eating. Behavioral interventions such as regular daytime eating, contingency management around nighttime eating, and behavioral experiments clearly complement, support, and are in turn facilitated by cognitive interventions, such as becoming aware of dysfunctional cognitions, challenging them, and examining whether behavioral expectancies are accurate. Specific cognitive and behavioral dimensions of treatment that are integrated in CBT are described in more detail in the introductions to Part I, "Behavioral Approaches" and Part II, "Cognitive Approaches," as well as in the two chapters on CBT.

Chapter 10 (by Thompson-Brenner, Shingleton, Satir, & Pratt), on enhanced, broad CBT (CBT-E broad) for bulimia nervosa (BN) and borderline personality disorder, is integrative on additional levels as well. Similar interventions to those in CBT for night eating syndrome are employed in the first phase of treatment, while additional "broad" interventions for mood intolerance and relational problems are added later in treatment. As the

formulation in that chapter shows, cognitions (shape and weight concerns), behaviors (food restriction, dietary restraint, binge eating, and purging), mood issues, and relational patterns are all seen to interact reciprocally to maintain the ED. Intervention is staged and integrated, but ultimately directed at every component of the system (cognitive, behavioral, affective, and relational) to produce the best outcome.

Dialectical Behavior Therapy for Eating Disorders

DBT is described by Marsha Linehan, its original author, as a cognitive-behavioral treatment that integrates aspects of Eastern philosophy, such as mindfulness and acceptance (see Linehan, 1993). This integrative approach targets particular dysfunctional cognitions, particularly regarding the self and others, and promotes behavioral techniques for promoting coping strategies that are more functional than self-injury or ED symptoms. It also integrates psychoeducational, behavioral, and cognitive interventions for identifying emotions. Furthermore, emotional tolerance and positive decision making are supported by the development of a nonjudgmental, "radically accepting" attitude toward one's self, one's emotions, and the world—an attitude that comes from Eastern philosophy. As Chapter 11 (by Segal, Ohler, Eneva, & Chen) shows, many interventions are utilized in service of this integration; these interventions are selected during a session in accordance with a hierarchy of issues that require attention, and delivered with a particular positive, validating, therapeutic tone. DBT for EDs further integrates the specific interventions to assess and change eating behaviors, to record and restructure thoughts specific to body image and eating (see also the introduction to Part II, "Cognitive Approaches"), and to identify and improve links among emotions with eating behaviors.

Adolescent-Focused Therapy for Anorexia Nervosa

Chapter 12 (by Fitzpatrick, Hoste, Lock, & Le Grange) does not describe AFT for AN as an integrative approach, but the thoughtful combination of interventions targeted at interconnected areas of growth necessary to achieve full physical and nutritional health and full psychological, developmental growth clearly meets the definition.

As the chapter authors describe and demonstrate, AFT is focused on the following targets: developing the patient's ego strength/coping skills, facilitating individuation from the family, and developing insight into the relationship between interpersonal issues and ED symptoms. These very different targets can be seen to have reciprocally positive relationships to one another. The development of ego strength comes from a self psychological approach, which posits that individuals with EDs have a problem with the development of adequate self-esteem, which in turn affects affect

regulation and the ability to meet one's own needs (Gardner, 1999). As the chapter states, the symptoms of AN are seen as meaningful but maladaptive attempts to get one's needs met (e.g., for self-esteem, for achievement, for attention; Bachar, 1998). The insight into one's self, along with development of a stronger sense of self and self-esteem, leads to the ability to separate from the family, a goal that is more characteristic of child or family therapy than self psychology. The opposite is true as well; as an adolescent successfully separates from the family and demonstrates successful independence and achievement separate from the ED, he/she develops additional self-esteem and self-knowledge. Furthermore, these two integrated goals are also integrated with the goal of healthy eating and weight gain—achieved in part through psychoeducation and nutritional goal setting—which provides the energy and mood benefits necessary to undertake the other therapeutic goals. Integrating affective and humanistic goals, AFT encourages "emotional expressiveness and identifying the patient's ability to define, experience, and tolerate emotions," as well as "the patient's values and encouraging the patient to develop values that are not related solely to achievement or performance." As Chapter 12 states, the goals of increasing insight, expressing and managing negative affect, expanding the sense of self and identity, developing age-appropriate independence, and achievement of healthy weight/nutritional status are all compatible goals, and growth in each domain supports the ability to pursue growth in the others. Finally, AFT also clearly identifies the importance of a relational focus in the optimal treatment through a therapy relationship that is characterized by both *nurturance* and *authority*, and by analyzing the client's characteristic interpersonal patterns. In summary, AFT is a truly integrative approach that thoughtfully and beneficially combines goals and interventions from multiple schools of psychotherapy.

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CHAPTER 9

Cognitive-Behavioral Therapy for Night Eating Syndrome

JENNIFER D. LUNDGREN and KELLY C. ALLISON

Night eating syndrome (NES) was first described in the medical literature in the 1950s, after being identified in obese individuals seeking weight management (e.g., Stunkard, Grace, & Wolff, 1955). Its identification preceded that of binge-eating disorder (BED; Stunkard, 1959), although in contrast to BED, it did not receive significant clinical attention until recently.

We have been working with patients who struggle with night eating for the past 10–15 years. Anecdotally, our patients' experiences with NES have been varied. One individual told us "I have been hungry at night since I can remember. I have been this way well over 30 years. I love sweets at night like ice cream, but also will snack on crackers and popcorn. I do try very hard to keep the nighttime eating down but find it very difficult most of the time." Interestingly, many patients report that they are not hungry at night, despite their eating behaviors. One patient commented "I rarely crave food at night. I actually rarely get hungry. If I eat in the night it is because I have awakened in the early hours of the morning and cannot get back to sleep. I know I will usually go to sleep if I eat a few nuts or crackers." Despite the variation in clinical presentation, our patients have in common a real distress about their night eating behavior. NES is much more than an occasional midnight snack. It can be dangerous and debilitating. As one woman

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Mel is a disguised/composite portrait.

stated, "I now feel that this is a part of my life, so I think that makes it worse. I'm also starting to wake up my husband and it interferes with his sleep. I also fell down the stairs a month or so ago so this really frightened me." Another patient wrote, "Night eating is still the biggest demon I wrestle with. The struggle is ongoing."

Although NES has been recognized in the medical literature since the 1950s, only recently have diagnostic criteria been developed (Allison, Lundgren, O'Reardon, et al., 2010); they are presented in Table 9.1. The core feature of NES is a circadian delayed pattern of food intake with intact circadian sleep onset and offset (O'Reardon, Ringel, et al., 2004) that results in evening hyperphagia (EH; the consumption of ≥ 25% of one's total daily food intake after the evening meal) and/or nocturnal awakenings with ingestions of food (NI). A person must have awareness during evening/night eating episodes, although it is common for patients to report varying degrees of awareness. Night eating that occurs without any awareness, involves dangerous food preparation, or involves the consumption of nonfood substances may be better classified as sleep-related eating disorder

TABLE 9.1. Research Diagnostic Criteria for NES

A. The daily pattern of eating demonstrates a significantly increased intake in the evening and/or nighttime, as manifested by one or both of the following:
   1. At least 25% of food intake is consumed after the evening meal
   2. At least two episodes of nocturnal eating per week

B. Awareness and recall of evening and nocturnal eating episodes are present.

C. The clinical picture is characterized by at least three of the following features:
   1. Lack of desire to eat in the morning and/or breakfast is omitted on four or more mornings per week
   2. Presence of a strong urge to eat between dinner and sleep onset and/or during the night
   3. Sleep onset and/or sleep maintenance insomnia are present four or more nights per week
   4. Presence of a belief that one must eat in order to initiate or return to sleep
   5. Mood is frequently depressed and/or mood worsens in the evening

D. The disorder is associated with significant distress and/or impairment in functioning.

E. The disordered pattern of eating has been maintained for at least 3 months.

F. The disorder is not secondary to substance abuse or dependence, medical disorder, medication, or another psychiatric disorder.

Note. From Allison, Lundgren, O'Reardon, et al. (2010). Copyright by Wiley Periodicals, Inc. Reprinted by permission.

(SRED; American Academy of Sleep Medicine, 2014; Schenck, Hurwitz, Bundlie, & Mahowald, 1991).

As outlined in Table 9.1, three of five additional criteria must be met for a diagnosis, including morning anorexia, an urge to eat at night, insomnia, a belief that one must eat to return to sleep, and mood disturbance. These features illustrate both the unique (i.e., circadian/sleep) and shared aspects of NES (i.e., meal skipping, mood) in relation to anorexia nervosa (AN), bulimia nervosa (BN), BED, and obesity. Research also demonstrates the frequency with which night eating behavior occurs across eating-disordered populations. We found that 9.4% of inpatients diagnosed with AN and 40.6% of inpatients diagnosed with BN met full threshold criteria for NES in the month preceding their hospitalization (Lundgren et al., 2011). Although the treatment described below was developed for persons with NES, it may also be useful for clinicians who are treating patients with diagnoses of AN, BN, or BED who also engage in night eating behavior.

Based on what was understood about the nature of NES and efficacious treatment for BED (e.g., Fairburn, 1995), depression (e.g., Beck, 1995), and insomnia (e.g., Morin et al., 1999), the NES research team at the University of Pennsylvania's Center for Weight and Eating Disorders developed a cognitive-behavioral treatment (CBT) for NES in the early 2000s, led by Dr. Allison. The intervention was tested in an open-label trial conducted from 2004 to 2006, and the authors (K. C. A. and J. D. L.) served as the therapists. Concurrent with the development of the treatment, the team published the self-help book *Overcoming Night Eating Syndrome* (Allison, Stunkard, & Thier, 2004), based on CBT principles.

OVERVIEW OF COGNITIVE-BEHAVIORAL THERAPY FOR NIGHT EATING SYNDROME

CBT for NES has been described previously (Allison, 2012a, 2012b; Allison, Lundgren, Moore, O'Reardon, & Stunkard, 2010). Most recently, it was published as a treatment manual in our book *Night Eating Syndrome: Research, Assessment, and Treatment* (Chs. 13 and 14; Allison, 2012a, 2012b; Lundgren, Allison, & Stunkard, 2012). We provide an overview of the general approach and phases of treatment here, but readers are directed to the treatment manual published in Lundgren, Allison, and Stunkard (2012) for session-by-session details and participant handouts that can be used in clinical practice.

Consistent with the general cognitive-behavioral approach (Beck, 1995), treatment is based on a thorough functional analysis and case conceptualization that assumes the patient's current patterns of thinking and behaving maintain the night eating symptoms, and that the patient's

thoughts and behaviors are the result of proximal precipitating factors (e.g., job stress) and distal developmental factors (e.g., long-standing poor sleep hygiene or family history of night eating). Similarly, the intervention occurs within the context of a strong therapeutic alliance, collaborative treatment planning and implementation, and a focus on the present problems. It is important to note that by the time many patients seek CBT for NES they are often demoralized and have experienced multiple failed attempts to control their night eating. In the words of one individual, "Why do I do it? I am so frustrated! I have tried everything—exercise, therapy, medications, nutritionist—and I still eat in the middle of the night. I am disgusted with myself."

As developed and tested, CBT for NES is a brief, time-limited approach broken into three stages over 10 sessions. As with most interventions, in actual clinical practice, more sessions over a longer period of time may be necessary to produce additional symptom reduction, and booster sessions may be beneficial for sustained remission of NES. We would like to emphasize that the development and testing of CBT for NES is in its infancy. Although the intervention is promising, additional work is necessary to refine it and determine the most effective mechanisms of lasting change. The stages and intervention activities by stage are summarized below and described more completely in Allison (2012a) and other references.

Stages of Cognitive-Behavioral Therapy for Night Eating Syndrome

In Stage 1 (Sessions 1–4, weekly), the goals are to establish a therapeutic alliance, deliver psychoeducation, develop a formulation, and begin to intervene. Activities include dysfunctional thoughts record (DTR), sleep and eating diary, self-monitoring (including caloric monitoring if weight loss is a goal), behavior chaining, cognitive restructuring, and shifting caloric intake to earlier in the day. In Stage 2 (Sessions 5–8, weekly), the goals are to firmly establish CBT techniques to modify thinking, behavior, and mood (if relevant), and increase awareness of nocturnal ingestions for patients with low levels of alertness. Activities include continuation of the same activities in Stage 1, work toward a structured meal plan including breakfast, techniques to address depressed mood (if relevant), and stimulus control for patients with little awareness of nocturnal ingestions (e.g., a bell on the door). In Stage 3 (Sessions 9–10, biweekly), relapse prevention and maintenance is discussed, and booster sessions at 4-month intervals are planned.

Common Night Eating Syndrome Themes to Address in Treatment

Common themes associated with night eating have been identified (Allison et al., 2004) and will emerge early in the intervention through the use of

the Nighttime Eating Assessment (NEA), DTRs, and the behavior chaining exercise, as well as conversations that occur during the therapy sessions. The four most common themes include (1) experiencing a food craving, (2) feeling anxious or agitated, (3) needing to eat to fall back asleep, and (4) physical hunger or a "compulsion" to eat. Less common themes include feeling stressed, depressed, or bored. It is important to assess the patient's unique factors that maintain night eating behavior during the pretreatment assessment and early in treatment. Theme identification is important in understanding the function of the night eating behavior for the patient (i.e., Does night eating satisfy a craving for a pleasurable food or does it reduce anxiety about sleep loss?) and it is crucial in tailoring the specific cognitive and behavioral interventions within the general CBT framework. This will be illustrated in the case example below.

Identifying and Challenging Automatic Thoughts

Within a CBT framework, a primary mechanism of action is assumed to be the identification and modification of dysfunctional (maladaptive, inaccurate) automatic thoughts that influence maladaptive behaviors. By reviewing the DTRs each week, the therapist can help identify the situations or experiences that lead to thoughts (e.g., "If I don't eat something, I'll be awake all night"), which influence behavior (e.g., go to kitchen to snack), that result in negative outcomes (e.g., shame that he/she cannot stop eating at night and fear of weight gain). Through a process of continual assessment in the form of self-monitoring and in-session techniques, as well as collaborative experimentation with alternative thoughts and behaviors, the patient is encouraged to practice new ways of thinking and behaving to maintain a more normative circadian eating pattern and desired emotional experience (e.g., improved mood).

Behavior Chaining and Stimulus Control

Because one of the primary goals of CBT for NES is to resynchronize the patient's circadian eating pattern, behavioral and environmental modification is necessary to regulate eating behavior. Thinking and behaving co-occur, so behavioral techniques will also be introduced as an exercise to challenge dysfunctional thinking (e.g., PATIENT: I can't start eating breakfast until I get my night eating under control because I'll gain weight." THERAPIST: "How do you know that you'll gain weight if you eat breakfast? Let's add breakfast 3 days this week and see what happens"). Similarly, stimulus control to modify environmental cues, such as a "kitchen is closed" sign or locking the refrigerator at night, are effective behavioral techniques to limit access to food and extinguish associations between specific food cues and eating behavior. Consequently, the implementation of

behavioral techniques often leads to new automatic thoughts (e.g., "What would my neighbor think if she saw the lock on my refrigerator?") that should be addressed during the intervention.

Structured Eating and Planning for Weight Loss

Structured eating is a common technique in CBT-based interventions for other eating disorders, such as BN and BED (Fairburn, 1995), as well as lifestyle interventions for obesity (Wing et al., 1996). What is different in CBT for NES, however, is that the focus is not necessarily on the amount of food consumed (unless weight loss is a goal), but on the timing of food intake. The rationale is that re-entrainment of circadian eating patterns is a key mechanism of change in treatment. Research shows that persons with NES, compared with weight-matched controls, consume slightly more calories during a 24-hour period, suggesting that weight gain may result from this pattern of eating over time (Lundgren, Allison, O'Reardon, & Stunkard, 2008; O'Reardon, Ringel, et al., 2004).

Beginning early in treatment, all patients should be encouraged to reduce the number of evening and nighttime calories and increase calories in the morning. Patients should be educated about the circadian nature of NES and reminded that behavior change can re-entrain physiological processes (e.g., the circadian rhythm of appetite-regulating hormones), thereby helping to maintain a regular pattern of eating. For this reason, keeping a daily food record is crucial in helping the patient plan specific ways that he/she can modify caloric intake.

When working with patients for whom weight loss is an appropriate goal, the therapist will not only help the patient shift caloric intake to earlier in the day but decrease the overall amount. Consistent with standard lifestyle weight loss interventions, we recommend goals of 1,200–1,500 kcal/day for women and 1,500–1,800 kcal/day for men (Wadden, Webb, Moran, & Bailer, 2012). These are general recommendations and will vary from patient to patient, depending on several factors including their current body mass, physical activity level, and weight loss goals. The first place to target caloric reduction will of course be the food consumed in the evening and nighttime.

When working with nonobese patients, we have found that daytime dietary restraint and compensatory behaviors are more common (Lundgren et al., 2008). In our study of nonobese individuals with NES who did not currently meet criteria for another eating disorder, those diagnosed with NES reported higher scores on all EDE subscales (Weight Concern, Shape Concern, Eating Concern, Dietary Restraint) and the EDE global score compared with controls (Lundgren et al., 2008). Similarly, the nonobese group, compared with the weight-matched controls, reported a greater fear of weight gain ($p < .05$) and more days of compensatory exercise in the previous month (5.4 vs. 1.3), although this did not reach statistical significance

(p = .12). CBT for NES among nonobese persons, therefore, shares similarities with CBT for other eating disorders (e.g., Fairburn, 1995) and the reentrainment of food intake at normative times during the day may involve challenging thoughts and behaviors that are rooted in a fear of weight gain and body image concerns.

Sleep Disturbance

Sleep disturbance is a common feature of NES. The extent to which patients with NES also experience sleep disorders such as obstructive sleep apnea and restless leg syndrome is in need of further study (Howell & Crow, 2012). Patients with EH only, do not necessarily have sleep maintenance insomnia, but some individuals report that eating before bed helps them to fall asleep (Allison et al., 2004). Because sleep is a problem for many persons with NES, improving sleep is an important part of treatment. Consistent with CBT for insomnia (CBT-I; Morin et al., 1999, 2006), CBT for NES should address the following elements: sleep hygiene, restriction of time in bed, sleep education, stimulus control, and lying in bed and worrying. Table 9.2 describes the elements of CBI-I that can be incorporated into CBT for NES. Additional information about these interventions can be found in Allison (2012a) and in Morin and colleagues (2006).

TABLE 9.2. Elements of CBT for Insomnia That Can Be Incorporated in CBT for NES

Sleep technique	Example
Sleep hygiene	• Regulate bedtime and wake time. • Decrease alcohol and caffeine. • Avoid napping. • Make the bedroom dark and comfortable.
Restriction of time in bed	• Encourage the patient to limit time in bed to those hours he/she typically sleeps.
Sleep education	• Educate the patient about the sleep cycle and normal variation in sleep in adults.
Stimulus control	• Reduce distractions in the bedroom, such as television. • Remove stressful/arousing cues such as reading in bed for work. • Use the bedroom only for sleep/sex.
Addressing night worry	• Help the patient understand that lying in bed and worrying will likely increase arousal and decrease sleepiness. • The therapist can use cognitive and behavioral techniques (e.g., thought challenging and progressive muscle relaxation) to address worry at night.

MECHANISMS OF ACTION

No formal dismantling treatment outcome studies of CBT for NES have been conducted, as they have for other CBT interventions. Doss differentiates between therapeutic change mechanisms and change processes, suggesting that change mechanisms are the "immediate changes in client characteristics or skills, not under direct therapist control, that are expected to lead to improvements in the ultimate outcomes of therapy" (2004, p. 369). Examples include more accurate cognitions and adaptive emotional responses, as well as observable changes in behavior, such as an increase in the frequency of breakfast consumption. Change processes, however, include specific therapist and client activities such as completion of DTRs or a behavior chain to examine the antecedents to a nocturnal eating episode. Such therapeutic activities are thought to lead to change mechanisms that mediate treatment outcome (e.g., symptoms reduction or improved quality of life).

In the case of CBT for NES, we propose that the key change mechanisms include (1) a change in the strength of the belief that eating is necessary for sleep initiation or re-initiation and (2) a re-entrainment of the circadian pattern of food intake such that more food is consumed in the first half of the day and less food is consumed in the latter half of the day. Associated with a circadian re-entrainment mechanism is a reduction in daytime dietary restraint and morning anorexia as evidenced by more frequent breakfast consumption and a reduction in the frequency and amount of food consumed during nocturnal ingestions, independent of a reduction in frequency of nocturnal awakenings. We reiterate that additional treatment outcome studies of CBT for NES, and consequently dismantling studies, are necessary to confirm our assertion. Our position is based on the outcome of one treatment outcome study (Allison, Lundgren, Moore, et al., 2010) and additional anecdotal clinical experience with this population.

Research Supporting Cognitive-Behavioral Therapy for Night Eating Syndrome

CBT for NES has been tested in one pilot trial (Allison, Lundgren, Moore, et al., 2010), and demonstrated results comparable with pharmacotherapy (O'Reardon, Stunkard, & Allison, 2004). The 10-session intervention (delivered over 12 weeks) followed the procedures outlined in Table 9.2 and was conducted individually with 25 patients recruited from a 10-day outpatient assessment study of NES (Lundgren et al., 2008; O'Reardon, Stunkard, et al., 2004). Fourteen of 25 participants completed the CBT intervention. Of the 11 who did not complete treatment, seven withdrew by the second week of the intervention (see Allison, Lundren, Moore, et al., 2010). The 14 completers differed in baseline characteristics from the 11

noncompleters in the number of nocturnal awakenings/week (completers = 7.6, noncompleters = 21.0) and the number of nocturnal ingestions of food/week (completers = 5.6, noncompleters = 12.7), but not in any other baseline assessment.

For the treatment completers, significant improvements were observed in many areas. In mixed-models regressions, significant main effects for time were noted for the change in (1) the percentage of calories consumed after the evening meal until awakening the following morning, (2) the percentage of calories consumed after bedtime until awakening the next morning, (3) the number of awakenings/week, (4) the number of nocturnal ingestions of food/week, (5) Night Eating Symptom Scale (NESS) total score, (6) the average total calories/day, (7) the weight change from Session 1 (kg), (8) Beck Depression Inventory-II (BDI-II) total scores, and (9) Quality of Life Enjoyment and Satisfaction Scale-Questionnaire (QLES-Q) total scores (Allison, Lundgren, Moore, et al., 2010).

When comparing the baseline characteristics of participants with a body mass index (BMI) of 20–25 kg/m^2, versus those with a BMI > 25 kg/m^2, the groups differed in the percentage of calories consumed after the evening meal until awakening the next morning and quality of life, with the lower BMI group demonstrating both greater EH and quality of life. However, there were no interactions between time and weight status in the primary outcomes of EH or nocturnal ingestions of food.

CASE STUDY: MEL

Method

Therapist and Client Characteristics

As described above, the authors (J. D. L. and K. C. A.) served as therapists in the clinical trial (Allison, Lundgren, Moore, et al., 2010) from which the case example was selected. At the time of the intervention, both therapists were licensed, doctoral-level clinical psychologists, and the case was primarily treated by J. D. L. The patient characteristics and specific therapy dialogue have been altered, and in some cases represent a composite material from several patients, to protect the patient's anonymity while preserving the general nature of the treatment processes to illustrate key mechanisms of change.

At the time of treatment, Mel was a 44-year-old, married, African American male. He was a college graduate and worked as a marketing specialist for a local company. His career choice appeared to be a good fit for his interpersonal style, as he could be described as upbeat and engaging during treatment. He would often tell jokes to "break the ice" during our initial sessions, which was consistent with both his overall positive outlook

on life and his self-described "social anxiety in new situations." He and his wife had one teenage son, whom he reported was more like his wife interpersonally. In one of our early sessions, Mel stated "My family loves me, but they tell me that I sometimes embarrass them because I talk a lot."

Mel had no history of medical or psychiatric conditions, except alcohol abuse. Despite his generally positive demeanor, he did report occasional irritability and depressed mood, especially when his job was stressful. Mel reported that he enjoyed his job, but that he had a lot of pressure and deadlines. His family was generally supportive, but he sometimes missed his son's athletic events due to his work schedule. This had caused conflict between him and his wife when their son was younger, but, as he stated, "Now they just accept that this is the way it has to be."

Mel reported a history of alcohol abuse beginning in college and lasting until his early 30s, when his son was born. When asked about his drinking history, he recalled that drinking helped him feel like he "fit in" during his college years. He noted that he met his wife at a college social event, and wouldn't have had the courage to talk to her had he been sober. Mel did not currently use alcohol or other substances, for which he was very proud. His sobriety did not come without great effort, however. He remarked that "It would be so easy to have a drink to relax after work, but I just can't let myself go there."

He recalled that his night eating began in his early 20s, and at that time it was often associated with nighttime drinking. Specifically, he remembered that he would eat to "sober himself" late at night after having several drinks. During that time in his life, he had difficulty sleeping and would frequently wake at night and eat in order to put himself back to sleep. Once he sought treatment for his alcohol abuse and abstained from drinking, he continued to eat late into the evening and experience nocturnal awakenings and ingestions of food.

Mel's BMI (kg/m^2) was 30.8, classifying him as obese, although he was physically fit and physical activity was an important part of his life. He described himself as an athletic teen and young adult, and did not experience significant weight gain until his early 30s. He reached his highest adult weight of 246 pounds at age 42, resulting in a BMI of 32.9 kg/m^2. He lost approximately 15 pounds over the course of a year while participating in a commercial weight loss program. He has maintained his current weight for the past year, but reported that it was with great effort. His treatment goals were the following: establish a normative eating pattern, stop his nocturnal awakenings and ingestions of food, and lose weight.

Assessment

As part of the NES assessment study that he completed before enrollment in treatment, Mel had been interviewed with the Night Eating Syndrome

History and Inventory (NESHI; Lundgren, Allison, Vinai, & Gluck, 2012) to establish a diagnosis of NES and to gather information about his eating, sleep, and mood patterns over the previous 28 days, longer-term history and course of the night eating problems, and previous treatment attempts. In addition, both at baseline and during each week of treatment, Mel completed a 7-day food and sleep record, a night eating symptom assessment, the BDI-II (Beck, 1996), and the QLES-Q (Endicott, Nee, Harrison, & Blumenthal, 1993). His height was assessed at baseline only; his weight was assessed at baseline and at each treatment session. In addition to the baseline and weekly symptom assessments, three assessments were used during treatment to inform the functional analysis of Mel's night eating behavior and his general case conceptualization. These included the night eating assessment (NEA) and behavior chain (Table 9.2) and data obtained from the food records about the timing and amount of foods consumed during the week.

Therapy Procedures

Mel was treated individually during the 10-session CBT intervention. Sessions 1–8 were held weekly for 1 hour and Sessions 9 and 10 were held biweekly for 1 hour (see Table 9.2 and Allison, 2012a).

Results

Description of Mel's Typical Eating and Sleeping Patterns

At the baseline assessment, Mel reported that he was "not at all" hungry in the morning and typically consumed only coffee around 7:00 A.M. One of his baseline food records is illustrated in Figure 9.1. He often skipped lunch and did not eat until 3:00 P.M. or later. His evening meal was regularly consumed between 5:30 and 6:00 P.M. and often consisted of fish or chicken and vegetables. He frequently napped after dinner for an hour or two and upon awakening felt hungry. His after-dinner/evening snacks typically consisted of store-bought muffins, yogurt, or peanut butter on whole wheat bread. He reported strong cravings to eat snacks after dinner and very little control over his evening food consumption. Mel's bedtime was irregular and he reported always having difficulty falling asleep, often not initiating sleep until 1:00 A.M. He regularly woke up several times during the night and frequently consumed a snack upon wakening; on nights that he couldn't fall back to sleep he would watch television or read. His nocturnal snacks were similar in content to his evening snacks, although dry cereal was also sometimes consumed. When asked how much awareness he had over his nocturnal eating, he reported "complete awareness." When asked about distress and impairment in functioning, he reported that his

WAKE-UP TIME: 7:00 A.M. BEDTIME: 11:35 P.M.

