ABCT CLINICAL PRACTICE SERIES

Applications *of the* Unified Protocol *for* Transdiagnostic Treatment *of* Emotional Disorders

Edited by
David H. Barlow
Todd J. Farchione

Applications of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders

ABCT Clinical Practice Series

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Applications of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders

EDITED BY

DAVID H. BARLOW

AND

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SERIES FOREWORD

Mental health clinicians desperately want to help their clients, and they recognize the importance of implementing evidence-based treatments toward achieving this goal. In the past several years, the field of mental healthcare has seen tremendous advances in its understanding of pathology and its underlying mechanisms, as well as proliferation and refinement of scientifically informed treatment approaches. Coinciding with these advances is a heightened focus on accountability in clinical practice. Clinicians are expected to apply evidence-based approaches and to do so effectively, efficiently, and in a patient-centered, individualized way. This is no small order. For a multitude of reasons, including but not limited to client diversity, complex psychopathology (e.g., comorbidity), and barriers to care that are not under the clinician's control (e.g., adverse life circumstances that limit the client's ability to participate), delivery of evidence-based approaches can be challenging.

The *ABCT Clinical Practice Series*, which represents a collaborative effort between the Association for Behavioral and Cognitive Therapies (ABCT) and Oxford University Press, is intended to serve as an easy-to-use, highly practical collection of resources for clinicians and trainees. The series is designed to help clinicians effectively master and implement evidence-based treatment approaches. In practical terms, it represents the 'brass tacks' of implementation, including basic how-to guidance and advice on trouble-shooting common issues in clinical practice and application. As such, this series is best viewed as a complement to other series on evidence-based protocols such as the Treatments *That Work*™ Series and the Programs *That Work*™ Series. These represent seminal bridges between research and practice and have been instrumental in the dissemination of empirically supported intervention protocols and programs. The *ABCT Clinical Practice Series*, rather than focusing on specific diagnoses and their treatment, targets the practical application of therapeutic and assessment approaches. In other words, the emphasis is on the *how-to* aspects of mental health delivery.

It is my hope that clinicians and trainees find these books useful in refining their clinical skills, as enhanced comfort as well as competence in delivery of evidence-based approaches should ultimately lead to improved client outcomes. Given the

emphasis on application in this series, there is relatively less emphasis on review of the underlying research base. Readers who wish to delve more deeply into the theoretical or empirical basis supporting specific approaches are encouraged to go to the original source publications cited in each chapter. When relevant, suggestions for further reading are provided.

APPLICATIONS OF THE UNIFIED PROTOCOL FOR TRANSDIAGNOSTIC TREATMENT OF EMOTIONAL DISORDERS

In this book, Barlow, Farchione, and colleagues present the application of the Unified Protocol (UP) across a range of presenting problems. It complements the detailed therapist guide and workbook (Barlow, Farchione et al., 2nd Edition, 2018). In addition to describing how the disorder can be conceptualized dimensionally as a problem related to core negative reactivity and perceived lack of control of emotion, each chapter explains how the core UP modules can be flexibly implemented for that problem or context. Every chapter also includes detailed case examples to demonstrate how the principles of the UP manifest in clinical practice.

As all clinicians are aware, comorbidity is the rule rather than the exception. Indeed, this is a primary impetus for transdiagnostic treatments such as the UP. Across the volume's chapters, which align to particular diagnoses, we see how the UP can be used by clinicians to conceptualize disorders and co-occurring conditions along common temperamental features and apply the core elements of the UP in an individualized way. The chapters are written by experienced UP clinicians, who provide a wealth of first-hand practical knowledge that helps bring the UP, an evidence-based protocol with a great deal of research to support its efficacy, to life.

Susan W. White, Ph.D., ABPP
Series Editor

PREFACE

This book focuses on clinical applications of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP). It may be helpful at the outset to say what this book is *not*. First, it is not simply another in-depth description of the UP. An updated and revised therapist guide for utilizing the UP, along with a detailed, step-by-step workbook for patients containing all the necessary elements of the UP will be published shortly (Barlow, Farchione, et al., 2018; Barlow, Sauer-Zavala, et al., 2018). In addition, the book is not focused on an in-depth description of the theoretical and conceptual basis of the UP with accompanying research findings, although those topics are touched upon in various chapters when appropriate. Rather, the focus of this book is on providing detailed practical advice on applications of the UP in a variety of cases, including very complex comorbid cases, along with typical roadblocks that a clinician might encounter in the course of treatment and troubleshooting strategies.

Some readers, when first coming across the table of contents for this book, may be puzzled by the focus on existing categorical DSM diagnoses (or classes of diagnoses), such as major depressive disorder (MDD), bipolar disorder, and eating disorders. After all, we are presenting a transdiagnostic assessment and treatment approach focused on core common therapeutic elements applicable to all disorders of emotion, so why put it in the context of specific disorders? But once again, the point of this book is to explicate how it is possible to conceptualize these varied emotional disorders, most often with accompanying comorbidities, from a common framework focusing on shared temperamental characteristics, which then leads to the application of five core transdiagnostic elements across the full range of these disorders. Therefore, the steps in this treatment approach are presented in some detail for each disorder, beginning with explanations of the therapeutic rationale to the patient, as well as the application of each of the core modules or elements.

The central premise of developing this transdiagnostic treatment is to make life easier for clinicians on the front line, who are faced with treating patients presenting with a wide variety of emotional disorders, such as social anxiety disorder, depression, and panic disorder, most of which, up until now, have had their own

evidence-based, single-diagnosis protocols, many of them differing considerably from each other. Few clinicians become even aware of all the protocols available, let alone become proficient in their application. It has been the experience of clinicians who have mastered the core transdiagnostic elements of the UP that this is pretty much all they need to address these disorders.

This book begins with a chapter outlining the development of the UP over the preceding decades, a description of the elements of the protocol, and some of the research supporting the effectiveness of the protocol at this point in time, including a recent large clinical trial sponsored by the National Institute of Mental Health (NIMH), showing that the UP is at least as good as individual, single-diagnosis protocols for the major anxiety disorders (Barlow et al., in press). This is followed by an important chapter covering transdiagnostic assessment and case formulation that takes a step-by-step approach to educating patients on the nature of emotions and how their own clinical problems relate to dysregulated functional mechanisms in their emotional life. This is followed by a series of 11 chapters covering specific disorders or classes of disorders with which we now have had experience, including bipolar disorder (Chapter 6), emotional disorders connected with alcohol use disorders (Chapter 8), borderline personality disorder (BPD), which we conceptualize as the most severe of all emotional disorders (Chapter 12), and other major disorders. The last several chapters of the book deal with complex clinical presentations (which, of course, are more the norm than the exception on the front lines of clinical practice). In many cases, these presentations may include other dysregulated emotional targets such as shame, guilt, or embarrassment. Next comes an all-important chapter on group treatment applications. Administration in groups may be an emerging strength of the UP since the common transdiagnostic therapeutic elements of the UP allow one to form heterogeneous groups of individuals with emotional disorders (anxiety, depression, etc.), thereby increasing efficiency in clinics. Also, a chapter on cross-cultural applications reflects our growing experience with the UP in very different cultural contexts across the world, including the victims of the long civil war in Colombia and recent applications of the UP developed in Japan. Finally, we conclude with a chapter on future directions of the use of the UP, including some of our nascent efforts in the area of employing these principles to prevent emotional disorders.

