The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders: Preliminary Exploration of Effectiveness for Group Delivery

Jacqueline R. Bullis¹, Shannon Sauer-Zavala¹, Kate H. Bentley¹, Johanna Thompson-Hollands¹, Jenna R. Carl¹, and David H. Barlow¹

Abstract
The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP) has demonstrated promising results among patients with heterogeneous anxiety and comorbid depressive disorders when delivered on an individual basis, but greater efficiencies may be achieved with group-based applications. The aim of the present study was to provide a preliminary exploration of the UP when delivered in a group format. Among diagnostically diverse patients (N = 11), the UP group treatment resulted in moderate to strong effects on anxiety and depressive symptoms, functional impairment, quality of life, and emotion regulation skills, as well as good acceptability and overall satisfaction ratings from patients. Three clinical cases are presented in detail to illustrate the group-based UP delivery, followed by a critical discussion of associated challenges and proposed guidelines for group administration, as well as directions for future research.

¹Boston University, MA, USA

Corresponding Author:
Jacqueline R. Bullis, Boston University, 648 Beacon St., 6th floor, Boston, MA 02215, USA.
Email: jbullis@bu.edu
Keywords
anxiety disorders, cognitive-behavioral treatment, transdiagnostic, unified protocol, group therapy

Introduction

The recent development of transdiagnostic treatment approaches (e.g., Barlow, Farchione, et al., 2011; Norton, 2012) represents an effort to improve the dissemination of effective treatments. Transdiagnostic interventions are explicitly designed to address a range of diagnoses by targeting shared mechanisms maintaining symptoms. This approach provides a more efficient and cost-effective training model as practitioners need only become proficient in one protocol to provide empirically supported treatment for many diagnoses. In addition to advantages for therapists, transdiagnostic treatment approaches are also more time- and cost-efficient for patients; these protocols target principal and comorbid disorders concurrently compared with single diagnosis protocols that may have to be delivered sequentially to address each diagnosis.

Another method for increasing resource availability is delivering evidence-based psychological treatments in a group format, as multiple patients can be placed under the care of only one or two group leaders. Studies suggest that group-based cognitive-behavioral therapy (CBT) is an efficacious treatment for anxiety disorders and recurrent depression (McDermut, Miller, & Brown, 2001; Norton & Price, 2007; Teasdale et al., 2000), as well as an excellent vehicle for training because they can be lead by a senior therapist and a less-experienced therapist (Erickson, Janeck, & Tallman, 2009). Whereas most treatment clinics lack a sufficient patient flow to run concurrent diagnosis-specific groups for each anxiety or depressive disorder, a transdiagnostic treatment delivered in a group format can be flexibly applied to a variety of clinical presentations to meet the needs of a diagnostically heterogeneous waitlist.

In addition to the advantages conferred by scalability (described above), group CBT is associated with other unique benefits. Group therapy tends to promote the normalization of experiences through identification with other group members, and also allows the opportunity for patients to receive feedback from other patients, who may be viewed as more impartial or objective than a therapist (Whitfield, 2010). In vivo exposures that require an audience (e.g., public speaking) are particularly well-suited to a group format, and, regardless of the exposure type, observing one group member complete a challenging exposure can motivate other group members to attempt an exposure. For some individuals, it may also be easier to apply CBT skills (e.g.,
problem-solving strategies, cognitive reappraisal) to someone else’s situation, and so, group therapy can promote skill mastery by letting patients practice the application of treatment skills on others. In other words, patients can practice becoming their own therapist by approaching other group members’ problems from the perspective of a therapist.

Given the theoretical advantages of transdiagnostic group treatment, several researchers have explored the utility of providing CBT in the context of diagnostically heterogeneous groups of patients. For example, Erickson and colleagues (2003, 2007) evaluated whether patients with various anxiety disorders would benefit from one group treatment protocol based on standard CBT techniques and found moderate improvement in self-reported symptoms of anxiety, particularly for patients with panic disorder. In addition, Garcia (2004) reported that a group CBT protocol produced significant reductions in subjective ratings of anxiety and emotional distress in mixed groups of patients with panic and generalized anxiety disorder (GAD). It is important to note that although some of these studies refer to the treatment approach as “transdiagnostic,” all of these treatments still include diagnosis-specific strategies (e.g., psychoeducation related to each particular disorder, “worry time”). These treatments are not truly transdiagnostic because they include components that are not relevant for all diagnostic presentations within a given group of patients.

Unlike the group CBT protocols described above, other researchers have developed CBT protocols designed to be more uniformly applicable across the range of anxiety disorders. For example, Norton (2012) developed a group-based transdiagnostic therapy for anxiety disorders that also utilizes common CBT strategies (e.g., cognitive restructuring, exposure), while targeting factors underlying the development and maintenance of anxiety disorders (e.g., beliefs about uncontrollability and unpredictability of threat). Studies evaluating the efficacy of this group protocol suggest that it is associated with improvements in diagnostic status for individuals with a subset of anxiety disorders, as well as comorbid depression (Norton et al., 2013; Norton, Hayes, & Hope, 2004; Norton & Hope, 2005). False Safety Behavior Elimination Therapy (F-SET; Schmidt et al., 2012) is another recently developed transdiagnostic CBT group protocol for anxiety disorders that aims to identify and eliminate safety behaviors (i.e., actions performed to either avoid or reduce the intensity of anxiety symptoms), and preliminary evidence suggests that it is an efficacious treatment when delivered to mixed groups of patients with a subset of anxiety disorders (Schmidt et al., 2012). Further research is necessary to determine whether these transdiagnostic group CBT protocols are also efficacious for treating other anxiety disorders.
Recently, a transdiagnostic protocol was developed to extend beyond the treatment of the range of anxiety disorders to also address other theoretically related disorders. Specifically, the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP; Barlow, Ellard, et al., 2011; Barlow, Farchione, et al., 2011) is a CBT intervention that was developed to target core temperamental characteristics underlying anxiety, mood, and related disorders (e.g., somatic symptom disorders, dissociative disorders). These diagnoses, aptly referred to as emotional disorders due to the frequently occurring, intense negative emotions that characterize them, are purportedly maintained by aversive reactions to emotional experiences that lead to subsequent efforts to escape or avoid them (Barlow, Sauer-Zavala, Carl, Bullis, & Ellard, 2014). As such, the treatment focus is conceptualized as neuroticism itself (Barlow, Ellard, Sauer-Zavala, Bullis, & Carl, 2014). The UP contains five core treatment modules adapted from traditional CBT strategies that cultivate willingness to experience emotions and decrease avoidance. The UP has demonstrated promising reductions in anxiety and depressive symptoms in a series of preliminary trials (Ellard, Fairholme, Boisseau, Farchione, & Barlow, 2010; Farchione et al., 2012).