DAY: Thursday

Time	Food or beverage	Amount	Check if NE episode
7:05 am	coffee w/ skim milk	1 cup	
7:00 pm	meatloaf steamed cauliflower	8 oz. 1 cup	
8:30 pm	chocolate ice cream	1½ cups	
10:00 pm	pudding	1 cup	
1:00 am	chocolate ice cream	1 cup	✓
2:15 am	crackers	10	✓

TIME OF AWAKENINGS:

1. 1:00 A.M. 2. 2:15 A.M. 3. 4.

FIGURE 9.1. Example of Mel's baseline food record. As the food record illustrates, Mel often skipped breakfast and lunch. His first eating episodes were typically in the evening, except for his morning coffee. He regularly consumed snacks after dinner and in the middle of the night. *Note.* NE, nocturnal eating.

night eating was "somewhat distressing" and that it "very much" affected his life. Mel's baseline, as well as week-by-week, assessment data are presented in Table 9.3.

Session-by-Session

SESSION 1

At the time of the first appointment, approximately 1 month after the baseline assessment, Mel reported strong motivation to change his eating behavior, primarily because he did not want to gain weight. At the time of the first session he had already begun incorporating breakfast on his own. He was concerned, however, that he might have some difficulty changing his evening and night eating because he "enjoys eating."

During the first session the CBT model was introduced, the health consequences of NES were reviewed, his eating patterns for the previous

TABLE 9.3. Mel's Symptom Change across 10 CBT Sessions

Session	Weight (pounds)	NESS	% TDI	Number of awakenings	Number of nocturnal ingestions	BDI-II	QLES-Q
Baseline	229.8	37	49.7	10	10	8	60
1	223.4	21	49.3	7	5	4	58
2	222.0	21	33.9	5	4	3	57
3	221.2	18	25.0	2	0	0	60
4	216.0	19	34.5	1	1	1	60
5	215.2	18	42.0	5	0	1	60
6	222.6	19	41.8	6	2	2	64
7	220.4	16	37.2	2	2	1	64
8	218.0	16	41.0	4	2	1	64
9	216.2	17	35.2	1	0	1	56
10	215.0	16	31.3	2	1	1	60

Note. NESS, Night Eating Symptom Scale; % TDI, percent of total daily caloric intake after the evening meal until awakening the next morning; BDI-II, Beck Depression Inventory–II; QLES-Q, Quality of Life Enjoyment and Satisfaction Questionnaire.

week were discussed, and he was asked to begin completing the weekly food/sleep record and NEA. The NEA consisted of a series of eight physical/emotional states that are commonly associated with night eating. He was instructed to indicate on a visual analog scale, ranging from "not at all" to "extremely," how he felt for each state before a night eating episode. The therapist explained to him that the NEA and food record would help both him and the therapist understand better the function of his night eating behavior and its antecedents. He was familiar with the food/sleep records because of the baseline assessment and did not anticipate difficulty adhering to the self-monitoring.

Although specific intervention strategies to reduce late night and nocturnal eating were not yet implemented, he and the therapist mutually agreed that 10:00 P.M. would be a reasonable time for him to establish that his "kitchen is closed." We have found that acknowledging such a time early in treatment provides structure and prepares the patient for later sessions aimed at reducing food intake after this time. On his own, he wanted to add the goal of incorporating lunch into his daily eating pattern. This was not discouraged, but he was reminded that trying to change too many behaviors in the same week could become overwhelming. Table 9.3 shows his assessment scores at Session 1. From baseline to Session 1, several of his measures had clinically significant decreases, including a 6.4-pound weight

loss, and reduction in his number of nocturnal awakenings and nocturnal ingestions of food.

SESSION 2

Session 2 began with review of Mel's weekly food record and NEA. His food record indicated a reduction in his after-dinner food intake (49.3 to 33.9%; Table 9.3) and a reduction in the number of nocturnal awakenings and ingestions of food (seven awakenings, five ingestions to five awakenings, four ingestions). His NEA revealed that his night eating was regularly associated with hunger and specific food cravings, but not associated with emotions or cognitive states such as agitation, sadness, or boredom. Although he reported feeling good about his previous week, he expressed some ambivalence about reducing his night eating and re-entraining his eating patterns, as illustrated with this interaction between Mel and the therapist:

THERAPIST: Mel, you did a great job keeping your food record and completing the night eating assessments. I can see that two common states you experience when eating at night are hunger and cravings. What is that like for you?

MEL: It really wasn't all that surprising for me. I love to eat at night, and considering that I don't eat during the day, I am really hungry. I want to lose weight, that's why I'm here, but I don't want to give up my night eating because it's a treat for me. I've already given up alcohol for years, and this is the only vice [in air quotes] that I have left. I have a stressful work day and eating my snacks at night makes me feel good.

THERAPIST: I can understand—eating does make people feel good. You've also worked really hard to avoid using alcohol to manage stress. I can also see your conflict between wanting to change your eating pattern to lose weight and wanting to keep your eating pattern because nighttime is a time to relax and wind down after a stressful day.

MEL: Yes, there is a conflict. I want to be healthy, but I'm in this cycle and I can't imagine that eating breakfast everyday would be the same experience for me.

THERAPIST: I would expect that you are right. I guess that's why there are more social events celebrated at dinnertimes than breakfasts. But, I wonder if over the next several weeks we can work toward gradually increasing your daytime food intake and decreasing your nighttime food intake while helping you find other ways to feel good at night. We call this re-entraining your circadian rhythm so that your body stops expecting food at night and associating craved nighttime foods with feeling good or relaxing. We want to find other activities for you

to enjoy at night, such as reading—which you mentioned to me that you like to do.

MEL: I get it. I need to retrain my body to associate food with the daytime and night with other pleasurable, relaxing activities.

THERAPIST: That's right, but it doesn't mean that food can no longer be enjoyable. Perhaps one way we can encourage you to shift your eating to earlier in the day is to give yourself permission to eat a moderate amount of foods that you may crave for breakfast or lunch. Let's talk more about that when we talk about your goals for the coming week.

Session 2 continued with an introduction of the behavior chaining technique. Using one of his nocturnal eating episodes during the previous week, the therapist helped Mel identify a chain of antecedents leading to the eating episode. His homework assignment was to continue to monitor his food intake and sleep and use the NEA anytime he had a night eating episode.

SESSION 3

In the week between Sessions 2 and 3, Mel reported significantly improved sleep and reduced night eating behavior. As shown in Table 9.3, he had only two nocturnal awakenings and no nocturnal ingestions of food, and his after-dinner until awakening the next day food intake decreased to 25%. He reported eating only one time after the "kitchen is closed" time of 10:00 P.M. and associated that eating episode with hunger, cravings, boredom, feeling tired, and feeling compelled to eat. Because weight loss was one of Mel's primary treatment goals he was provided with a calorie guide and encouraged to track calories as part of his weekly food record. Mel and the therapist used his previous week's food record to identify higher-calorie foods that he could eliminate or replace with lower-calorie options. Mel also wanted to increase his physical activity levels. Additional review of his food records indicated that he was having some success shifting his calories to earlier in the day, as he had consumed a small breakfast of instant oatmeal on four of the previous days. Finally, the DTR was introduced. The concept of an automatic thought was explained and the relationship among antecedents, thoughts, and behaviors was reviewed. Mel was asked to document his thoughts during any night eating episodes during the coming week.

SESSION 4

By Session 4 Mel had lost 7.4 pounds since treatment was initiated and he continued to have few nocturnal awakenings and ingestions of food (one

each). His after-dinner food intake, however, did increase from 25.0 to 34.5% from Week 3 to Week 4. While reviewing his food and sleep record at the beginning of the session, Mel reported that he had had several stressful days during the previous week and a very difficult time falling asleep on most nights. Mel reported that part of his stress came from a conflict with his son over the previous weekend. His son, who generally stayed out of trouble, was caught with alcohol at a school athletic event. Although Mel felt that he and his wife handled the situation as best they could, the incident was concerning to him, given his own alcohol use history. His other stressor was related to a conflict with a coworker about a work project.

On two of the nights Mel had kept a detailed thought record that reflected a common NES theme (i.e., a belief that he needed to eat in order to fall asleep) and a fear that eating earlier in the day would "trigger" daytime overeating.

THERAPIST: Thanks, Mel, for keeping detailed thought records on the nights that you had a hard time sleeping. I see a couple of themes we could talk about. Let's start with your thoughts about not being able to fall asleep if you don't have a snack. Can you tell me more about that specific situation?

MEL: Sure. I've had a lot of stress at work recently, in addition to the incident with my son, and I can't stop thinking about it at night. On that specific day I had a heated discussion with a coworker about the direction of a project. We had a tight deadline and needed to wrap up the project before going home. We didn't get everything accomplished, so I knew that I needed to get to work early the following morning to tie up loose ends. When I wrote this, it was about midnight and my wife and son had already gone to bed. I kept thinking about the project and what needed to be done, and I was worried that I wouldn't be able to fall asleep.

THERAPIST: So it was about midnight and you were thinking about the project and worried that you wouldn't be able to fall asleep. Where were you?

MEL: At that point I was standing in the kitchen and had just looked through the refrigerator for some yogurt. I found some and ate it, and then remembered to write my thoughts down on the sheet.

THERAPIST: So your thought before eating the yogurt was "I won't be able to fall asleep"?

MEL: Well, it was several thoughts. I guess I'm not good at this yet. I was also having images of me dragging through the next day if I was up all night. (*pause*) Okay, so I suppose my thought was "I have to eat a snack or I'll never get to sleep and I'll have a terrible day tomorrow."

THERAPIST: You're doing great. Learning to identify your automatic thoughts, and your images, is a skill that takes practice. You wrote down some emotions too. It looks like you were experiencing fear and frustration.

MEL: Yes, I remember being afraid and frustrated because I thought things were going so well and then I had a stressful week and I couldn't control myself at night.

THERAPIST: Well, let's take a closer look at your thought, "I have to eat a snack or I'll never get to sleep." Have you ever had a time when you didn't have a snack and were able to fall asleep okay?

MEL: Hmm. I guess when I was a kid. For as long as I remember, I've had a snack to help me fall back to sleep. (*pause*) Well, okay, when I travel I don't always have a snack and I always seem to fall asleep eventually.

THERAPIST: All right, so you have some evidence that it is possible for you to fall asleep even if you don't eat a snack. Let me ask you another question. What would you tell a friend if he couldn't sleep?

MEL: I'd say don't ever start eating to sleep. No, seriously, I'd encourage him to find something else to do to relax himself. I'd also tell him that he shouldn't check his e-mail after 7:00 P.M. I think that is also why I was so frustrated that night. I kept checking my work e-mail and getting upset about other stressful things that are happening.

THERAPIST: Interesting, let's keep that in mind. First, though, let's reassess your thought that you have to eat or you won't get to sleep. How strongly do you have that thought now that we've talked about it?

MEL: Well, I still believe it, but I think there are things I can try to change it. I mean, in the moment, I can remind myself that I don't always have to eat in order to sleep and I can do something else to try to relax. I also need to find ways to prevent myself from getting worked up in the evening.

THERAPIST: That all sounds good. What is a coping statement that you can use the next time you have the thought "I have to eat or I won't be able to sleep"?

MEL: Hmm . . . I could say "I'll fall asleep eventually, I always do."

THERAPIST: That sounds like a good coping statement to me. Do you think it would be helpful to make a list of other activities you can do, besides eating, to help yourself sleep at night?

MEL: Yes, I'd like to do that.

At this point in the session, the therapist felt confident that Mel was beginning to see the importance of identifying and evaluating the accuracy of his thoughts, especially at night when he was tired or frustrated. The

session continued with a review of alternative behaviors that Mel could engage in when he felt that he needed to eat in order to sleep. After helping Mel brainstorm, the therapist decided to address Mel's fear about triggering overeating during the day.

THERAPIST: Mel, I'd like to go back to one of the comments you made on your thought record. You mentioned that you were afraid to eat more during the day because it could trigger overeating during the daytime. Can you tell me more about that?

MEL: I've been trying to add breakfast and sometimes lunch to my schedule. I chose prepackaged oatmeal this week because it comes in preportioned sizes. I noticed that when I eat it, I sometimes feel like eating more. On Wednesday I wrote down that I am afraid that this will make me overeat. I guess my emotion was fear and my thought was "What if I can't stop?"

THERAPIST: What would that mean for you if you "couldn't stop"?

MEL: It would mean that I have a day and a night eating problem.

THERAPIST: So, is it accurate to say that you have a fear that eating breakfast and wanting more means that you might lose control over your eating and not be able to stop?

MEL: Well, no, I know that I could stop. I guess I think about it like when I was drinking a lot. The only way I could stop was to cut it out all together. As I've told you, I enjoy night eating and so I want to reduce it so that I can lose weight, but I'm not sure if I'll ever be able to stop. I have justified that by skipping breakfast, and now that I'm doing both, it feels like I'm on the edge of overdoing both. It just seems safer to not eat during the day until I get my night eating under control.

THERAPIST: Okay, so it sounds like when you were in treatment for your alcohol use an all-or-none approach worked—you either drank or you didn't. Is that accurate?

MEL: Yes, that was the only way I could quit.

THERAPIST: That makes sense to me. I think the difference, though, is that your body needs food, but doesn't need alcohol. So, maybe, rather than take an "all-or-none" approach to daytime eating we can try to find the middle ground. What I mean is that there is a big leap between having a 400-calorie breakfast and a 3,000-calorie binge-eating episode. Do you think it is possible for you to think about your daytime food intake on a continuum, almost like a dial? The more you dial down the night eating, the more you dial up the daytime eating, but you're not switching the dial completely on or off. Does that make sense?

MEL: Yeah, I've never thought about it like that. I'm still really uncomfortable

about it, but when you put it like that, I have control over the dial. I guess this week I can try to keep increasing my morning food intake by 100 or 200 calories and keep cutting back on my nighttime food intake.

THERAPIST: I think that sounds good. You don't need to change your eating patterns all at once, but let's start shifting the calories a couple hundred at a time until your eating pattern is more balanced.

The session concluded with a review of Mel's weekly goals and his homework assignments, which were to continue to keep a food/sleep record and monitor his thoughts using the DTR. Because both Mel and the therapist had a good sense of the states associated with his night eating, he was not specifically encouraged to continue the NEA.

SESSION 5

Mel continued to make good progress and lost an additional 0.8 pounds from Week 4 to Week 5. He had no nocturnal ingestions of food during the week, although his percentage of total daily food intake after the evening meal was increased from the previous week again. During the session his food/sleep diary and thought records were reviewed and discussed and he continued to brainstorm alternatives to snacking at night when he felt "worked up" because of work stress. The therapist introduced progressive muscle relaxation and made a recording for him to practice at home. Session 6 was scheduled for 2 weeks later because the patient was planning a vacation the following week.

SESSION 6

Mel was very distressed during his sixth session. As shown in Table 9.3, he had gained nearly 7.5 pounds in the previous 2 weeks and he experienced more nocturnal ingestions of food. He also continued to eat a high percentage of his total daily food intake after the evening meal. He attributed his weight gain to his reduced adherence to his weight loss plan during his vacation. He reported that he and his family had visited a town known for its restaurants and he couldn't resist overeating on several occasions. He attributed his increased nocturnal awakenings and ingestions to difficulty adjusting back to a normal routine after the vacation. Mel and the therapist talked about how his "all-or-none" thinking pattern may have contributed to his different approach to eating while on vacation in comparison to when he was home. He was motivated to resume a healthier eating pattern now that his schedule had become routine again. His stated goals for the week were to eat by midmorning each day and to continue to challenge cravings

and automatic thoughts about eating at night. He was also asked to continue the food/sleep record and DTRs.

SESSION 7

By Session 7 Mel reported feeling back on track with his treatment goals. He had lost 2.2 pounds and his after-dinner food intake had decreased slightly, although he did have two small nocturnal ingestions of food. He reported feeling good about how he handled those, and stated that instead of eating the food he craved (pecan pie that a neighbor had baked), he substituted it with fruit. During the session his food/sleep record and DTR were discussed and he was encouraged to identify any issues related to his night eating that he thought had not yet been adequately addressed. He reported that he wanted more information about sleep hygiene and he and the therapist agreed to make that a primary topic for the next session. In the meantime, he was encouraged to continue to monitor his food/sleep and complete the DTR. He was also encouraged to complete behavior chains on any night that he had difficulty sleeping.

SESSION 8

Session 8 began with a review of his food/sleep record. The therapist noted that Mel had lost 2.4 pounds, but continued to consume a large percentage of his food intake after dinner (41%), and he had two nocturnal ingestions of food. Mel and the therapist reviewed his DTR to look for situations and thoughts that might shed light on his continued EH and nocturnal ingestions. The therapist also assured Mel that sleep hygiene would be a priority for the session and this was added to the session agenda.

In reviewing the DTR, the therapist noted situations where Mel continued to experience fear of both overeating during the day and of not being able to sleep without eating. The therapist decided to start with Mel's belief that if he eats more during the day he will not lose weight, nor will it help him reduce his nighttime eating.

THERAPIST: Mel, I notice that you continue to have automatic thoughts about not being able to eat more during the day because of a fear that you'll overeat and gain weight. Let's talk more about that.

MEL: Yep, I feel a little stuck. I'm losing the weight I gained during vacation, but my eating pattern isn't really changing. I'm eating less food and more healthy food, but not changing my patterns.

THERAPIST: Do you remember the conversation we had about thinking of food intake like a dial?

MEL: Yes, I do recall that, but I haven't thought about it much since a while back when we first talked about it.

THERAPIST: Well, it might be worth thinking through it now. Let's say you have a calorie goal of 1,800/day. You can divide that several different ways. For the past few weeks your pattern has been to eat about 60% before dinner and 40% after dinner. But, if we consider your evening meal as what you eat at night (*calculates using the food record*), yesterday you consumed about 30% during the day and 70% in the evening. If your goal is 1,800 calories/day, that comes to about 500 calories during the day, 500 calories at dinner, and 800 calories in the evening and when you wake up at night. Do you think we can set a goal of 800 calories during the day, 500 calories at dinner, and 300 calories after dinner? Basically, we're shifting the dial by 300 calories.

MEL: I will try. I guess when I look at it like that, I'm not actually eating any more calories during the day, I'm just eating them at a different time. I've never done the math before.

THERAPIST: Let's take this a step further and talk about what you will eat at night that will still feel satisfying. I think we should also tie this into sleep hygiene and your fear of not being able to sleep because I can tell from looking at your food record that you could reduce by 300 calories at night last week if you cut out your snack right before bed and the snack you had when you woke up.

MEL: Yes, I think this is all tied together and I want to focus more on sleeping better so that I don't need as many snacks at night.

At this point in the session, Mel and the therapist reviewed his behavior chain for one night that he was unable to sleep. They identified the following behaviors that Mel could work on to improve his sleep hygiene: (1) reducing caffeine intake in the afternoon and evening, (2) not answering e-mails late at night, and (3) not watching television in bed or sleeping on the living room couch in front of the television. Mel thought that caffeine intake and e-mails were the two things he should address first. He agreed to consume only decaffeinated drinks past noon and agreed to check his work e-mail only one time in the evening and it had to be before 8:00 P.M. Mel was encouraged to try his sleep hygiene goals in addition to continued food, sleep, and thought monitoring. Session 9 was scheduled for 2 weeks later, consistent with the treatment protocol.

SESSION 9

Two weeks later, at Session 9, Mel was feeling hopeful about his continued weight loss and reported significant improvement in his night eating

and sleeping. He had had only one awakening and no nocturnal ingestions of food, and his percentage of food intake after the evening meal dropped to 35.2%. His food and sleep records were reviewed, along with his thought record. The therapist also inquired about his sleep hygiene goals. He reported success in limiting his caffeine intake, but was struggling to reduce his nighttime e-mail checking. Together, he and the therapist problem solved stimulus control strategies to help reduce e-mail cues in the evening. He decided that he would post an "e-mail is closed" sign on the computer at 8:00 P.M. each night. Mel commented that the "e-mail is closed" sign would be appreciated by his wife and son who regularly "nagged" him for being on the computer so much.

By Session 9 Mel had returned to his prevacation weight and was pleased with his success in sticking to his calorie plan. He reported consuming a small breakfast the majority of days since the previous session and had a personal goal of increasing his physical activity.

The remainder of the session focused on preventing and recovering from relapses once therapy ended. Mel anticipated that he would be most vulnerable to relapses when his work stress increased. He and the therapist discussed how Mel could identify signs that his stress level was increasing and they identified coping mechanisms to deal with it. Mel and the therapist agreed that sticking to his sleep hygiene goals, using progressive muscle relaxation, monitoring and challenging his automatic thoughts, and exercising would help him prevent a relapse and recover from one if/when it happens. The final session was scheduled for 2 weeks later.

SESSION 10

Mel reported continued progress at the final session. A sample food record from this week is illustrated in Figure 9.2. He had lost an additional 1.2 pounds and reported only one nocturnal ingestion of food since the last session; his percentage of food intake after the evening meal had reduced to 31.3%. He indicated motivation to continue the cognitive and behavioral change strategies that he learned in treatment, and he reported confidence in his ability to maintain his modified eating patterns. He reported that his goal was to lose 5 to 10 more pounds over the next few months. The therapist encouraged him to continue to keep food records in an effort to reach his weight loss goals and maintain the behavior change he had accomplished during the previous 3 months. When asked what Mel found to be the most beneficial during therapy he stated, "As much as I dreaded keeping the food records, they were very helpful. To see my eating patterns on paper made a big difference for me." He also noted, "Having to be accountable at weekly sessions was one of the primary reasons I stayed on track." Mel and the therapist brainstormed other ways that he could be accountable to someone in order to stay on track. He came up with several

WAKE-UP TIME: 6:35 A.M. BEDTIME: 10:20 P.M.

DAY: Monday

Time	Food or beverage	Amount	Check if NE episode
6:45 am	coffee w/ skim milk	1 cup	
	strawberry yogurt	1 cup	
	banana	1	
1:00 pm	ham sandwich (ham, cheese, low-fat mayo, wheat bread)	1	
	corn chips	approx. 20	
2:00 pm	peach	1	
7:00 pm	salmon—grilled	6 oz.	
	rice	½ cup	
	beans	½ cup	
8:30 pm	ice cream with chocolate sauce	½ cup, 2 tbs.	

TIME OF AWAKENINGS:

1. 1:00 am—no food 2. 3. 4.

FIGURE 9.2. Example of Mel's end-of-treatment food record. At posttreatment Mel had incorporated breakfast and midday meals. He still snacked after dinner, but the caloric content was reduced, as were his nocturnal eating episodes. *Note*. NE, nocturnal eating.

options including giving his food records to his wife or signing up for an online program to monitor his progress. A follow-up booster session was scheduled for 4 months later.

DISCUSSION

Mel's case illustrates the cognitive and behavioral change processes that can lead to the circadian re-entrainment of eating behavior earlier in the day and a reduction in a reliance on food in order to fall asleep at night. His case also illustrates a common therapy goal and reason that many people with NES present for treatment: weight management. There is accumulating evidence from both human and animal literature that the time of day of food intake, independent of the amount of food intake, is associated with

weight gain and poor metabolic health (e.g., Scheer, Hilton, Mantzoros, & Shea, 2009). Thus, we are coming to understand that there could be unforeseen health consequences of a circadian delayed food intake pattern that warrant treatment.

Mel's case also illustrates the role of sleep disturbance in persons with NES. He did not have a diagnostic sleep study, but he did have clinically significant concerns about his ability to fall asleep and stay asleep that maintained his night eating behavior. Mel's night eating began during a time when he was engaging in excessive drinking, and the nighttime food intake likely became associated with the ability to sleep during that time. Upon reflection of Mel's case, he likely would have benefited from introducing sleep hygiene earlier in treatment. If he would have been treated in the context of clinical practice and not a research study, we would have encouraged him to complete a medical sleep evaluation and would have continued to work on sleep hygiene and stress management as primary aspects of his treatment.

Mel is fortunate that he was able to manage his alcohol abuse as a young adult. Some patients have complex substance use or psychiatric histories, which will lengthen treatment, and when necessary may require a delay in the treatment of night eating behavior until other acute symptoms are addressed. It is for this reason that a thorough clinical assessment and functional analysis of night eating behavior is conducted in the early stages of treatment because targeting substance use, mood, stress, and anxiety will reduce night eating behavior for some patients. Although his treatment ended sooner than it might in clinical practice, we consider it successful for the following reasons: (1) he reduced his nocturnal awakenings and ingestions of food and was making progress in the re-entrainment of his circadian eating pattern, (2) he lost weight, (3) he learned to recognize the behaviors and thoughts associated with his stress, sleep disturbance, and night eating behavior, and (4) he felt confident and motivated to continue to work on his treatment goals after therapy formally ended. In our experience, it is rare that after 10-sessions a person no longer experiences any symptoms of NES. Rather, at the end of the 10-session intervention, the patient experiences a symptom reduction and a skill set that allows him to serve as his own therapist. In clinical practice, the patient and therapist might choose to continue weekly sessions for a longer period of time, especially if treatment goals or self-efficacy in maintaining treatment gains by oneself are not attained at the end of 3 months. In Mel's case, the research protocol determined the length and frequency of his treatment; unfortunately, he did not return for his 4-month session so we are unable to report on his longer-term treatment outcome.

As described in the introduction to this chapter, not everyone with NES is overweight or obese. Individuals with a BMI less than 25 kg/m^2 pose a particular challenge to treatment because of the increased daytime

dietary restraint, compensatory behavior, and body image concerns (Lundgren et al., 2008). When working with this population, it is recommended that the therapist use the Eating Disorder Examination in addition to the NESHI at the baseline assessment to determine what additional thoughts and behaviors need to be addressed to re-entrain the circadian eating pattern, as well as reduce negative body image and fear of weight gain. As described in Mel's case, patients often fear starting to eat earlier in the day, and this fear is typically magnified in patients with lower BMIs who may be actively restricting during the day to compensate for their eating at night. Thought records may be used to challenge these fears, along with weigh-ins at each session to provide evidence that shifting food intake will not cause significant weight gain.

IMPLICATIONS FOR TREATMENT RESEARCH

We have several suggestions for future NES treatment outcome research. First, the combination of CBT and pharmacotherapy has not been studied. Given the independent benefits of each intervention, we recommend that a combined medication/CBT treatment be tested. Second, CBT for NES has only been tested using an individual approach. A group approach, which is often used in weight management interventions, is in need of further study. Third, our dropout rate was high (44%), and the reasons for discontinuing treatment were varied. Replication studies are needed to determine if the high dropout rate was due to our particular sample or if there are common themes (e.g., comorbid mood/anxiety symptoms) that need to be addressed more systematically during the intervention. Fourth, we know of no treatment outcome studies specifically targeting night eating behavior among patients whose primary diagnosis is AN, BN, or BED. Given the regularity of night eating behavior in these groups (Lundgren et al., 2011), aspects of CBT for NES could be incorporated into standard CBT interventions for these conditions and examined in a clinical trial. Finally, given the preliminary nature of CBT for NES, this intervention is in need of replication, dismantling to determine the most effective components, and effectiveness research to determine its benefit in community and "real-world" treatment settings.

