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Development of a Unified Protocol for the Treatment of Emotional Disorders in Youth

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Abstract

This paper reviews the development and initial trial of a treatment for adolescents that targets negative emotionality and associated psychological difficulties, particularly anxiety and depressive disorders, as a more singular entity by utilizing an approach rooted in both emotion science and theory. The rationale for such an approach is based upon the perceived need for novel treatment approaches that target commonalities in emotional disorder symptom presentation and their intervention. Utilizing the *Unified Protocol for the Treatment of Emotional Disorders* originally developed for adults (Barlow, Allen & Choate, 2004), we conducted a multiple-baseline design study of a slightly modified version of this protocol with three adolescents presenting an array of anxiety and depression symptoms. Adolescent participants in this preliminary investigation evidenced symptom reductions across disorders at post-treatment, with greater improvements noted at a six-month follow-up. Based on these findings and research regarding the association between emotion science and developmental psychopathology, we detail a more extensive set of modifications to the protocol, undertaken in preparation for a subsequent open-trial investigation of the revised treatment.

Keywords

unified protocol; anxiety; depression; adolescents; emotional disorders

Despite a history of empirically-based treatments for emotional disorders in youth, these treatments are not reaching those who need them most. In fact, children and adolescents are the least likely to receive appropriate mental health resources, with less than 20% of children in need of such services receiving suitable intervention strategies (Collins, Westra, Dozois, & Burns, 2004). Considering the extraordinarily high prevalence of emotional disorders such as anxiety and depressive disorders during childhood and adolescence, this discrepancy between prevalence and access to treatment is of great concern. While the reasons for a lack of adequate mental health care for children and adolescents are surely many, a likely relevant issue is the difficulty of effectively disseminating the multitude of empirically-based treatments for emotional disorders to clinicians throughout the country. Adequate training for each of these protocols is scarce and when available may tax clinicians' time, energy, and financial resources (Allen, Ehrenreich, & Barlow, 2005).

Researchers have suggested several approaches to empirically-based treatment that, although in their preliminary stages of development, may eventually facilitate greater community uptake as well as involve a less demanding clinical training, such as using computer or internet-based training materials or modularized approaches to treatment itself (Chorpita, 2007; Khanna & Kendall, 2006). Providing a treatment that targets negative emotionality and associated

psychological difficulties as a more singular entity by utilizing an approach rooted in both emotion science and theory may be one additional way to potentially maximize and simplify treatment dissemination. Moreover, an emotion-focused treatment may have broader applicability by allowing for an effective response to greater and possibly more naturalistic variations in symptoms common across anxiety and depressive disorders.

This “unified approach” to targeting emotional disorders is currently being researched with an adult population (Allen, Ehrenreich, & Barlow, 2005). The theoretical basis for the resulting *Unified Protocol for the Treatment of Emotional Disorders* has been described as deriving from many sources, including modern learning theory, cognitive neuroscience, and emotion regulation literatures (Barlow, Allen, & Choate, 2004). Research on etiology and latent structure as well as studies highlighting the high rates of comorbidity between anxiety and unipolar depression also influenced the drive towards a unified approach. Preliminary findings within the adult population suggest a unified protocol for emotional disorders may have efficacy as a treatment (Allen, Ehrenreich, & Barlow, 2005; Ehrenreich, Buzzella, & Barlow, in press). Building from a strong theoretical basis and the simplicity inherent in disseminating and implementing an emotion-focused treatment manual to practicing clinicians, we hypothesize that the unified treatment approach may also be an ideal treatment for youth with emotional disorders. In order to better consider the potential utility of this treatment model for an adolescent population, we will first briefly review the rationale for a unified protocol to treat anxiety and depressive disorders in youth and discuss the outcome of an early open trial using the protocol with an adult population. Next, we will briefly summarize the results of an initial test of a slightly modified version of the adult protocol with three adolescents presenting with a range of anxiety and depressive disorder symptoms. We conclude with a description of the significant modifications we have made to the protocol following this initial test, along with further tests of the resultant protocol currently in progress.