The purpose of the present study was to pilot test the effectiveness of the UP delivered in a group format. Based on previous studies demonstrating that the UP is an efficacious treatment for anxiety and comorbid depressive disorders (Ellard et al., 2010; Farchione et al., 2012) and other studies demonstrating the efficacy of transdiagnostic group treatment protocols (Erickson, Janeck, & Tallman, 2007; Norton & Barrera, 2012), it was hypothesized that the UP would result in similar outcomes when delivered within a group setting. In an initial exploration of this hypothesis, we conducted an open clinical trial of two cycles of heterogeneous groups of patients treated with a 12-session version of the UP. In this article, we present data on symptom change from pre- to posttreatment, discuss the treatment response of three illustrative cases, and finally, reflect on challenges encountered and lessons learned.

Method

Participants

Following an intake assessment using the Anxiety Disorders Interview Schedule for Diagnostic and Statistical Manual of Mental Disorders (4th ed., DSM-IV; American Psychiatric Association [APA], 1994): Lifetime Version (ADIS-IV-L; Di Nardo, Brown, & Barlow, 1994; see Measures for further description), patients on the Center’s waitlist were offered either transdiagnostic group treatment (immediately) or individual therapy (approximately
Patients in the UP group completed pre- and posttreatment outcome questionnaires and were charged a weekly fee per usual Center practices. Patients provided their written consent for questionnaire data and case information to be used for the purposes of clinical research and publication; they received no compensation for sharing their information.

The first group (Group A) consisted of five individuals (four females, one male) and the second group (Group B) consisted of six individuals (three females, three males). Patients were primarily Caucasian (one patient identified as Asian) with an average age of 44.55 years (SD = 16.79, range = 20-69). Table 1 presents the composition of principal (i.e., most severe or interfering) diagnoses for each group. Most group members (n = 8) had at least one additional clinical diagnosis (M = 1.27 additional diagnoses, SD = 1.10, range = 0-3). Additional diagnoses at intake included social anxiety disorder (SOC; n = 2), alcohol abuse (n = 1), specific phobia (n = 1), attention deficit hyperactivity disorder (ADHD; n = 2), major depressive disorder (MDD; n = 1), trichotillomania (n = 4), GAD (n = 1), panic disorder with agoraphobia (PDA; n = 1), depressive disorder not otherwise specified (DDNOS; n = 2), post-traumatic stress disorder (PTSD; n = 1), and an anxiety disorder not otherwise specified where the individual just missed receiving a diagnosis of GAD (n = 1).

The groups did not differ in age, number of sessions completed, number of comorbid diagnoses, or clinical severity rating (CSR) ratings for principal

---

**Table 1. Principal Diagnoses for Each Group.**

<table>
<thead>
<tr>
<th>Principal diagnosis</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>OCD</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PDA</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>GAD</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Specific phobia</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Anxiety disorder NOS</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Agoraphobia without history of panic disorder</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. SOC = social anxiety disorder; OCD = obsessive-compulsive disorder; PDA = panic disorder with agoraphobia; GAD = generalized anxiety disorder; NOS = not otherwise specified.
Table 2. Outline of Unified Protocol (UP) Content Delivered By Session.

<table>
<thead>
<tr>
<th>Session</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unified model of psychopathology; motivation enhancement strategies; treatment goal setting (UP Module 1).</td>
</tr>
<tr>
<td>2</td>
<td>Psychoeducation on adaptive function of emotions; three-component model of emotional experiences (UP Module 2).</td>
</tr>
<tr>
<td>3</td>
<td>Natural course of emotions and role of avoidance; present-focused, nonjudgmental emotion awareness (UP Module 3).</td>
</tr>
<tr>
<td>4</td>
<td>Cognitive appraisal; thinking traps and countering questions; downward arrow (UP Module 4).</td>
</tr>
<tr>
<td>5</td>
<td>Identification of emotional avoidance strategies; rationale for replacing emotion-driven behaviors (EDBs) with incompatible behaviors (UP Module 5).</td>
</tr>
<tr>
<td>6</td>
<td>Psychoeducation on interoceptive conditioning; symptom induction test; interoceptive exercises (UP Module 6).</td>
</tr>
<tr>
<td>7-11</td>
<td>Exposure rationale; create and review individual hierarchies; situational emotion-focused exposures (UP Module 7).</td>
</tr>
<tr>
<td>12</td>
<td>Skill review; emphasis on continued implementation of exposures; review of progress and future goals; relapse prevention strategies (UP Module 8).</td>
</tr>
</tbody>
</table>

diagnoses, and there were no differences between groups at baseline on any of the outcome measures. All group members had a history of previous psychotherapy and more than half ($n = 7$) of the patients were currently prescribed medication for anxiety or depression.

**Treatment**

The length and number of treatment sessions utilized in previous UP studies (e.g., Ellard et al., 2010; Farchione et al., 2012) were adapted for a group-based application. Specifically, instead of a maximum of 18, 60-min sessions, each of the 8 UP modules were delivered over the course of 12, 2-hr weekly sessions in small groups of 5 to 6 patients. All patients were required to purchase the UP client workbook (Barlow, Ellard, et al., 2011). Sessions were structured such that each session, with the exception of the first, began with a brief review of previous session material and a collaborative review of homework that targeted issues with homework completion as needed. Homework review was followed by introduction of new material and completion of any in-session exercises, and then sessions concluded with homework assignment. An outline of specific topics addressed in the group each week is presented in Table 2. A detailed description of each session topic in
the UP is presented elsewhere (Wilamowska et al., 2010). Patients completed, on average, 10 of the 12 sessions ($SD = 1.40$ sessions, range = 7-12).