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CHAPTER 10

Enhanced, Broad Cognitive-Behavioral Therapy for Complex Bulimia Nervosa

HEATHER THOMPSON-BRENNER, REBECCA M. SHINGLETON, DANA A. SATIR, and ELIZABETH M. PRATT

"Whenever I felt the need to binge something just completely took over, and I was like I will walk a mile to binge . . . and I will walk a mile back. Yeah, I walked like in the rain and freezing cold and blistering hot. I was like—I need to binge and then I have to throw up and that's all there is to it."

"I never really thought that highly of myself, so if other people accept me then I feel better . . . so then it's like, you know, I need to be thin to get that, to be happy.

"I know it doesn't make sense, but I feel like if I don't eat then I won't get left behind."

Enhanced cognitive-behavioral therapy (CBT-E; Fairburn, 2008) is a transdiagnostic treatment for eating disorders (EDs). It has demonstrated efficacy for bulimia nervosa (BN), EDs not otherwise specified (Fairburn et al., 2009), and adults with anorexia nervosa (AN; Fairburn et al., 2013).

The underlying transdiagnostic model of CBT-E posits that all individuals with EDs struggle with common interrelated symptoms. In the CBT-E model, cognitive overconcern with shape, weight, or eating drives

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Chloe is a disguised/composite portrait.

dysfunctional efforts to control body shape and weight (e.g., caloric restriction, dietary restraint), which in turn generates vulnerability to binge eating or other unplanned eating events. Overconcern also drives extreme behaviors to compensate for food consumption, such as vomiting, laxative and diuretic use, driven exercise, and additional restriction/restraint. The model theorizes that certain components are cyclically reinforcing, for example, binge eating and chronic dieting both may increase or maintain shape and weight concerns. The CBT-E model also incorporates other factors such as negative mood and stressors that may trigger ED symptoms.

CBT-E includes both a "focused" and a "broad" treatment protocol. The focused treatment more narrowly targets specific ED psychopathology, including behavioral and cognitive symptoms, whereas the broad treatment first addresses core ED issues, then incorporates additional modules for mechanisms that may be observed to maintain the disorder in particular cases, specifically, interpersonal difficulties, clinical perfectionism, or core low self-esteem. The broad version is used only if these problems are clearly interfering with ED treatment response. The additional broad modules were developed based on review of cases where patients did not show optimal response to the focused version of CBT. In the original versions of CBT-E, mood intolerance was also considered a "broad" issue. However, in later iterations, treatment of mood intolerance was incorporated into the focused form of treatment.

All patients receiving CBT-E receive an initial eight sessions (4 weeks of therapy, twice per week) that include self-monitoring, weekly weighing, regular eating, and strategies to control behavioral symptoms. After seven or eight sessions (at Week 4), therapy moves to one session per week, and the clinician and patient together conduct a careful review of the patient's remaining symptoms, the results of which indicate whether one of the broad modules is recommended. CBT-E broad and focused versions include regular self-monitoring of all food consumed and in-session weekly weighing throughout treatment, and address regular eating (three meals and two or three snacks at regular intervals); dietary restriction and restraint if present and persistent (i.e., limits on amount and/or caloric value of food, efforts to follow food rules); and triggers for binge–purge behavior.

POTENTIAL MECHANISMS OF TREATMENT ACTION ACROSS ENHANCED COGNITIVE-BEHAVIORAL THERAPY APPROACHES

The focused and broad versions of CBT-E both include several key mechanisms of action. These mechanisms are hypothesized, as the identification of the key specific mechanisms (mediators) of change in integrative psychotherapy is still a goal of research. In theory, in the opinion of these

authors, one mechanism is *interrupting behavioral patterns of avoidance and checking* that reinforce shape and weight concerns. For example, at the beginning of treatment, regular eating, weekly weighing, and reducing restriction and dietary restraint may all be seen as behavioral strategies to interrupt behavioral patterns of avoidance (e.g., avoidance of eating) and checking (e.g., frequent weighing) that are thought to both reflect and reinforce ED symptoms. Later in treatment, behavioral strategies that reduce avoidance include the reintroduction of avoided foods and behavioral strategies to eliminate body-checking behaviors. Checking behavior may include frequent mirror checking, pinching, measuring, or other behaviors that may be seen as compulsive behaviors, performed to avoid anxiety associated with body shape or weight. A second important mechanism of action in CBT-E is addressing *mood intolerance*. Eating symptoms are seen to serve the purpose of avoiding or reducing moods that are undesirable or unbearable. Interventions intended to have positive effects on mood tolerance include chain analysis, which is a cognitive-behavioral strategy to identify and improve awareness of complex sequences of cognitions, affects, and behaviors. The identification and anticipation of these chains promotes a patient's ability to change course and avert negative outcomes, including eating symptoms.

INCREASING REGULAR EATING, AVOIDING UNPLANNED EATING, REDUCING RESTRICTION/RESTRAINT

Beginning the first week of treatment, patients are asked to record their daily food intake, binge episodes, and compensatory behaviors (e.g., self-induced vomiting, laxative/diuretic use). The goal of the monitoring is to help the patient observe and understand his/her own patterned eating behaviors (e.g., skipping breakfast and lunch, then binge eating at night), in order to identify and test changes in eating that may reduce ED symptoms. Self-monitoring is also intended to increase the patient's awareness of automatic behaviors and the relationships among thoughts, feelings, and behaviors. The clinician reviews the food records with the patient in detail throughout the beginning of treatment. Once monitoring has been established and practiced, the therapist introduces "regular eating," typically during the second session.

Regular eating is a guideline for daily eating, defined as a plan to consume three meals and two or three snacks a day, without letting 4 hours pass without eating. As noted, this intervention interrupts delayed eating and long periods of undereating, which may lead to binge eating/overeating, as well as additional shape and weight concerns. In order to successfully engage in regular eating, the patient must *plan ahead* and know what and when he/she will be eating next. The therapist and patient review the

food records in each session in order to assess the patient's progress and troubleshoot problem areas.

As emphasized in the ED formulation described above, dietary restriction (i.e., undereating) and restraint (i.e., attempts to reduce or limit eating) may be primary maintaining mechanisms of an ED. Therefore, clinicians should also be investigating these issues in the weekly food records. Food records may show that a client is following strict rules regarding the type or amount of foods eaten, and that these behaviors are related meaningfully in time to binge episodes or other symptoms. In the latter stages of treatment, dietary restriction and restraint may be addressed if they are still maintaining ED symptoms.

Many patients also have difficulty *not* eating between meals/snacks, either in binge-eating episodes or grazing/snacking. One way to counter this unplanned eating is engaging in alternative behaviors that inhibit the patient's ability to eat. These activities help the patient "urge surf" when he/she wants to graze on, pick at, or binge on food outside of regular eating. The theory behind this intervention is that the desire to eat is time limited, and engaging in other activities when the desire peaks gives time for the urge to subside. The activities are most effective when they are incompatible with eating. For example, if the activity is watching TV, this low level of engagement may not help the patient ride out his/her desire to eat in an unplanned way. Therefore, the clinician's aim is to help the patient brainstorm pleasurable activities (e.g., taking a walk, engaging in crafts and hobbies, calling a friend) that will help focus his/her attention away from the opportunity to eat. The patient should keep a readily accessible list of these activities so that there is a higher likelihood of using this skill when faced with wanting to eat outside of planned regular times.

IN-SESSION WEIGH-INS

The therapist records the patient's weight once a week from the outset of treatment for multiple reasons: (1) to educate the patient about weight, (2) to address anxiety surrounding weight when changing eating patterns, (3) to allow the clinician and patient to interpret the meaning of the number on the scale together, and (4) to address weight checking or weight avoidance behavior, which is related to ED pathology. Patients with EDs often either weigh themselves repeatedly as a means to ensure they are not gaining weight and/or to confirm they are losing weight, or will avoid the scale altogether because of the distress associated with knowing one's weight. Both these behaviors perpetuate the preoccupation with weight and may exacerbate the ED mindset. Therefore, the patient is asked to cease any self-weighing outside of the therapy session. The in-session weigh-ins allow the clinician to address the patient's concerns regarding his/her weight, and

to help address urges to restrict if weight gain is observed. In this way, the weighing may also serve as an exposure with response prevention. The clinician should conduct the weigh-in at the start of one session per week, and weights are charted on a standardized graph that may outline the lower and upper limits of a healthy weight range, if useful. Although the in-session weigh-ins can be initially distressing for the patient, they are essential in helping the patient understand that an isolated weight does not provide adequate data about one's weight trajectory and that natural weight fluctuations are normal. They also provide information disconfirming the belief that ED behavior (e.g., binge eating, daily restriction) leads directly and immediately to substantial weight changes, and provide an opportunity to discuss weight and shape concern when these symptoms are active in the session.

MOOD TOLERANCE

For some patients, mood intolerance may precede and/or impact ED behavior. Many patients report that they engage in ED behaviors to regulate negative mood. A patient may have difficulty coping with negative affect and feel that he/she needs to escape affects through binge eating, purging, or dieting. In order to address this, Fairburn (2008) suggests using problem solving, binge analysis, and distress tolerance skills. The therapist coaches the patient through "proactive problem solving" in order to help reduce ED symptoms. Proactive problem solving addresses triggers that may make a patient vulnerable to ED thoughts and behaviors. Binge analysis is a similar tool used to explore antecedents, typically external events or negative mood, to maladaptive behavior and is often used when a patient reports residual binge episodes. Focusing on one specific binge episode, the patient and therapist work together to understand what preceded the episode, sometimes much earlier in time; the multiple factors that contributed to the episode (including affect, cognition, and behavior); and the various time points and strategies that could be utilized to interrupt symptomatic behavior in the future. If mood intolerance appears to be a significant factor, then the therapist may have the patient complete "chain analysis," as noted above, to identify affect, cognition, and behavioral factors that may interact to influence a number of symptoms.

ENHANCED, BROAD COGNITIVE-BEHAVIORAL THERAPY

CBT-E broad includes the interventions mentioned above as well as specific modules targeting clinical perfectionism, interpersonal difficulties, and core low self-esteem. The decision to use CBT-E broad occurs after the first

4 weeks of treatment, during which the patient and clinician have reviewed and engaged in regular eating, in-session weigh-ins, alternative activities, and reduction of binge–purge behaviors. This allows time for the clinician to build rapport and assess whether one of the broad modules may benefit the patient.

The case described here was treated in a clinical trial wherein all participants had both BN and borderline personality disorder (BPD). Therefore, the broad arm of the treatment trial included the full set of mood tolerance interventions and the "interpersonal" module. This broad treatment approach was compared with the focused enhanced treatment approach in the randomized control trial (Thompson-Brenner, Pratt, Satir, Shingleton, & Richards, 2013). Thus, in our description of the case, the details will focus on the interventions for symptoms that are common to focused and broad CBT-E treatments, as well as mood interventions and the interpersonal module of treatment. Of note, the clinician is also able to flexibly incorporate any of the additional focused inventions (e.g., reintroduction of feared foods) as needed throughout the CBT-E broad portion of treatment. The broad interventions take place in Stage 3 (after the review, and prior to relapse prevention, approximately in Sessions 8–18), and occur alongside other focused Stage 3 interventions for shape and weight concerns (e.g., body checking, feeling fat mindsets).

Interpersonal Difficulties

The module for interpersonal difficulties is based on interpersonal psychotherapy (IPT) principles and the primary goals are to (1) identify and resolve interpersonal difficulties and (2) improve the patient's interpersonal skills. IPT as a stand-alone therapy is an empirically supported treatment for BN (e.g., Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000, Mitchell et al., 2002, Nevonen & Broberg, 2006), but in CBT-E broad, it is used to address external issues that may be affecting the ED symptoms within the context of CBT. Fairburn (2008) highlights that when using CBT-E broad, the clinician must be aware that when combining different treatments, the inherent switch in topics discussed and therapeutic style may be confusing to the patient. Therapists should prepare patients for the change in focus and process, and note in particular sessions when a switch is being made.

The IPT therapeutic stance is collaborative but nondirective. The therapist should help guide the patient, highlight inconsistencies, and help the patient focus, but should not interpret the patient's comments. This contrasts with the CBT style, which is directive, educational, and agenda oriented. Interpersonal techniques include encouragement of affect (e.g., "What were you feeling when that happened?" "What were the feelings you were pushing away?"); communication analysis (e.g., "What exactly did you say?" "What exactly did the other person say?"), clarification

(e.g., "You said you avoid confrontation, but your e-mail sounded angry." "What do you think that was about?"), and exploratory techniques (e.g., "Can you tell me more about that?" "What do you think that means?"). Clinicians are directed to repeatedly ask what their patients have done to make changes to support their goals in the past week, and what steps they might take to advance their goals in the following week. Clinicians conducting IPT within the context of CBT-E remind patients that therapy is a good time to "test out new behaviors," but do not identify or recommend the changes to be made. In this module, in each session, the clinician must make it clear to the patient when he/she is making a switch from CBT-based activities to IPT topics, during which the patient will guide discussion of the identified interpersonal issues.

The module is divided into three phases. The first phase includes education surrounding IPT and how it fits within the CBT-E framework—that is, how interpersonal problems can at times exacerbate or maintain ED symptoms and limit potential progress in treatment. The clinician and patient then identify interpersonal problems and choose target areas for treatment. In traditional IPT, the problems identified in Phase 1 are grouped into one of four categories: grief, interpersonal role disputes, role transitions, and interpersonal deficits (see Markowitz & Weissman, 2004). As IPT is used in CBT-E, this categorization is less important. What is most important is that the patient understands the nature of the problem and attempts to generate and test solutions to the problem using his/her own emotional and interpersonal skills and decision making. In CBT-E broad, due to the limited time frame, the IPT interventions are provided in a more limited version than in typical stand-alone IPT. The mechanisms of action for IPT as included in CBT-E are not well known.

Emotional Acceptance and Mindfulness

In the clinical trial from which the case below was taken, the CBT-E broad treatment included a strong focus on mood intolerance and interpersonal problems because patients were preselected for having the long-term emotional and interpersonal problems characteristic of BPD. Because intense negative affect, or "dysphoria," is the central characteristic of BPD, we added a brief psychoeducational intervention concerning nonjudgmental, mindful awareness of emotion and emotional acceptance, to help patients tolerate affect and cognition without engaging in ED symptoms or other emotion-driven behavior. If the patient responded positively to this concept, two mindfulness exercises were available as homework. These were intended to promote awareness of emotions and associated cognitions without taking the habitual actions that may maintain ED symptoms and emotional avoidance. For example, one exercise suggested engaging in a period of contemplating one's thoughts as if they were leaves floating down

a stream. These were not taken from the CBT-E manual, but are commonly included in CBT and dialectical behavior therapy protocols including an emotional tolerance/mindfulness component (e.g., Barlow et al., 2011; Safer, Telch, & Agras, 2001).

THE CLINICAL TRIAL

The patient described in the current case study participated in a clinical trial for women with BN, current or recent mood or anxiety disorders, and the affective and interpersonal features of BPD (Thompson-Brenner et al., 2013). Participants were randomized to receive either the broad or focused version of CBT-E, and both patient and clinician knew the condition from the start of treatment. The aim of the study was to compare outcomes for the two versions of treatment for emotionally dysregulated women with long-standing patterns of negative affect and interpersonal problems. The treatment followed the CBT-E manual (Fairburn, 2008), and the therapists had been trained and supervised in both approaches (focused and broad) by senior supervisors in the Oxford program at which CBT-E was developed (see Thompson-Brenner et al., 2013, for more details).

It is important to describe a few important distinctions between the CBT-E approach as it was utilized in the trial and the approach described in the manual (Fairburn, 2008). As noted, clinicians and patients knew the treatment condition (focused or broad) from the beginning of treatment, and although a review was conducted after eight sessions, the review indicated the targets of therapy within either focused or broad CBT-E as opposed to which version of the therapy to utilize. As noted, psychoeducation concerning emotional acceptance and mindfulness were also introduced in one session of the "broad" condition, although some patients (including the one described here) were particularly attracted to this approach and continued to discuss it further in later sessions. Furthermore, because protocol therapists in the trial were also extensively trained in CBT for mood and anxiety disorders, some of the interventions may have emphasized the concepts of "avoidance" or "exposure" more than is standard for CBT-E. Finally, patients in the trial were diagnosed with BPD, and these diagnoses were shared with the clinicians. Though comorbid diagnoses other than BN were not shared with patients, therapist knowledge regarding common patterns of emotional and interpersonal functioning in BPD at times may have influenced the choice or description of affective and interpersonal problems. As readers will see in this case, rejection and abandonment issues were emphasized. Personality disorders are not diagnosed routinely in order to practice CBT-E according to the manual, and none of the CBT-E manualized interventions are based on personality disorder symptoms (Fairburn, 2008; Z. Cooper, personal communication, 2013).

CASE STUDY: CHLOE

The Participant

Chloe was a 19-year-old female, enrolled as a freshman at a private northeast university, where she was majoring in psychology. She grew up in a working-class community outside of a major city, and was the older of her parents' two children. Chloe appeared somewhat younger than her stated age, with long black hair. She reported her goal was to "look cute," and frequently wore casual clothing (i.e., yoga pants and sweatshirts) to sessions. She presented with bright affect and was very enthusiastic about engaging in treatment; her extensive history of depression and turbulent relationships was not apparent in her cheerful, unassuming interpersonal style. Chloe was curious about college social life, reporting that she herself had never had a romantic relationship, and was unused to the drinking and drug use behavior she witnessed on campus. Chloe was very likable and often funny, particularly when describing her own clumsiness and awkward interpersonal interactions. She expressed a strong sense of compassion toward others, respect for authority, and an ethic of self-care and self-respect, although she struggled with prioritizing her own needs and worried about how others perceived her. The therapist admired Chloe's ability to take initiative in treatment, though the therapist believed Chloe was more vulnerable and sad than she often acknowledged.

The Therapist

The therapist (D. A. S.) was a 30-year-old female in her last year of doctoral training in clinical psychology. The therapist had treated multiple patients with BN and BPD. She had been trained and supervised in CBT-E broad, including the IPT module, with Zafra Cooper (DPhil, DipPsych) of Oxford University prior to the treatment trial. During the trial, the therapist was supervised weekly by a licensed clinical psychologist (E. M. P.), a specialist in CBT for EDs, who herself had been trained and supervised in CBT-E by Dr. Cooper (and previously in CBT by G. Terence Wilson). All the psychotherapy sessions were taped for the purposes of supervision and adherence ratings. Subsequently, Chloe provided special consent for the psychotherapy tapes to be transcribed and excerpted in this case description.

Assessment

Chloe was assessed by the Eating Disorder Examination (Fairburn & Cooper, 1993), which indicated she met criteria for BN, and endorsed extremely high shape, weight, and eating concerns (see Table 10.1). The Structured Clinical Interview for DSM-IV (First, Spitzer, Gibbon, & Williams, 2002) indicated that Chloe met criteria for major depressive disorder

TABLE 10.1. Baseline, Posttreatment and Follow-Up Clinical Data

Assessment	Pretreatment	Posttreatment	6-month follow-up
EDE–Restraint	5.0	0.2	0.0
EDE–Eating Concern	4.8	0.2	0.0
EDE–Shape Concern	5.2	0.0	0.4
EDE–Weight Concern	5.3	2.0	0.2
EDE–Global	5.1	0.6	0.1
OBEs in the past month	28	0	0
Purges in the past month	128	0	0
DIB-R total scaled score	8	[Not assessed at termination]	4
Axis I disorders	History of AN; MDD, recurrent	MDD, recurrent, in full remission	MDD, recurrent, in full remission
Axis II disorders	Borderline PD Avoidant PD	[Not assessed at termination]	None

Note. EDE, eating disorder examination; OBE, objective binge episode; DIB-R, Diagnostic Interview for Borderlines—Revised; AN, anorexia nervosa; MDD, major depressive disorder; PD, personality disorder.

and a history of AN. She reported the current period of depression onset approximately 2 weeks prior to the interview, including depressed mood, difficulty getting through classes, and social isolation. Chloe said she felt "nothing good" about herself, had difficulty concentrating, and difficulty doing anything at all (apathy) or enjoying anything (anhedonia). She noted that her depression was currently linked to eating symptoms, including restriction that left her "so weak that I am blacking out when I get up in the morning." She dated her depressive disorder to well before the ED began (fourth or fifth grade), when she first felt socially excluded. Chloe reported feeling depressed "98%" of the time since then, and only feeling good "if I'm lucky, a few days at a time."

Chloe also completed two assessments of personality symptoms: the Diagnostic Interview for BPD—Revised (DIB-R) and the Diagnostic Interview for DSM-IV Personality Disorders (DIPD; Zanarini, Frankenburg, & Vujanovic, 2002; Zanarini, Gunderson, & Chancey, 1989). The DIB-R assesses social, cognitive, affect, and interpersonal functioning, including symptoms characteristic of BPD. Individuals receive both subscale and total scores, ranging from 0 to 10. A total score of 5 and above indicates borderline features, and 8 and above indicates full criteria for BPD. Chloe scored a full 10 in the affect section, due to her frequent and long-standing

depressive symptoms, feelings of anger (which she did not express to others), anxiety, and feelings of loneliness and emptiness. She scored an 8 on the interpersonal relationships symptom section, due to her feelings of depression, anger, anxiety, and emptiness particularly when she was alone; fears of both abandonment and of engulfment (i.e., losing her identity if she were too close to someone); her dependency (i.e., needing to be close to others, including physically close); and her "counterdependency" (frequently trying to take care of other people, sacrificing herself, in order to keep people close and avoid driving them away). On the cognition section of the DIB, she endorsed unusual perception experiences such as fears that others could read her mind using telepathy, especially when she was upset. She also reported experiencing depersonalization and derealization when upset. Regarding impulsivity, Chloe reported a history of self-harm, including cutting herself two times when experiencing derealization, and punching herself in the stomach when very hungry. She reported one previous suicide attempt, but no current ideation or intent. She described frequent spending sprees, during which she would spend money on things she did not need. Her full score on the DIB-R was an 8, indicating she had full-criteria BPD.

Chloe also met DSM-IV criteria for avoidant personality disorder on the DIPD. She reported viewing herself as socially inept and unappealing to others, and described worrying that she would be criticized and rejected in social situations. She added that her fears about this were "always justified." In addition, Chloe reported being unwilling to begin relationships without being reassured that she was not being judged. She reported being inhibited in new social situations, being a very private person in relationships due to her fear of being judged or shamed, and avoiding activities that involve interpersonal contact. Finally, she reported avoiding trying new things, such as sports or other activities, for fear she would look foolish or be embarrassed.

Self-report assessments were administered before every session, and included two subscales from the Eating Disorder Inventory (EDI; Garner, Olmstead, & Polivy, 1983): Drive for Thinness and Body Dissatisfaction. The Drive for Thinness subscale is a cardinal marker of ED pathology and represents an individual's desire to be thinner, preoccupation with shape/weight, and fear of gaining weight. Chloe's pretreatment Drive for Thinness score was very high, for example, she reported she "always" felt extremely guilty after overeating. The Body Dissatisfaction subscale represents discontent with body shape, which often drives ED behaviors. Chloe's pretreatment body dissatisfaction was also very high, for example, she reported she "always" felt that her stomach was too big and "never" felt that her thighs were "just the right size." The Beck Depression Inventory (BDI; Beck, Steer, & Brown, 1996) was also administered at baseline and before every session, as a measure of change in negative emotion and the interference experienced as a result of negative affect. Chloe's pretreatment

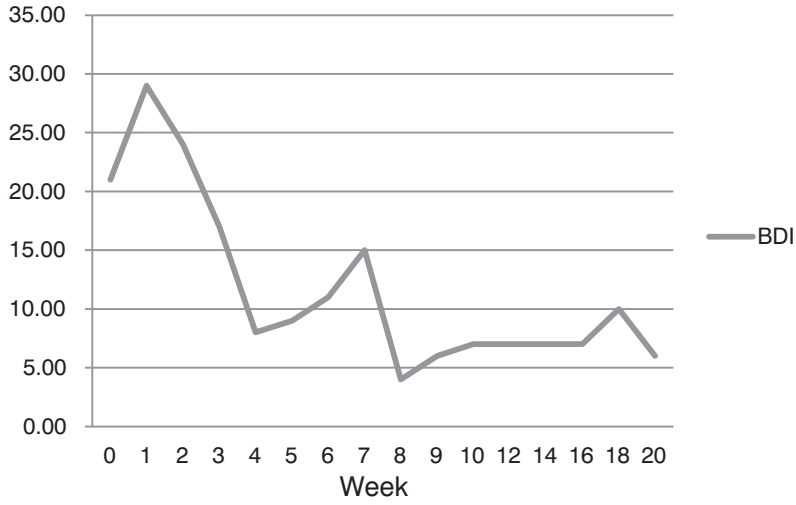

FIGURE 10.1. Beck Depression Inventory (BDI) scores over the course of treatment.

(assessment) score on the BDI was 21, and her Week 1 score (prior to the first session) was 29 (see Figure 10.1), indicating moderate and severe depression, respectively, and reflecting her highly variable, unstable negative affect at baseline.

The Presenting Problem

In the month prior to the intake interview, Chloe reported 109 episodes of objective binge eating. She reported trying not to eat as long as possible during the day, trying to restrict her intake solely to apples, and trying to limit her caloric intake to fewer than 500 calories per day, less than one-third of the daily calories recommended for a woman of her size and age. Chloe reported compensating in the past month by vomiting, fasting, laxative misuse, and diuretic misuse. She reported purging by vomiting after every binge episode, fasting 2 full days in the past month, and taking laxatives twice per day every day in the past month. She also reported taking diuretics (one pill at a time) five times in the past month. She reported having engaged in driven exercise in the past, but not in the most recent month, due to lack of energy. At intake, her height and weight were measured at 5′6″ and 128 pounds (body mass index = 20.7 kg/m^2, within the normal weight range).

Chloe reported that her ED started at age 16 during her junior year of high school. She stated she was depressed at that time in the context of social pressures and social exclusion, and that she weighed 140 pounds,

her highest lifetime weight. She reported that at that time she "stopped eating," and would eat on "some days a handful of cereal all day," but she stated the undereating at that time was due to depression and lack of appetite as opposed to efforts to lose weight. Chloe reported losing 10 pounds in several weeks at that time, finding pleasure in that weight loss, and then deliberately restricting her intake. She stated that the summer after she turned 19, while deliberately restricting her intake and actively fearing weight gain, her lowest weight was 115 pounds (body mass index = 18.6, at the low end of the normal weight range) and that her menstruation at that time was irregular. Around that same time she began purging by self-induced vomiting after normal meals. After the beginning of her senior year of high school, she began binge eating. She reported regularly binge eating and purging since that time. Chloe was assessed by a medical professional prior to the treatment described here, who stated her examination and lab results indicated she was medically stable and could engage in outpatient psychotherapy. During the course of the treatment trial she had weekly medical checks.

Treatment

The first session of CBT-E is crucial to set the tone for therapy, establish expectations, and engage the patient's motivation and commitment. The therapist explained that therapy would be structured, and would focus on eating behaviors initially in treatment, followed by mood and relationships later in treatment. The therapist explained that the standard form of CBT had been shown to be very effective for 70% of the patients in treatment studies, and that there was no reason why Chloe should not experience that benefit. She explained that it was very important that there were no breaks during the first 4 weeks of treatment, and that all 20 weeks required an important ongoing commitment. She asked Chloe whether there was anything that might interfere with treatment, and Chloe reflected that she was looking for a new job (in retail, so that she could receive a discount from her favorite stores) and that she was unsure what the schedule might be. The therapist joked with Chloe about the need for money for shopping and entertainment, and then restated the importance of maintaining a primary commitment to the therapy for the full 20 weeks. She stated, "The best predictor of how someone does is being really engaged and changing a lot during the first 4 to 6 weeks." Chloe agreed to try her best.