We sincerely hope that clinicians struggling with the welter of emotional problems presented to them every day that often don't fit neatly into any categorical DSM diagnoses will find the specific case-study elements of this book helpful in their day-to-day practice. As experience with the UP broadens and deepens, more varied applications will be forthcoming, and we would be delighted to hear from clinicians on their own experiences with this protocol as they unfold.

Todd J. Farchione
David H. Barlow

ABOUT THE EDITORS

David H. Barlow, Ph.D.
David H. Barlow is Professor of Psychology and Psychiatry Emeritus and Founder of the Center for Anxiety and Related Disorders at Boston University. He has published over 600 articles and chapters and over 80 books and clinical manuals mostly in the area of the nature and treatment of emotional disorders. His books and manuals have been translated in over 20 languages, including Arabic, Chinese, Hindi, Japanese and Russian. He is the recipient of numerous awards, including honorary degrees from the University of Vermont and William James College, and the two highest awards in psychology, the Distinguished Scientific Award for Applications of Psychology from the American Psychological Association and James McKeen Cattell Fellow Award from the Association for Psychological Science honoring individuals for their lifetime of significant intellectual achievements in applied psychological research. He was a member of the DSM-IV Task Force of the American Psychiatric Association, and his research has been continually funded by the National Institutes of Health for over 45 years.

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Applications of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders

1

The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders

An Introduction

KATHERINE A. KENNEDY AND DAVID H. BARLOW ■

The development of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP) had its origins in a book published nearly three decades ago, *Anxiety and Its Disorders* (Barlow, 1988). In a chapter entitled "The Process of Fear and Anxiety Reduction: Affective Therapy," the author made an attempt to outline a coherent and consistent therapeutic approach to the full range of emotional disorders based on emotion theory. Among the transdiagnostic targets for change described there were the *action tendencies* associated with strong emotions, phenomena that we now refer to as *emotion-driven behaviors.* Other core targets included a pervasive sense of uncontrollability over life stressors (now considered research team to be part of the core temperament of neuroticism itself), and negative attentional biases, including a focus on internal, affective, and self-evaluative schemata.

Those ideas were put aside for over a decade while we focused on further developing and evaluating single-diagnosis treatments, such as treatments for panic disorder in large clinical trials (e.g., Barlow, Gorman, Shear, & Woods, 2000). In 2004, we revived this focus on targeting shared features of emotional disorders with the publication of an article called "Toward a Unified Treatment for Emotional Disorders" (Barlow, Allen, & Choate, 2004). At that time, recognizing the plethora of treatment manuals developed for each individual anxiety, mood, and related disorder reflecting DSM-IV categories, we returned to the approach

first articulated in 1988: attempting to identify a common set of principles of change that could apply to all these disorders.

At the same time, research on the classification and nature of emotional disorders conducted with our colleague Tim Brown underscored the fact that fundamental temperamental aspects underlying anxiety, mood, and related disorders seemed more central to the nature of these disorders than did the symptom presentations that were the defining features in DSM-IV and DSM-5 systems (Brown & Barlow, 2009). This led in turn to a greater focus on the underlying temperament of neuroticism and other related traits, such as extraversion or positive affect, as well as the beginnings of conceptualizations of treating these temperaments directly rather than focusing on disorder-specific symptoms. The protocol that eventually emerged, as detailed next, consists of five core therapeutic procedures thought to be *transdiagnostic*, or widely applicable to all disorders of emotion. The remainder of this chapter is devoted to explaining the rationale for this approach and providing a description of the UP as it now exists. Subsequent chapters in this book focus on illustrating applications of the UP to diverse disorders of emotion.

RATIONALE FOR A UNIFIED APPROACH

In recent years, differing strands of research have come together to provide a strong rationale for creating a unified transdiagnostic approach to disorders of emotion. Commonalities among the emotional disorders have become increasingly apparent, including high rates of comorbidity, a similar responsiveness to treatment among comorbid disorders, and the presence of a common neurobiological syndrome. In addition, a hierarchical structure of emotional disorders has emerged, with a focus on core dimensions of temperament. In other words, the same traits and tendencies appear to leave individuals vulnerable to experiencing a wide variety of mental health problems, such as panic attacks, intrusive thoughts, posttraumatic stress, worry, and depression. Recently, we have developed an understanding of one reason why emotional disorders have so much in common: they appear to be maintained by similar functional processes, such as marked negative reactions to intense emotional experiences. We now elaborate briefly on each of these different strands of research.

Commonalities Among Disorders of Emotion

Since the turn of the century, research has begun to highlight commonalities among disorders of emotion (Barlow, 2002; Brown, 2007; Brown & Barlow, 2009). Specifically, high rates of comorbidity, broad treatment responses across comorbid emotional disorders, and common neurobiological mechanisms serve as examples of how emotional disorders are more similar than different. At the diagnostic level, overlap among emotional disorders is demonstrated by

high rates of current and lifetime comorbidity (e.g., Allen et al., 2010; Brown, Campbell, Lehman, Grisham, & Mancill, 2001; Kessler et al., 1996; Roy-Byrne, Craske, & Stein, 2006; Tsao, Mystkowski, Zucker, & Craske, 2002, 2005). For example, results from a study of 1,127 patients at the Center for Anxiety and Related Disorders (CARD) at Boston University indicated that 55% of patients with a principal anxiety disorder had at least one additional anxiety or depressive disorder at the time of assessment (Brown et al., 2001). When including lifetime diagnoses, this rate increases to 76%. Further, 60% of patients diagnosed with panic disorder with or without agoraphobia (PDA) utilizing DSM-III-R or DSM-IV diagnoses met the criteria for an additional anxiety or mood disorder, or both—a statistic that increases to 77% when considering lifetime diagnoses. Diagnoses with the highest overall comorbidity were posttraumatic stress disorder (PTSD), major depressive disorder (MDD), dysthymia (DYS), and generalized anxiety disorder (GAD). Especially strong comorbid patterns were found between social phobia (SOC) and mood disorders, PDA and PTSD, and PTSD and mood disorders. Furthermore, Merikangas, Zhang, and Aveneoli (2003) studied nearly 500 people for 15 years and found that relatively few people suffer from a single mood or anxiety disorder.