Each group was run by a total of three clinicians and all therapists were doctoral students; there was no overlap among therapists across groups. An advanced doctoral student who was extensively trained and certified in the delivery of the UP by a treatment developer led Group A with two more junior students. Three advanced doctoral students who had also received extensive training in the UP and completed certification requirements led Group B. Treatment adherence was monitored closely during weekly supervision with a licensed psychologist who was also certified in the UP.

**Assessment**

Assessments were administered at pretreatment (Week 1), midtreatment (Week 6), and posttreatment (Week 12) unless otherwise noted.

Intake diagnoses were established using the ADIS-IV-L (Di Nardo et al., 1994). The ADIS-IV-L focuses on the DSM-IV (APA, 1994) diagnoses of anxiety and mood disorders, somatoform disorders, and substance and alcohol use disorders. Diagnoses are assigned a CSR on a scale ranging from 0 (no symptoms) to 8 (extremely severe symptoms), with a score of 4 (definitely disturbing/disabling) as the clinical threshold for DSM-IV diagnostic criteria. In the event two diagnoses are determined to be equally (and principally) interfering, they are assigned as co-principal diagnoses. Diagnosticians included clinical psychologists and advanced clinical doctoral students who were required to undergo rigorous training on all measures to meet strict certification criteria (see Brown, Di Nardo, Lehman, & Campbell, 2001).

Both groups completed weekly measures of anxiety and depressive symptom severity and impairment: the Overall Anxiety Severity and Impairment Scale (OASIS; Norman, Cissell, Means-Christensen, & Stein, 2006) and the Overall Depression Severity and Impairment Scale (ODSIS; Bentley, Gallagher, Carl, & Barlow, 2014). The Multidimensional Experiential Avoidance Questionnaire (MEAQ; Gamez, Chmielewski, Kotov, Ruggero, & Watson, 2011) was also administered to both groups to assess the tendency to avoid negative internal experiences. A five-item measure, the Work and Social Adjustment Scale (WSAS; Marks, Connolly, & Hallam, 1973; Mundt, Marks, Shear, & Greist, 2002), was administered as a self-report measure to capture the degree to which symptoms were currently interfering in the domains of work, home management, private leisure, social leisure, and family relationships. Last, both groups completed the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q; Endicott, Nee, Harrison, & Blumenthal, 1993) to assess satisfaction across a range of domains shown to be important to quality of life.
In addition to the measures listed above, Group B was administered a few additional self-report questionnaires for research purposes. These included the following: a self-report measure of positive and negative affect, the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988); a measure of self-reported symptoms of depression, anxiety, and stress, the Depression Anxiety Stress Scales–21 (DASS-21; Lovibond & Lovibond, 1995); and a measure that assesses the fear of anxiety symptoms and beliefs regarding the dangerousness of such symptom, the Anxiety Sensitivity Index (ASI; Peterson & Reiss, 1993; Reiss, Peterson, Gursky, & McNally, 1986). Members of Group B also completed a feedback form that solicited qualitative feedback on the treatment and rated the overall acceptability and their satisfaction with the treatment at the conclusion of the final treatment session; quantitative ratings were adapted from Borkovec and Nau’s (1972) commonly used treatment credibility measure.

Results

Effectiveness of UP in Group Format

Overall, UP group treatment was well received in this sample, with change on each outcome measure in the expected direction. Table 3 presents means at pretreatment, posttreatment, and effect size estimates collapsed across the two groups. To evaluate the effect of treatment with the UP in a group format, we utilized Hedges’s $g$ (a variation of Cohen’s $d$ effect size that corrects for biases due to small sample sizes) to calculate effect size estimates. Effect size estimates were interpreted conservatively, with 0.2, 0.5, and 0.8 reflecting small, medium, and large effects, respectively (Cohen, 1988). Treatment with the UP demonstrated a very strong effect on anxiety symptoms and related interference (OASIS; Hedges’s $g = 1.33$) and a moderate effect on depression and associated interference (ODSIS; Hedges’s $g = 0.65$). There was a strong effect on both functional impairment across various life domains (WSAS; Hedges’s $g = 0.87$) and experiential avoidance (MEAQ total; Hedges’s $g = 1.12$), and a moderate effect on satisfaction and enjoyment in various areas of daily living (Q-LES-Q; Hedges’s $g = -0.52$).

In addition, given that our small sample size precluded significance testing, examination of the number of patients with scores in the healthy range on our outcomes measures (per validation studies) at pre- and posttreatment was used to evaluate the effectiveness of UP group treatment. At the end of treatment, more than half of the patients ($n = 6$) described their functional impairment due to their symptoms as mild (compared with only one patient at pretreatment). Among the patients ($n = 7$) who reported clinically significant
levels of anxiety on the OASIS (total score ≥ 8) at pretreatment, only two patients remained at the clinical level at posttreatment. For the subset of patients (n = 6) who reported clinical levels of depression on the ODSIS (total score ≥ 8) at pretreatment, all but one fell within the subclinical level at posttreatment. At pretreatment, the majority of patients reported either impairment (n = 2) or severe impairment (n = 7) in overall life enjoyment and satisfaction; of the patients with severe impairment, only one continued to report severe impairment at the end of treatment. Following treatment termination, one patient from Group A and two patients from Group B requested additional treatment. One patient from Group B was provided a referral for alcohol dependence at the recommendation of the group leaders, but it is unknown whether this patient pursued further treatment. The one patient from Group A requested further treatment for social anxiety, one patient from Group B requested treatment for ADHD (which was not explicitly addressed during group), and the second patient from Group B’s reason for seeking additional treatment is discussed below during Case 2 (K.S.).

Table 3. Descriptive Statistics and Within-Treatment Effect Sizes Collapsed Across Groups (N = 11).