Next, the therapist took a history of the ED from the patient's perspective, with the goal of making a personalized formulation that would allow Chloe to understand the symptoms of her ED within the CBT-E framework. This part of the session is presented below in detail, in order to show the formulation that informed the remainder of treatment. The written version of the formulation is presented in Figure 10.2.

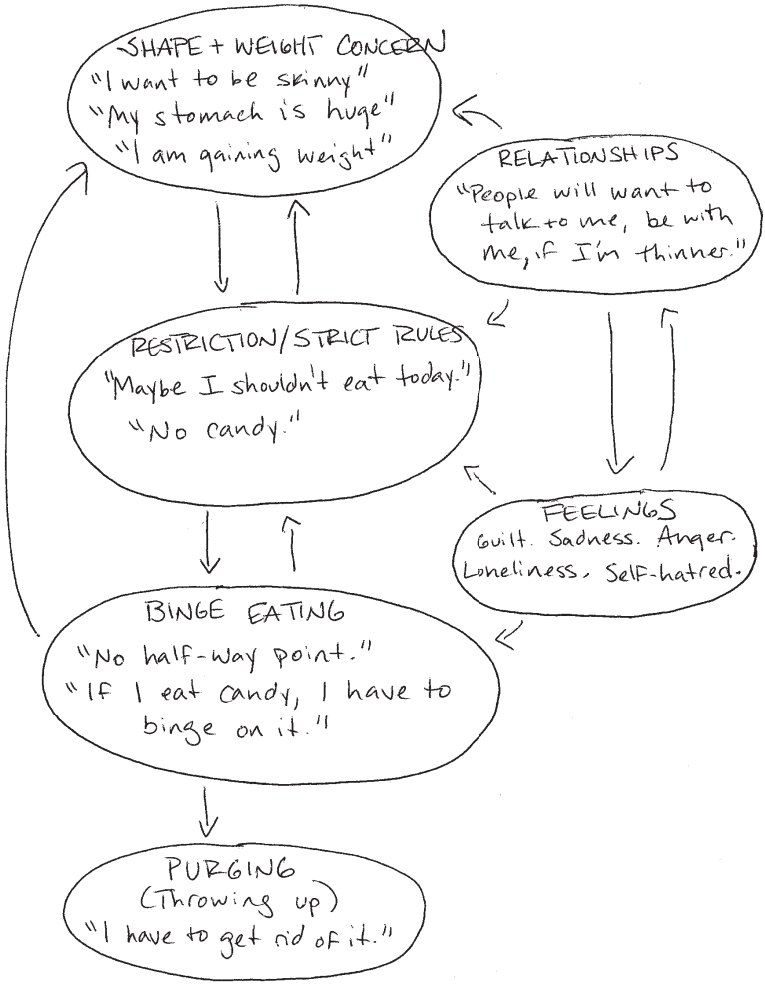

FIGURE 10.2. Personalized formulation.

The therapist started by asking Chloe what was "most distressing right now" as far as the eating disorder was concerned, and continued:

THERAPIST: . . . What in your mind is still kind of keeping things going?

CHLOE: That it is still, it's still hard because when I used to see skinny people, I'll be like—"Oh, I have to look like that." And now, I don't necessarily think I have to look like that. I'm trying to be like, when I see curvy people, be like—"Oh, that's pretty too." I liked when I used to feel like having curves was really sexy and stuff. But now,

even today when I see thin people I'm like—"Oh, that's so pretty. And maybe even, maybe I shouldn't eat today so I can have legs like that."

THERAPIST: So one way to think about that is that kind of placing a lot of value on shape and weight and control over those things is really kind of driving what happens with your behavior. (*Draws a bubble at the top of the page that says "shape and weight concern."*) . . . So this high value on weight and shape, even though that's not necessarily how the eating disorder started, after it developed, it led to restriction of what you were eating. And when you had some positive results about that—it sort of said, "Hey this is good, this is something I can control, it feels good to care about my shape and weight." (*Draws a bubble that says "restriction" and arrows between "shape and weight concerns" and "restriction."*)

CHLOE: Yeah, yeah. It totally did.

THERAPIST: Yeah. Okay. So I'm wondering—restriction or restraint can look like a lot of things—it's cutting back on the quantity of food. There is also the problem of having these like really rigid rules about restraining what you can and can't eat, and that's where—I don't know if you tend to binge on candy from what you were saying before.

CHLOE: Oh, yeah.

THERAPIST: Yeah. Do you try to like, not eat candy at any other point in time?

CHLOE: Yeah, a few weeks ago, you know, if I wanted candy, I had to eat a ton of it so I could throw it up.

THERAPIST: Right. (*Writes, "strict rules" in the same bubble with "restriction."*) What can sometimes happen is if people aren't eating enough during the daytime, and I don't know if this is what you would find with your binges, is that your body needs food. It needs fuel. Otherwise, you're gonna feel faint, you're gonna feel dizzy. You're gonna stand up and fall over, literally.

CHLOE: Yep, that's happened a lot.

THERAPIST: Has it? Yeah, so that can lead to two things. One is that when you then start to eat your body is like—"Sweet, hook me up with this stuff. I don't want to stop. I need to store this stuff." So in a way that leaves you kind of vulnerable to the bingeing. And then once, and I don't know if this happens to you, once you sort of break that kind of cycle, does it feel like all or none? Like—every time I eat, "I'm finally eating, so I'm going for it at this point"?

CHLOE: Yeah, definitely. There is no halfway point.

THERAPIST: (*Draws bubble with "binge eating" and arrow from "restriction."*) And then the effect of that is—"Well, oh no, I've binged, so

maybe tomorrow I have to cut back a little bit." Is that something that's happened before?

CHLOE: Yeah. For a while I was pretty good at that. You know, the whole "Tomorrow I'll be better thing." But especially in the last few months it's gotten to a point where I'll say that, but tomorrow will be the same exact thing.

THERAPIST: So you're in the cycle. (*Draws an arrow from "binge eating" up to "restriction/strict rules."*)

CHLOE: Yeah.

THERAPIST: Okay, so sometimes the bingeing leads back to this—"I'll be good. Yeah, I have to cut back." And then, after the binge, do you always purge these episodes?

CHLOE: Yeah.

THERAPIST: Yeah. (*Draws bubble for "purging" and an arrow from "binge eating" to "purging."*) So that's kind of, you know, inevitable afterward. And what do you find that does to some of your thoughts about shape and weight?

CHLOE: Umm, for a while it was nice because I kind of thought of it as—"Well, I can eat as much as I want and then get rid of it." But after a while I started noticing that I was actually gaining a bit of weight.

THERAPIST: Yeah.

CHLOE: And my stomach is actually really swollen.

THERAPIST: Yeah. Distended.

CHLOE: Yeah, even back when I was at a much higher weight, it didn't do that, and I didn't feel like I was going to explode when I ate.

THERAPIST: So, in a way, feeling that physical discomfort after you eat, it might make you worried about what you look like. (*Draws an arrow from "binge eating" bubble back to "shape and weight concerns."*)

CHLOE: Yeah, yeah.

. . .

THERAPIST: What else do you think gets into sort of causing these binges or influencing the restriction? Or making you feel like it's very important to control your shape or weight? That's not maybe exclusively related to eating.

CHLOE: Yeah. I guess my relationships with people a lot of times.

THERAPIST: Yeah.

CHLOE: Yeah, I definitely feel like, you know. For a while I was like—"I'm more of a worthwhile person if I'm thinner, so then people will want to talk to me."

THERAPIST: Yeah.

CHLOE: And I definitely place a lot of, 'cause I never really thought that highly of myself, so if other people accept me, then I feel better.

THERAPIST: Yeah, so that's really reinforcing. (*Draws "relationships" bubble, with Chloe's quotes.*)

CHLOE: Yeah, so then it's like, you know, I need to be thin to get that, to be happy. And then after a while I realized, you know, the sicker I was, the less I could talk to people. And I was constantly angry all the time because I was thinking about when I was next going to binge or like how I would avoid bingeing or stuff. And I'm like—I am just totally isolated and in my own world.

. . .

THERAPIST: Okay, so maybe we don't have all the evidence yet, but maybe we'll draw a dotted line—that your guilt and sadness and loneliness actually may cause the bingeing. That it doesn't really come out of the blue.

CHLOE: Yeah.

THERAPIST: You know, because if it's happening at night, that's kind of the time when things get quiet.

CHLOE: Yeah. And that's definitely when I feel most, especially if I happen to be at home alone on like a Friday or Saturday night when everyone else is out partying, I'm like—"Oh, this is great you know."

THERAPIST: Yeah. Like where are all of my friends?

CHLOE: Food is all I have right now, so I might as well eat it and then get rid of it.

THERAPIST: Yeah. (*Makes "feelings" bubble, connects with arrows.*)

CHLOE: So yeah, that definitely, definitely plays into it.

. . .

THERAPIST: So how does this look? Does this feel like it?

CHLOE: Umm, that's a lot of arrows, but it—it makes total sense.

The therapist then explained that their plan was to return to the formulation regularly, and to start therapy by addressing a "keystone" in the building, which was the effort to restrain her food intake, right in the middle of the formulation. She explained that by eating regularly, she would reduce her vulnerability to binge eating (see Figure 10.2 for formulation).

In other parts of the session, the therapist described the importance of food records and weekly weighing. She explained that Chloe would be recording food, binge eating, and any forms of compensatory behavior in treatment, and probed to see whether there were any concerns that Chloe

needed to have addressed, given the necessity of adherence to food records. Chloe reported she had recorded her food intake for a nutrition class in the past, and had not minded doing it, but was not sure whether it might be more difficult now that she also had to report binge eating. The therapist also went through the details of how to self-monitor food intake and context in real time, which Chloe had no objections to; in fact, she thought it would help her to see the ED symptoms as explainable and outside herself, as opposed to her fault and a part of her identity. In the last 10 minutes of the initial session, the therapist introduced the concept of weekly in-session weighing. The patient stated she thought that would be helpful because, as she said, "I realized I used to weigh myself every day like all day every day. And I hated seeing the ups and downs, but back when I used to only weigh myself once in a while I wouldn't really notice a big change."

In the next few sessions, treatment included weekly weighing, reviewing the food records, and planning for regular eating. Chloe reported that in fact, self-monitoring was more difficult than she expected, as she did not like seeing what she had eaten written on paper, and the therapist congratulated her for writing it down despite having this reaction. Following the first in-session weighing Chloe was slightly upset about her weight, which was up by 2 pounds from the assessment weight. The therapist graphed her weight, and showed her that both her lowest and highest weights were within a healthy range, and that the two recent weights were close together and did not yet constitute a "trend." Chloe admitted that the number might prompt her to increase efforts to restrict her intake, and the therapist and patient together agreed that was a symptom of the eating disorder and that the important goal was to consistently institute regular eating and try to avoid compensation.

Large sections of each session early in treatment were devoted to instituting regular eating, as in this excerpt from Session 2:

THERAPIST: (*with a curious tone*) Some things I noticed from your self-monitoring that are important are that there tend to be big gaps between mealtimes.

CHLOE: Yeah.

THERAPIST: (*still curious*) You tend to eat frequently during the day, but the portions tend to be really small.

CHLOE: Yeah.

THERAPIST: Does that feel accurate or this is more of just this day?

CHLOE: No, that's pretty much every day, yeah. I mean, actually it feels like a lot, to me [referring to her food intake].

THERAPIST: Yeah, so like looking at this, this feels like a lot.

CHLOE: Yeah.

THERAPIST: And I look at this and I say basically you had one apple and two meals. So like two meals and a snack.

CHLOE: I never thought of it that way. But I see what you mean.

. . .

THERAPIST: This is how we start with regular eating. The basis of regular eating is that if you are having three meals and at least two snacks a day, within a time frame, so that there is no more than a 4-hour gap between eating . . . And at this point in time, portion sizes actually don't matter. It's just sort of getting into the scaffolding and the routine of doing it.

Following the agreement to try regular eating, much of the early session time was concerned with review of the prior week's self-monitoring forms and planning eating for the following period of time, including particularly challenging events, such as going home for the weekend. Chloe made great efforts over the first few sessions to institute regular eating, and her objective binge eating and purging were sharply reduced.

The therapist also pointed out links between Chloe's eating and her body image concerns, such as the time each week when she has coffee cake for lunch—a food that was "forbidden," or avoided, at that time in treatment—and then reported feeling that her stomach was grossly distended, so much that she said, "If I don't suck it in all the time I actually look like I'm pregnant, so it's not really a good feeling." The therapist gently suggested that feelings of anxiety around eating foods that were normally out of bounds might be affecting her feelings about her body. These themes are more closely attended to in Stage 3 when the therapist emphasizes mechanisms that may maintain the ED such as dietary restraint and body checking (but are not described in detail in this case report).

A challenge early in treatment was maintaining the CBT-E agenda of weighing, discussing, and graphing weight; reviewing food records; analyzing unplanned eating episodes; and planning future regular eating, while paying attention to the emotional concerns that Chloe brought to the session agenda. For example, at the beginning of one early session, Chloe stated that two of her relatives had been diagnosed with serious illnesses, and a neighbor from her hometown had suddenly died. She was clearly affected by the events and was using some of her usual, depressive coping styles, such as ruminating on her close family members' health, and emotionally numbing. These moments early in CBT-E have to be handled very carefully because the alliance with the patient has to be maintained, but the agenda of the sessions has to be preserved or forward progress may be sacrificed. In this case, the therapist expressed her sympathy, and briefly underlined some of the emotional themes they may return to later in the treatment—that efforts to avoid or suppress emotions may be problematic.

THERAPIST: It may be that you're coping really well with something that's just painful, and you don't have to get into a puddle of grief in order for that to mean that you're experiencing it. But knowing what you said about crying, and not being able to cry, it might be that feelings get pushed away.

CHLOE: Yeah. Definitely.

THERAPIST: Okay. So, just something for us, since we're going get to that mood module to think about if that's some way that you try to cope when things feel intense.

CHLOE: Yeah, just to sort of ignore them and pretend they're not really happening. I have definitely done that before, and there are times when I know I'm doing it.

THERAPIST: So in the meantime it's good that your family members who are sick, that they are taking care of their physical health, and we can really get into ways of approaching your feelings a little later in treatment.

The therapist then reengaged Chloe in the CBT-E session agenda.

Early in treatment, Chloe also identified the interpersonal themes that she hoped to address later in treatment, as in this statement: "I definitely want to work on the whole *feeling lonely* thing when the plans fall through. That's something I've always had trouble with, and I just want to find some way to nip that in the bud and learn to *not feel so desperate when I'm alone*." Because it was early in treatment, the therapist addressed particular incidents where Chloe felt rejected or abandoned as antecedents to ED symptoms, with an immediate problem-solving approach. Together they made a list of activities that could help Chloe change her emotional state when she was vulnerable to binge eating in those situations. For example, one night Chloe had plans with a friend, and had gone so far as to get dressed and walk to the location where they were to meet when he canceled the plans. She had written in her self-monitoring forms that she felt terrible at that time and very vulnerable to losing control over eating, particularly also because the plans had been for dinner and more than 3 hours had passed since her last snack. Together they began to examine how she had handled the situation, and problem solve around how she might handle it in the future, in the following excerpt:

> "So let's imagine, let's sort of rewind and do things differently. What could you have done? So, you get the call, you're dressed to the nines, ready to hit the town, and you're totally bummed, and that intense feeling of loneliness kind of comes into you. So how do we rewrite what happened here as far as what you were eating and what you were doing so the rest of the day didn't look like that?"

Through a step-by-step process of challenging Chloe to come up with ideas and suggesting ideas herself, they came up with the ideas of having a meal in the cafeteria, watching a TV show, calling other people to go out, cleaning and organizing the apartment (which Chloe found soothing), going to the bookstore to read books and magazines, and taking a walk outside or in the gym. Over time, Chloe added substantially more items to the list, and she posted the list clearly where she could see it when she needed to turn to it. In early sessions, while focused on troubleshooting her regular eating schedule, she also further described the connections between her ED and her fears of being rejected and abandoned. The therapist noted these connections for attention in later sessions, when interpersonal issues would have more primacy.

CHLOE: I meant to have the tea bread that I got as a snack when I got home. And then when I did get home, me and one of my friends had plans to get together and I called him up. It turns out he was going somewhere else. And whenever I have like plans with people and they kind of get shifted I start to get really nervous because I'm like—"Oh great, now I'm by myself . . . " And I know it doesn't make sense, but I feel like if I don't eat, then I won't get left behind.

THERAPIST: Yeah.

CHLOE: And I know there's like no connection, but when I'm in that mode, there is a connection . . . Like if I made plans to see a movie, even if I didn't really want to see the movie, if that falls through I'm like—"Oh god, I'm losing control. I need to go back to the one thing that I sort of have control over."

In the first 4 weeks of treatment Chloe made great strides with binge eating and purging, as Figure 10.3 shows, and essentially eliminated these behaviors through her regular eating and use of positive coping strategies when urges to binge eat or purge came up. After 4 weeks of treatment the therapist and patient together reviewed her progress, and agreed that her remaining urges to binge eat and to purge were mostly coming up at times when she ate a food that had been "forbidden" (avoided/feared), or when she had feelings of intense sadness and loneliness that were attached to feeling abandoned, rejected, or unlovable, as described above. Following this review, the treatment had two additional phases and one ongoing intervention that were woven into the agenda. In each session, Chloe and the therapist planned a careful reintroduction of one feared food for the following week and reviewed how the exposure to the feared food had gone the prior week. Though Chloe was a vegetarian, she decided to reintroduce meat as well as other avoided foods during treatment because she admitted her vegetarianism was "convenient" for her eating disorder. In

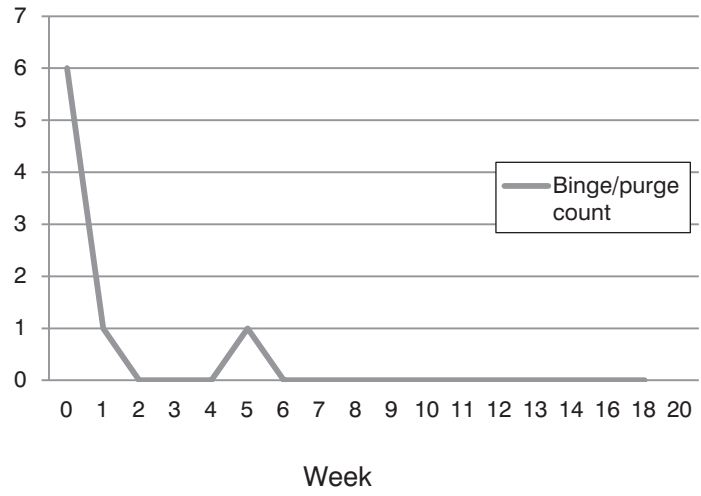

FIGURE 10.3. Binge–purge count over the course of treatment.

addition, the therapy came to focus on mood tolerance and interpersonal difficulties.[1]

Mood Tolerance

Chloe engaged fully in the mood tolerance activities during Sessions 8–12. In Session 8 the therapist introduced her to the process of making chain analyses, which promote identification of individual emotions, thoughts, and behaviors that lead to binge eating or purging activities, and reflect intolerance of particular mood states. The process of making a chain analysis, and noting moments when active problem solving might have prevented the purging that took place, is illustrated in the therapy process excerpted below (see Figure 10.4).

THERAPIST: One thing I'm thinking of is the home example of getting into a fight with your brother. Not only because that was the last time that you purged, but also because there were sort of a couple things that led up to that event. Does that seem like a relevant thing to think about?

CHLOE: Yeah.

[1]This treatment did include interventions for shape and weight concerns, but they are not described in detail here. Description of these interventions may be found in Fairburn (2008).

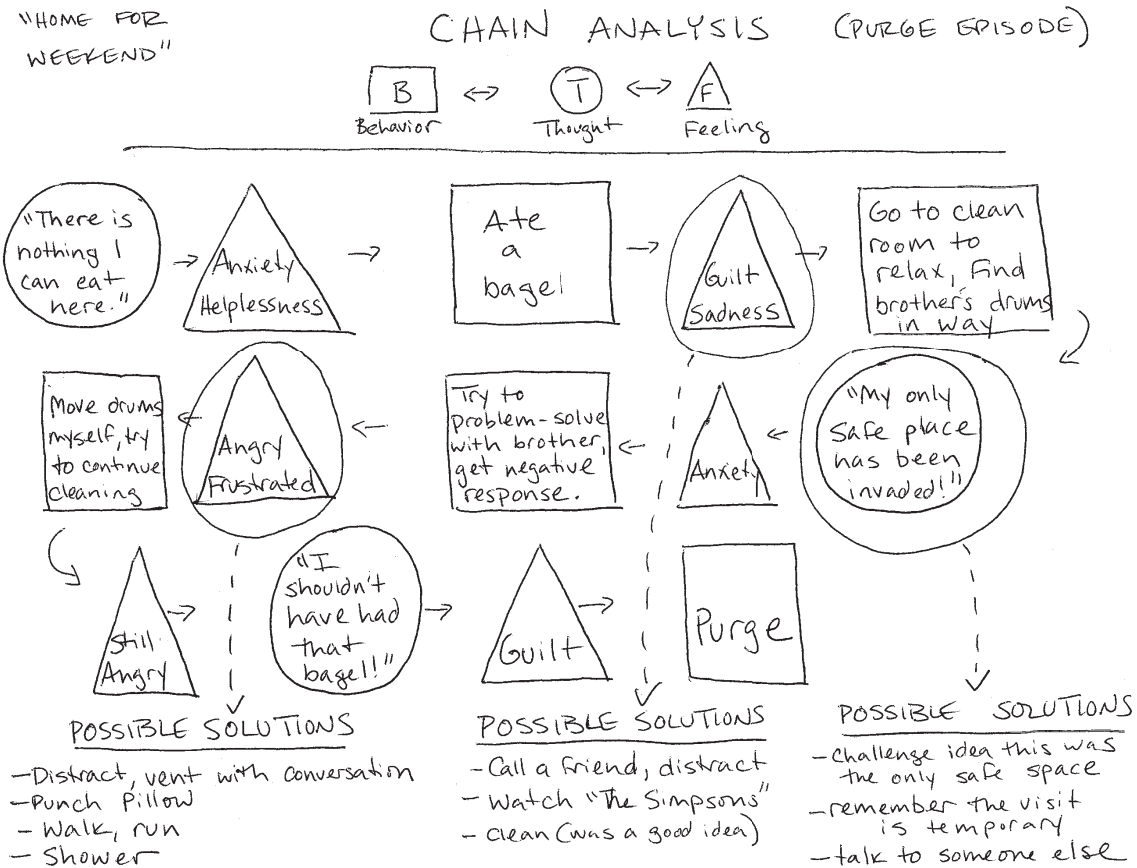

FIGURE 10.4. Chain analysis.

THERAPIST: Okay. So here's what I'm going to do. This is called a chain analysis. And I'm going to sort of label different things. So these are going to be . . . boxes are going to be behaviors, circles are going to be thoughts you have, and then triangles are going to be feelings. And we want to see how all of these are related to one another. So if you think back to the time you were at home, what was the situation that you were in?

CHLOE: When the fight started or before that?

THERAPIST: Let's say even before, like if you had to say the earliest point at which maybe there was some strong feelings that might've come up.

CHLOE: Well, I mean I didn't feel great when I was eating, but it felt like something I could handle at the time 'cause I had kind of felt like that before.

THERAPIST: Okay, so let's talk even about that. So, what was happening then? You were eating dinner?

CHLOE: Yeah, umm . . . again, I wasn't too, too hungry, but I knew it was my dinnertime, umm . . . and I was also kind of thrown in a place where I don't have a whole dining hall to like choose different foods from, so I was like, well I don't eat pretty much anything else they have here, and actually my family's kind of big on like junk food and stuff, so it was also really hard to find something that wasn't—you know, like I try to keep healthy, or as healthy as I can.

THERAPIST: But there weren't as many options?

CHLOE: Yeah, so a bagel was pretty much the only thing that I could have, and I mean I could've had more but by the time I had almost finished it I was sort of starting to feel more like stressed.

THERAPIST: So we're setting up the stage, you're at home with your family, and you're engaging in some unfamiliar eating. So you started to tell me some of the feelings that you had, which is some anxiety because you didn't know what kind of foods you could have and also it was making you nervous because it was foods you're not normally going to eat at dinnertime. What kind of thoughts came up when you were feeling that way?

CHLOE: Umm . . . just kind of helplessness really, because I didn't know what to do now because I wanted to stick with the plan and everything, but I didn't really know how and I didn't want to eat something that felt unhealthy or I used to binge on, or just a food that was generally like a bad food because that probably would've set me off a lot faster.

Chloe is describing a typical emotional reaction to eating an avoided food, and as noted, portions of each sessions during this period were also

devoted to planning the gradual reintroduction of these foods into her diet without compensation. This portion of the session was focused on promoting mood tolerance through chain analysis, however, so the therapist continued mapping out the sequence of thoughts, feelings, and behaviors without commenting further on the actual foods.

THERAPIST: So, you're feeling some anxiety and there's a sense of "What do I do now?" and that leads you to feel really helpless, like you don't really have a lot of control over what's happening . . . And then how were you feeling after that?

CHLOE: Just kind of . . . not so stressed anymore like not worried about it, but just feeling kind of, you know . . . like there was a little bit of guilt like I wish I hadn't eaten it. I always kind of have that after eating, it's not something I can totally avoid. But I went up to my room and I was doing relatively okay, I could manage, and I was going to start cleaning and stuff to get my mind off it. I was planning on being able to move past it and I think I could've if I hadn't gotten into that fight.

THERAPIST: Mmhm. So you were feeling guilty, but you had a plan. Okay. So then what happened next? So like you said, you went to upstairs to clean, and then . . .

CHLOE: Well, my brother's drum set is in my room now and it is set up so that I have to clamber over it to get to the other side of the room. So I couldn't really clean with it there 'cause it was just like a pain in the butt, so I went and asked him, instead of making him mad by doing it on my own, I asked him if I could move it.

THERAPIST: How'd you feel when you saw it there?

CHLOE: Umm . . . kind of . . . invaded sort of I guess, that's like my room, it's my place, like that's where I go when I try to get away from stuff and now I have other people who have access to it, so I kind of feel like really my only like alone place is being taken away, which is another sort of disadvantage again, because it's like well what do I do when I need to go somewhere by myself and maybe I'm really tired or it's raining out and I can't take a walk or something?

THERAPIST: What are those alternatives, yup. Okay. All right. So this is sort of your thinking: "This is my room, this is my place. The only alone place that I have." Okay, so then you approach your brother and you guys kind of get into an argument, right?

CHLOE: Yeah. . . . So, I'm like, "Okay this might be a problem, but I'm going to ask him anyway . . . " I was like "I need to clean my room, can I just move your drum set?" and he was like "No, just walk around it or something" and I was like "I can't, it's right between my beds." Like

I've been going this way and this way, and the drum set's here, like I have to go around . . .

THERAPIST: Are you feeling angry at this point?

CHLOE: Yeah, I was so frustrated, 'cause he was just looking at me and he was like "No, that's my drum set." And I was like well . . .

THERAPIST: Well, that's my room.