Second, psychological treatments for a single disorder often generate improvements in comorbid anxiety or mood disorders not specifically targeted during treatment (Allen et al., 2010; Borkovec, Abel, & Newman, 1995; Brown, Antony, & Barlow, 1995; Tsao, Lewin, & Craske, 1998; Tsao et al., 2002). Brown et al. (1995) examined the course of comorbid diagnoses in patients receiving cognitive-behavioral treatment specifically for PDA and found that overall comorbidity significantly declined from pretreatment to posttreatment (from 40% to 17%). To take another example, a wide range of emotional disorders [e.g., MDD, obsessive-compulsive disorder (OCD), PDA] respond analogously to antidepressant medications (Gorman, 2007). These findings could mean that individual treatments coincidentally target symptoms from more than one disorder, or that treatments for single diagnoses target the core underlying features of all emotional disorders, at least to some extent.

Third, research from affective neuroscience has suggested that disorders of emotion share neurobiological mechanisms. For example, increased negative emotionality among people with anxiety and related disorders is associated with hyperexcitability of limbic structures and limited inhibitory control by cortical structures (Etkin & Wager, 2007; Mayberg et al., 1999; Porto et al., 2009; Shin & Liberzon, 2010). Specifically, increased "bottom-up" processing, along with dysregulated cortical inhibition of amygdala responses, has been indicated in studies of GAD (Etkin, Prater, Hoeft, Menon, & Schatzberg, 2010; Hoehn-Saric, Schlund, & Wong, 2004; Paulesu et al., 2010), SOC (Lorberbaum et al., 2004; Phan, Fitzgerald, Nathan, & Tancer, 2006; Tillfors, Furmark, Marteinsdottir, & Fredrikson, 2002), specific phobias (Paquette et al., 2003; Straube, Mentzel, & Miltner, 2006), PTSD (Shin et al., 2005), and depression (Holmes et al., 2012). Individuals with high levels of neuroticism also have been found to have this relatively uninhibited amygdala overactivation (Keightley et al., 2003).

Hierarchical Structure of Emotional Disorders

Research on latent dimensional features of emotional disorders has revealed a hierarchical structure based on two core dimensions of temperament: neuroticism and extraversion (Barlow, 2002). *Extraversion* broadly refers to having a positive outlook on the world, including an energetic and social disposition. In contrast, neuroticism describes a tendency to develop frequent, intense negative emotions associated with a sense of uncontrollability (the perception of inadequate coping) in response to stress. Extraversion also has been called *positive affect* or *behavioral activation*, while constructs isomorphic with neuroticism include *negative affect, behavioral inhibition*, and *trait anxiety*. Neuroticism and extraversion have been identified for their key roles in explaining the onset, overlap, and maintenance of anxiety and mood disorders (Brown, 2007; Brown & Barlow, 2009; Brown, Chorpita, & Barlow, 1998; Gershuny & Sher, 1998; Griffith et al., 2010).

The study of neuroticism has been ongoing for decades, with many researchers referring to traits similar to neuroticism (as well as extraversion) in their work (Eysenck & Eysenck, 1975; Gray, 1982; Kagan, 1989, 1994; McCrae & Costa, 1987; Tellegen, 1985; Watson & Clark, 1993). Prominent personality conceptions, such as the Big Three and Big Five (see McCrae & Costa, 1987; Tellegen 1985) reference these dimensions of personality. Gray's (1982) conceptions of the behavioral inhibition system and behavioral activation system seem to correspond to varying intensities of neuroticism and extraversion (e.g., high levels of behavioral inhibition relate to high levels of neuroticism). While Gray's fight-flight system corresponds with the emotion of fear (panic), Clark and Watson (1991) proposed their tripartite theory based on two core dimensions: neuroticism/negative emotionality and extraversion/positive emotionality (Clark, 2005; Clark, Watson, & Mineka, 1994; Watson, 2005).

In order to understand these concepts more clearly, researchers have been using latent variable modeling to examine their role in anxiety and mood disorders (Brown et al., 1998; Chorpita, Albano, & Barlow, 1998; Clark, 2005; Clark & Watson, 1991; Watson, 2005). Brown and colleagues (1998) confirmed a hierarchical structure for emotional disorders, in which neuroticism and extraversion were higher-order factors with significant paths from neuroticism to GAD, SOC, PDA, OCD, and MDD. Notably, low positive affect is associated with significant paths to MDD and SOC. In addition, Rosellini, Lawrence, Meyer, and Brown (2010) found that agoraphobia (AG) is also related to low extraversion, separating it from panic disorder.

Several other research groups have replicated these findings (e.g., Griffith et al., 2010; Kessler et al., 2011). Results from a large study of adolescents, using self-report and peer-report measures, identified neuroticism as a common factor in lifetime diagnoses of mood and anxiety disorders (Griffith et al., 2010). Although specific symptoms defining each diagnostic category of anxiety and mood disorders cannot be wholly collapsed into higher-order temperamental dimensions,

based on these data, we have concluded that similarities among disorders of emotion outweigh differences.

Negative Reactions to Emotional Experience

Individuals with an emotional disorder, as opposed to their healthy peers, have higher levels of negative affect/neuroticism (Brown & Barlow, 2009) and express a greater frequency of negative emotions (Campbell-Sills, Barlow, Brown, & Hofman, 2006; Mennin, Heimberg, Turk, & Fresco, 2005). Importantly, however, they also react more negatively to their own emotional experiences (Barlow, 1991; Barlow et al., 2011; Campbell-Sills et al., 2006; Brown & Barlow, 2009), have greater difficulty accepting their emotions (McLaughlin, Mennin, & Farach, 2007; Tull & Roemer, 2007; Weiss et al., 2012), and are more intolerant of their negative emotions (Roemer, Salters, Raffa, & Orsillo, 2005). As a result, many individuals with emotional disorders attempt to downregulate these negative emotional experiences (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Baker, Holloway, Thomas, Thomas, & Owens, 2004).

This negative reactivity to emotional experience is shaped by how individuals process emotions as they occur (Sauer & Baer, 2009; Sauer-Zavala et al., 2012). For example, in early models of PDA where this functional relationship was first noticed, after a person experiences a panic attack, physical symptoms associated with the attack (e.g., shortness of breath) signal anxiety focused on what will happen next (e.g., fainting; another panic attack), which further exacerbates the somatic and cognitive symptoms (Barlow, 1988; Clark, 1986). Since panic attacks in individuals without PDA do not cue similar emotional reactions (and therefore are called *non-clinical panic attacks*) (Bouton, Mineka, & Barlow, 2001), the negative emotional reaction to panic in people with PDA is more important to generating PDA than the panic attacks themselves.