Etiology, Latent Structure, and Comorbidity of Emotional Disorders

The commonalities in etiology and latent structure between emotional disorders justify condensing various protocols for anxiety and depression into a single treatment (Barlow, Allen, & Choate, 2004). Based on the overlap between anxiety and depression, researchers have suggested the existence of a “general neurotic syndrome” (Andrews, 1990; Andrews, 1996; Tyler, 1989). Research in this regard considers differences in the expression of emotional disorder symptoms (e.g., individual differences in feelings of irritability, the presence of panic attacks, anhedonia, etc.) as varying expressions of the same syndrome. In support of this notion, Brown, Chorpita, and Barlow (1998) examined the latent structure of internalizing disorders using 350 children with a range of anxiety and mood disorders and found significant paths from negative affect to both mood disorders and anxiety disorders. Although not all variation between disorders may be accounted for by variations in affect, results supported a strong etiological link between anxiety and mood disorders. In addition, some psychopharmacological research suggests a common pathophysiology between the symptoms of various internalizing disorders. Hudson and Pope (1990) found approximately equivalent efficacy of antidepressant medications for a number of internalizing disorders (e.g., MDD, dysthymia, OCD, and PDA), suggesting a potentially common etiological basis.

High rates of comorbidity between anxiety and unipolar depression further point toward a strong overlap in the presentation of emotional disorders. A number of studies have found significant comorbidity of anxiety and depression throughout childhood, adolescence, and into adulthood (Angold & Costello, 1993; Biederman et al., 1995; Keller, Lavori, Wunder, Beardslee, & Schwartz, 1992; Kovacs & Devlin, 1998; Lewinsohn, Gotlib, & Seeley, 1995; Wadsworth, Hudziak, Heath, & Achenbach, 2001). Rates of children and adolescents with depression who have comorbid anxiety disorders range from 25% to 50% in community

samples (Angold, Costello, & Erkanli, 1999) and up to 70% in clinical samples (Birmaher et al., 1996). Brown and Barlow (2002) found evidence that these disorders generally develop sequentially, with anxiety possibly acting as a risk factor for future depressive disorders. Other researchers have found that psychological treatments targeting particular anxiety or depressive disorders result in improvement of comorbid internalizing disorders not targeted in treatment, indicating that a unified treatment approach may be an efficacious treatment for a full-range of anxiety and depressive disorders (Borkovec, Abel, & Newman, 1995; Brown, Antony, & Barlow, 1995).

Targeting Improved Emotion Regulation in Intervention Approaches for Youth

The literature on emotion regulation also provides strong support for commonalities between emotional disorders, implying that focus on emotion regulation strategies in treatment may provide a broader benefit for all emotional disorders (Campbell-Sills & Barlow, 2006). An individual's vulnerability for emotional disorders may lie in individual differences in emotional regulation. Specifically, maladaptive emotion regulation strategies may serve to exacerbate unwanted emotions rather than to reduce them, aiding in the development or maintenance of anxiety and mood disorders. In fact, some studies show that most of the Axis I clinical disorders and all of the Axis II personality disorders involve dysregulation of emotion or maladaptive emotion regulation strategies (Gross & Levenson, 1997). Thus, a core component for the development of psychopathology may be rooted in maladaptive emotion regulation strategies.

Researchers have recently called for better integration of emotion concepts, such as emotion regulation, into empirically-based treatment approaches (Samoilov & Goldfried, 2000; Southam-Gerow & Kendall, 2002). Barlow, Allen and Choate (2004) clearly describe the relationship between emotion science and the unified approach in regard to adult intervention strategies. However, only recently have researchers examined the application of emotion understanding and emotion regulation strategies in the treatment of emotional disorders in youth. One example of this recent work is a slightly modified version of traditional child and adolescent cognitive behavioral therapy for anxiety disorders, termed *Emotion-focused Cognitive Behavioral Therapy* (ECBT; see Suveg, Kendall, Comer, & Robin, 2006).