CHLOE: Yeah, and then I pulled that and I was like "It's my room" and he was like, "Well you don't live here anymore so it's not your room" and I was like, I was so mad and I'm not really good at expressing anger, I don't even yell that much, I just get really like, like I take it all out on myself 'cause I don't know what else to do, like I want to hit him but I can't so I don't know what else to do.

THERAPIST: So what did you do?

CHLOE: So we just kind of kept bantering a little bit and then he was like, "Fine you can move it but you have to move it back or whatever" or something, he was like, I don't know, I was like "Well I don't know how it goes back, so I'm gonna need your help with that" and he was like, "I can't do it, it's so heavy, I had to have dad help me last time" and I was like you know what, whatever, so I went to my room, moved it—by the way, it was a piece of cake, it was like as light as a feather. But at that point I was so like—anger especially does that to me, like kind of fear and stress sometimes I can sleep off, but anger is like, that's a hard one to shake off.

THERAPIST: That's a hard one to cope with, okay. That's good for us to know.

CHLOE: Yeah. So I was just kind of pacing in my room and I had started cleaning but by that time I was so mad and so upset . . .

THERAPIST: It escalated.

CHLOE: Yeah, the cleaning was just annoying me, it wasn't even helping, so, and I didn't know what to do. And I hadn't been mad about eating dinner before, but since I was already mad I was like, "Well, you had to go and eat dinner, so now you have to go you know, throw up . . . at least do something right."

As Chloe was talking, the therapist was mapping out the thoughts, feelings, and behaviors on the chain analysis pictured in Figure 10.4. She then reviewed each step and described each step in the chain a second time, to make sure that each step in the chain was correct and also to reinforce for Chloe the labels for the emotions, the nature of the thoughts, and the progressive quality to the events. Chains of emotions, thoughts, and behaviors can feel overwhelming, indistinguishable, and inevitable to patients

with BN, and this systematic approach helps to label emotions, anticipate them, and consider options for different behaviors from those that were previously automatic and dysfunctional. The therapist and Chloe together generated different options for her behavior at different points, as well as different ways she might have challenged the distressing thoughts, pictured in Figure 10.4.

The therapist and Chloe generated a list of alternatives to the self-critical thoughts and purging, including alternative behavioral activities to address the anger, such as a brisk walk or punching a pillow; cognitive activities, such as trying not to view going home as "such a big deal" and remembering that her visit home is temporary; and emotional activities, such as trying to *accept* the emotion as opposed to feeling guilty about it, or trying to make it go away. Chloe, in particular, seized onto the emotional acceptance aspect of the treatment as a helpful alternative. The therapist also suggested that Chloe begin making chain analyses of her own and problem solving when she notes the earlier feelings in the process, such as anxiety. Chloe responded in the following exchange:

CHLOE: It'll be hard to write everything down that I'm feeling at once, like picking apart different thoughts and stuff, but seeing this written down does make it lot easier and especially a lot easier to pinpoint places that I could've done something differently, so hopefully next time I'll be able to do that and that can prevent it.

THERAPIST: Yes, definitely and listen, it's just practice. So this requires a little time to get used to, but it's also a way of slowing down what feels like a very rapid process and being more aware of these things as they're coming up before you get to this stage where you're kind of like the point of no return.

CHLOE: Oh yeah, no yeah, I like identifying these things. That's where the problem lies, so that felt kind of good to see all that, especially written down.

During these middle sessions (8–12) Chloe also read exercises from dialectical behavior therapy and mindfulness practices that promoted experience of her emotions without judgment or action, and the development of present-focused awareness. Chloe found the shift in perspective from criticizing her emotions to accepting them very powerful, and developed an individualized approach to applying these principles, which she explained in the following excerpt:

> "Well, as far as the emotions go, like when I first started using [mindfulness], I started feeling things that in the past would have like totally exploded on me and started, you know, to make me feel like I was

losing control. So when I felt those come on, I'd be like okay, you know, I'm angry right now or I'm frustrated or I'm starting to feel really depressed again, that's okay, they're feelings, they're there, there might be a really obvious reason I'm feeling them—or there might not be, that's fine too. And I'd be like, all right, that's fine, I can get on with my life even if I'm feeling a little sad. And automatically that kind of you know, added, since I was feeling so calm and accepting of it, I started feeling happy as well. So it was like happiness and sadness present together, and normally that would've been like really weird, but it was you know, then I accepted the happiness as well, and I was like, I feel both at the same time and that's fine . . . I don't like facing away from my feelings anymore or trying to ignore them because then they come back and you're like, I should've dealt with this before. Last night, I was actually feeling really sick last night and I had all these stressors going through my head because of my midterm and I'm behind in English and I was having trouble in computer science and I was like all right, slow roll [counting on her fingers], I'm confused, I'm sick, I'm frustrated that I'm not doing well in a class that seemed like it would be easy, I'm nervous about this midterm, I'm you know, I'm mad that I'm behind on this reading. But that's all right. You know, I was like, I'm feeling all these things at once, but it's okay. And I mean, last night those feelings in the past would probably have sent me over the edge."

As Figure 10.4 shows, Chloe's weekly scores on the BDI dropped substantially when her binge eating and purging stopped during the first 4 weeks. During the weeks when they were focusing on her negative emotions (Weeks 5–8) Chloe's report of negative emotions went up slightly, possibly due to her increased awareness of her negative feelings. Following the module for mood tolerance her negative affects were much reduced (i.e., to subclinical levels of depression) through the end of treatment (Week 8 and onward).

Interpersonal Difficulty

As the earlier case description shows, Chloe and her therapist had already identified that situations where she interpreted herself as being rejected or abandoned led to strong feelings and urges to engage in ED symptoms. From Session 11 through the end of treatment these interpersonal issues were an additional focus of treatment, along with ongoing mood tolerance and behavioral changes. In Session 11, Chloe and the therapist conducted a formal interpersonal inventory, which was a review of the temporal relationships between different aspects of the ED (shape and weight concerns, eating behaviors), relationships, and feelings. Much of the material in this

inventory had come up at other times during the treatment, however, it became more clear that Chloe had experienced actual rejection—for example, by her peers in high school when she pressed charges against a popular student—but that she also frequently interpreted ambiguous situations as rejection, and interpreted herself to blame for rejection due to her personal faults and "unlovability." She identified and clarified a tendency to withdraw from other people or to try to please them in order to escape rejection. These patterns, common to borderline personality, could technically be classified as an "interpersonal deficit" within the problem areas identified in IPT, and Chloe's self-identified goals in this area were to be more outgoing with new people, to be more authentic with her close friends, and to pursue her own social desires regardless of her fears of rejection. Over the period of time when interpersonal goals were the focus, she went out on two dates and followed up on both in authentic ways, by discontinuing a romantic relationship she was not interested in and pursuing one that she was. She also practiced disagreeing with her friend's opinions in a sincere way. In Sessions 15 and 16, she described her emotions in the context of interpersonal interactions, and her decisions to try different patterns of behavior than she was used to. As she made decisions to be more outgoing, her usual fears of rejection or abandonment took a backseat to her excitement about dating relationships. These changes were very satisfying to Chloe, and in some sessions she was mostly interested in describing her social success, as in the following excerpt:

THERAPIST: All right. So, let's talk about, let's go back to interpersonal goals, and what are some things this week that you might've done in the service of those goals?

CHLOE: Umm . . . moving past the fear of rejection was one, I believe.

THERAPIST: Yeah, absolutely.

CHLOE: That was like the biggie.

THERAPIST: That was the biggie, yeah, and kind of tolerating that alone feeling . . ., but the rejection piece, I guess a part of that was expressing yourself to someone and your feelings toward someone else and being willing to kind of ask people for things without letting that fear get in the way.

CHLOE: Okay, well the first thing that happened wasn't really great, but it was kind of me sort of jumping over a hurdle, which felt really good.

THERAPIST: That's awesome.

CHLOE: So there's this kid in my orientation group over the summer named Frank . . . I didn't talk to him then, but I ended up friending him on Facebook because I'm a creep and you know, I friend people if I even meet them like once.

THERAPIST: You're friendly. You're friendly, there's another way of looking at that.

CHLOE: (*giggling*) And so, I put as my status Thursday night "I'm freezing" and he ended up commenting and he was like, "Burn stuff," and I was like "Well, I'd love nothing more to burn my textbooks right now, but I think I might regret that later." And at first I was like, that is so out of the blue, I have never talked to this kid in person or on Facebook. And we ended up having this whole conversation and we ended up creating this funny story of me like accidentally burning down part of south campus or whatever, and he was like, "If you survive, want to get coffee sometime?" and I was like, "Okay" and I was like a little weirded out because I never do this, and it was like so random, but then I was really excited because I was like, "Oh my god!"

THERAPIST: So what were you feeling in that moment?

CHLOE: Umm, I was like, okay, I'm not gonna lie, my first thought was "I got it goin' on!" I swear to god I was like, "I guess I'm not that bad at this after all!"

THERAPIST: Aww, I'm glad you shared that! . . . So which part would you say was the hurdle?

CHLOE: Well, I said "Yes," which was the biggest hurdle.

. . .

THERAPIST: So this is amazing on so many levels. One is that you can't get the smile off of your face.

CHLOE: I can't.

THERAPIST: And the other is you are bringing this confidence.

CHLOE: It feels so great.

DISCUSSION

Patient Considerations

At the end of treatment, Chloe had made substantial progress in overcoming both her ED and the other symptoms she had struggled with. She was in remission from BN, having gone more than 4 weeks with no binge-eating or purging episodes, and her Eating Disorder Examination and EDI (see Figure 10.5) scores had dropped to within a normal range. These gains were maintained at her 6-month follow-up assessment. She also no longer reported the symptoms of major depressive disorder, and at 6-month follow-up (the next time that personality symptoms were assessed) she no longer met criteria for BPD at either the subthreshold or threshold level.

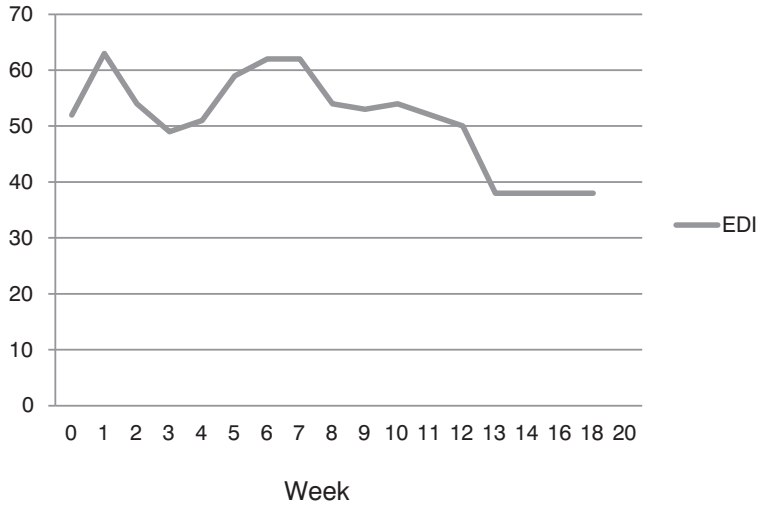

FIGURE 10.5. Eating Disorder Inventory (EDI) scores over the course of treatment.

Extensive research suggests that patients like Chloe who make early changes in their behavioral symptoms (by Week 4) are more likely to achieve remission by termination (Fairburn, Agras, Walsh, Wilson, & Stice, 2004). Chloe's baseline symptoms and history, including her full-criteria BPD, recurrent MDD, history of AN, and severe ED symptoms might have been assumed to make early and sustained change a challenging goal. However, both research and our clinical experience suggests that there are other positive patient characteristics that may be more relevant. Chloe had strong self-reported motivation to change, and was intelligent and sophisticated about her approach to psychological topics. She often went above and beyond therapy suggestions, for example, posting reminders about therapy interventions around her room. Chloe was able to make a strong positive connection to her therapist from the outset of treatment, and was not suspicious of the therapist's suggestions or secretive regarding her experience. Though she reported being angry, her anger and criticism were typically directed inward, rather than used to blame or distance herself from other people. Other than motivation/readiness for treatment, which has been linked to outcome many times, these hypothesized predictors of good outcome require further investigation.

Therapist Considerations

In addition to the patient characteristics mentioned above, therapists in the trial reported other experiences that made therapy challenging and/

or productive, as well as other considerations for the therapists attempting to implement CBT-E broad. As noted by Fairburn (2008), the setting of therapy goals, session agendas, and clear expectations for patient–therapist interaction were all very important to managing the challenges of this integrative, multifocus treatment in 20 sessions. The therapists reported that in Sessions 10–12 it was difficult to juggle the different goals of reviewing regular eating, reintroducing previously avoided foods, completing interventions for mood tolerance, including interventions for shape and weight concerns, and shifting gears toward IPT. By Session 13 or 14 it typically felt that therapeutic direction was set and goals were more clear, but time management and clarity of focus were challenging in the middle sessions.

As briefly noted above, the therapists reported more difficulty with patients with BPD who had an externalizing rather than an internalizing style. In cases where the patient's anger was turned toward the therapy, goals were sometimes hard to accomplish due to the difficulty of being "on the same team" in terms of therapy goals. In cases where the patient's anger was turned toward other people in his/her life—and his/her problems were blamed on these other people—it was a clinical challenge to continuously redirect the patient. In general, however, the directive and structured nature of CBT-E was useful in these cases.

The other symptoms of BPD experienced by patients, such as impulsiveness, personal/interpersonal chaos, self-hatred, and severe depression also posed problems at times. Patients' impulsiveness led to premature dropout and to difficulty being consistent in implementing therapy interventions. Frequently, however, improvements in binge–purge behavior were accompanied by improvements in these other symptoms, and the therapists in general felt that sticking to the therapy foci was more productive than attempting to be of assistance in other areas of life. The version of CBT-E broad utilized in this trial included interventions for mood intolerance and for interpersonal difficulties, and did not include the module for core low self-esteem. This challenging symptom, when present, did require additional therapy attention within the established therapy protocol.

Overall, however, the therapists felt they shared a strong sense of success and positive interpersonal bonds with the patients with BN and BPD in the trial. Like Chloe, many had great senses of humor and deep understanding and sympathy for the human condition. Also like Chloe, they often shared a strong appreciation for the skills they learned and changes that they made in CBT-E broad.

IMPLICATIONS FOR PRACTICE AND RESEARCH

The data in this case, as well as from the available research, suggest that CBT-E broad can offer significant benefits to patients with notable

interpersonal and affective problems, including those with BPD (Fairburn et al., 2009; Thompson-Brenner et al., 2013). As noted, additional research is needed to help identify whether other baseline characteristics may help to tailor treatment from the outset, or whether adjustments according to treatment response are most useful to produce substantial improvement and recovery.

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CHAPTER 11

Dialectical Behavior Therapy for Bulimia and Major Depressive Disorder

KAY SEGAL, LINDSEY A. OHLER, KALINA ENEVA, and EUNICE CHEN

"All day long now I think about food, what I'm going to eat next, when I can binge, how quick I can get to the bathroom to throw up . . . Usually I decide to stay home and just binge instead. I throw it up every time but, of course, I know I can't get it all out of me. Then I cut myself because I feel so crazy and guilty for being such a complete pig. And now I just feel sad and tired all the time, too. Every minute of the day."

"It can't be worse than the hell I live every day, I'm telling you. And I can't live the hell of every day anymore, so if I don't come to therapy and get better, then eventually I'm going to kill myself."

"I am not saying I am 100% my best one option. Setbacks happen. What I do know with 100% certainty is that the purging and cutting just isn't me anymore. Let's face it, it's a complete waste of my time and it causes too much damage."

Standard dialectical behavior therapy (DBT) is a cognitive-behavioral therapy (CBT) originally developed for women with extreme emotion dysregulation and recurrent suicidal behavior, namely, borderline personality disorder (BPD). This comprehensive skills-based treatment integrates change-based

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Lanie is a disguised/ composite portrait.

behavioral strategies (e.g., problem solving, contingency management) and crisis intervention with strategies derived from acceptance-based Zen practices (e.g., mindfulness and validation). These strategies are integrated within a dialectical framework, emphasizing wholeness and interrelatedness, which are utilized in persuasive dialogue within the therapeutic relationship. For a more comprehensive description of this treatment, see Linehan's manuals (Linehan, 1993, 2015a, 2015b). Standard DBT includes a transdiagnostic model of affect regulation that has been empirically supported for the treatment of substance abuse, binge-eating disorder (BED), and bulimia nervosa (BN) (Lynch, Trost, Salsman, & Linehan, 2007). This chapter describes the application of DBT for clients with comorbid BN and major depressive disorder (BN/MDD), by offering a case example illustrating the 6-month course of DBT for a client with BN/MDD.

RATIONALE FOR THE MODIFICATION OF DIALECTICAL BEHAVIOR THERAPY FOR BULIMIA NERVOSA AND MAJOR DEPRESSIVE DISORDER

In order to utilize DBT for clients with BN/MDD, we modified the treatment in several ways. DBT offers an alternative for clients for whom existing treatments have failed. CBT and interpersonal psychotherapy (IPT) have demonstrated efficacy for BN in the most treatment trials, however, approximately 50% of participants with BN (or BED) drop out or remain symptomatic after treatment (Fairburn & Brownell, 2001). Enhanced CBT (CBT-E) has similar findings with BN, BED, and eating disorder not otherwise specified (Fairburn et al., 2009). Predictors of poor outcome in CBT for eating disorders (EDs) may include co-occurring DSM-IV Axis I and II disorders (e.g., MDD, BPD) or related symptoms (Grilo, Masheb, & Wilson, 2001; Stice & Agras, 1999; Wilfley et al., 2000). In the case of depression, DBT is beneficial for clients who have not seen improvement in their symptoms after therapeutic or pharmacological interventions (Harley, Sprich, Safrin, Jacobo, & Fava, 2008; Lynch, Morse, Mendelson, & Robins, 2003). Standard DBT was originally designed to address multidiagnostic, difficult-to-treat disorders and represents a viable option for ED clients with comorbid disorders or for whom existing treatments have failed.

The biosocial theory of DBT also offers an etiological framework for the development of ED behaviors. Dysfunctional behaviors such as binge eating, purging, and excessive exercise are understood as developing over time through transactions between an individual with biologically based heightened emotional vulnerability and an invalidating environment. This includes specific invalidation of ED behaviors (e.g., "Why can't you just stop eating?"), weight-related teasing, or excess concern with weight demonstrated by peers and family. Therefore, DBT therapists utilize validation

to reduce the self-judgment and blame clients may experience regarding their disorder.

DBT is based on a broad affect regulation model in which purging and other types of eating-disordered behaviors are understood to be the result of an attempt to regulate affect rather than from dietary restraint and weight and shape concerns or as a result of difficulties with interpersonal problems. ED behaviors, in the absence of other adaptive emotion regulation skills, may become negatively reinforced (i.e., as escape behaviors) or result in secondary emotions such as shame or guilt, that prompt further dysfunctional (life-threatening and/or ED) behaviors. Standard DBT treatment is designed to teach adaptive affect regulation skills while simultaneously decreasing disruptive behaviors resulting from emotional dysregulation.

Individual DBT treatment sessions are organized around a treatment hierarchy that prioritizes target behaviors as follows: (1) life-threatening behaviors (e.g., suicide ideation, nonsuicidal self-injury), (2) therapy-interfering behaviors (e.g., client or therapist being late for sessions), (3) quality-of-life-interfering behaviors (e.g., bingeing and/or purging, depressive symptoms), and (4) behavioral skills. Overweight clients with BN are likely to list weight loss as a quality-of-life goal; therefore, we recommend that clinicians establish realistic expectations about weight loss with clients early in treatment to prevent later frustration with failures to lose unrealistic amounts of weight. Clinicians should help clients focus on specific achievable lifestyle changes (e.g., increasing social contact, not eating after a certain hour at night to reduce overeating) and the possible use of ancillary treatments, such as walking groups. Underweight clients with BN are not likely to list weight gain as a quality-of-life goal; however, we recommend that clinicians establish expectations about weight gain goals with clients early in treatment based on the needs of the individual (e.g., regain menstruation).

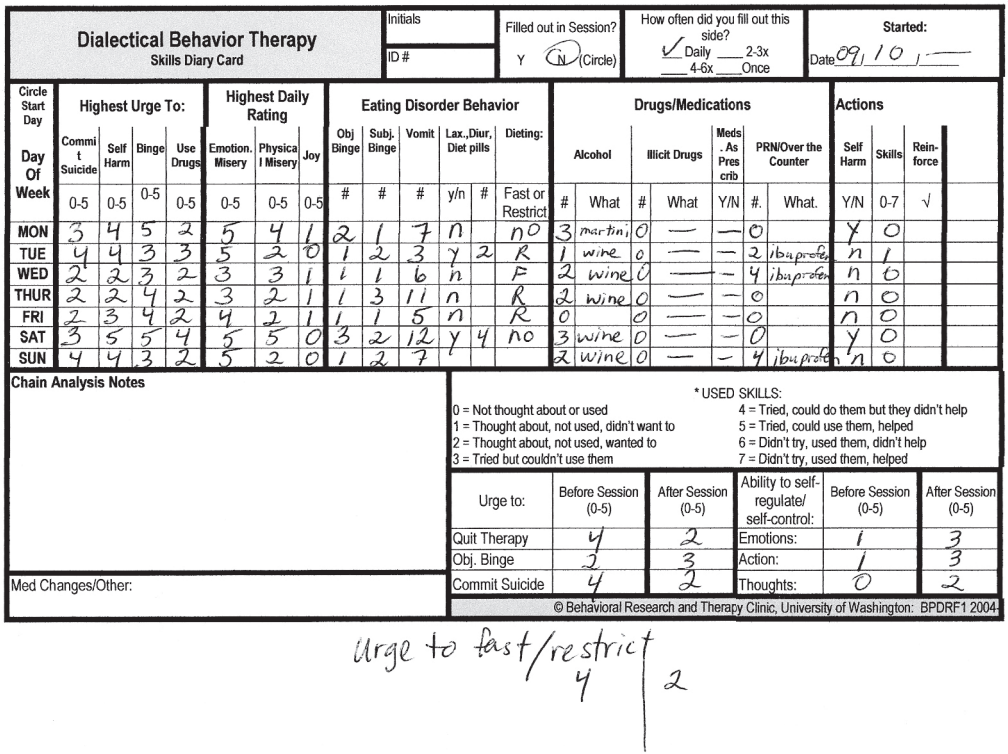
UTILIZING THE STANDARD DIALECTICAL BEHAVIOR THERAPY FORMAT FOR CLIENTS WITH BULIMIA NERVOSA AND MAJOR DEPRESSIVE DISORDER

The format that we utilize for clients with BN/MDD includes all four standard DBT components: weekly individual sessions (beginning with pretreatment orientation sessions), 24 weekly 2-hour group skills training sessions, DBT consultation team (e.g., support for the DBT therapist), and 24-hour phone consultation (e.g., skills coaching for the client to generalize skills; for a more exhaustive description of standard DBT treatment, see Linehan, 1993, 2015a, 2015b).

Individual Sessions

In the pretreatment stage, clients meet with their individual therapist and are oriented to the structure of treatment, including telephone consultation and the four-missed-appointments rule that results in termination from treatment. The goals of the orientation phase include identifying cues to problem behaviors, examining the pros and cons of these behaviors, providing the client with crisis survival skills, and creating the formulation of a "life worth living." A crisis plan to prevent life-threatening and other dysfunctional behaviors is also developed. The therapist explains dialectical abstinence in which clients "keep an eye on the prize (eliminating all ED behaviors)," while simultaneously accepting the possibility of failure (e.g., the occasional late-night bingeing episode; see also Safer, Telch, & Chen 2009). Clients must also commit to cease life-threatening behaviors, maintain regular treatment attendance, and willingness to stop binge eating and purging to begin treatment. Therapists also assess the values, goals, and beliefs clients want to possess in order to build a life that is worth living. Therefore, clients begin to formulate how they will live their lives in the absence of problematic behavior (e.g., bingeing, self-injury).

Individual sessions begin by weighing the client, reviewing her diary card (see Figure 11.1), and assessing daily food intake prior to the session ("What have you eaten today? Did you purge?"). The standard DBT diary card assessing the client's urges (0- to 5-point scale) to commit suicide, quit therapy, or engage in any other target behavior was modified to include assessment of ED urges/behaviors (e.g., bingeing, restricting, laxative abuse; see Figure 11.1). Clients will have completed their diary cards prior to arriving to each scheduled appointment. After review of the diary card, the content of the session is determined based on the client's reported ratings utilizing the treatment hierarchy of individual DBT sessions (e.g., life-threatening behaviors, therapy-interfering behaviors, quality-of-life-interfering behaviors, and skills training). Because multidiagnostic clients can bring a sense of chaos to individual sessions, this hierarchy helps therapists choose a course of action during each session and bring focus to the treatment targets most pressing. For example, if any suicidal or self-injurious behaviors or urges occur during the previous week, the session focuses on these life-threatening behaviors. A "chain analysis," in which a series of emotional and behavioral antecedents, behaviors, and consequences are elucidated, is completed when the diary card indicates that a client's urges to engage in target behaviors were increased by at least 1 point from the previous week. It is important to balance a focus on problem behaviors with a focus on analyses of successes (e.g., "How did you make it through the whole weekend without bingeing or purging?"). If no target behaviors have occurred since the previous session, new skills are taught or reinforced.



Dialectical Behavior Therapy
Skills Diary Card

Initials
ID #
Filled out in Session? Y (N) (Circle)
How often did you fill out this side? ✓ Daily ___ 2-3x ___ 4-6x ___ Once
Started: Date 09/10/—

Circle Start Day / Day Of Week	Highest Urge To: Commit Suicide	Self Harm	Binge	Use Drugs	Highest Daily Rating: Emotion. Misery	Physical Misery	Joy	Eating Disorder Behavior: Obj Binge #	Subj. Binge #	Vomit #	Lax.,Diur, Diet pills y/n	#	Dieting: Fast or Restrict	Drugs/Medications: Alcohol #	What	Illicit Drugs #	What	Meds. As Prescrib Y/N	PRN/Over the Counter #.	What.	Actions: Self Harm Y/N	Skills 0-7	Reinforce √
	0-5	0-5	0-5	0-5	0-5	0-5	0-5	#	#	#	y/n	#	Fast or Restrict	#	What	#	What	Y/N	#.	What.	Y/N	0-7	√
MON	3	4	5	2	5	4	1	2	1	7	n		no	3	martini	0	—	—	0		Y	0	
TUE	4	4	3	3	5	2	0	1	2	3	y	2	R	1	wine	0	—	—	2	ibuprofen	n	1	
WED	2	2	3	2	3	3	1	1	1	6	n		F	2	wine	0	—	—	4	ibuprofen	n	0	
THUR	2	2	4	2	3	2	1	1	3	11	n		R	2	wine	0	—	—	0		n	0	
FRI	2	3	4	2	4	2	1	1	1	5	n		R	0		0	—	—	0		n	0	
SAT	3	5	5	4	5	5	0	3	2	12	y	4	no	3	wine	0	—	—	0		Y	0	
SUN	4	4	3	2	5	2	0	1	2	7				2	wine	0	—	—	4	ibuprofen	n	0	

Chain Analysis Notes

Med Changes/Other:

* USED SKILLS:
0 = Not thought about or used
1 = Thought about, not used, didn't want to
2 = Thought about, not used, wanted to
3 = Tried but couldn't use them
4 = Tried, could do them but they didn't help
5 = Tried, could use them, helped
6 = Didn't try, used them, didn't help
7 = Didn't try, used them, helped

Urge to:	Before Session (0-5)	After Session (0-5)	Ability to self-regulate/ self-control:	Before Session (0-5)	After Session (0-5)
Quit Therapy	4	2	Emotions:	1	3
Obj. Binge	2	3	Action:	1	3
Commit Suicide	4	2	Thoughts:	0	2

urge to fast/restrict
4 | 2

FIGURE 11.1. First diary card from the beginning of treatment. Blank diary card copyright by the Behavioral Research and Therapy Clinic, University of Washington. Reprinted by permission.