Negative interpretations of emotions that intensify an emotional experience are not unique to PDA and are prevalent in other anxiety and mood disorders. For instance, Rachman and de Silva (1978) found that patients with OCD and control participants had similar intrusive negative thoughts under stress, but only patients with OCD reacted with intense distress and anxiety to these emotionally salient thoughts. To take another example, when individuals with GAD encounter potentially stressful situations, they may try to downregulate their emotions by worrying (an intense verbal-linguistic process activating brain structures that dampen affect) or checking, unlike individuals without GAD (Newman & Llera, 2011). Differences among emotional disorders (i.e., different presenting symptoms in PDA, OCD, and SOC) may be determined by specific early learning experiences (Barlow, Ellard, Sauer-Zavala, Bullis, & Carl, 2014); however, the core psychopathological mechanism or functional relationship consists of negative reactions and subsequent efforts to downregulate emotional experiences.

Associated Constructs Reflecting This Functional Relationship

Research has identified several transdiagnostic constructs associated with the development and maintenance of emotional disorders, which collectively describe a propensity to find emotional experiences aversive (Barlow, Sauer-Zavala, Carl, Bullis, & Ellard, 2014). They include experiential avoidance, anxiety sensitivity, deficits in mindfulness, and negative appraisals and attributions reflecting the neurotic sense of uncontrollability (see *Figure 1.1*).

Experiential avoidance is the urge to escape or avoid uncomfortable internal experiences such as thoughts, memories, or emotions (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Studies have shown that individuals with anxiety and depressive disorders have high levels of self-reported experiential avoidance (Begotka, Woods, & Wetterneck, 2004; Berking, Neacsiu, Comtois, & Linehan, 2009; Kashdan, Breen, Afram, & Terhar, 2010; Shahar & Herr, 2011). Lee, Orsillo, Roemer, and Allen (2010) found that after accounting for variance related to frequency of negative affect, experiential avoidance predicts GAD symptoms. Also noteworthy is that this construct mediates the association between neuroticism and PTSD (Maack, Tull, & Gratz, 2012; Pickett, Lodis, Parkhill, & Orcutt, 2012). Recent research found that the relationship between experiencing negative emotions and major depressive symptoms is partially mediated by avoidant coping in individuals high in experiential avoidance (Cheavens & Heiy, 2011). Individuals with emotional disorders use several forms of avoidant coping strategies, including emotion suppression and rumination. *Emotion suppression* is a strategy where individuals try to eliminate negative, unwanted, emotion-provoking experiences. However, these emotions often end up returning with greater intensity, resulting in an increase in negative affect (Abramowitz, Tolin, & Street, 2001; Rassin,

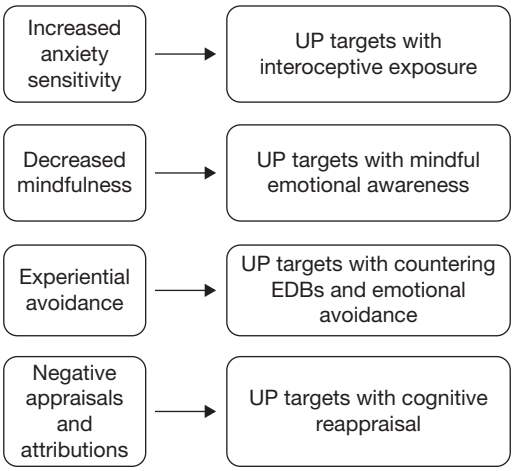

Figure 1.1 Associated constructs reflecting negative reactivity and perceptions of lack of control of intense emotion.

Muris, Schmidt, & Merkelbach, 2000; Wegner, Schneider, Carter, & White, 1987). Individuals with emotional disorders, including depression, GAD, OCD, and PTSD, demonstrate high levels of emotion suppression (Purdon, 1999).

Rumination is another cognitive strategy where individuals repetitively fixate on negative moods and their possible causes, meanings, and consequences (Nolen-Hoeksema, 1991). Rumination has been shown to intensify negative affect, leading to more rumination about increased negative mood; this process often continues until individuals engage in an avoidant behavior (e.g., reassurance seeking, substance use, or self-harm) to divert their attention (Selby, Anestis, & Joiner, 2008). This cycle is also negatively reinforced, as it temporarily protects individuals from more distressing concerns (Lyubomirsky & Nolen-Hoeksema, 1995; Lyubomirsky, Tucker, Caldwell, & Berg, 1999). Use of this strategy seems to be consistent across emotional disorders and predicts increases in anxiety and depressive symptoms (Aldao et al., 2010; Butler & Nolen-Hoeksema, 1994; Calmes & Roberts, 2007; Hong, 2007; Nolen-Hoeksema, 2000; Nolen-Hoeksema, Larson, & Grayson, 1999; O'Connor, O'Connor, & Marshall, 2007; Sarin, Abela, & Auerbach, 2005; Segerstrom, Tsao, Alden, & Craske, 2000).

Another transdiagnostic construct that has been identified as a factor in the development of emotional disorders is *anxiety sensitivity (AS)*, which refers to the tendency to believe that symptoms of anxiety and fear will have negative consequences (Reiss, 1991). This construct specifically looks at an individual's unique response to an emotional experience as it occurs, aside from the duration or severity of the emotion itself. Although anxiety sensitivity has primarily been studied in the context of PDA (e.g., Maller & Reiss, 1992; Plehn & Peterson, 2002; Rassovsky, Kushner, Schwarze, & Wangensteen, 2000), research has shown that it also is associated with other anxiety and depressive disorders (Boswell et al., 2013; Naragon-Gainey, 2010; Taylor, 1999; Boettcher, Brake, & Barlow, 2016).

Interestingly, it has been found that anxiety sensitivity transdiagnostically predicts the onset of anxiety and depressive disorders beyond the propensity to experience anxiety (Maller & Reiss, 1992; Schmidt, Keough, Timpano, & Richey, 2008). Reduction in anxiety sensitivity during treatment predicts patient recovery (Gallagher et al., 2013). Furthermore, anxiety sensitivity predicts symptoms of mood and anxiety disorders with even greater incremental validity than neuroticism (Collimore, McCabe, Carelton, & Asmundson, 2008; Cox, Enns, Walker, Kjernisted, & Pidlubny, 2001; Kotov, Watson, Robles, & Schmidt, 2007; Norton et al., 1997; Reardon & Williams, 2007). This supports the proposition that how an individual relates to negative emotions is just as much of a determinant of the development of an emotional disorder as the duration or severity of negative affect. For this reason, we are currently working on expanding the construct of AS to emotion sensitivity generally.

A deficit in mindfulness is another feature of emotional disorders; *Mindfulness* refers to being aware and accepting of one's experience, including emotions in the present moment, no matter how unpleasant the experience (Cheavens et al., 2005; Hayes et al., 1996; Kabat-Zinn, 1982). Deficits in mindfulness are also transdiagnostic occurring across emotional disorders (Baer, Smith, Hopkins, Kritemeyer, &

Toney, 2006; Brown & Ryan, 2003; Cash & Whittingham, 2010; Rasmussen & Pidgeon, 2011). A recent study found that after a laboratory stressor, individuals with higher levels of mindfulness reported fewer feelings of anxiety and lower cortisol response than those with lower levels of mindfulness (Brown, Weinstein, & Creswell, 2011). Moreover, the frequency with which individuals use mindfulness while responding to negative emotions predicts psychopathology more than the inherent tendency to experience negative emotions (Segal, Williams, & Teasdale, 2002; Sauer & Baer, 2009). Similar to experiential avoidance and anxiety sensitivity, these results support the importance of focusing on an individual's reactions to negative emotions as they occur.