The Unified Protocol for Adults

Barlow, Allen, and Choate's (2003) *Unified Protocol for the Treatment of Emotional Disorders* was initially developed for adults to target anxiety and unipolar mood disorder symptoms by providing an intervention associated with three basic treatment components: 1) targeting antecedent cognitive appraisals, 2) reducing and preventing avoidance of dysregulated emotions, and 3) encouraging actions that are inconsistent with disordered emotional states. There is evidence that the expression of negative emotions can be ameliorated by the reappraisal of the meaning one attributes to internal sensations (both physiological sensations and emotions) and one's perception of external threat prior to a situation (Gross, 1998; Richards & Gross, 2000; Thayer, 2000). There is also evidence to support the idea that avoidance of unexpected or unpleasant emotional experiences are related to emotional disorders (Barlow, 2002; Craske, Brown, Meadows, & Barlow, 1995). Moreover, consistent with Izard's (1971) work on emotion theory, suggesting that "the individual learns to act his way into a new way of feeling" (p. 410), the Unified Protocol encourages actions inconsistent with disordered emotional states in order to promote healthy coping behaviors and foster a stronger sense of control within those suffering from emotional disorders (Barlow, Allen, & Choate, 2004).

Initial research using the Unified Protocol with an adult population has been promising (Allen, Ehrenreich, & Barlow, 2005; Ehrenreich, Buzzella, & Barlow, in press), with all six pilot participants exhibiting a reduction in their principal diagnoses from a clinical to sub-clinical level after 12 sessions of treatment, as measured by clinician severity ratings (CSR) on the Anxiety Disorders Interview Schedule for the DSM-IV (ADIS-IV; DiNardo, Brown, & Barlow, 1994). However, prior to the current investigation, no known attempts had been made to develop a unified approach for emotional disorders occurring in childhood or adolescence.

A Unified Protocol for Adolescents

Adapting the *Unified Protocol for the Treatment of Emotional Disorders* for use with children and adolescents required certain modifications be made to the original protocol. However, our goal in initial testing was to keep it as faithful to the original adult protocol as possible, in order to both remain consistent with the basic theoretical focus of the treatment and to more systematically evaluate areas for treatment modification, based on initial client response. However, in using the adult protocol with an initial pilot participant, a 12-year-old female with Separation Anxiety Disorder, it became clear that small modifications to treatment language and the incorporation of strategies to facilitate parent understanding of the strategies utilized would be necessary to ensure basic compliance with treatment procedures. Therefore, two additional 30 to 40 minute parent sessions were added in order to incorporate parent participation into the treatment and to secure their understanding of treatment concepts. In addition, the language and relevant examples were slightly modified in an effort to make the protocol more developmentally appropriate and relevant for an adolescent population.

Like the adult protocol, the adolescent treatment involves provoking emotion and reinforcing emotional tolerance through presentation of situational, internal, and somatic cues. In early treatment sessions, patients complete standard emotion inductions that induce emotions such as anxiety, sadness, happiness and disgust. Patients are presented with a number of skills they can use to better manage their emotional experiences such as emotion awareness, cognitive reappraisal and behavioral activation. Putting these skills to work later in treatment, implementation of the emotion exposures differs from patient to patient in the situational cues and exercises utilized. A more detailed summary of the Unified Protocol's original treatment components are summarized in Table 1.

For this first phase using the *Unified Protocol for the Treatment of Emotional Disorders* with an adolescent population, we describe the cases of three adolescents who presented for treatment of various anxiety and depressive disorders as part of pilot study employing a multiple-baseline design across participants. We hypothesized that, relative to pre-treatment levels, participants would exhibit fewer symptoms of anxiety and depression as measured by clinical assessment immediately following treatment. We further hypothesized that these treatment gains would be maintained at a six-month follow-up assessment.