Addressing multiple complex problems in one session is a challenging but necessary task for DBT therapists. As mentioned above, chain analysis is a behavioral change strategy that is a meticulous analysis of the topography, intensity, frequency, duration, situation, antecedents, and consequences of a problem behavior. Repeated chain analyses of a problem behavior allow the clinician and client to determine the cues, maintaining factors, and function of a behavior, as well as structure treatment sessions. One session may involve conducting a chain analysis on a day that the client engaged in multiple target behaviors (e.g., a negative review at work led to a depressed mood, getting drunk, fighting with a boyfriend, bingeing, purging, and hopelessness) or focus on multiple brief chain analyses, asking "What would you have done differently to be more effective?" The therapist may use a variety of commitment strategies (e.g., "foot in the door/door in the face," devil's advocate) to elicit commitment from the client to prevent future problem behaviors. See Table 11.1 for a complete list of interventions.

A chain analysis typically begins with the therapist eliciting this client's willingness to partake in the chain analysis. Clients often view chain analysis as a form of punishment and, thus, therapists stress the necessity of determining the anteceding events and maintaining factors of problem behavior in order to decrease their frequency in the future. Next, therapist and client identify *vulnerability factors* (e.g., not eating during the day, physical illness) impacting the client's emotional state that may heighten the client's sensitivity to react emotionally to *precipitating events* ranging from mild nuisances (e.g., receiving the incorrect order at a café) to major stressors (e.g., argument with spouse about having children). For example, therapist and client may identify how not eating all day (vulnerability factor) affected the client's emotional state when she received a poor performance evaluation at work (precipitating event). The therapist and client then list, albeit tediously at times, each *link* (e.g., precipitating event, vulnerability factors, thoughts, emotions, physiological sensations, behaviors, actions) that happened between the precipitating event (poor performance evaluation) and the problematic behavior (bingeing and purging when returning home from work). For example, the client listed how she was disappointed in herself (feeling), felt her heart racing and cheeks blushing with anger (physiological response), stomped out of her office (action), thought how terrible of a person she is (thoughts) while driving home, grabs the first bag of food she sees when entering her home (action), and eats 15 cookies (problematic behavior). Therapist and client then generate the short- and long-term *consequences* (immediate relief of emotions followed by later guilt). Finally, therapist and client return to the chain to identify moments when the client could have performed skillfully (solution analysis; e.g., diaphragmatic breathing, distraction) at each link of the chain in order to prevent future problem behaviors.

TABLE 11.1. Dialectical Behavior Therapy Treatment Interventions

Intervention	Use	Example
Opposite to emotion action	The client changes emotions by acting opposite.	When the client is crying uncontrollably in therapy, the therapist may say, "Let's take a moment to focus on our breath. With every inhale we notice the tension in our body, and with every exhale we release that tension and practice quieting our minds."
Devil's advocate	The therapist makes an argument against the client's commitment or for problematic behavior, which helps to assess and improve commitment.	"Wouldn't it be easier for you to binge and feel better than spending 6 months learning to use all of these skills?"
Making lemonade out of lemons	The therapist points out something problematic or distressing to the client and turns it into an asset.	"This breakup was so distressing for you and, yet, it was an awesome opportunity to practice your skills!"
Turning the tables	The therapist turns the problem over to the client, asking for alternative solutions.	"We seem to be in disagreement about this. I am not able to say yes, but you really seem to want me to. What can we do here?"
Wise Mind ACCEPTS	The client utilizes a crisis survival strategy with activities, contributing, making comparisons, opposite emotions, or pushing away distressing thoughts or emotions temporarily.	"I'm feeling terrible about this situation, but I do know that I'll have a roof over my head, good friends, and college—that's a lot more than some people and I'm grateful for that."
Foot in the door	The therapist makes an easy request prior to making a difficult request to enhance compliance.	"You've agreed to stop bingeing for the next 3 days. I would actually love a commitment from you to stop bingeing for 7 days until your session next week."
Door in the face	The therapist makes a difficult request followed by an easy request to enhance compliance.	"I know you said that you won't invite your friends over to your house for a dinner party. Would you be willing to go out to eat with your best friend this weekend?"

(continued)

TABLE 13.1. *(continued)*

Intervention	Use	Example
Checking the facts	The therapist encourages the client to check out whether the client's reactions fit the facts of the situation. Changing beliefs and assumptions to fit the facts can help change emotional reactions to situations.	"Is it really true that you can't live through the embarrassment of speaking in front of your class? Have you survived this kind of situation before? What are the facts?"
Building a life worth living	The client is encouraged to identify characteristics and work toward a life worth living. The therapist utilizes strategies to encourage a thorough assessment by helping the client figure out values and goals.	"Let's figure out what your life would look like if you woke up tomorrow and it was the life you really wanted. What is important to you? What could give your life meaning? It's easier to work hard when you know what you're working toward."
Reciprocal communication	The therapist utilizes interpersonal warmth, responsiveness to the client's concerns, and strategic self-disclosure.	"I've been thinking about you this week. I can't wait to hear how your meeting went!"
Irreverent communication	The therapist uses an outrageous, humorous, or blunt style when the session has become deadlocked or polarized.	"You're kidding! I can't believe the skills didn't work when you didn't use them!"
Validation	The therapist uses validation strategies to further strengthen the client's commitment by communicating that the client's responses are understandable within his/her life context and situation.	"It totally makes sense why you would be angry about this situation in your life. Given some of your history, I understand why you would avoid situations like that."
Willingness	The client is encouraged to enter and participate fully in therapy, life, and living.	"While I understand you are skeptical of the possibility you can get better, I'm asking you to practice willingness anyway by showing up, doing homework, and, basically, acting like you will get better."
Self-soothe	The client utilizes distress tolerance activities to soothe the five senses and reduce vulnerability to emotional triggers and strong urges for problem behaviors.	"Maybe tonight, if you are feeling particularly angry after your conversation with your mom, you can light some candles and take a long bath."

Skills Training

Consistent with standard DBT, group skills training promotes the acquisition of new behavioral skills in a structured psychoeducational format that is divided into four modules: mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness. Mindfulness skills improve clients' awareness through observation and description of thoughts and emotions. Acquisition of emotion regulation skills allows clients to identify the function of emotions, reduce vulnerability to negative emotions, and use opposite action to alter negative emotional states. Distress tolerance skills teach clients to tolerate painful emotions without worsening their current situation. Finally, interpersonal skills focus on validation, effective communication, and maintaining positive relationships. All DBT skills are based on the assumption that clients must learn to change their dysregulated emotional states while simultaneously accepting painful emotions, without engaging in maladaptive behavioral responses.

None of the skills modules uniquely address ED behaviors or depression and only minor adaptations to the skills program were made (i.e., modeling the use of skills to prevent binge-eating behaviors, tolerating a physical sensation of being "too full"). Mindfulness exercises concerning eating and body awareness include imagining one's self in a full-length mirror while noting any judgmental thoughts that arise ("I look disgusting") and observing the taste and texture of melting chocolate. Depressive symptoms are targeted by increasing behavioral activation, with a particular focus on building a life worth living. To work toward building a life worth living, clients are encouraged to reengage in healthy interpersonal relationships, assess short- and long-term goals, clarify values, increase activities, work on setting and overcoming challenges to build a sense of mastery and competence, and work toward decreasing mood-dependent behavior through mindfulness and behavioral activation.

Consultation Team

DBT recognizes that therapists serving a challenging, multiproblem population require encouragement and a supportive environment to maintain personal well-being and improve client outcomes. The consultation team enhances therapist motivation (e.g., reminding therapists that clients are doing the best they possibly can), builds therapist skills, and manages problems arising in the delivery of treatment. Consultation team members are trained in the identification and treatment of EDs (e.g., high-risk ED behaviors, medical and dental consequences of ED behaviors, obesity) and understand information regarding activity, weight, and healthy eating.

Phone Consultation

Twenty-four-hour telephone consultation permits clients to contact therapists for crisis intervention before engaging in problem behaviors. Phone consultation disrupts potential reinforcement of problem behavior (e.g., contacting the therapist after bingeing), provides coaching to promote skills generalization, and repairs client–clinician relationships. While phone consultation limits are those of standard DBT, the time interval that lapses before the client can call her therapist after engaging in ED behavior is determined by treatment targets and varies by client. During a typical 10-minute phone consultation the individual clinician will assess urges and ask: "What three skills have you tried to prevent this behavior? What help do you need to use these skills?" After generating solutions and a plan, the clinician obtains the client's commitment to this plan, troubleshoots the plan, and then asks the client to call again if she runs into difficulty.

Treatment Agreements

As part of entering treatment, clients agree to participate in 1 year of therapy, attend all scheduled appointments (both individual sessions and skills training), and reduce self-injurious and ED behavior. Therapists agree to make "every reasonable effort" to help their clients, conduct treatment ethically, and respect the client's rights and confidentiality. Both therapist and client agree to attend all scheduled appointments on time and address any problems that interfere with treatment (e.g., repeatedly being late for appointments, canceling appointments without adequate notice).

The agreements that clients and therapists make with each other are unique and crucial. One agreement is that clients and therapists are viewed as equals in the therapeutic relationship. It is understood that therapists are experts in DBT, but clients are experts on their lives. Clients and therapists also agree that clients may not have caused all of their problems, but nonetheless they are responsible for fixing their problems. This agreement promotes clients' development of skills to resolve their problems. One of the most crucial agreements for the therapeutic relationship is that the client cannot fail in treatment. This agreement is particularly important for treatment-resistant clients because it reduces shame clients may experience when they are engaging in problematic behaviors and feel they have regressed in treatment.

Dialectical Strategies

Dialectical strategies highlight dichotomous thinking, behavior, and emotions to assist clients in finding balanced and synthesized responses to

polarities (i.e. finding "the middle path" between loving and hating their therapists, bingeing and restricting) through the use of metaphors, paradox, cognitive restructuring, and playing devil's advocate. Dialectical dilemmas unique to EDs include "over-controlled" (restricting) versus "out-of-control" (binge) eating, or the vacillation between extreme dieting and loss of control. The synthesis of this dialectical dilemma involves engaging in neither extreme, but eating in moderation.

In every DBT encounter with a client, change strategies are balanced with acceptance strategies (e.g., validation). Validation strategies further strengthen a client's commitment by communicating that the client's responses are understandable within his/her life context and situation (e.g., expressing understanding of why a client binges to cope with emotional dysregulation). The range of validation strategies include listening in an interested fashion (Level 1 validation), reflecting accurately (Level 2), articulating unstated thoughts and emotions (Level 3), expressing understanding for the client's behaviors (Level 4), emphasizing how the client's behaviors are understandable in the present moment (Level 5), and being radically genuine (Level 6). To demonstrate a balance of acceptance and change, a clinician may say, "On the one hand, you feel really depressed when you've had a fight with your mom, so it makes sense that you do binge to help you feel better. On the other hand, this behavior is getting in the way of having a life worth living. Let's work on finding new ways to feel better."

Stylistic Strategies

DBT stylistic strategies also balance acceptance and change. An irreverent communication style involves an outrageous, humorous, or blunt style that is utilized when a clinician and client become deadlocked or polarized (e.g., "Holy cow! You're absolutely right! The skills don't work at all . . . of course they really don't work if you're not using them."). Alternatively, reciprocal communication involves interpersonal warmth, responsiveness to a client's concerns, and strategic self-disclosure (e.g., "I really care about you; I would feel so sad if you decided to quit coming to therapy").

CASE STUDY: LANIE

Lanie was a 27-year-old Caucasian, single woman living in a two-bedroom apartment in an urban area with a female roommate at the pretreatment assessment. She had a bachelor's degree in biology from a highly reputable university and had recently begun working toward a master's degree. Lanie contacted our outpatient Eating Disorders Program after seeing a flier for a research study. She reported that she had been bingeing and purging two

to three times a day for 11 years and recently began feeling hopeless, anxious, and isolated with frequent urges to commit suicide. Lanie was 5′9″ and underweight, weighing 123 pounds (body mass index [BMI] = 18.2) at the time of the initial evaluation. Lanie had also engaged in self-injurious behaviors (e.g., multiple cuts to her arms, thighs, and abdomen) since the age of 15, and had one inpatient hospitalization for anorexia nervosa (AN) during adolescence. She was dissatisfied with her weight and shape, evaluated herself based on her appearance, and feared losing control during eating. Although Lanie had been able to function successfully in school, her interpersonal relationships had been chaotic for years due to her excessive anger, tendency to emotionally stonewall partners, suicide threats, and frequent bouts with severe depression. Lanie experienced two sexual attacks by her father during adolescence. Her sleep was interrupted by nightmares of these attacks one to two times per week and she would often use late-night bingeing as a way to prevent herself from falling asleep. In order to treat these issues, Lanie sought therapy on multiple occasions, only briefly engaging in treatment with at least five different therapists over the years.

The pretreatment assessment for the study included the University of Washington Risk Assessment, the Eating Disorder Examination (EDE) for ED behaviors, the Lifetime Parasuicide Count (LPC) and Suicide Attempt Self-Injury Interview (SASII) for suicidal/self-injurious behavior, the Structured Clinical Interview for DSM-IV (SCID-II) for confirmatory BPD diagnosis, the Structured Clinical Interview for DSM-IV for Axis I Disorders (SCID-I), and the Global Assessment of Functioning (GAF). Lanie met criteria for BN, MDD–mild, BPD, and posttraumatic stress disorder. She was admitted to the research study and was assigned a DBT individual therapist, a postdoctoral fellow and research therapist trained extensively and experienced in DBT (K. S.), and a DBT skills training group.

Four pretreatment sessions oriented Lanie to the structure of DBT and sought her commitment to eliminate behaviors that interfere with a life worth living (e.g., self-injury, bingeing, purging). Lanie was provided with information about the biosocial theory, diary cards, and chain analyses during the first pretreatment session. The therapist also obtained further information about Lanie's reason for beginning therapy to treat her bulimic behaviors and depressed mood. As seen in the excerpts that follow, the therapist obtained Lanie's commitment to treatment by highlighting how the biosocial theory applied to Lanie's reported difficulties and playing devil's advocate for her ED behaviors. By the end of the first session, Lanie committed to not engaging in suicidal, self-injurious, or ED behaviors and agreed to attend all therapy sessions for 6 months.

Lanie was given informational handouts about treatment expectations, crisis survival skills, and a group skills training manual during the remaining pretreatment sessions. For example, the therapist and Lanie

completed a "pros and cons" worksheet for the problem behaviors of bingeing and purging, highlighting that many of Lanie's reasons for engaging in these behaviors involved emotion regulation. Lanie also surmised that other problem behaviors, including cutting, were used to regulate emotions. The therapist explained that many traditional therapies focus on "change" without much regard for what to change into. Therefore, Lanie was encouraged to explore the values, goals, and relationships with which she could build a "life worth living." Lanie listed graduating with her master's degree, having more friends, creating a more positive relationship with her boyfriend, and engaging in a new activity (e.g., outdoor cycling with her boyfriend) in her life worth living. Following the treatment orientation, Lanie continued to meet for individual therapy and a skills training group each week for 6 months.

The following dialogue represents actual examples of the process of therapy occurring over several sessions with Lanie. These particular dialogues between therapist (T) and client (C) provide the reader with comprehensive examples of the application of numerous DBT strategies that highlight key mechanisms of action in treatment.

Pretreatment sessions targeted orienting and commitment utilizing validation, problem solving, and dialectical (acceptance and change, devil's advocate) strategies. The dialectical technique of devil's advocate involves arguing for the client's problematic behavior in order for the client to develop reasons for eliminating the behavior and can also be effective to obtain the client's commitment at the beginning of therapy. The following dialogue of the first session demonstrates that the therapist's highest priority was to obtain Lanie's commitment to both therapy and eliminating life-threatening behavior (i.e., suicidal urges, cutting).

THERAPIST: Today we're going to spend about an hour getting to know each other. I'll tell you a little bit about our program, what you can expect from treatment, and orient you to some of the things we'll work on together every week in our individual sessions if we decide to work together. First, though, I really want to know more about you. Why do you want to be in treatment? What are you doing here [orientation]?

CLIENT: I guess I feel like I can't take it anymore. I know there's a lot wrong with me and I'm pretty miserable. My grades keep getting worse, probably because I don't even show up to class half the time anymore, and my relationships keep combusting. I walk around feeling so angry all the time now. I can't take it.

THERAPIST: It sounds like you're pretty miserable [Level 2 validation—reflecting accurately.]

CLIENT: All day long now I think about food, what I'm going to eat next, when I can binge, how quick I can get to the bathroom to throw up. I

skip class because I am so overwhelmed and behind on school work. Usually I decide to stay home and just binge instead. I throw it up every time but, of course, I know I can't get it all out of me. Then I cut myself because I feel so crazy and guilty for being such a complete pig. And now I just feel sad and tired all the time, too. Every minute of the day.

THERAPIST: How often do you self-injure [assessing Level 1—life-threatening behaviors on treatment hierarchy]?

CLIENT: Not every time I binge, which is two or three times a day now. I probably self-injure once or twice a week.

THERAPIST: What do you use to self-injure [orientation]?

CLIENT: I use a box cutter or a razor blade that I keep in my nightstand.

THERAPIST: And sometimes you feel like killing yourself [assessing Level 1—life-threatening behaviors on treatment hierarchy]?

CLIENT: Yeah. Well, I get these images in my head of me killing myself that I just can't get rid of. It usually happens when I'm angry or depressed, like when I have a fight with a boyfriend or just can't stand myself anymore. Or when I feel really fat. A lot of reasons, I guess. I've never tried to kill myself, but I think quitting life seems like a decent idea sometimes. Not to die, just to feel relieved or escape from feeling like shit.

THERAPIST: Do you think all these behaviors—the self-injury, bingeing and purging, angry outbursts—do you think you use them to feel better?

CLIENT: Could be. I do usually think I'll feel better after I do them. Sometimes I do feel better or, at least, numb in that moment, but then later I feel worse. It's like this awful cycle. Everything's tied together. I obsess about food all day, feel angry and depressed. I get home and want to reward myself for making it through the day, I want to feel comfort, I want to procrastinate, whatever—the point is, I want to feel something different than what I feel—so I binge, feel guilty, throw it up, feel guilty, cut myself, and then feel hopeless and suicidal. I sound so crazy when I say it out loud. God it's even crazy that I'm here—I'm beyond hope.

THERAPIST: You are in school, functioning enough to get by, so why would you go through the trouble of coming to therapy? What do you want help with?

CLIENT: Well, I really hate feeling like shit! But that's how I feel pretty much all the time lately.

THERAPIST: What about some of the things you've told me about? Do you want to stop self-injuring, bingeing and purging, feeling suicidal [assessing commitment]?

CLIENT: Yeah, but also I want to stop thinking constantly about food. I'd also like to get better at relationships. And get my grades back up. I'd like things to stop feeling like they're falling apart.

After highlighting the relationship between the client's mood or emotions and her behavior, described above and discussed in the resulting conversation, next the therapist utilized the dialectical strategy of devil's advocate, in which the therapist makes an argument against the client stopping the problem behavior, in order to begin shaping a commitment to stay in treatment and stay alive.

THERAPIST: These are behaviors you've been using to try to feel better for years. And let's face it, in some ways they've worked. We wouldn't do the same thing over and over if it didn't work at least a bit. It sounds like each problem behavior you've told me about is used to feel something different than what you're feeling in the moment you're in, whether it's tired or guilty or angry [Level 4 validation—expressing understanding for the client's behaviors]. Is that about right?

CLIENT: Yes. That's true. If I felt good or happy, I really don't think I'd do all this crazy stuff.

THERAPIST: You do things based on whatever you're feeling in the moment or, conversely, whatever you don't want to feel in the moment. You might be one of those people who does things only when you're in the mood. Almost like your emotions control your life. So, we can call that mood-dependent behavior or emotion mind.

CLIENT: Yup, that's me. I do everything based on the mood I'm in, which changes all the time.

THERAPIST: One of our goals might be to work on doing the behaviors you need to do, or the behaviors you think will get you closer to a life worth living, regardless of what you are feeling in the moment [building a life worth living]. Less action based on mood, more action based on increasing effective behaviors.

CLIENT: That sounds impossible.

THERAPIST: Well, not impossible, but really hard! But I'm sure you're thinking, "Why on earth would you want to work on that?" Don't you think it would be easier just to do things when you're in the mood [devil's advocate]?

CLIENT: Sometimes, maybe, if it's not that important . . . but I binge when I'm not in the mood to clean the apartment or do homework or after I get in a fight with a boyfriend. When I feel like crap, I don't do anything I need to, anything to feel good, and usually do stuff to make it worse. I can't live like this anymore. It's miserable.

THERAPIST: It seems like your emotions wreak havoc in your life sometimes, and yet that hasn't been enough to push you to do the behaviors you need to do [Level 3 validation—articulating unstated thoughts and emotions]. I don't think this has an easy solution at all. You've

spent years basing your actions on your mood, your emotion mind, and haven't been that motivated to change even though it's caused a lot of heartache and misery for you [Level 4 validation—expressing understanding for the client's behaviors].

CLIENT: So what are you saying? You can't help me? I already said I can't live like this.

THERAPIST: I think we could work on this, certainly. It's going to be hard, though. Incredibly difficult. And that's the point. This treatment and our work together won't make you comfortable. Did you ever hear of that saying, "The only way out is through?" Well, that's what this will be, if you decide to be in treatment. We'll be going through the pain. It will be hell [devil's advocate].

CLIENT: It can't be worse than the hell I live every day, I'm telling you. And I can't live the hell of every day anymore, so if I don't come to therapy and get better then I'm going to eventually kill myself.

THERAPIST: Why haven't you killed yourself yet [crisis assessment, eliciting reasons for living]?

CLIENT: I don't really know. I guess I'm afraid to do it. Plus, there's a tiny part of me that thinks maybe I could be happy, like other people, and have a normal life.

THERAPIST: So you still have hope [in crisis assessment, a potential buffer for suicidal behavior]? And that has kept you alive? Gotten you here?

CLIENT: Looks like it.

The following session occurred approximately 2 months into treatment. Lanie's diary card revealed she had engaged in a bingeing episode and had urges for cutting during the previous week. The transcript demonstrates a chain analysis of her ED behavior as well as validation and dialectical [making lemonade out of lemons] strategies. Making lemonade out of lemons, a dialectical strategy utilized in this session, occurs when the therapist highlights distressing events or problematic behaviors and turns them into an asset. Additionally, the therapist utilizes a cognitive modification strategy by challenging the client to "check the facts" in her thinking. Lanie had completed several chain analyses with her therapist by this point in treatment and did not need to be directed through the analysis.

THERAPIST: I see from your diary card that you had a 2-point increase for bingeing and cutting urges on Saturday and that you had one binge episode on the same day [diary card review]. What exactly was involved in the binge [identifying problem behavior]?

CLIENT: I ate three-dozen cookies [problem behavior].

THERAPIST: Let's do a chain analysis, so we can figure out what happened.

CLIENT: I'm really not feeling up to that today. It takes so long and I slipped just this one time.

THERAPIST: I understand that these analyses are tedious and can bring up negative feelings that may be difficult for you to cope with right now Level 3 validation—articulating unstated thoughts and emotions], but I think this an excellent opportunity to learn about what happened in this particular instance and figure out the best skills to help you during these kinds of moments in the future [making lemonade out of lemons]. Are you willing to do the chain analysis?

CLIENT: Yeah. I guess it started Saturday morning. My roommate left for winter vacation in the morning, which was perfect because I had a tremendous amount of studying to do for my final exam that was pushed back to Monday. I studied from 10:00 A.M. until 6:00 P.M. in my apartment, only taking breaks to use the bathroom or get more coffee. When I stopped studying at 6:00, I realized I skipped lunch and was pretty hungry [physiological state, vulnerability factor for problem behaviors]. My roommate and I had made reservations for a great restaurant that night [coping ahead, plan ahead to cope with binge urges], but she decided to take the early train. I didn't want to eat by myself because it's completely embarrassing. Now, I'm sitting at home realizing how pathetic I am for not having fun like typical people my age [self-judgment link, vulnerability factor for problem behaviors].

THERAPIST: That sounds like a pretty harsh judgment to me. Tell me what you mean about "not having fun like typical people my age."

CLIENT: It's exactly what it sounds like. Most people my age are spending time with friends, meeting people at bars, and joining running groups! Not me, I'm sitting at home with three textbooks, a cat, and have absolutely no one in this city to call for dinner.

THERAPIST: "Absolutely no one?" Is that really true [checking the facts]?

CLIENT: Well, no one I wanted to call anyway.

THERAPIST: Keep telling me about what was going on with you in this moment.

CLIENT: I pretty much feel like hell, you know? I'm strung out from studying [emotion link, stress–vulnerability factor]. I miss my family because it's the holidays and I was supposed to be with them last night, but needed to stay in the apartment because of this freakin' exam being pushed back . . . I hate being alone on the holidays! All of my close friends went to visit family for the holiday so no one is around and there is nothing but holiday movies with smiling families on TV [vulnerability factor].

The therapist continued through the chain analysis with the client and reinforced skillful behavior utilized by the client. Opposite-to-emotion action was utilized, in which the client acts in a manner opposite to his/her emotional urge, as well as Wise Mind, an intuitive state that balances emotions and logic. At this point on the chain, it became apparent that the client's negative self-judgments began to fuel intense emotions and the subsequent urges to binge. As skillful behavior began to emerge, the client demonstrated use of such distress tolerance skills as self-soothe (soothing the five senses), turning the mind (choosing to accept reality over and over again), Wise Mind ACCEPTS (shifting attention away from the prompting event), and willingness (to enter and participate fully in life and living).

THERAPIST: What are you feeling in your body at this point [assessing physiological link]?

CLIENT: I'm starting to feel tears in my eyes and my stomach is still turning with hunger pains [physiological links], so I decide that I need to walk to the local deli for dinner, which would hopefully get me out of my funk [opposite action for loneliness].

THERAPIST: It seems to me that you used Wise Mind and opposite action to decide to get out of your apartment and loneliness. That's awesome!

Client: I made the decision, but didn't act on it. When I walked into my bedroom to grab my jacket, I noticed that my roommate left me a tray of holiday cookies on my pillow. The tears started falling faster [emotion link]. I thought, "How can I be so freakin' miserable right now when she did this really sweet gesture [self-judgment link]? Isn't that what the holidays are about?" I looked down at the cookies and my stomach growled [physiological link]. I said to myself, "It is one cookie and it won't ruin dinner" [apparently irrelevant behavior or leaving the door open to problem behaviors link]," so I ate one cookie [prompting event for binge]. But the cookie reminded me of my grandma's cookies [thought link] and I had this strange feeling inside of me like the cookie warmed my heart [physiological link], but at the same time I felt awful about not being with my family [emotion link]. I longed for that warmth [emotion link] and sure as hell preferred it over the stress and hunger [binge urge of 3 on DBT diary card]. Before I realized what I was doing, the three-dozen homemade cookies were completely gone [problem behavior].

THERAPIST: Three-dozen cookies . . . how long did it take you to eat the cookies?