Finally, since Beck's pioneering work from the 1970s (e.g., Beck, 1976), we have recognized that all disorders of emotion are associated with pessimistic, negative, and, most important, very rigid and automatic attributions and appraisals of persons (including oneself) and situations. As noted earlier, although these negative interpretations and appraisals were first noticed in the context of depression, they are prevalent across the anxiety and mood disorders.

DIMENSIONAL DIAGNOSES AND ASSESSMENT

Beginning with DSM-III and continuing in DSM-IV and DSM-5, there has been an ever-increasing splitting of mental disorder diagnoses into more narrowly defined categories. Based on these categories of anxiety, depressive, somatoform, and related disorders, specific pharmacological and psychological treatments emerged (Barlow et al., 1984), requiring specific treatment protocols for each diagnosis, which constituted the independent variable. Researchers then validated these protocols empirically in clinical trials, and the process of delineating the treatment in the form of a manual in order to create an operationally defined independent variable began with the study of psychodynamic treatments (Strupp, 1973). This process of research resulted in numerous individual efficacious treatment protocols that clinicians needed to master to treat patients presenting with symptoms pertaining to specific disorders (e.g., GAD, OCD, and MDD).

Although this splitting approach produced high rates of diagnostic reliability, this has occurred almost certainly at the expense of validity, in that the current system may be overemphasizing categories that are trivial variations of underlying temperament. In this conceptualization of nosology, a quantitative approach using structural equation modeling would optimally examine emotional disorders without the constraint of DSM-5 categories. A more dimensional classification of emotional disorders constructed in this way would eliminate issues of comorbidity while representing significant characteristics of these disorders.

Recently, we have proposed such an approach (Brown & Barlow, 2009). This dimensional approach, when fully developed, should provide a more complete picture of a patient's clinical presentation than a categorical approach consisting of multiple comorbid diagnoses. In this system, a profile for each patient is

created consisting of several constructs, including temperaments of neuroticism, extraversion (referred to as *behavioral activation/positive affectivity*), avoidance, mood, and autonomic arousal (as in panic attacks and flashbacks), as well as a dimensional assessment of severity on several specific foci of anxiety (e.g., intrusive cognitions, social evaluation, and trauma experience). Scores on neuroticism reflect the frequency, intensity, and distress associated with negative emotions, perceptions about uncertain future experiences, and low self-efficacy regarding the ability to cope with these emotions. Low levels of extraversion/positive affect are associated with MDD, SOC, and AG, while high levels are associated with euthymic states of bipolar and cyclothymic disorders.

A recently developed measure, the Multidimensional Emotional Disorder Inventory (MEDI), assesses these vulnerabilities and characteristics of emotional disorders. This measure is currently under validation, but recent research has indicated that it may be a reliable and valid method for assessing emotional disorder dimensions (Rosellini, 2013; Rosellini, Boettcher, Brown, & Barlow, 2015). For instance, while using this measure, patients with PTSD might present with high levels of neuroticism and a preoccupation with past trauma and autonomic arousal (flashbacks), but their profile might also reflect some degree of social evaluation concerns and intrusive ego dystonic thoughts unrelated to trauma. Given high rates of comorbidity among emotional disorders, the MEDI will be especially useful for assessing patients with clinical or subclinical comorbid disorders, since previously discarded information on these disorders could be integrated into treatment plans. More information on dimensional diagnoses and assessment will be provided in Chapter 2.

DEVELOPMENT OF THE UNIFIED PROTOCOL

The UP was first published in manual form as a patient workbook and therapist guide in 2011 (Barlow, Ellard, et al., 2011; Barlow, Farchione, et al., 2011), and has recently been revised (Barlow, D. H., Sauer-Zavala, S., Farchione, T. J., Latin, H., Ellard, K. K.,. . .& Cassiello-Robbins, 2018; Barlow, D. H., Farchione, T. J., Sauer-Zavala, S., Latin, H., Ellard, K. K., Bullis, J. R., . . . Cassiello-Robbins, C. (2018). The goal of the UP is to help patients understand and recognize their emotions and respond to their uncomfortable negative emotions in more adaptive ways. Changing these maladaptive responses can lessen the intensity and frequency of uncomfortable emotions. The UP consists of five core treatment modules and three additional modules intended to be covered in 12–18 one-on-one weekly treatment sessions lasting 50 to 60 minutes each, with flexibility in the number of sessions per module. The clinician can decide to hold last few sessions every week or every other week, depending on the patient's progress. If the patient is doing well, holding final sessions every other week could allow the patient to consolidate gains; on the other hand if the patient is having difficulty using treatment concepts, then weekly reinforcement might be more beneficial. The five core modules (3–7) correspond with transdiagnostic constructs reflecting functional

Box 1.1

UP Modules and Suggested Session Lengths

Module 1: Setting Goals and Maintaining Motivation *(1 session)*
Module 2: Understanding Emotions *(1–2 sessions)*
Module 3:* Mindful Emotion Awareness *(1–2 sessions)
Module 4:* Cognitive Flexibility *(1–2 sessions)
Module 5:* Countering Emotional Behaviors *(1–2 sessions)
Module 6:* Understanding and Confronting Physical Sensations *(1 session)
Module 7:* Emotion Exposures *(4–6 sessions)
Module 8: Recognizing Accomplishments and Looking to the Future *(1 session)*

Core modules are in bold.

relationships in emotional disorders described earlier (see *Box 1.1*). In the following section, we will briefly review each module.

Module 1: Setting Goals and Maintaining Motivation

This first treatment module uses motivational interviewing principles and techniques (MI; Miller & Rollnick, 2013) to increase patients' readiness and motivation for change by developing awareness that they have the ability to effect change in themselves. We include MI due to recent research revealing that this approach may enhance treatment gains for anxiety disorders (Westra, Arkowitz, & Dozois, 2009; Westra & Dozois, 2006). The therapist targets motivation by using a decisional balance exercise and a treatment goal–setting exercise. In the decisional balance exercise, patients discuss with the therapist the advantages and disadvantages of changing versus staying the same. During the treatment goal–setting exercise, patients talk about areas that they would most like to change. These exercises are used to identify potential obstacles to change and concrete goals during treatment. This module helps prepare patients for learning as they progress through the core modules; principles in this module can be revisited at any point during treatment to enhance treatment engagement.