Participants

Three adolescent participants and their families were recruited through consecutive referrals to a University-based research clinic specializing in the treatment of anxiety disorders. Inclusion criteria for an adolescents' participation were as follows: (a) receiving a principal diagnosis of an anxiety or mood disorder; (b) a willingness to refrain from initiating additional treatment during the course of therapy unless mutually agreed upon with the clinician or clinical supervisor; and, (c) being between 12 and 17 years of age. In addition, adolescents taking medication for anxiety or behavioral difficulties were required to be on a stable dose of medication, as measured by one month of continuous medication treatment at the same dosage level. Exclusion criteria were: (a) comorbid diagnoses of bipolar disorder, psychotic disorder, substance abuse, or substance dependence; (b) acute suicidal intent; (c) emotional symptoms

due to a medical/physical condition, or (d) a sole clinical diagnosis of specific phobia. All study participants were Caucasian, with an average family income of \$74,000. The education level of parents ranged from completion of high school to completion of a Master's degree.

Participant 1—The first participant was a 12-year-old Caucasian male with a principal diagnosis of Anxiety Disorder, Not Otherwise Specified, with a Clinician Severity Rating (CSR) on the ADIS-IV-C/P (Silverman & Albano, 1997) of a four. Participant 1 was treated with 36mg of Concerta throughout the investigation, and his Attention-Deficit/Hyperactivity Disorder (ADHD) was not deemed to be clinically interfering. Participant 1's primary complaint at the time of assessment was of disturbing thoughts of apocalyptic scenarios in which the world “blows up [and/or] everyone dies.” Participant 1 reportedly attempted to avoid experiencing these thoughts by distracting himself by reading or recalling pleasant memories. Participant 1's parents explained that Participant 1 felt consumed by these “existential thoughts” and could not be redirected to focus on other things when experiencing them.

Participant 2—The second participant was a 16-year-old Caucasian male who was given a principal diagnosis of Social Phobia, Generalized, with a CSR of a five at the initial diagnostic assessment. Participant 2 reported that he became nervous in a number of social situations, especially when speaking to unfamiliar people and in classroom situations. In addition, he was nervous about speaking to people in authority and being assertive. Participant 2 reported having difficulty with mathematical computation, and a recent psychoeducational assessment confirmed that he performed in the Low-Average range in overall cognitive ability.

Participant 3—The third participant was a 16-year-old Caucasian female. Participant 3 was assigned a principal diagnosis of Generalized Anxiety Disorder, CSR of a six, during the initial diagnostic assessment. Additional clinically significant diagnoses of Major Depressive Disorder, Mild, CSR of a five, and Social Phobia, CSR of a four, were assigned. Participant 3 worried about how she was perceived by peers, her family's finances, her performance, relationships, her personal health, and more general family matters. Participant 3 reported that she was extremely bothered by the persistent worry she experienced, endorsing difficulty concentrating and relaxing, and excessive irritability due to her worry. In addition, Participant 3 reported significant symptoms of depression, including poor appetite, difficulty sleeping, high levels of fatigue, and feelings of worthlessness.

Measures

Anxiety Disorders Interview Schedule, Child and Parent Versions (ADIS-IV-C/P; Silverman & Albano, 1997)—The ADIS-IV-C/P is a downward extension of the Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV; DiNardo, Brown, & Barlow, 1994) was administered to all parents and adolescents in separate interviews. The ADIS-IV-C/P is a reliable and valid semi-structured interview designed to facilitate the diagnosis of all DSM-IV anxiety disorders, mood disorders, and externalizing disorders of childhood and adolescence, and also provides screening questions for selected other disorders (e.g., psychotic disorders, eating disorders, and somatization disorders; Silverman, 2001; Albano, Marten, Holt, Heimberg, & Barlow, 1995). Clinician Severity Ratings (CSR) for each diagnosis assigned on the basis of the ADIS-IV-C/P were examined as an indicator of change in emotional disorder symptomatology for this investigation. A CSR of four or above is generally considered a clinically-significant severity level. The ADIS-IV-C/P was administered prior to treatment, at post-treatment, and at six-month follow-up assessments.