CLIENT: Not long enough, maybe 10 minutes. You know what's interesting about all of this? I didn't even think about purging. Instead, I thought, "Cut yourself and it will all go away, the tears will stop, the loneliness will stop" [reacting with emotion mind, consequence of binge

episode], and I wanted to get rid of it [self-injury urge of 4 on DBT diary card].

THERAPIST: And this diary card shows that you had the urges, but you didn't act on them. What happened?

CLIENT: I thought to myself, "Lanie, you have come too far to start this shit again" [keeping the eye on the prize]. I may have binged, but there was no way I was going to cut myself . . . I'm stronger than that [willingness, turning the tables on problem behavior]. And I did that stuff they keep preaching in group, you know? I lit my candles, grabbed my scented oils, and took a long, warm bath. It took a few minutes before I felt the slightest bit of relief [self-soothe].

THERAPIST: You took a warm bath and it made you feel better—fantastic! So you turned the tables on your emotions in what we can consider one of your lowest moments in the last few weeks. I have to say, I'm truly impressed and proud of your ability to use a skill in such a turbulent moment.

CLIENT: It was really a "not this again" kind of moment where I had to do something to get myself out of my head and emotions [turning the mind]. Once I felt some relief, I got out of the bathtub and did some fun novel reading instead of the textbooks [Wise Mind ACCEPTS].

THERAPIST: This is excellent! Do you notice anything about what you just told me?

CLIENT: Not really.

THERAPIST: Lanie, you didn't use just one skill, you chained multiple skills together. It's so impressive! Were you aware of it at the time?

CLIENT: No. Things just felt awful. I mean terrible! And this is the kind of shit that I've been doing since I was a kid. It's far time I grow up and stop doing this stuff [willingness].

THERAPIST: You sound really willing and committed to stop the eating disorder behavior and self-injury and I really admire that about you! It reminds me of what we discussed during our first session. You are now seeing how you're using these behaviors to cope with your emotions and that it's not working for you anymore. Let's go back and look at the links in your chain to see what skills you could've used to turn the situation around. When you saw the cookies on your bed, what could have you done differently [solution analysis]?

CLIENT: For starters, I could've got the cookies out of my sight. Either I could've left the room or put the cookies in the pantry.

THERAPIST: That's a great idea. But let's face it, food is always going to be around and that's what makes things so hard. I'm thinking about radical acceptance. What's your reaction?

CLIENT: Honestly, I think we should've spent 3 weeks on it in group instead of 1. I really don't understand it. The group leader makes it sound so easy, but it's totally over my head.

THERAPIST: I understand how difficult radical acceptance is to learn and I find that's the skill most people have difficulty understanding and practicing [Level 2 validation—reflecting accurately]. It's really about accepting the facts of reality and "It is what it is." Cookies are going to be around sometimes and you won't be able to hide them. Like if one of your classmates brings them to class. It takes way more effort to fight against wishing they weren't around and figuring out how to avoid them than accepting "There are cookies on the table, it is what it is. Now what can I do?"

CLIENT: Again, it's easy to say. Do you know how many times I would have to say to myself, "There are cookies, it is what it is?"

THERAPIST: Maybe 10? Maybe 100? And that's okay! It takes a lot of willingness to make it through a situation like the one on Saturday because it's so emotional. And remember radical acceptance isn't about approving of or even liking that the cookies are around. It's about accepting that there are delicious cookies in front of you, which is reality, and opening your mind to the fact that they are right there and "It is what it is." The key is learning to respond skillfully to what is, not what you want it to be, what it should be, what it used to be. Just what is. It's going to take practice.

CLIENT: Lots of practice.

THERAPIST: Willing to try?

CLIENT: Okay.

THERAPIST: One way to practice radical acceptance is writing down what you have to accept. But the key is that you write it down in a nonjudgmental manner: sticking to the facts. What else could you do in a moment like this—when you have already used skills and are still really struggling to keep from engaging in the problem behavior?

CLIENT: I know. I know! I could call you for phone coaching. Sometimes I think of it, but I don't want to be a bother and I figure I should be able to handle this on my own.

THERAPIST: First of all, it's no bother, it's just part of DBT. Phone coaching can be so helpful during your real life—not the life we have in this room during your sessions, but the life you live the other 99% of the time! If you've used three skills already and still feel strong urges, give me a call and we can come up with some other ideas to handle things effectively.

CLIENT: I could do that.

THERAPIST: Maybe we should practice. Let's set a time tonight when you can call me.

The therapist and Lanie completed a chain analysis of an objective binge episode in this session. Lanie was highly self-guided in her chain because she had completed numerous chains with the therapist prior to this session. She was successfully able to chain multiple skills together in order to survive the moment without making it any worse for herself. The end of dialogue demonstrates how the therapist took Lanie through the chain in order to develop solutions for intervening with skills at each link in the chain, as well as reinforcing the use of phone coaching for skill generalization.

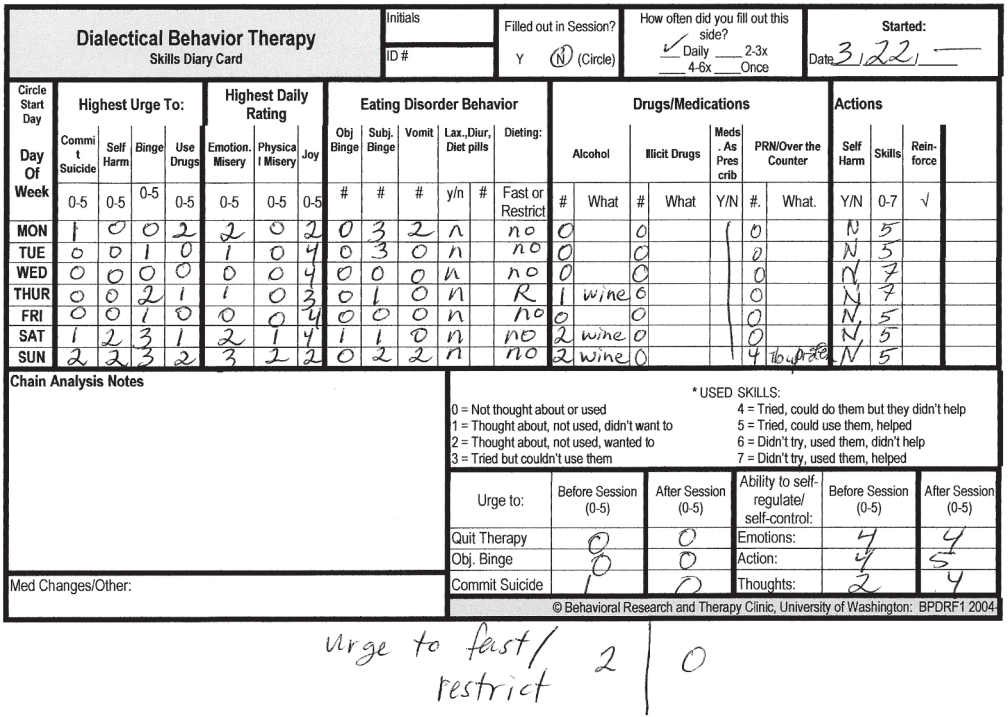
Outcome

Lanie completed 6 months of weekly individual therapy session and group skills training. At the posttreatment assessment, Lanie weighed 127 pounds (BMI = 18.7) and binged once per week for the final 2 months of treatment. She continued to remain dissatisfied with her weight and shape because of her binges, but no longer avoided foods or felt guilty after eating. Lanie was spending less time thinking about food and eating at the end of treatment and was able to focus more on obtaining her degree ("I never realized how much time I lost when I binged and purged. It's as if I have more time to study or to plan 'Lanie time' for the weekend. Can you believe it?"). (See Figure 11.2 for the final diary card from treatment.)

During treatment Lanie had, on rare occasion, utilized phone coaching during particularly difficult moments. Although phone coaching was often highlighted by her individual therapist as an option for generating ideas for skills usage and troubleshooting potential problems, she sometimes reported during sessions her desire to avoid using skills ("If I call you, I'll have to use skills. If I don't call you, I can act on my urges and tell myself I couldn't do anything about it"). As treatment progressed, Lanie called for coaching somewhat more frequently and was able to get through strong urges without engaging in the problem behaviors.

Lanie had not self-injured for the final 3 months, although she occasionally reported urges after a binge or an argument with her boyfriend, and had not experienced any suicidal thoughts since ending treatment. She continued to experience nightmares of her assault, but eventually (Month 4) was able to replace her binge episodes, which were typically prompted from these nightmares, with self-soothing skills:

> "The dreams still happen and obviously I can't control that they pop in my head. I still feel panicked and jittery when I wake. If I light my aromatherapy candles, turn the classical station on the radio, and do some deep breathing, I feel a little less anxious. It seems like a lot of work, but really all I have to do is reach for the stereo remote and the candle next to my bed."



Dialectical Behavior Therapy
Skills Diary Card

Initials
ID #

Filled out in Session? Y (N) (Circle)

How often did you fill out this side? ✓ Daily ___ 2-3x ___ 4-6x ___ Once

Started: Date 3/22/___

Day Of Week	Highest Urge To: Commit Suicide 0-5	Self Harm 0-5	Binge 0-5	Use Drugs 0-5	Highest Daily Rating: Emotion. Misery 0-5	Physical Misery 0-5	Joy 0-5	Eating Disorder Behavior: Obj Binge #	Subj. Binge #	Vomit #	Lax.,Diur, Diet pills y/n	#	Dieting: Fast or Restrict	Drugs/Medications: Alcohol #	What	Illicit Drugs #	What	Meds. As Prescrib Y/N	PRN/Over the Counter #.	What.	Actions: Self Harm Y/N	Skills 0-7	Reinforce √
MON	1	0	0	2	2	0	2	0	3	2	n		no	0		0			0		N	5	
TUE	0	0	1	0	1	0	4	0	3	0	n		no	0		0			0		N	5	
WED	0	0	0	0	0	0	4	0	0	0	n		no	0		0			0		N	7	
THUR	0	0	2	1	1	0	3	0	1	0	n		R	1	wine	6			0		N	7	
FRI	0	0	1	0	0	0	4	0	0	0	n		no	0		0			0		N	5	
SAT	1	2	3	1	2	1	4	1	1	0	n		no	2	wine	0			0		N	5	
SUN	2	2	3	2	3	2	2	0	2	2	n		no	2	wine	0			4	Tb upset	N	5	

Chain Analysis Notes

Med Changes/Other:

* USED SKILLS:
0 = Not thought about or used
1 = Thought about, not used, didn't want to
2 = Thought about, not used, wanted to
3 = Tried but couldn't use them
4 = Tried, could do them but they didn't help
5 = Tried, could use them, helped
6 = Didn't try, used them, didn't help
7 = Didn't try, used them, helped

Urge to:	Before Session (0-5)	After Session (0-5)	Ability to self-regulate/ self-control:	Before Session (0-5)	After Session (0-5)
Quit Therapy	0	0	Emotions:	4	4
Obj. Binge	0	0	Action:	4	5
Commit Suicide	1	0	Thoughts:	2	4

urge to fast/restrict 2 | 0

FIGURE 11.2. Final diary card from the end of treatment. Blank diary card copyright by the Behavioral Research and Therapy Clinic, University of Washington. Reprinted by permission.

Her relationship with her boyfriend became less volatile and they were engaged by her final session. Although Lanie was excited for her upcoming nuptial, she expressed increased concern about her weight and shape due to wearing a wedding dress in front of her friends and family:

> "The stress still gets the best of me sometimes and I binge. This is a problem! First, how I am going to buy a dress if I keep adding on this extra weight? Second, I will look horrible. Can you see this fat growing on my hips? I don't want to be standing in front of both our families looking like this."

The therapist and Lanie discussed the possibility of relapses in her bulimic and self-injurious behaviors and planned ahead for coping with stressful events in Lanie's future including graduating with her master's degree, seeking employment, and planning her wedding.

The dialogue above highlights the key features of DBT that contributed to Lanie reducing both self-injury and bulimic behaviors. Alternate Rebellion is another DBT skill that significantly contributed to Lanie's ability to eliminate self-injurious behaviors. This skill encourages clients to rebel against others who have been judgmental of them in a way other than either purging or self-injuring. For example, Lanie described herself as a "people pleaser" and often completed favors for friends and family despite being disinterested in helping them. She frequently experienced shame as a result of not being able to stand up for herself and would cut her thighs to eliminate the negative emotions. Lanie discovered that rebelling by saying "no" in an assertive manner (sometimes even when she was willing to help with favors) allowed her to feel pride and rebel against the years of people pleasing she engaged in throughout her life. The variety of skills in DBT provides clients with numerous skills to implement in any given situation. We have found that each of our clients develop a unique set of "go-to" skills that significantly contribute to their ability to eliminate problematic behavior.

DISCUSSION

Mechanisms of Change

Although DBT has demonstrated efficacy in numerous randomized controlled trials with BPD, depression, and EDs (Linehan, Armstrong, Suarez, Allman, & Heard, 1991; Neacsiu, Rizvi, & Linehan, 2010; Safer, Robinson, & Jo, 2010), the key mechanisms of change remain unclear and need to be evaluated in future research. Orientation and commitment strategies (e.g., foot-in-the-door, devil's advocate, freedom to choose in the

absence of alternatives) are unique to DBT and are necessary for acquiring commitment to attend treatment and eliminate life-threatening behavior from difficult-to-treat clients. Treatment-resistant clients often experience ongoing pain, so the DBT phone consultation also provides clients with an agreed-upon strategy for contacting their therapists for assistance in times of crisis. As a result, DBT provides therapists and clients with a flexible structure that increases clients' commitment to treatment and promotes therapists' willingness to engage with a difficult-to-treat population while eliminating the potentially life-threatening behavior (e.g., self-injury, restricting, purging).

In the case of EDs, key DBT mechanisms of change may be chain analyses of ED behaviors and mindfulness of emotions and physiological sensations (e.g., feeling "full"). For example, repeated chain analyses of bulimic behavior permit the therapist and client to identify apparently irrelevant behaviors (e.g., taking the long drive home from work that happens to have a favorite fast-food restaurant along the way), triggers (e.g., feeling lonely, receiving a poor performance evaluation at work), and function (e.g., decreasing feelings of shame) of ED behaviors in order to problem solve and "plan ahead" what skills (e.g., radical acceptance, opposite action) to utilize in these dysregulated emotional states. Mindfulness skills may also be mechanisms of DBT. These skills include observing thoughts of purging without engaging in the behavior and not judging oneself while evaluating her body shape teach clients to tolerate ED triggers and urges without engaging in quality-of-life interfering behaviors.

Emotion regulation skills are expected to be the active treatment mechanisms for clients experiencing periods of depression. Specifically, skills focusing on behavioral activation (e.g., opposite action for hopelessness, accumulating positive emotions, half-smile) promote a life worth living for clients. Many clients experiencing symptoms of depression also find that participating in a group with others who share similar problems is beneficial for improving their symptoms. As demonstrated in the above dialogue, radical acceptance is a unique feature of DBT that instructs client to accept reality "as it is" rather than using significant energy resisting unpleasant situations that are unavoidable in clients' lives.

Treatment Challenges

DBT is an appropriate treatment option for treatment-resistant clients. Dialectical abstinence maintains that clients work toward eliminating all ED behavior while acknowledging that failures may happen. Therefore, it becomes challenging to progress forward in treatment when clients or therapists view a binge or purge as total relapse rather than one lapse. In these instances, therapists may discuss treatment with the consultation team that can orient them toward a more dialectical stance.

Compliance with treatment is another issue that is likely to occur with clients with EDs. Specifically, clients initially may be resistant to eliminating their ED behaviors despite making a commitment to the contrary. It is likely that clients have engaged in bingeing and/or purging behaviors for years and have discovered that these behaviors helped them reduce their anger and anxiety, so it is not surprising that they are unwilling to decrease the frequency of their ED behaviors. Weight loss is another challenge for both clients and therapists. DBT is based on an affect regulation model in which ED behavior is hypothesized to regulate emotions. Therefore, clients are encouraged to refrain from dieting in order to develop effective mechanisms for regulating their emotions. Therapists with clients who have lost weight should reorient them to the affect regulation model and seek commitment from the client to eliminate these behaviors. Significant weight loss, however, may require refeeding and hospitalization. Ancillary providers (e.g., physicians, nutritionists) should be consulted about the client's weight.

Future Research

Researchers are only beginning to research how specific components (e.g., mindfulness, interpersonal effectiveness, chain analysis) of DBT are effective for improving treatment outcomes. The application of DBT in the treatment of EDs is also an area in need of future research. Although standard DBT (see Linehan & Chen, 2005) and the Stanford model of DBT (see Safer et al., 2009) have proved efficacious for clients with BN and BED, few researchers have studied the effectiveness of DBT for clients with AN. However, radically open DBT, a new adaption of DBT by Thomas Lynch (in press), is theorized as a model of emotional overcontrol focusing on radical acceptance and appears promising for the treatment of AN.

AVAILABLE RESOURCES

In order to be competent in the delivery of this adapted treatment, familiarity with behavioral principles and of the standard DBT program is essential. Readers are urged to read *Cognitive-Behavioral Treatment of Borderline Personality Disorder* (Linehan, 1993), *DBT Skills Training Manual* (Linehan, 2015b), and *DBT Skills Training Handouts and Worksheets* (Linehan, 2015a). In addition, interested readers are referred to a descriptive chapter (Wisniewski, Safer, & Chen, 2007) as well as overviews of the Stanford model (Wiser & Telch, 1999) and the University of Washington model (Linehan & Chen, 2005). Descriptive case reports of the Stanford DBT manual (Safer, Telch, & Agras, 2001; Telch, 1997) are also available. A manual, *Dialectical Behavior Therapy as Adapted for Binge Eating*

Disorder and Bulimia, by Safer, Telch, and Chen (2009), may also prove useful. Finally, in order to receive more training in DBT, readers are referred to Behavioral Tech LLC (*http://behavioraltech.org*), a company focused on the dissemination of DBT and other empirically validated treatments.

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CHAPTER 12

Adolescent-Focused Therapy for Anorexia Nervosa

KATHLEEN K. FITZPATRICK, RENEE RIENECKE HOSTE, JAMES LOCK, and DANIEL LE GRANGE

Adolescent-focused psychotherapy (AFT) is a manualized outpatient individual treatment developed for older children, adolescents, and young adults with anorexia nervosa (AN; Robin, Siegel, Koepke, Moye, & Tice, 1994; Robin et al., 1999). Although individual psychotherapy approaches for this population are commonly used, few manualized treatment protocols exist. This chapter provides an overview of the background, theory, and implementation of AFT, as well as a practical illustration using case material (see also Fitzpatrick, Moye, Hoste, Lock, & Le Grange, 2010; Moye, Fitzpatrick, & Hoste, 2011).

Research on treatment of young people with AN has focused primarily on family-based treatment (FBT), which has been found to be effective in bringing about full remission and helping patients maintain these gains at long-term follow-up (Eisler, Simic, Russell, & Dare, 2007; Lock, Couturier, & Agras, 2006). However, FBT is not effective for every family, some families may not be willing to participate in a family-based approach, and some patients express a desire for individual support to further their progress toward recovery (Krautter & Lock, 2004). In addition, although FBT has been manualized to enable dissemination, therapists are not always willing or able to implement FBT per the manual, possibly resulting in a less effective form of treatment (Couturier et al., 2013). Thus, effective forms of individual therapy are important treatment options. It is worth

All personal information and therapy dialogue has been altered to protect confidentiality. The case of Zahra is a disguised/composite portrait.

noting that individual treatments may include parental involvement. It has been recommended, in contrast to historical views on the role of the family in treatment, that parents now be viewed as a resource and source of support for their child during the recovery process (Le Grange, Lock, Loeb, & Nicholls, 2010).

Several randomized controlled trials (RCTs) have supported the use of AFT to produce improvements in weight and associated symptoms for adolescents with AN. In the first RCT of this treatment approach, 22 adolescents with AN were assigned to either behavioral family systems therapy (BFST) or AFT, then called ego-oriented individual therapy (EOIT) (Robin et al., 1994). BFST was similar to FBT in that parents were initially put in charge of the weight restoration process, but the treatment approach also included components of nutritional counseling, cognitive restructuring, and communication skills training. EOIT involved weekly individual sessions with the adolescent patient and bimonthly collateral meetings with the adolescent's parents. EOIT focused on developing the patient's ego strength and coping skills and promoting individuation from his/her family of origin, as well as exploring the relationships between other interpersonal issues and eating, weight, and body image. Both forms of treatment resulted in improvements on measures of eating attitudes, interoceptive awareness, depression, internalizing behavior problems, and family conflicts related to eating. Both groups' body mass index (BMI) improved significantly, although patients receiving BFST saw greater gains in BMI than patients receiving EOIT. A larger study of 37 adolescents receiving either BFST or EOIT produced similar results (Robin et al., 1999). The two treatments resulted in similar improvements in eating attitudes, depression, and family conflict. Both groups improved on BMI and return of menses, although the group receiving BFST saw a faster return to health than did the group receiving EOIT. The largest RCT for adolescents with AN compared FBT to AFT and found no differences in full remission between the two groups at end of treatment, although at follow-up, FBT was superior to AFT in this regard (Lock et al., 2010). Other indices of improvement, such as rates of partial remission, BMI percentile, and scores on the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993), a structured clinical interview for eating disorder assessment, showed differences between the groups at end of treatment, but these differences were no longer significant at follow-up.

OVERVIEW AND STRUCTURE OF ADOLESCENT-FOCUSED THERAPY

AFT was originally referred to as EOIT (Robin et al., 1994, 1999). The name was changed to AFT to reflect an adolescent-centered, focused approach to addressing core deficits in one's sense of self. The treatment is

rooted in self psychology, which posits that psychopathology is a result of disruption in the normal development of the self. Deficits in ego strength may cause difficulties with affect regulation, low self-esteem, or ineffective means of meeting one's needs (Gardner, 1999). Individuals with anorexia are viewed as using food in a maladaptive attempt to meet certain needs (Bachar, 1998), such as managing challenges related to adolescent development.

In addition to weight restoration and a return to physical health, the focus of treatment is on strengthening patients' sense of self in order to enable them to face the normal developmental challenges of adolescence, such as separation and individuation from one's family of origin; managing social pressures; and learning to identify, define, and tolerate emotions. Patients learn to develop healthier ways of coping and to increase their sense of self-efficacy. This form of treatment is appropriate for patients who are medically stable enough to be seen on an outpatient basis and for those individuals whose level of cognitive development allows for some degree of abstract reasoning and self-reflection.

Patients are seen individually over a 12-month period, with sessions taking place weekly at first and tapering off in frequency as treatment progresses. Parents and other significant family members or support people are seen separately in collateral sessions. AFT consists of three phases. Goals of the first phase include gathering information about the patient's family—developmental and social history—as well as the development of the eating disorder; beginning to develop therapeutic rapport; developing a formulation of the patient's psychological issues and the ways in which AN is serving to manage developmental challenges; establishing expectations for eating and weight gain; and providing psychoeducation about the eating disorder. These interventions develop a context for both the therapist and patient to understand the role of AN in the patient's life, and to consider the possibility of developing new, more effective, and less harmful ways of managing stress.

The second phase focuses on helping the adolescent begin to understand the purpose that AN serves for him/her; identifying the patient's typical patterns of responding to challenges or stressors; encouraging emotional expressiveness and identifying the patient's ability to define, experience, and tolerate emotions; developing effective coping skills; improving self-image; discussing the patient's values and encouraging the patient to develop values that are not related solely to achievement or performance; and exploring developmental challenges such as individuation and social identity. These interventions are designed to increase the patient's insight into the role of the eating disorder in his/her life, begin to practice other ways of managing negative affect so there is ultimately less of a need for the AN behavior, and to expand the patient's sense of self and develop an identity apart from the eating disorder.

The goals of the third phase include continued discussion and exploration of normal adolescent challenges, problem solving for these challenges, addressing concerns related to relapse, discussing termination, and continuing to foster separation and individuation from the patient's family of origin and encouraging healthy peer relationships. These interventions are designed to solidify patients' forward developmental progress; help them continue to increase their sense of self-efficacy, independence, and self-reliance; and to feel less of a need to rely on the therapist for support.

According to AFT, although weight gain and a return to health are necessary treatment goals, they are not considered sufficient in and of themselves to bring about full and lasting recovery. Rather, accompanying maladaptive beliefs and behaviors need to be changed in order to enable the patient to lead a healthy lifestyle and reduce the risk of relapse.

THE THERAPEUTIC RELATIONSHIP

AFT views the therapeutic relationship as a key agent for promoting change. The therapeutic stance is characterized by a combination of nurturing and authoritative components (Levenkron, 2001) to meet the needs of the adolescent patient, while also acknowledging the severity of this potentially life-threatening disorder. It is likely that the adolescent has been brought to therapy by his/her parents and may be reluctant to engage with the therapist. The therapist's nurturing stance is necessary in order to enable the patient to develop a relationship with the therapist that will ultimately allow for meaningful disclosure and self-exploration. The nurturing stance is supportive and empathic, and can be accomplished in a number of ways: by showing a genuine interest in the patient's life, for example, by knowing about his/her friends, interests, or accomplishments; by engaging in careful and appropriate self-disclosure, particularly given the fact that adolescent patients are often curious about their therapist as a person as well as a clinician; acknowledging the benefits of AN for the patient; providing reassurance when the patient believes that he/she cannot get better or that he/she will become fat; and supporting the patient by externalizing the eating disorder. This separation of the patient and the illness is also done in FBT; the purpose in FBT is in part to enable parents to take on the difficult task of refeeding, while not responding critically to resistance from the eating disorder. In AFT the purpose of separating the patient and the illness is to allow the patient to begin to see the differences between him-/herself and AN, and to develop a better sense of identity apart from the eating disorder. Communicating empathy, validation, and a genuine respect for patients (i.e., mirroring in self psychological terms) enables patients to feel valued by the therapist and is hypothesized to aid in the development of a healthier sense of self (Banai, Mikulincer, & Shaver, 2005).

The authoritative component to the therapeutic relationship serves to remind patients that they are expected to work toward weight gain and a full return to health. While the therapist works to develop a meaningful and useful relationship with the patient, he/she never colludes with the eating disorder or downplays the dangers of the illness. This is not done in an adversarial manner; instead, the therapist remains aligned with the part of the patient that wants to recover and attempts to increase the patient's motivation for recovery. The therapist provides education about the eating disorder, and acknowledges that although AN serves a purpose for the patient, it is a purpose that comes at a great cost.

An important element of AFT, and one that can contribute strongly to the therapeutic relationship, is the expectation that the therapist has experience working with adolescents and families and that the therapist be knowledgeable not only about adolescent development in general, but also familiar with the local adolescent culture in his/her area. This may involve the therapist reading books that his/her patients are reading, or watching television shows or movies that are popular among adolescents at the time.

AFT is a team approach. The severity of AN requires regular medical monitoring by a physician to ensure that the patient remains well enough to participate in outpatient therapy. Some teams may also include a psychiatrist to manage comorbid psychiatric disorders, and a dietitian to provide education around weight goals, the amount of food necessary to reach these goals, and how the body responds to starvation and refeeding. If the team does not include a dietitian, these messages will be given to the family by the physician and the therapist. It is crucial that each team member give consistent messages to patients and families.

CASE FORMULATION

After obtaining a personal and developmental history from the patient over the first several sessions, the therapist develops a psychodynamic case formulation to guide treatment going forward. This case formulation serves to identify the specific physical, social, familial, personal, or cultural challenges the patient is facing, and how the patient is attempting to use AN to manage those challenges. Although not an exhaustive list, the following paradigms can be useful in conceptualizing the purpose served by the AN:

1. *Regressive needs*, in which the adolescent is reluctant to take on a more independent or adult role. This could be due to fears of adult demands, expectations, or responsibilities, discomfort with developing sexuality, or avoidance of complex emotional experiences. The AN keeps the adolescent in a dependent state, and treatment may focus on normalizing these

concerns, challenging assumptions about adulthood, and developing coping skills to face these challenges.