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre</th>
<th>Post</th>
<th>Pre–Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>ESsg</td>
</tr>
<tr>
<td>OASIS</td>
<td>10.33 (4.53)</td>
<td>5.27 (2.90)</td>
<td>1.33</td>
</tr>
<tr>
<td>ODSIS</td>
<td>7.00 (4.58)</td>
<td>4.09 (4.23)</td>
<td>0.65</td>
</tr>
<tr>
<td>WSAS</td>
<td>18.07 (8.82)</td>
<td>11.55 (9.25)</td>
<td>0.87</td>
</tr>
<tr>
<td>Q-LES-Q (%)</td>
<td>46.64 (10.09)</td>
<td>51.55 (8.66)</td>
<td>−0.52</td>
</tr>
<tr>
<td>MEAQ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral avoidance</td>
<td>39.91 (11.73)</td>
<td>27.70 (8.03)</td>
<td>1.12</td>
</tr>
<tr>
<td>Distress aversion</td>
<td>41.55 (14.22)</td>
<td>29.00 (7.16)</td>
<td>1.11</td>
</tr>
<tr>
<td>Procrastination</td>
<td>27.55 (8.65)</td>
<td>21.10 (7.94)</td>
<td>0.78</td>
</tr>
<tr>
<td>Distraction and Suppression</td>
<td>22.64 (6.04)</td>
<td>17.70 (6.43)</td>
<td>0.79</td>
</tr>
<tr>
<td>Repression and Denial</td>
<td>35.18 (10.52)</td>
<td>24.80 (10.49)</td>
<td>0.99</td>
</tr>
<tr>
<td>Distress endurancea (%)</td>
<td>43.64 (8.89)</td>
<td>50.80 (10.95)</td>
<td>−0.72</td>
</tr>
<tr>
<td>Total</td>
<td>204.27 (49.11)</td>
<td>152.30 (43.76)</td>
<td>1.12</td>
</tr>
</tbody>
</table>

Note. OASIS = Overall Anxiety Severity and Impairment Scale; ODSIS = Overall Depression Severity and Impairment Scale; WSAS = Work and Social Adjustment Scale; Q-LES-Q = Quality of Life Enjoyment and Satisfaction Questionnaire; MEAQ = Multidimensional Experiential Avoidance Questionnaire. Positive effect sizes denote a decrease in scores, negative effect sizes denote an increase. aFor these measures, higher scores are reflective of less impairment and negative effect sizes reflect improvement.
Patient Feedback

At the conclusion of Group B, patients completed a feedback form assessing how acceptable the group was (i.e., how much did the treatment approach and activities make sense and feel reasonable) and their overall satisfaction with the group. All treatment completers from Group B \((n = 5)\) completed the feedback form at the end of the final session. Acceptability and satisfaction were assessed on a Likert-type scale ranging from 1 \((\text{not at all acceptable or not all satisfied})\) to 5 \((\text{extremely acceptable or extremely satisfied})\). Most patients rated the group treatment as either “very acceptable” \((n = 2)\) or “extremely acceptable” \((n = 2)\); the fifth patient rated the group treatment “moderately acceptable.” Patients also reported strong levels of satisfaction, with the same patients who found the treatment “very” and “extremely acceptable” rating their level of satisfaction as “very satisfied” and “extremely satisfied,” and the final patient reported “moderate satisfaction.”

We also asked patients to tell us in their own words, what they thought of the group overall, which elements were most helpful and which were less helpful, what were the most important things they learned during the group, and any recommendations for improving the group. The majority of group members expressed a positive reaction to the group’s diagnostic heterogeneity, reporting that “it was very helpful to hear the experiences of others” and “it [was] nice to be able to have a variety and understand that issues always come to a common center.” One group member (T.B., described below) felt differently, stating that “sometimes [he] had trouble relating to some of the problems the other patients in group dealt with” and that it was most helpful when he was able to receive instruction from the therapists that was specific to his personal experiences. Three group members suggested that additional sessions, particularly sessions focused on emotion exposures, would be helpful.

Patient Case Examples

Although the outcome data presented above suggests that the UP delivered in group format may be an effective and scalable treatment for emotional disorders, relying solely on group averages to infer the impact of a treatment masks potentially important sources of variability in treatment response. To provide a context for our later discussion of what worked, what did not, and for which patients, we present three case examples illustrating a patient with a positive treatment response to the UP (Case 1) and two patients who did not respond as well as desired to the UP (Cases 2 and 3). We choose to present three cases from Group B, including the two who did not do as well as hoped,
for several reasons: (a) Patients in Group B were administered a greater number of outcome measures than patients in Group A; (b) patients in Group B completed a feedback form assessing the acceptability and level of satisfaction with treatment; (c) all three group leaders in Group B were certified in the delivery of the UP; and (d) there is often more to learn from relative failures than successes (e.g., Barlow, 2010). Outcome data for these three cases are presented in Table 4.

**Case 1: Treatment Responder**

T.B. was a 22-year-old, single, Caucasian male who presented to the Center seeking treatment for social anxiety, which became interfering during a recent preparatory course for business school entrance exams. He reported anxiety in social or performance situations where he feared that he would be judged negatively or disliked by others, and expressed concern that his social anxiety was negatively influencing his career advancement, interfering with his ability to network, and causing him to avoid dating situations. T.B. also reported symptoms consistent with alcohol abuse, including finding it difficult to control his drinking, missing work, and occasionally driving while under the influence. Based on these symptoms, T.B. received a principal diagnosis of SOC, generalized type (CSR = 5) and an additional diagnosis of alcohol abuse (CSR = 4). T.B. reported a previous history of pharmacotherapy and psychotherapy during college for anxiety; he denied any history of depression. He did, however, endorse a history of problematic substance use during the past 5 years, including marijuana abuse, opioid dependence, and anxiolytic abuse. He was not taking any medication when he presented for treatment at the Center.