Procedure

Prior to their initial assessment at the clinic, a brief screening was conducted with the adolescent's parent(s) over the telephone to assess current anxiety and mood symptoms as well

as exclusionary criteria, including active suicidal ideation, psychotic features, substance abuse, or significant cognitive impairment. Families were then scheduled for an assessment and both parents were encouraged to attend. However, the assessment was conducted if one parent was present. After obtaining consent to conduct the assessment, the interviewer conducted the ADIS-IV-C/P first with the adolescent, then the parent. Diagnoses made by the clinician following administration of the ADIS-IV-C/P were reviewed by supervisors and a team of doctoral-level clinicians for accuracy. Following the completion and review of the assessment, parent(s) and adolescents were offered participation in the current investigation and randomly assigned to one of three designated baseline lengths. All three participants and their families elected to participate in this investigation and completed treatment as described below.

Participants had between a two and eight week baseline phase before beginning treatment and were reassessed after this waiting period in order to control for major changes that might occur as a function of time. Treatment was then conducted as described in Table 1. Participants received a post-treatment assessment from an independent evaluator blind to treatment course after 13 sessions of treatment and approximately six months after the 13th session occurred.

Results

Table 2 summarizes changes in CSR across diagnoses for each of the three adolescent participants. A description of treatment course and outcomes for each participant is further detailed below.

Participant 1—Participant 1 appeared to demonstrate a thorough understanding of the treatment concepts based on his detailed and accurate completion of homework and his thoughtful discussion of material in session. Participant 1 indicated that he initially had difficulty using the acceptance-oriented skills discussed in session three when he experienced intrusive thoughts. He stated that he habituated to the strong feelings associated with interoceptive exposures with little change in the self-reported intensity of the physiological sensations evoked by them; however, he reportedly experienced a decrease in anxiety sensitivity to physiological sensations after practicing the interoceptive exposures during and after the sixth session. Participant 1 readily applied the concept that emotional avoidance maintained his anxiety, and he completed exposures with minimal avoidance. He quickly learned and applied cognitive reappraisal strategies, but these seemed to have little measurable impact based on his self-reported anxiety level.

Participant 1 verbally reported a modest decrease in anxiety. He indicated that he found emotional exposures to be the most helpful part of treatment. This is consistent with his anxiety ratings on a self-report measure of anxiety and depression, which show a precipitous drop between sessions nine through 13 (a period during which exposure is heavily emphasized). Participant 1's anxiety disorder was deemed to be no longer clinically interfering based on his report and his parents report from the ADIS-C/P. A diagnosis of Anxiety Disorder Not Otherwise Specified, CSR was assigned at two at post-assessment and zero (i.e., in full remission) at six-month follow-up.

Participant 2—Though Participant 2 readily engaged in treatment, he usually demonstrated only a rudimentary understanding of concepts introduced in session despite repeated discussion and repetition to refine his knowledge and skill base. He generally remembered simplified forms of major treatment themes but had difficulty discussing details and nuances without significant support from the clinician. During the first few sessions of treatment, Participant 2 was able to apply relevant examples from his own experience to the treatment components, including describing situations using the three-component model and discussing the role that avoidance played in maintaining anxiety and depression. He also participated in interoceptive

exposures, to which he reported experiencing mild habituation to the physical sensations associated with the exercise.

Though Participant 2 successfully participated in a number of exposures during the second half of treatment (e.g. volunteering to ask questions in class, asking a young lady out on a date), during the final sessions of treatment he declined to follow through on some assigned exposures related to obtaining a new job. He acknowledged that avoidance played a prominent role in his decision not to engage in these emotion exposures. His difficulty initiating the job application process was a major factor in assigning the CSR at an improved but still clinically interfering level of a four. In addition, the “Generalized” specifier assigned at the initial assessment was not assigned.