2. *Anger/control issues*, in which refusal to eat may be an indirect expression of anger toward parents or other family members, or an attempt to exert some control over others. At times patients may not be fully aware of these intentions, instead expressing guilt for the impact the disorder is having on the family. Treatment may focus on developing healthier ways of communicating anger and finding more appropriate and effective ways to assert control over one's environment.

3. *A depressive stance*, characterized by feelings of helplessness and vulnerability, may result in AN behavior, as the false sense of control given by attempting to manage eating and weight issues may offer a sense of achievement. It may also occur in those depressed individuals who feel that they do not deserve to eat, or do not deserve better than to live a life controlled by the eating disorder. Treatment may focus on managing emotions, increasing pleasurable activities, finding mastery in areas other than food and weight, and creating a sense of achievement in areas that are not related to performance.

4. *Deficits in self-esteem* may lead to AN in an attempt to develop a sense of identity, accomplishment, or self-worth. Treatment may focus on identifying personally meaningful goals and interests and developing a sense of self apart from the eating disorder.

The case formulation will guide the focus of future sessions and the development of interventions used in sessions. Although AFT draws on self psychology in conceptualizing the patient and his/her difficulties, the interventions used in session can be drawn from a variety of therapeutic models. For instance, therapists working with a patient with a depressive presentation may choose to use behavioral activation, cognitive restructuring, emotion management, self-exploration, and the therapeutic relationship in order to facilitate change. Although the AFT therapist can draw on a range of therapeutic interventions, the goal of these interventions is ultimately to strengthen the patient's coping skills and sense of self within the structure of the case formulation, so that the patient feels less of a need to rely on AN.

COLLATERAL SESSIONS

Collateral sessions occur separately from the patient's individual sessions, and can include parents and other people who provide support to the patient. Collateral sessions tend to occur more frequently at the beginning of therapy while the therapist is putting together a picture of the patient's family—developmental and social history—and may taper off as therapy progresses.

In addition to gathering information about the patient's history, early collateral sessions are used to provide psychoeducation about the eating disorder and about adolescence, to communicate to families the goals that are being worked on in therapy, and to discuss ways in which family members can create a supportive environment at home that will enable the patient to learn and implement new skills. Parents are asked to support their child and create an environment that will facilitate eating and weight gain, but the responsibility to eat ultimately rests with the patient.

Later collateral sessions may involve the therapist aiding family members in interacting with a healthy teenager. Despite the difficulties associated with AN, parents may struggle with the emergence of typical adolescent behaviors, such as desiring more time away from the family or attempting to assert more independence. The therapist can normalize these experiences during collateral sessions and help parents adjust to living with the challenges that accompany adolescence.

CASE STUDY: ZAHRA

The following case study illustrates the different treatment phases of AFT, and how the case formulation guides the focus of treatment and choice of treatment interventions, as well as common themes that are explored in therapy.

Presenting Information

Zahra, a mixed-race (Caucasian/Hispanic) female, presented with a first-time onset of AN at age 15. She was referred to the outpatient clinic following a hospital stay to address bradycardia, orthostasis, and hypothermia. She was released from the inpatient eating disorder–focused medical stabilization unit after 14 days. She was scheduled for an intake within a week, but was medically unstable again at her first follow-up visit with her outpatient medical team and was subsequently hospitalized again for 5 days. She was seen in the outpatient clinic the following day for an initial intake. This intake was conducted with Zahra and her biological parents. Zahra was interviewed first, followed by her parents. During the meeting with her parents, Zahra completed pencil-and-paper questionnaires and also completed the EDE.

Intake Assessment

During the initial assessment, Zahra reported that she had experienced a long history of body image dissatisfaction, which she related to teasing beginning in her freshman year of high school at her local public school. She described the teasing as being primarily by the boys in her grade, who

commented on her bust. She felt ashamed as she had significant sexual development during the summer between eighth and ninth grades. She also reported that as the year progressed, the girls in her grade also began to shun her, calling her names ("slut") likely due to the attention by the boys. Although Zahra reported having two "best" friends, she felt largely isolated at school, had been engaging in some school avoidance due to the bullying, and described herself as preoccupied with concerns about what her peers were thinking, fearing their judgments. One of the girls who had been a friend, though not a close friend, began rejecting Zahra, spreading untrue stories and calling her "fat," although by her report, supported by parents, Zahra was well within normal limits for height and weight at a height of 5′4″ and a weight of 123 pounds. Zahra reported reading online that if she stopped her menses she would stop her continued breast development and she began looking for ways to reduce her intake. In the spring she decided to give up all junk foods and sugar-based foods for Lent. At that point, she began losing weight quickly, typically 2 or more pounds per week. She reported being very happy with her initial weight loss, but as "no one noticed," she made an attempt to further decrease her intake, cutting out carbohydrates, further limiting her diet, and maintaining a relatively steady weight loss.

Zahra had always been athletic and was a nationally ranked volleyball player. At the end of her first year of high school she was selected for the Women's Under 16 national volleyball team, a team that was dedicated to training the next generation of U.S. olympians. This was both "exciting and terrifying," according to Zahra, who reported that she was excited to meet her idols and receive mentorship but also tremendously afraid of failing and being seen as incapable of the higher level of play. Despite these concerns, the opposite happened, and Zahra both played well and attracted the attention of coaches for her consistent, aggressive play. She was invited to further summer camps and trainings. During one of these trainings the team met with a sports nutritionist who outlined the importance of diet in maintaining strength. Although Zahra's father reported the information they received from this visit was well rounded and focused on complete nutrition and energy/expenditure balance, Zahra reported that she learned that fats were "bad" and that she should be eating more lean protein and whole grains but also significantly more vegetables. Over the summer, Zahra's intake appeared to increase, but was increasingly rigid and composed of low-calorie density foods. A typical breakfast was two egg whites; half of a whole-grain English muffin; and a small handful of raisins, dried cranberries, or prunes. Lunch consisted of low-fat turkey slices wrapped around a lettuce leaf, shredded carrot, and some bell pepper slices. Dinner was largely a whole grain, such as quinoa, barley, or brown rice, with a plain, boneless, skinless chicken breast and either steamed broccoli and cauliflower or raw spinach. Zahra cut out most snacks, increased her water

intake to 2.5 liters per day, and increased her daily exercise to include 45 minutes of running, strength training, and volleyball practice for a total of 3 to 4 hours of physical activity per day, 5 to 6 days per week.

Initially Zahra's parents reported that they were pleased with what they perceived as her commitment to health and sport and felt that her weight loss was really more "toning" and muscle building. However, during a family vacation just prior to the start of school, Zahra's parents reported becoming incredibly concerned when they saw her in a bikini and realized she had lost a significant amount of weight. They insisted on weighing her and discovered a nearly 30-pound weight loss, to 95 pounds. They scheduled an appointment with her pediatrician immediately upon their return home and Zahra was found to be medically unstable and hospitalized immediately following her appointment.

The family reported deep concern around Zahra's eating and weight loss, although Zahra herself described her weight loss as "excellent" and felt she was "the most fit" she had ever been. She was upset that her hospitalization interfered with the start of school and was eager to return to class as quickly as possible. She had difficulty acknowledging that she had an illness, although her parents were very concerned and expressed frustration with her, and felt their efforts to assist her to increase her intake had been met with intense resistance. Rather than active conflict, Zahra would simply refuse to eat or speak and her parents felt hopeless in assisting her. The family requested individual therapy and agreed to AFT. They consented, Zahra gave her assent, and the family was also presented with information on confidentiality and its limits within treatment.

Phase I

The initial phase of AFT focuses on continued history gathering, with an emphasis on the adolescent experience broadly defined: friendships, family relationships, and academic and athletic performance, as well as values and goals. The aim is to gather a thorough understanding of the adolescent, as well as identify the issues that led up to the illness and subsequent factors that may maintain the AN behaviors. Psychoeducation to the adolescent around eating-disordered behaviors and appropriate nutrition while malnourished are also critical elements of the early treatment. Collateral sessions were scheduled following the third and fifth visits. The clear expectation that the focus is on weight gain was given to both the patient and her parents. While her parents were not specifically instructed in renourishment, they were provided with information on how best to address Zahra's malnourishment and work toward weight gain.

Zahra described herself as a "go-getter" who was determined to "make a difference, live BIG, and make a splash." She reported that she had always had a strong desire to do well, worked hard in school, and was

supported by her parents in her athletic and academic endeavors. These were also important to her parents, whom she described as "street smart" and "scrappy" rather than educated. They had married young and did not complete college, though both went on to successful careers. They resided in a moderately wealthy neighborhood and Zahra was ashamed of their lack of education, though she could admit also that no one asked about this. She reported wanting to "do things right" and make the right decisions and be seen as successful in every way. However, no matter how well she performed, she always felt as though she was not as successful as she could be. Even her acceptance on the national volleyball team felt more like a defeat than an achievement because, while there, she compared herself with the others, even those with many more years of training and experience.

In addition to her difficulties with her self-acceptance, Zahra also described a history of family challenges. She was much closer to her mother than her father, whom she described as distant. However, particularly since the onset of teasing and bullying, Zahra and her mother also had a conflictual relationship. Zahra felt this was due to what she described as her mother "blaming the victim"—Zahra's mother would encourage Zahra to stand up to the others or to ignore them and Zahra felt hopeless to do either. Over time this had become contentious, with Zahra stating that her mother would belittle her, not listen to her or would reject her if she expressed distress around her peer relationships. Zahra's mother reported she had tried repeatedly to make suggestions, hear Zahra's feelings, and encourage her to manage these concerns, but over time "It just became whining and nothing ever changed." Both parents expressed their feelings that Zahra was in control of her difficulties and was choosing not to "buck up" and face them. They expressed great frustration regarding what they felt was Zahra's lack of motivation in wanting to get better and feeling that she would, in fact, get better if she chose to. Zahra felt that things would be better following her weight loss, but her parents felt differently and were considering moving her from her school or homeschooling her, as they felt she could not control her stress with her peers.

In sessions, it was noted that Zahra routinely expressed a sense of there being only one "right way" to accomplish something and that any other option or choice would be considered wrong, illegitimate, or harmful. For her, this meant working on her sports in very specific ways: individual training, group training, mental training, and watching tapes. She had a specific plan and needed to follow it. Indeed, her rigidity around these concepts meant she had a difficult time scheduling all of her activities: she would run after practice even if she had a large amount of homework or a project due the next day. She refused to alter her routines and often found that she was rushing to finish work at the last minute and staying up very late or even all night to complete her work.

During Phase I it was established that Zahra's eating disorder really served two main purposes: the first was to reduce anxiety regarding how her peers perceived her and to help prevent what she perceived as her physical inadequacies, which had led to teasing and bullying. The therapist framed this as "AN as armour" that would protect her from potential disappointment and disapproval. The second function of her AN was a means of establishing her independence from her family; yet another way to be "perfect," to avoid making mistakes or not reaching their approval. Interestingly, this also became a battleground at home, where Zahra could make demands that her parents did not feel capable of arguing with, as they had regarding her peer-relationship struggles. As such, Zahra felt more "in control" both at home and at school, reinforcing her use of weight restriction methods as a means to solve her problems. Despite the ways in which AN functioned effectively to help Zahra manage distress and assert her independence, both she and her parents could easily acknowledge that it also clearly interfered with her ability to move forward with preferred activities. Given her difficulties, it would be unlikely that Zahra could remain on the national volleyball team, attend school, or avoid scrutiny at school, given the drastic change in her appearance.

Initial efforts not only included developing a shared history and strengthening the therapeutic relationship, but also acknowledging the direct relationship between these difficulties and challenges in eating. It was clear that Zahra felt restriction relieved her anxieties regarding areas in which she felt inadequate, but doing so was also leading to conflict and upset that she felt unable to manage. Zahra struggled to adequately care for herself in many ways: inadequate meals, overexercise, reduced sleep, and social withdrawal. She had few coping resources and placed excessive emphasis on perfecting and performing rather than sharing and enjoying.

Initial work targeted Zahra's desire to work on planning her daily activities to better manage her multiple demands. The therapist encouraged Zahra to keep a day planner and work on outlining her daily activities, particularly as it was summer vacation and she had more time to engage in a wide variety of activities. These were then viewed in several contexts: how much Zahra valued these activities, the amount of time she thought they would take versus the amount of time they actually took, the ratio of "have-to-do" activities versus the "want-to-do" activities, and, finally, by the level of sociability of these exercises. During this period of time, lasting approximately 4 weeks, Zahra was able to identify that a majority of her time was spent alone, in activities she did not particularly value, even if she valued certain outcomes, and that most of these fell in the "have-to-do" category. Interestingly, many of the activities she later rated as enjoyable involved her family and often this also involved food. She reported enjoying family meals, spending time with her younger brother, and engaging in activities involving her extended family. Zahra's parents expressed surprise

when she shared this with them but they responded by scheduling more frequent family meals and they reported that this worked to help improve their overall relationship. In addition, Zahra's parents reported taking more time to try to listen to her concerns and ask her how she wanted to go about solving her challenges, rather than providing advice. Zahra continued to report that her parents "did not listen" to her but also described decreased conflict with her mother. Zahra was encouraged to identify pleasurable activities, but continued to struggle with identifying activities that she would enjoy and did not dismiss as a "waste of time."

The therapist made it clear that it would be necessary to begin eating before the coping strategies for these other challenges could be managed, and that weight gain would be expected throughout the treatment. Zahra was resistant to this suggestion but did agree to focus on maintaining her weight and increasing specific foods, namely proteins, to help with her athletic performance. She was referred to a dietitian who specialized in sports nutrition and performance in order to help her in establishing an improved eating routine. Throughout the first phase of treatment, Zahra met with the dietitian regularly and identified an appropriate plan for intake, though she continued to have significant difficulty in following this plan. During the first 10 sessions of therapy (eight with Zahra alone, two with her parents separately) she initially continued to lose weight, although at a reduced rate, followed by 6 weeks of weight maintenance and 2 weeks of slight weight gain (roughly 1 pound per week).

Phase II

With the upcoming return to school, Zahra's treatment focused more significantly on the role of AN in helping her manage her concerns around peer interactions. Similar activities to those completed in Phase I were reintroduced as her daily routine changed. She recognized that she continued to fill her life with activities that were not fulfilling to her and she discovered that the harder she worked at the tasks that she thought would ultimately make her feel better—namely, schoolwork and exercise—the worse her overall mood, anxiety, and eating. With the return to school she again returned to maintaining, rather than gaining weight, but did not experience weight loss. She identified that lunches at school were a particular struggle, due both to the short amount of time she had to eat (roughly half an hour), as well as fears of eating in front of her peers. She was able to recruit her best friend to eat with her, but still reported difficulty with sufficient intake at lunch. With the help of her parents and dietitian she began eating an after-school snack to help her maintain her intake. She continued to struggle with identifying enjoyable activities, although she continued with increased family meals. Given these difficulties, a goal was established of decreasing exercise routines outside of structured volleyball practice. She

targeted decreasing her running, as this was not helpful to her sport, and she noted it was the least enjoyable—and most time consuming—of her "had-to" activities. Despite her concern regarding reducing this activity, she could not deny the positive impact: her volleyball coaches commented on her increased energy and focus and the addition of approximately an hour a day of unstructured time allowed her more time to complete her homework.

Zahra's parents, meanwhile, reported being very pleased with these changes and found more ways to praise Zahra's efforts to care for herself. In a serendipitous moment, Zahra's mother invited her to join a yoga class that her mother was going to attend with a friend who could not make it. Zahra reported finding yoga to be inspiring and calming and expressed an interest in continuing to do this work. To accommodate this, she also reduced her strength-training exercises, doing a "slow-yoga" class instead. Part of the class focused on mindfulness and meditation, which were both interesting and frustrating to Zahra. The net impact of the reduction in activity was that Zahra began to gain weight once again, albeit inconsistently, with an average of a pound per week for 5 weeks. This increased to approximately 2 pounds per week with a switch to yoga three times per week rather than daily weightlifting and core exercises.

Zahra was also able to note that the instruction in her yoga class dovetailed with the notion of values and goals initiated in the start of treatment and she began to use her instructor and other class participants as role models, asking about these efforts and exploring their self-care skills. She was surprised when the therapist suggested that her commitment to yoga and her enjoyment of it were signs that she was living a more value-centered life: Zahra had assumed that any and all exercise would be considered "bad" and was pleased to realize that she could both value something and view it as important to her goals of improving in sports. The therapist congratulated her on this and encouraged continued thinking on the things that she enjoyed that also helped her meet her goals.

Most significantly, work began to focus on Zahra's social concerns. Zahra was able to identify that her previous experiences with bullying made her expect to feel that others did not like her. As a result, she would keep herself aloof and distant and—even though her high school had a large student body, many of whom had never been involved in bullying her—she was reluctant to identify others she could spend time with or who might like her. She was encouraged to identify peers who she felt she might share interests with or that she felt she could approach. Surprisingly, during a weekend yoga class she did not usually participate in, Zahra ran into another young woman from her biology class who greeted her enthusiastically and chatted with after class. After this first meeting, Zahra reported being pleased that this young woman had struck up a conversation, as she was someone Zahra admired but felt she could never talk to and that the

two had "nothing in common." At school, however, this peer engaged Zahra and invited her to another yoga class and dinner afterward. With this introduction, Zahra began a new friendship: she realized that this peer knew nothing of the taunting Zahra had endured in eighth grade and she shared her own "horror stories" of middle school. In addition, Zahra was invited to join this new friend at lunch and a new peer group opened up to her. Although Zahra continued to maintain some distance, the new peer group had similar interests—they often studied together, went to yoga or Zumba classes together, and also had movie and pizza nights on occasion. Zahra and her best friend were welcomed into this group, which presented a new set of challenges. Zahra had to learn to reciprocate socially, including hosting a movie and pizza night at her own home. Zahra's concerns around her friends meeting her parents and her feelings of shame around their lack of education introduced another set of concerns: the ways in which Zahra was like and unlike her parents, and the degree to which others might care about the things Zahra was ashamed of.

Zahra and the therapist identified several ways in which Zahra had limited herself based on her beliefs of how others saw her and might judge her. Zahra was encouraged to identify how often she judged others this way and was surprised to find that she rarely thought about others the way she thought they would consider her. She was able to make a plan, guided by the therapist, to invite over one peer from her group of friends, choosing the person she thought would be least judgmental. Rather than finding fault, this friend raved about how beautiful Zahra's house was (Zahra's mother worked as an interior designer) and how cool Zahra's parents were. On their end, Zahra's parents were so pleased to see her increase her sociability that they joked that they would have moved houses if that meant Zahra felt comfortable bringing people home, but they settled for acting like themselves and found that this was enjoyable for everyone. Once this barrier had been crossed, Zahra felt comfortable inviting her group over, all had a relatively good time, and this led to increased sociability, with Zahra spending time with other friends at their homes and bringing her friends into her home. This increased intimacy meant that Zahra was able to see the way other families interacted and came to appreciate the relationship and support she had from her own. She also was able to see the ways her friends handled their problems, relationships, and concerns and discussed these openly in treatment as ways she could manage herself.

Throughout this, Zahra paid less attention to the peers who had teased her and, indeed, over time appeared to forget all about them. When this was brought to her attention she noted with a laugh that she found that liking people was more effective than fearing them, and that once she believed she had something worth sharing with others she preferred that to hiding from others. Following this, she also began reaching out to her peers on the

national volleyball team, working to have them over for more activities, and laughing and joking with them more. Feedback from her coaches was strongly positive and they reported that they had been concerned about her ability to be an effective teammate before, as she was aloof and did not communicate easily with her teammates.

In addition to increasing her sociability and intimacy with others, Zahra was able to open up about her eating difficulties to certain friends. Despite her fears in doing so, the outcome was largely positive. One friend made a commitment to helping Zahra eat more effectively at school and the two began sharing a morning snack as well. This helped with continued weight gain, which slowed as Zahra moved toward a more healthy weight. Other friends shared their own challenges with eating, mood, and anxiety. Unfortunately, one friend diminished these concerns and stated that Zahra was "not that skinny" and "nowhere near anorexic," which brought up a host of concerns for Zahra. She struggled with feeling "fat and ugly" and whether she could remain friends with this peer. This led to a focus in treatment on managing negative feedback and assertiveness with others. Zahra was encouraged to reflect on the way she had managed this previously (avoidance) and was encouraged to practice new skills. In treatment, this included role-playing conversations, identification of "fears versus reality," and encouragement to gather coping strategies from her peers. Zahra referred to this as "life anthropology," meaning that she felt she was studying how others lived in order to choose for herself ways she might act. She began keeping a journal, asked her mother for advice on being more assertive, started utilizing skills learned in yoga, and asked for more information on mindfulness.

During this phase of treatment, which lasted almost 20 weeks, frequent efforts were made to look back on her progress, identify activities that "boosted her up" and helped her "free herself from shame," in order to specifically outline the tasks that were helpful, difficult to engage in, or that created a new sense of self. Zahra's own assessment was that being more active helped her and she was able to engage with her peers more readily around things she valued. However, this also led to feelings that she was "just not interesting" and had "wasted [her] life trying to be perfect and ended up subpar." Regarding the former comment, therapeutic work went into identifying what made one interesting to others. Initially Zahra was wedded to the idea that this meant doing grand things (going skydiving or hiking a local mountain) and she attempted many of these things. While these led to interesting things to say about herself, she ultimately came to understand that what made her most interesting to others was finding herself interesting. The therapist practiced pointing out to Zahra when she was most animated or when she was able to lose herself in a conversation or spontaneously say that she wanted to do something, rather than thinking

about how others wanted her to behave. This process was challenging and involved the therapist continually reframing and reflecting Zahra's behavior back to herself.

By the end of Phase II, Zahra had regained all weight lost and experienced a growth spurt, resulting in the need for continued weight gain. She fell at the 50th percentile weight for age and the 60th percentile height for age, which was similar to her growth curve prior to the onset of her illness. She was menstruating regularly at this weight and reported improved energy. Zahra's parents reported that she was eating well in a variety of settings and with relatively few limitations, and although there were times when she might balk at certain foods, she could be encouraged to eat them with relatively little resistance. Overall, Zahra and her family felt she was no longer eating disordered in her behavior or thoughts.

Phase III

In the final stage of treatment, lasting only three sessions in this case, Zahra identified "goals for living without and leaving behind AN." Areas of continued difficulty surfaced, namely mild body image dissatisfaction. Zahra was able to identify when she might become concerned about her body—most often when she had to perform in a high-level competition or meet—and this was reframed as anxiety anyone might feel before a big event or meet, but she focused on her body. She began practicing visualization with a coach to help with her "sports nerves." This became particularly important as she was moved to the Olympic preparation team and began competing internationally. She was also encouraged to view body image dissatisfaction as an unfortunate but common feeling for most women. She was able to see that her dissatisfaction had led her to restriction and she was encouraged to identify other behaviors, such as journaling, discussing with a friend, "doing it anyway!" (which might also be called opposite action), and focusing on the positive.

The therapist also encouraged setting future goals—Zahra was a hard worker but needed to have a stronger sense of what she was working toward and how she would know she was on the right track. She was increasingly able to think about the things she wanted to accomplish and where she might like to end up. As her "sports dreams came true" and she spent more time traveling and competing, she had to balance this with her schoolwork and made the difficult choice to take fewer honors courses and a lighter courseload as she approached her junior year. She also identified strategies that would help her with this—such as taking some online college courses that had more flexible deadlines and would still earn her credit toward college—and focusing in on her interests, which were predominantly in science and technology. This helped her make choices for where she would put her efforts, choosing advanced chemistry over AP U.S. history, for example.

The purpose that AN had served for Zahra was no longer in place: she felt confident in being able to make friends and protect herself from criticism and judgment, having experienced this both from people who were and were not close to her. Although her relationship with her parents was punctuated by some conflict, it was also more stable and she and her mother, in particular, had routines and shared interests that allowed them to connect. Zahra's parents could distinguish between normal adolescent conflicts—curfew, appropriate independence, financial responsibility—and they had improved their skills in listening and responding to these concerns.

Summary

In Zahra's case, AN was a tool to help her avoid and manage her interpersonal distress and avoid challenges of independence in adolescence. These were maintained by her perfectionism and rigidity. The therapist used a variety of skills in this treatment. The first was a firm expectation that Zahra would work on increasing her nutritional intake and gain weight, while also maintaining an empathic, nurturing stance that did not exacerbate conflict but rather looked for ways to support Zahra in solving them. The techniques utilized included more traditional self psychological techniques such as mirroring, identity exploration/development, and values-based support (identifying and practicing values, examining behaviors for their "fit" with the life one wanted to live). In addition, role-playing skills were often utilized to help Zahra see the ways others might manage or think about the situations that were challenging for her. Improving her social interactions also provided Zahra with a wider range of social "mirrors" and therapy often involved looking at these to help Zahra choose which aspects of her personality and style she wanted to highlight and those she wished to move away from. To achieve these ends, the therapist also utilized skills that may now be considered to fall under the rubric of cognitive-behavioral therapy, such as exploration of beliefs about situations, challenging maladaptive thoughts, and encouraging behavior change. Other skills might be thought of through the lens of mindfulness-based psychotherapy, such as encouraging Zahra in her desire to meditate—though she identified this as a skill on her own—and in helping with emotion regulation techniques. These skills were applied flexibly and adapted to Zahra's own presenting concerns, not drawing on the theories that served to help develop these techniques. The most critical aspect was the relationship between Zahra and the therapist, which was characterized by empathy, warmth, nonjudgment, and an expectation of a return to health and optimum functioning. At the end of treatment, Zahra noted that she felt therapy offered her a space to explore a variety of concerns, to "learn from a mentor or if not, to have a place to think about the 'how' rather than the 'what' of (her) behavior."

DISCUSSION

AFT views AN as a maladaptive way to avoid facing normal developmental challenges. The nurturing and authoritative therapeutic relationship provides patients with a safe place in which to explore new ways of thinking about and managing these challenges. Parents play an important role in supporting their child through the treatment process, although if parents are unwilling or unable to be involved in therapy, the patient is still expected to take on the responsibility for change, with guidance from the therapist. AFT is a promising approach to the treatment of adolescents with AN, and may be more acceptable than family-based approaches to families that cannot be involved in treatment to the level required in FBT, or for therapists who do not have the training necessary to offer FBT.

Individual treatment can be challenging with a malnourished patient who is entrenched in the eating disorder and unmotivated for change. AFT addresses this by making eating and weight gain non-negotiable within the context of a respectful and safe therapeutic environment. Even very reluctant patients often agree to the treatment expectations after therapeutic rapport is established and they feel that their voice is being heard. Although the primary responsibility for change lies with the patient, parental involvement can also aid therapeutic movement with reluctant or emotionally restricted patients. For patients with significant alexithymia, AFT therapists will encourage forms of self-expression that feel safe to the patient, such as journaling (with or without sharing with the therapist) or other creative or artistic outlets.

IMPLICATIONS FOR PRACTICE AND RESEARCH

Data from this case and from clinical trials indicate that AFT may be a beneficial approach for many adolescents. To date, research on predictors of outcome in AFT is lacking. AFT may be more effective for older adolescents and young adults who have the cognitive and developmental capacity for insight, reflection, and perspective taking. Other areas for future research include learning more about mechanisms of change in AFT and determining which treatment approach is the best fit for a particular patient.

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