Module 2: Understanding Emotions

This module, which is typically covered in one to two sessions and could either precede or follow the motivational enhancement module, provides patients with psychoeducation about the function and development of emotions. In addition to discussing the function of anxiety, the UP covers many other emotions, including anger, sadness, and fear. During this module, the therapist explains cognitive, physiological, and behavioral components of emotions and the interaction of

these components. Patients should begin to understand that their emotions serve a functional and adaptive role of providing information about the environment and guiding appropriate action.

The therapist then provides an example of the three-component model of emotions (cognitions, behaviors, and physiological sensations), using experiences from the patient's life to improve understanding. The therapist and patient work together to identify how the patient's emotions correspond to the model. This model is used as a framework for looking closely at the patient's emotions during treatment as each component interacts with the other components and contributes to the overall experience. Patients develop a greater awareness for their own patterns of emotional responding and associated triggers through careful monitoring of their responses to emotional experiences.

In order to facilitate careful monitoring of emotions, the UP uses the acronym *ARC* to describe the sequence of events around emotions. Emotions are always triggered by an event, situation, or experience known as an *antecedent* (the *A* in the *ARC*), which can occur immediately or several days (or even longer) before experiencing an emotion. Often, there are multiple antecedents, and they may include recent and distal events. One's *response* to the emotional experience (the *R* of *ARC*) corresponds to all cognitions, somatic sensations, and behaviors from the three-component model. Finally, short- and long-term outcomes of emotional responding are referred to as *consequences,* or the *C*. During this explanation, the therapist will clearly work through an example with the patient.

Negative reinforcement serves as an illustration of how this cycle of emotions is maintained. The therapist describes how escape or any form of avoidance during an emotional episode (a consequence) perpetuates the anxiety and distress associated with the emotional experience since it reduces the emotion in the short term (i.e., by avoiding it), but fails to teach the patient that she or he can manage the emotions and that they will naturally run their course. This process is key for the patient to benefit from the emotion exposures covered in future modules.

Module 3: Mindful Emotion Awareness

This is the first of the core modules, and it is typically covered in one to two treatment sessions. The goal of this module is for patients to learn and begin using an objective, present-focused, nonjudgmental perspective of their emotions. Often, patients report that their emotions happen spontaneously, are confusing, and seem out of their control; this module will help patients recognize the interaction between their thoughts, feelings, and behaviors during an emotional experience. The therapist will review *primary emotions*, or the first emotional responses to a situation or memory, as well as *reactions* to primary emotions that tend to be negative and not present-focused. The teaching of these concepts occurs in sessions during specific examples of emotionally arousing experiences tailored to individual patients.

Specifically, reactions to emotions tend to be subjective, judgmental, and negative; for instance, worrying that anxiety will preclude meeting one's obligations

in the future. Since these reactions are typically not based on information from the present, they can block positive information regarding the nature of the emotional response. At this point, patients' understanding of their emotions should be sufficient to utilize the strategies covered in subsequent modules.

Module 4: Cognitive Flexibility

The primary purpose of this module, typically covered in one or two sessions, is to encourage flexible thinking using principles originated by Beck (1975) and modified in our setting over the decades (e.g., Barlow & Craske, 1988). In it, the therapist helps patients understand how they misinterpret situations and that their appraisals influence their emotional reactions. Automatic appraisals happen quickly, while in the moment, and are most often negative. *Core* automatic appraisals are more generalizable cognitions that patients have about themselves, such as "I am a disappointment," and they may shape many emotional responses. Automatic appraisals force patients to exclude other, potentially more appropriate perspectives on a situation. These thoughts are considered "thinking traps" if patients are unable to view the situation in another way. Two thinking traps common to all emotional disorders (and the only two that are taught in the UP, reflecting our longstanding approach) are *probability overestimation,* or the tendency to assume that a negative outcome is very likely to occur, and *catastrophizing,* or thinking that the outcome will be disastrous. Each patient is taught to identify these biases and encouraged to be more flexible by using reappraisal strategies in a standard cognitive therapy approach.

Module 5: Countering Emotional Behaviors

This module is typically administered over one to two sessions. Emotion avoidance strategies are behaviors where patients attempt to avoid or suppress intense emotional experiences. The role of emotion avoidance is discussed since these strategies prevent patients from fully experiencing emotion in a situation. That is, avoidance maintains the initial high anxiety and distress levels since patients are unable to let the emotion repair naturally. In addition, extinction of anxiety and distress in response to the intense emotion is prevented since adequate exposure resulting in the disconfirmation of negative expectancies cannot occur. Finally, patients are unable to learn more adaptive emotion regulation strategies. Patients should provide examples of their own avoidance strategies and how those continue the cycle of their negative emotions.

The therapist introduces three main types of emotion avoidance: subtle behavioral avoidance, cognitive avoidance, and the use of safety signals. Subtle behavioral avoidance strategies correspond to a number of behaviors, depending on the disorder. For instance, someone with OCD may avoid touching the sink or toilet to avoid feeling contaminated. Similarly, avoiding caffeine and controlling breathing are forms of subtle behavioral avoidance in PDA. It is important to do a functional analysis to determine which behaviors serve to reduce or negate

emotional experiences or are functionally related in some way. The second type of strategy, cognitive avoidance, includes distraction, checking lists, and reviewing previous events. Worry and rumination may also serve as strategies to avoid emotions, since the individual would be focusing on future events instead of the present (Borkovec, 1994). Worrying prevents experiencing emotions to the fullest because patients are preparing for something negative that might happen in the future (Borkovec, Hazlett-Stevens, & Diaz, 1999). Finally, safety signals include objects that individuals carry in order to feel comfortable or reduce arousal in potentially emotional situations. Individuals have been known to carry actual medicine, empty medication bottles, and even supposedly "lucky" objects with them. These strategies are harmful because they perpetuate the cycle of negative reinforcement.

In addition to identifying and modifying emotion avoidance, this module concentrates on identifying and altering *emotion-driven behaviors (EDBs)*. The UP coined the term *EDB* to describe behavioral responses to emotions termed "action tendencies" in the emotion science literature (Barlow, 1988). *Action tendencies* are universal, evolutionary, favored behaviors motivated and driven by the emotional state to achieve a desired goal that is often associated with survival itself. There are adaptive and maladaptive EDBs—for instance, an adaptive EDB could be a fear-driven escape from a situation where there is a direct threat to one's safety (i.e., escaping a burning building). However, an EDB is maladaptive if there is no clear threat present (i.e., a false alarm), but the emotion and behavior occur anyway. EDBs are maintained through negative reinforcement since the function of EDBs is to reduce negative emotion intensity in the short term; thus, EDBs maintain the cycle of emotions. It is helpful if patients can discuss examples of EDBs from their own experiences. Two strategies that the patient should engage in to address emotional avoidance and EDBs are experiencing emotions and situations that they are currently avoiding, and developing and using behaviors that are more appropriate than and different from maladaptive EDBs.