T.B. attended 9 out of the 12 treatment sessions; he did not attend the first session without advance notice (psychoeducation and motivation enhancement), and he notified group leaders in advance that he would be unable to attend Session 4 (cognitive reappraisal and flexibility) and Session 6 (awareness and tolerance of physical sensations) due to conflicts with his preparatory course. Whenever a patient was unable to attend a session, one of the group leaders followed up with him or her to assign the appropriate reading and homework for the upcoming week. Whenever possible, the patient would also come in early the following week to meet individually with one of the group leaders to cover the missed material from the previous session. T.B. was fairly compliant with homework assignments (i.e., he completed some, but not all, of the assigned worksheets) and his comments during group indicated that he was also completing the workbook readings.
At the onset of treatment, T.B. identified his primary goals for treatment as “eliminating [his] social anxiety and negative thoughts” and learning to be more “accepting and forgiving of [him]self.” He described a tendency to engage in postevent processing where he would replay past social situations and evaluate his behavior from a highly self-critical perspective. Once he began monitoring the antecedents, responses, and consequences (ARC) of emotional experiences (UP Module 3), T.B. started to identify that these thought patterns resulted in feelings of anxiety and sadness, and often led him
to either avoid future social situations, or drink to excess or use other substances to manage his anxiety while in those situations. As the group progressed, T.B. learned to identify distorted thoughts and challenge them (UP Module 4) and began to become more aware of the subtle forms of avoidance and emotion-driven behaviors (EDB) he was utilizing to reduce his anxiety in uncomfortable social situations (UP Module 5). Although he readily viewed his reliance on substances as an EDB, he was initially resistant to the idea that he might be engaging in other EDBs. Over time, T.B. was able to recognize that other behaviors, such as avoiding eye contact or texting someone instead of calling, were also EDBs that needed to be replaced with more adaptive ways of coping. As interoceptive and situational emotion exposures were introduced (UP Modules 6 and 7), T.B. was able to test his predictions about how people would respond to him in social situations and eventually began to approach these situations with more flexible thinking. T.B. was enthusiastic about completing exposures in session and often suggested creative ways to make them even more challenging. For example, for an exposure where his goal was to initiate a conversation with other customers at a bookstore, he decided ahead of time that he would deliberately make an awkward comment in the middle of the conversation to assess the social consequences. During another exposure where he approached small groups of people at a nearby bar, he made the decision to shake hands with them because he felt anxious that his palms were sweaty.

T.B. especially excelled at challenging his distorted thoughts, as well as those expressed by other participants; when other group members struggled with catastrophizing or jumping to conclusions, T.B. would often suggest alternative explanations to consider. Although T.B. often made valuable contributions to the group, at other times, he appeared somewhat bored or disengaged. The group leaders hypothesized that he sometimes struggled to find similarities between his own experiences and those reported by some of the group members presenting with greater comorbidity or more severe symptoms; T.B.’s comments on the treatment feedback form ultimately confirmed this impression. By the conclusion of treatment, T.B. reported less rumination and postevent processing, more acceptance of anxiety, and increased engagement in social activities. At the onset of treatment, most of T.B.’s scores were within the mild to moderate range, with a few notable exceptions. His pretreatment level of positive affect was approximately 50% lower than scores typically observed in clinical samples, and his scores were notably elevated compared with clinical samples on the distress aversion and procrastination subscales of the experiential avoidance measure. At posttreatment, all of his scores fell within the normal range. T.B. reported that he looked forward to beginning business school next year and felt prepared to use the skills he learned in treatment to manage his anxiety in new social environments.
Case 2: Depressive Rumination and Negative Self-Schema

K.S. was a 27-year-old, single, Caucasian female who presented for treatment after a referral from her mother, who was a former patient at the Center. She reported considerable worry, anxiety, and difficulty relaxing. K.S. denied any history of pharmacotherapy, but reported a history of supportive psychotherapy for depression and stress related to romantic relationships for the past 8 years. At the time of intake, she was diagnosed with PDA (CSR = 5) and additional diagnoses of general anxiety disorder (CSR = 4), SOC, generalized type (CSR = 4), and a DDNOS (CSR = 4). After her initial evaluation, K.S. completed 20 sessions of individual CBT for her symptoms of panic and agoraphobic avoidance with a junior doctoral student at the Center. Her individual treatment involved completion of a manualized treatment focused solely on her panic symptoms, Mastery of Your Anxiety and Panic (Craske & Barlow, 2007). This course of individual treatment terminated when the Center clinician concluded her training rotation, and K.S. expressed a desire for additional treatment to target her worry and social anxiety.

K.S. attended 11 out of the 12 treatment sessions; she was unable to attend the sixth session (awareness and tolerance of physical sensations) due to a work conference. She was highly compliant with all homework assignments. Her goals for treatment included feeling confident in group situations, no longer “feeling like a burden” to others, and reducing “negative talk.” K.S. was highly sensitive to how her behavior would be perceived by group members. For example, she refrained from speaking about her romantic relationship because she did not want to upset another group member whose husband had taken his own life the past year. During homework review, she would wait until all other members had spoken or until directly called upon by a group leader to share her experiences. She spoke at a soft volume and often became flushed when speaking to the group; when discussing her concerns about inconveniencing or disappointing others, she would become distressed and very tearful, almost as if she were recounting a trauma.

K.S. was introduced to the three-component model of emotion in relation to panic disorder during her previous course of treatment at the Center, so early treatment sessions (UP Modules 2 and 3) focused on expanding the model to other emotions. She was able to successfully identify thinking traps and generate alternative appraisals (UP Module 4) on her homework forms, but K.S. was often unable to apply the same skills during in vivo emotion exposures. For example, when partnered with another group member to collaborate on structuring an emotion exposure and challenging anxious thoughts, she was unable to think of any challenging questions to ask her partner to help him reevaluate his distorted cognitions. During interoceptive
and situational emotion exposures (UP Modules 6 and 7), however, K.S. successfully tackled a number of items on her avoidance hierarchy, including being the center of attention in a group in a positive way, sitting in a small filing closet that could not be opened from the inside, giving a speech in front of a large group, and completing a social cost exposure where she deliberately inconvenienced a bartender. Although she successfully completed these exposures, she remained very distressed at their conclusion and was often unable to articulate what she had learned from the experience. It became apparent over the course of treatment and through one-on-one conversations with group leaders that K.S. engaged in almost constant rumination, particularly over failed romantic relationships. This pattern of rumination likely reinforced the core beliefs of worthlessness she identified using the downward arrow exercise (UP Module 4).

Despite these barriers, K.S.’s questionnaire scores indicated some improvement from pre- to posttreatment, most notably an increase in positive affect and decrease in negative affect. Her scores on each subscale of the experiential avoidance measure were comparable with community norms. K.S.’s report of anxiety and depressive symptoms largely remained in the moderate range, and her functional impairment and life satisfaction scores indicated significant deficits in both areas at posttreatment. She rated both the treatment acceptability and her satisfaction with the treatment as moderate, and reported that “some of the worksheets and names of [the] skills could be confusing.” She also wrote that she found the “structure of exposures” to be the least helpful element of the group; however, she did not provide specific information about how the exposures could be improved. At the conclusion of the group, she requested additional treatment to work on her “self-worth issues” and core beliefs, and was assigned to another Center clinician for individual therapy.

Case 3: Unwilling to Engage

G.P. was a 57-year-old, single, Caucasian female working full-time at a pharmaceutical company. She had originally received treatment at our Center more than a decade ago, and returned seeking treatment for strong urges to use the bathroom during meetings that began on starting a new job. G.P. reported anxiety in situations where she might need to use the bathroom or where it would be difficult to escape (e.g., public transportation, work meetings, driving long distances, or over bridges). Although she did not avoid these situations, she reported fasting and using the bathroom up to 6 times before meetings, and always carrying antidiarrheal medication with her when entering a feared situation. G.P. also would begin worrying about
experiencing stomach distress up to a week before a scheduled meeting, and found that her anxiety impaired her concentration during such meetings. Based on these symptoms, she was given a diagnosis of agoraphobia without a history of panic disorder (CSR = 5). G.P. did not have a history of depression and denied any history of pharmacotherapy. Her primary goal for treatment was to “reduce or eliminate anxiety in meetings.”

G.P. participated in only 7 of the 12 treatment sessions; she failed to attend the first session without prior notice, missed Session 7 due to a work obligation, and did not attend Sessions 10 through 12. She was also rarely compliant with skill-based homework assignments, and it was unclear how often she was completing the assigned workbook readings. From the onset of treatment, G.P. was unwilling to discuss her presenting complaint in any level of specificity in the presence of other group members and instead referred to her symptoms vaguely as “anxiety” that arose in work meetings and while traveling. She also evidenced considerable difficulty grasping core UP skills throughout the course of treatment. For example, after the introduction of present-focused, nonjudgmental awareness during Session 3 (UP Module 3), G.P. reported that she found the mindfulness practice “calming.” Although the group leaders clarified that the purpose of these exercises was not to reduce anxiety, but rather to remain in touch with emotional experiences even when they are uncomfortable, she continued to evaluate the utility of these exercises based on anxiety reduction. Furthermore, G.P. demonstrated considerable difficulty identifying automatic appraisals and the associated emotions. For example, after receiving an email about an upcoming work meeting, she recorded her automatic appraisal as “crowded room, hot/stuffy,” her emotion as “rush of adrenaline,” the thinking trap as “not going to feel comfortable,” and her alternate appraisal as “try not to think about it.” Because G.P. had explicitly requested that we refrain from discussing her feared outcome (i.e., having diarrhea and being unable to make it to the bathroom in time) in front of other group members, it was difficult to identify the core appraisals driving her surface-level automatic appraisals and demonstrate how to apply reappraisal skills to her specific situation while in session and there were limited opportunities to discuss her anxiety with her in private. Similarly, during the session in which we practiced symptom induction exercises (UP Module 6), she reported that she did not find breathing through a small straw for 60 s distressing; however, it was clear that she had taken a deep breath without the straw as soon as it became uncomfortable and then returned to using the straw, thereby escaping before the emotion reached its peak level.

Before Session 8, G.P. met individually with a group leader to review material that was introduced the prior week during her absence. In this setting, she expressed skepticism that she was benefiting from the treatment and
indicated that she did not find the treatment skills applicable to her specific symptoms. She then spontaneously admitted that she was not practicing the treatment skills as discussed between sessions, and acknowledged that her lack of engagement may also be contributing to her lack of progress. During the following session, when group members were given time to work on individual fear and avoidance hierarchies (UP Module 7), G.P. was unable to generate any exposure ideas, stating that her symptoms only occurred in very specific situations that could not be replicated in session. With considerable support and guidance from group leaders to structure an in vivo exposure, it was determined that she would first eat foods that might incite indigestion or stomach distress, and then, while giving an impromptu speech in front of the group, deliberately leave the room without providing an explanation. Somewhat unexpectedly, this exposure generated only mild distress for her. The following week, after much deliberation and resistance, G.P. agreed to complete an exposure in a small, confined space that was unable to be opened from the inside. She rated her anticipatory anxiety as an 8 out of 8 and predicted that would she would “almost definitely” have a panic attack. During this first exposure trial, G.P.’s anxiety peaked quickly at a 4 and diminished to a 2 by the end of the 30-s exercise, leading her to muse that “it wasn’t nearly as bad as I thought.” When asked whether she was willing to repeat the exposure for 60 s, she appeared highly distressed and ultimately refused to conduct an additional exposure.

G.P. did not attend Session 10, without advance notification. When a group leader contacted her to inquire about her absence, she reported that she had been unexpectedly laid off from her job that day. She expressed interest in attending the final two sessions, but each week she called to say that she would not be able to attend the session due to scheduling conflicts with job interviews. After the group terminated, G.P. thanked the group leaders for their time and agreed to return the posttreatment questionnaires by mail. G.P.’s pre- to posttreatment scores evidenced almost no change, with the possible exception of small decrease in her use of distraction and suppression, which may have been consistent with her report in group that she had been making an effort to fidget less during work meetings. G.P. was informed that she could contact the Center in the future for further treatment at her own discretion.

Although G.P. was distressed enough by her symptoms to contact our Center, complete a lengthy diagnostic evaluation, pay for treatment, and commute 2-hr round-trip to each session, she was unwilling to discuss her idiosyncratic symptoms or areas of impairment with the group. In fact, it was not until Session 8 during a one-on-one exposure when a group leader probed explicitly about her stomach distress (e.g., “Are you afraid of passing gas
during the meeting?”) that G.P. acknowledged that her primary feared situation was losing control of her bowels or that if she left during a meeting, her colleagues would assume it was due to diarrhea. It was suggested that discussing these concerns with other group members could be a great exposure for the top of her fear hierarchy; however, G.P. refused to consider the idea. G.P. also lacked cognitive flexibility. When asked in private by a group leader to come up with reasons other than diarrhea that might motivate someone to step out of a meeting, she was unable to do so. She was also incapable of utilizing past evidence (e.g., that she had never experienced diarrhea at work) to generate more realistic appraisals surrounding her feared situations. Behaviorally, she also seemed highly intolerant of distress, as evidenced by her refusal to repeat exposures that only induced mild to moderate anxiety.