Module 6: Understanding and Confronting Physical Sensations

This module typically lasts one session and aims to increase patients' awareness and tolerance of somatic sensations as an integral part of emotional experiences. After demonstration by the therapist, patients will engage in interoceptive exposure (IE) exercises to elicit somatic sensations typically experienced during times of emotional distress and begin to strengthen their understanding of how somatic sensations contribute to emotional experiences (e.g., shortness of breath, heart palpitations, or dizziness). Examples of standard IE exercises include hyperventilating, spinning, and running in place, representing common strategies to provoke physical sensation in the respiratory, vestibular, and cardiovascular systems. Many other strategies are covered in subsequent chapters of this book. After the patient completes each IE exercise, he or she is asked to rate the intensity, distress, and similarity to somatic sensations typically experienced during an intense emotional reaction. The patient then will complete the most relevant exercises several

times a day over the next week and prior to the next therapy session. Associated distress should decrease with repeated exposure, and as the patient disconfirms the expectation that somatic sensations are dangerous.

Module 7: Emotion Exposures

This final core module emphasizes the practice of treatment concepts through in-session and out-of-session exposures to emotion experiences uniquely created by the therapist to address the individual patient's symptoms (this module typically lasts four to six sessions). Emotion exposures should involve actual situations, events, or activities that trigger strong levels of previously avoided emotion, but the focus is on provoking the emotion, not the situation itself. Examples include giving a public speech, riding an elevator, imagining a past emotional event (often appropriate for PTSD or GAD), leaving the bathroom without washing one's hands, or watching a sad movie clip (for MDD). Interoceptive cues identified in the last module are integrated into the exercises. Emotion exposures serve to replace interpretations about the dangerousness of situations with more adaptive appraisals, reverse emotion avoidance, modify EDBs, and, most important, extinguish anxious reactions to intense emotional experiences. As the patient engages in in-session emotion exposures, the therapist should note the use of any avoidance strategies or EDBs, of which the patient may not be aware, and help the patient with any negative automatic appraisals by finding appropriate reappraisals. Some patients will also benefit from continuing IEs to develop greater tolerance of uncomfortable somatic sensations.

Module 8: Recognizing Accomplishments and Looking to the Future

In the final treatment session, an overview of major treatment concepts and the patient's progress is reviewed. If applicable, reasons for lack of improvement or shortcomings of treatment goals are discussed, including diagnostic error, lack of participation, lack of understanding of principles, and unrealistic treatment goals. Due to the inevitability of future stressors and potential symptoms, specific strategies for preserving and extending treatment gains are discussed.

Early Results and Current Clinical Trial

The UP has received preliminary support for its efficacy in treating emotional disorders from several studies, including a small randomized control trial (N = 37). In this experiment, the UP was found to be an efficacious treatment for a range of anxiety disorders compared to a wait-list control group (Farchione et al., 2012; Ellard, Fairholme, Boisseau, Farchione, & Barlow, 2010) with patients continuing to improve even 18 months after treatment (Bullis, Fortune, Farchione, & Barlow, 2014).

Based on these promising results, we recently completed a five-year, large, National Institute of Mental Health (NIMH)–sponsored randomized controlled equivalence trial (N = 223) comparing the UP with four efficacious single-disorder treatment protocols (SDPs) for principal diagnoses of GAD, SOC, OCD, or PDA and a wait-list control group. Results posttreatment and at a six-month follow-up indicate clear differences among all treatment groups and the control group, with the UP at least as efficacious as SDPs at both time points. Importantly, significantly fewer patients dropped out of the UP than the SDPs (Barlow et al., in press).

We have also studied the UP's ability to change dimensions of temperament in the scope of the randomized control trial mentioned previously (Carl, Gallagher, Sauer-Zavala, Bentley, & Barlow, 2014). The results revealed that the UP, compared to the wait-list group, produced small to moderate effects from pretreatment to posttreatment for both neuroticism and extraversion. Significantly, these changes in temperament are related to improvements in functional impairment and quality of life (Carl et al., 2014). These results underscore the potential importance of factoring in changes in temperament when considering treatment outcome.

Furthermore, based on the relative advantages of group treatment to individual treatment (e.g., ability to treat more patients, reduced stigma associated with seeking treatment, and patients learn from other group members), we have studied the efficacy of the UP delivered in a group format, which happens to be where the protocol originated (Barlow et al., 2004). Results indicated moderate to strong effects on anxiety and depressive symptoms, functional impairment, quality of life, and emotion regulation skills, along with good acceptability and overall satisfaction ratings from patients, all of which were roughly equivalent to individual administration (Bullis et al., 2015). Additional applications include a clinical trial administering the UP to emotional disorders in patients with a substance abuse diagnosis (Ciraulo et al., 2013). The results indicated the efficacy of the UP on anxiety and related substance use measures. Other applications are detailed in subsequent chapters of this book.

Role of Positive Affect

While the modules described in this chapter target negative affect and neuroticism, research on intervention strategies targeting positive affect or extraversion is also beginning to appear. Individuals with anxiety and mood disorders are less likely to maintain and more likely to minimize positive emotions. A recent study in our lab found that an augmented intervention for enhancing positive emotion, delivered in four sessions following a standard course of cognitive behavioral therapy (CBT) for anxiety and depressive disorders, was effective in improving positive emotion regulation skills for approximately 55% of participants (Carl & Barlow, submitted). Patients benefited from improvements in anxiety and depressive symptoms, positive and negative emotion, and quality of life.

In addition, Mata and colleagues (2012) found that directly after a session of moderate exercise, participants with MDD and control participants evidenced increases in positive affect. Interestingly, depressed participants, in comparison to healthy controls, reported greater increases in positive affect with longer and more intense physical activity. Furthermore, research from animal laboratories has found that exercise increases neurogenesis in the hippocampus, a possible mechanism of action in the successful combination of psychological treatment with exercise (Speisman, Kumar, Rani, Foster, & Omerod, 2012).

CONCLUSION

In summary, due to overlap among emotional disorders, common treatment response, and a common neurobiological syndrome, emotional disorders have more similarities than differences, suggesting the appropriateness of one treatment approach. The UP purports to treat the common temperament underlying all emotional disorders, neuroticism, which is a tendency to experience frequent, intense negative emotions and to react with anxiety and distress to these emotional experiences. The five core modules of the UP utilize mindful emotional awareness, increasing cognitive flexibility, countering emotion-driven behaviors (action tendencies), increasing awareness of emotionally salient somatic sensations, and emotion exposure to target negative emotionality and associated distress aversion, the putative driving mechanism of emotional disorders.

The following chapters will delve into specific case presentations and applications of the UP. Chapter 2 will cover the transdiagnostic assessment and case formulation needed to identify underlying traits and associated symptoms needing treatment. Chapters 3 through 13 discuss specific clinical applications of the UP to diverse disorders of emotion and patterns of comorbidity, in order to illustrate the wide range of cases in which the UP is appropriate. Chapter 14 focuses on complicated clinical presentations that can benefit from targeting comorbid diagnoses. Chapter 15 highlights advantages of using the UP in a group setting. Cross-cultural applications, which are relevant for addressing the need for transdiagnostic treatment in other countries, are discussed in Chapter 16, followed by a discussion of future directions in prevention, dissemination, and implementation in Chapter 17.