Finally, it is noteworthy that G.P.’s pretreatment questionnaires reflected extremely low levels of anxiety and related interference, which starkly contrasted the clinician-rating severity ratings provided to her at the Center intake. For instance, her reported levels of anxiety sensitivity, negative affect, and experiential avoidance were either negligible or at least one full standard deviation lower than average scores for healthy controls. The vast discrepancy between G.P.’s questionnaire scores and behavior during group suggests that for her, our self-report measures were likely inaccurate estimates of her current symptoms and functioning.

**Discussion**

Prior to the present study, the UP had only been empirically investigated in the context of individual therapy (Ellard et al., 2010; Farchione et al., 2012). The UP may confer advantages over other group-based CBT approaches as it is based on a clear theoretical foundation regarding the mechanisms relevant for the maintenance of symptoms across emotional disorders, not just anxiety disorders (Barlow, Allen, & Choate, 2004; Barlow, Sauer-Zavala, et al., 2014). Within the UP framework, each of the core treatment modules was designed to explicitly target aversive reactions to emotions and subsequent emotional avoidance, transdiagnostic processes that maintain symptoms across emotional disorders. In contrast, some of the group-based CBT protocols for mixed anxiety disorders discussed earlier (e.g., Erickson, 2003; Erickson et al., 2007; Garcia, 2004) were not designed to target common mechanisms and, in fact, contain diagnosis-specific material. Although these interventions may be efficacious insofar as they utilize evidence-based CBT strategies, targeting core processes may lead to more enduring change. A large equivalence clinical trial comparing the UP with single disorder protocols (delivered in individual format) is currently underway that may shed
light on the lasting effects of addressing underlying mechanisms versus DSM-level symptoms.

The utility of the UP in group format may also extend beyond other existing transdiagnostic group CBT treatment protocols (Norton, 2012; Schmidt et al., 2012) that similarly target core mechanisms. These treatments are only designed to address processes relevant for the range of anxiety disorders and current empirical support for these protocols are limited to the context of GAD, PDA, and SOC. The UP, however, is theoretically applicable to broader range of emotional disorders and has demonstrated support in the treatment of anxiety disorders, including obsessive-compulsive disorder (OCD) and PTSD (Farchione et al., 2012), depression (Boswell, Anderson, & Barlow, 2013), borderline personality disorder (Sauer-Zavala, Bentley, Wilner, & Barlow, in press), and bipolar disorder (Ellard, Deckersbach, Sylvia, Nierenberg, & Barlow, 2012).

Given the possible advantages of a transdiagnostic treatment approach, as well as the noted benefits of group-based CBT, the purpose of the present study was to explore the effectiveness of the UP when delivered in a group format. Consistent with our predictions, patients generally demonstrated improvements in symptoms of anxiety and depression, functional impairment, experiential avoidance, and quality of life. Effect size estimates suggest that the magnitude of these improvements ranged from medium (depressive symptoms, quality of life) to quite large (anxiety symptoms, functional impairment, and experiential avoidance). Patient feedback also indicated that the UP was an acceptable treatment; this is particularly noteworthy because although many group-based therapies produce effects equivalent to individual therapy, the vast majority of patients prefer individual therapy (e.g., Semple, Dunwoody, Sullivan, & Kernohan, 2006; Sharp, Power, & Swanson, 2004). These data indicate that the UP may be an effective and acceptable intervention when delivered in a group format in a routine clinical setting, and thus a promising way to increase dissemination of empirically supported treatments for emotional disorders.

Challenges to Group Delivery

Despite promising outcome data, group leaders expressed concern that some of the UP treatment concepts (e.g., the rationale for viewing all emotions as adaptive and accepting the full range of emotional experiences) were more difficult to deliver to some patients in a group relative to an individual context. The UP is an emotion-focused treatment that requires a level of emotion awareness to successfully implement treatment skills and ultimately facilitate reductions in experiential avoidance. As such, early sessions emphasize the
functional, adaptive nature of emotions and provide training in how to recognize avoidant patterns in emotional responding that may maintain symptoms (UP Modules 2 and 3). For some patients, particularly those who appear highly fearful of their emotions such as G.P. (Case 3), emotion awareness training is quite challenging and may require extensive redirection from the therapist before patients are able to begin engaging with their emotions; this level of therapist feedback may be difficult in a group context. Experienced UP therapists have noted that when the rationale for emotional acceptance “clicks,” symptom improvement quickly follows. T.B. (Case 1) provides an illustration of this observation as he demonstrated understanding of this core concept by independently pushing himself to induce strong emotions during exposures (e.g., deliberately shaking hands with sweaty palms) as a means to test his ability to cope with this experience.

Although the primary goal of the UP is to develop a greater willingness to experience and engage with emotions, it also includes instruction in skill acquisition (e.g., anchoring in the present moment, identifying and evaluating cognitive appraisals). Consequently, it can be challenging for a clinician to adequately deliver all the necessary treatment components. The group format made it difficult to assess each member’s comprehension and adjust the speed of material presentation accordingly. Although group members infrequently endorsed difficulty understanding or implementing treatment principles during homework review, it became apparent when group leaders reviewed patients’ completed homework assignments outside of session that some individuals struggled consistently with skill acquisition.

Finally, it is also important to note that the patients who participated in this open clinical trial were clinically challenging for a number of reasons. First, all group members had previous experience with psychotherapy and many patients had received CBT within the past 5 years; these patients are typically excluded from treatment trials because they may be “treatment resistant,” and therefore less likely to respond to any intervention. Our patient sample also included individuals with comorbid diagnoses that may have negatively affected treatment response. For example, one patient had originally sought treatment for ADHD and although his secondary diagnosis of a specific phobia qualified him for the group, many of the concepts discussed may have been less applicable to his ADHD-related interference. As previously noted, another patient (T.B.) presented with comorbid substance abuse. It also became clear partway through Group B that another patient was exhibiting significant signs of acute alcohol withdrawal during sessions. This level of drinking outside of session likely precluded the patient’s ability to derive any benefit from the emotion exposures he completed for homework.
Proposed Guidelines for UP Group Administration

Although our data suggest that the UP can be successfully delivered in a group format with diagnostically diverse and severe patient populations, we propose the following guidelines to maximize treatment response and improve the ease of administration. Initially, sessions were structured so that homework review was relatively brief (approximately 15% of each session) and although group members were encouraged to share examples from their homework practice, they were not required to do so. In response to the observation that some group members were incorrectly implementing treatment principles, clinicians from Group B elected to extend homework review to approximately 1 hr (50% of each session) as a means to gauge comprehension and provide corrective feedback. Although this change in session structure left less time for the introduction of new material each week, it allowed clinicians to review homework in greater depth after patients had attempted the practice on their own for a week, which appeared to enhance concept and skill acquisition.

Time management proved more difficult in a group format than in the context of individual therapy, with some sessions extending past 2 hr. One possible explanation is that many modules of the UP contain multiple learning objectives; it may be beneficial to focus on one objective per session to facilitate strong comprehension of one core concept, rather than limited understanding of several. We also found that brief individual meetings (approximately 15 min) with group members before or after sessions provided an excellent opportunity to reinforce concepts and skills or assess for areas of confusion. These individual meetings were especially important for patients who were less comfortable disclosing personal information in the group context (such as G.P.). These meetings were conducted when patients either missed the previous session or explicitly requested to meet with a group leader, but these brief “check-ins” could be incorporated into the treatment as an optional tool available to clinicians at their discretion.

The decision to conduct the UP group in 12 sessions was based on previous diagnosis-specific groups run at the Center and on existing studies of transdiagnostic group protocols (e.g., Erickson et al., 2007; Norton, 2008). Although some patients did suggest that additional emotion exposure sessions might improve the treatment, the majority of patients demonstrated achieved clinically meaningful symptom reduction following 12 sessions of the treatment. We propose that the UP can be viewed as part of a stepped care model when delivered in a group format, such that patient progress is monitored throughout the course of the intervention and appropriate referrals for more intensive treatment (i.e., individual therapy) are made as necessary at
the conclusion of the 12-week intervention (or earlier if clinically indicated). Using the present study as an example, three clinicians were able to provide immediate treatment for six patients at the cost of 24 hr per clinician. If the same number of clinicians were to deliver a standard 16-session individual treatment protocol to the same number of patients, it would require 32 hr per clinician and possibly a wait for treatment if each clinician could only see 1 patient at a time.

The group format also allowed us to implement several strategies that we found particularly valuable. First, we included other group members in individual patients’ exposures whenever possible. Our rationale for doing so was that observing other patients complete exposures would reinforce the rationale for this treatment component and help instill confidence in one’s own ability to complete personally relevant exposure tasks. In addition, we instructed patients to break into small groups to practice specific treatment skills (e.g., cognitive reappraisal), which gave them the opportunity to “try on” the role of therapist. For example, the exercise of leading another group member through cognitive challenging questions (e.g., “Do you know for certain that you’ll panic if you take the elevator?”) appeared to help patients practice this skill in a less challenging context when applied to their own sources of anxiety.

Unfortunately, the uncontrolled nature and small sample of the present study make it difficult to draw conclusions regarding for which patients UP group treatment is ideally suited. Future studies with larger samples will be necessary to conduct quantitative analysis of moderators of treatment efficacy. However, observations from the present study suggest some patient characteristics that may facilitate UP group administration. For example, willingness to discuss symptoms and distress-inducing life situations in front of other group members is necessary for patients to glean maximum support and instruction from group leaders. G.P., and to a lesser extent K.S., struggled with sharing personal information in group, which likely inhibited their ability to complete exposures that were personally relevant to their idiographic concerns.

Limitations and Future Research

The conclusions of the present study must be interpreted within the context of several limitations. First, the outcome data presented in support of the effectiveness of a group-based UP treatment were collected as part of an uncontrolled protocol evaluation. Although promising reductions in symptoms were observed, the lack of a control condition precludes causal inferences regarding the effect of the intervention (vs. passage of time). In
addition, the present study relied exclusively on self-report measures for outcome data. These results may be less reliable than clinician-rated or behavioral measures, particularly for highly emotionally avoidant patients, such as G.P., whose self-report symptom profile was markedly different from her clinician-assessed symptom severity at intake. The inclusion of implicit measures to evaluate attitudes about emotions may be useful, particularly for those individuals who find even endorsing symptoms on a questionnaire to be distressing. The current study also did not use follow-up assessments, thereby limiting our ability to draw conclusions about the long-term effectiveness of the group-based UP.

Conclusion

Overall, our results suggest that group-based delivery of the UP is a promising approach to address symptoms across a range of anxiety and depressive disorders. Targeting core mechanisms directly (as is done in transdiagnostic treatments) may be a more robust way to address symptoms and maintain positive treatment outcomes, although this notion has yet to be tested empirically. Despite the difficulties with administration described above, the majority of patients improved over the course of a 12-week group treatment with the UP. These results are particularly noteworthy given that these patients were more diagnostically diverse than those typically seen in efficacy trials, and many patients reported receiving previous CBT. Accordingly, our findings may be more generalizable than results reported from highly controlled clinical trials.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References


Author Biographies

Jacqueline R. Bullis is a doctoral student in clinical psychology at Boston University. Her research interests include transdiagnostic treatment development and the dissemination and implementation of empirically supported treatments. She is also interested in the role of sleep disturbance as a transdiagnostic process across emotional disorders.

Shannon Sauer-Zavala is a research assistant professor at Boston University. Her work is focused on exploring emotion-focused mechanisms that maintain psychological symptoms and using this information to develop more targeted, easily disseminated intervention strategies.

Kate H. Bentley is a doctoral student in clinical psychology at Boston University. Her research interests include emotion dysregulation processes common across a range of emotional disorder, particularly nonsuicidal self-injurious behavior, the development of transdiagnostic cognitive-behavioral treatment for anxiety, depression, and other related conditions, and dissemination of evidence-based psychological interventions.

Johanna Thompson-Hollands is a doctoral student in clinical psychology at Boston University. Her research interests include treatment development and outcome, obsessive-compulsive disorder, and family interventions.

Jenna R. Carl is a doctoral student in clinical psychology at Boston University. Her research focuses on the role of positive emotion in anxiety and mood disorders, psychotherapy process and outcomes, and development of novel interventions for preventing or treating emotional disorders.

David H. Barlow is a professor, founder, and director emeritus of the Center for Anxiety and Related Disorders at Boston University. He has published more than 500 articles and chapters and more than 60 books, and his research has been continuously funded by the National Institutes of Health for 40 years.