2

Transdiagnostic Assessment and Case Formulation

Rationale and Application with the Unified Protocol

HANNAH BOETTCHER AND LAREN R. CONKLIN ■

Assessment and case formulation are among the most important tasks facing researchers and clinicians hoping to develop or administer effective treatments. A functional understanding of individual psychopathology—that is, an understanding of the processes that develop, maintain, and exacerbate psychopathology—provides a foundation for case conceptualization and the creation and personalization of evidence-based intervention. It is unsurprising, then, that there is no shortage of views in the field about how best to go about assessing and conceptualizing cases. Prominent in this discussion are strong arguments for the merits and demerits of our most ubiquitous classification system, the largely categorical DSM-5.

Clinicians and researchers are increasingly torn between the advantages of this categorical classification (e.g., efficiency and communicability) and the growing appreciation for the dimensional nature of psychopathology (e.g., Maser et al., 2009; Brown & Barlow, 2009; Rosellini, Boettcher, Brown, & Barlow, 2015). Coupled with the necessity of taking into account the unique processes maintaining and exacerbating each patient's difficulties, it is clear that assessment and case formulation can be far from straightforward.

The purpose of this chapter is to present a practical, flexible framework for these tasks. We begin by discussing ways in which the current categorical DSM approach to classification could be improved, followed by our perspective on why transdiagnostic approaches are a promising alternative. Next, we provide

instructions for assessing and conceptualizing transdiagnostic processes using the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP), and we close by highlighting a new direction in transdiagnostic classification: a novel transdiagnostic assessment tool that was developed at our clinic, the Center for Anxiety and Related Disorders at Boston University (CARD).

CLASSIFYING MENTAL DISORDERS: ROOM FOR IMPROVEMENT?

We start our discussion with classification (i.e., assignment of diagnostic labels) because in most settings, the approach taken to classification dictates not only the approach taken to initial assessment, but also subsequent case formulation and assessment of treatment outcomes. In any discussion of classification, it is important first to acknowledge the advantages of a categorical system like that used by the DSM-5 and earlier versions. Categorical classification is a useful and necessary part of both research and clinical practice.

Studies show that emotional disorder diagnoses exhibit good reliability using both DSM-IV and DSM-5 criteria (Brown, Campbell, Lehman, Grisham, & Mancill, 2001; Brown, Di Nardo, Lehman, & Campbell, 2001; American Psychological Association, 2013), likely as a result of clearly defined sets of symptoms and clinical severity cutoffs. Categorical classification also establishes a common language among scientists and provides guidelines for clinicians searching for appropriate interventions. Treatment outcome research depends upon clearly defined sample characteristics, and categorical classification can facilitate the selection of evidence-based treatments from the literature. Categorical diagnosis, in some cases, can also offer patients useful labels for their difficulties, which may promote better understanding of their mental health struggles and facilitate self-advocacy for good care. Finally, insurance companies utilize a categorical diagnostic system in determining coverage for mental health services—without a diagnosis, patients can experience more limited access to affordable, quality care.

Coexisting with these strengths, purely categorical classification nevertheless has several major disadvantages, particularly for the study and treatment of emotional disorders. These disadvantages have been explored in detail previously (Brown & Barlow, 2009; Rosellini et al., 2015) and we return to them here, as they have informed our efforts to develop improved systems of classification, assessment, case conceptualization, and treatment.

First, categorical classification overemphasizes differences between diagnoses that have many shared features, as researchers have demonstrated. As described in Chapter 1, this problem is exemplified by high rates of comorbidity among emotional disorders. In a large study of DSM-IV emotional disorders at our clinic, 81% of patients met criteria for more than one current or lifetime Axis I disorder (Brown, Campbell, et al., 2001). Troublingly, statistics such as these are vulnerable to significant variability based on DSM diagnostic rules. For example, the use of the hierarchical rule in which generalized anxiety disorder (GAD) is not assigned

when it occurs within the course of a depressive disorder (American Psychiatric Association, 2013) causes the comorbidity of GAD and persistent depressive disorder (DSM-IV dysthymic disorder) to drop from 90% to just 5%, obscuring important information about anxiety in depressed patients (Brown, Campbell, et al., 2001).

DSM-5 exacerbated this issue by introducing a variety of new diagnoses and further splitting emotional disorders into additional categories (for a review, see Rosellini et al., 2015). As an example, the previously unified DSM-IV anxiety disorders are now split into three categories: DSM-5 anxiety disorders, trauma- and stressor-related disorders, and obsessive-compulsive and related disorders. Many disorders are newly counted in these categories due to being moved from other sections of the DSM (e.g., separation anxiety disorder, trichotillomania, and body dysmorphic disorder). There are also several new emotional disorders in DSM-5, such as hoarding disorder (previously considered a subtype of OCD), premenstrual dysphoric disorder, and disruptive mood dysregulation disorder. As the number of functionally similar emotional disorders grows, it is inevitable that high comorbidity rates will continue to be present.

Categorical classification also can inadvertently downplay subthreshold symptoms, which may independently benefit from intervention or make significant contributions to the maintenance or exacerbation of another diagnosis. For example, a patient with OCD who avoids touching surfaces in public could experience additional distress from subthreshold symptoms of social anxiety that lead her to be overly concerned that others will judge her for her OCD-related behaviors. Symptoms that do not make the diagnostic cut risk being insufficiently addressed in case conceptualization, or else not clearly communicated across providers.

In the domain of emotional disorders specifically, our current diagnostic system is also ill suited to detecting some examples of emotion dysregulation that may be central to some patients' difficulties. While there are a number of diagnoses related to the experience of intense, frequent anxiety or sadness, other emotions, like anger and shame, are often present in patients with emotional disorders and may be a source of significant distress and impairment, but they are not adequately captured in DSM diagnoses. Although the former is central to intermittent explosive disorder, that diagnosis is constrained by a highly specific and behavioral definition (i.e., destructive outbursts) that captures just one of many other possible manifestations of anger (e.g., being easily provoked to anger, excessively critical, or intolerant of situations that require patience). While anger and shame are both acknowledged as possible features of posttraumatic stress disorder (PTSD), this is also too narrow a domain to capture the many ways in which shame may be problematic (e.g., shame about one's appearance contributing to social anxiety or disordered eating, or shame about perceived incompetence leading to avoidance of tasks that carry the risk of failure). Next, we discuss the ways in which a flexible transdiagnostic framework for case conceptualization need not be limited to the disordered emotions that receive the greatest coverage in DSM diagnoses, or the ways in which problems with anger, guilt, embarrassment, and shame can be maintained by the very same processes that perpetuate difficulties with fear,