Participant 2 received three additional sessions consistent with the treatment protocol after the final protocol session to help him consolidate his gains and to continue to confront his most feared social situation, applying for jobs. One month after Participant 2 finished the treatment protocol, he applied for jobs with four different employers. Based on his six-month follow-up, Participant 2's CSR was assigned at a two (below the clinical cutoff of four).

Participant 3—The final participant, Participant 3, readily engaged in treatment, and rapport was established easily. Participant 3 recurrently reported experiencing very high levels of anxiety and depression, often with concurrent moderately severe suicidal ideation. Emotional exposures, introduced in the third session, seemed to be a particularly useful component of the protocol for Participant 3. These exposures seemed to result in moderate habituation to the emotions they evoked and correlated with a moderate decrease in anxiety given her report on a daily self-report measure of anxiety and depression. Participant 3 stated that she struggled to apply emotion acceptance and tolerance principles described in the protocol because she felt overwhelmed by her symptoms. Nonetheless, beginning with the acceptance and tolerance session in the third week of treatment, Participant 3 reported a subjective decrease in her anxiety and depression that lasted through the cognitive reappraisal portion of the treatment. Of note, Participant 3 was reluctant to engage in more personally-relevant emotion exposures. She indicated that she became more distressed by the anticipation of the heightened affective brought on by these exposures than to actually fearing negative evaluation by others.

At post-assessment, Participant 3's diagnoses reportedly each dropped one CSR. She continued to make seemingly large gains after treatment. At her six-month follow-up assessment, her depression was deemed to be in full remission. In addition, the GAD diagnosis (originally assigned at a CSR of six) and Social Phobia diagnosis (originally assigned at a CSR of four) were both assigned at the sub-clinical level of two.

Treatment Satisfaction—All participants and their parents reported favorable impressions of the treatment and indicated that they would recommend the treatment for friends or for friends' children. All participants reported that they found emotion exposure exercises to be the most helpful part of treatment. Most felt like the treatment was the appropriate length, although one parent suggested that the treatment be a few sessions longer. Parents reported that they personally felt good about being included in treatment.

Discussion

A developing body of research is beginning to link emotion-related processes to psychological difficulties – developments that clearly hold implications for future intervention and prevention studies in youth (Southam-Gerow & Kendall, 2002). The current investigation provides some initial indication that a consolidated treatment approach with roots in both emotion science and empirically-based intervention may hold benefit for adolescents with emotional disorders. All

three adolescents in this multiple-baseline design study evidenced reductions in emotional disorder symptoms at post-treatment, with much greater improvements noted across all participants at six-months following treatment, including the complete remission of depression symptoms in the one participant presenting with such. Treatment satisfaction with this intervention was also moderately high for all three participants and their families. Taken together, these results appear to warrant continued investigation of a unified approach to the treatment of emotional disorders in youth.

While any conclusions made from an investigation employing a sample of only three adolescents are necessarily limited, several issues for further study of this protocol may be identified. For instance, it is tempting to hypothesize that the broader, emotion-focused treatment approach utilized in this protocol produced a greater usage or generalization of effects following treatment, resulting in the continued symptom improvement noted across all three participants at six-month follow-up. However, the possibility that this small sample improved as a result of normative maturation and independent of the intervention cannot be completely ruled out at this stage and should be further investigated. The reasons for more limited outcomes, albeit improved ones, for each participant in the immediate post-treatment interval are even less clear. Our experience with Participant 2 in particular pointed to the possibility that a treatment with generalized emotion targets and emotion-focused skill presentation may need to be extended or modified further in order to ensure more personally-relevant application of treatment concepts across the range of cognitive ability levels in adolescents presenting for treatment. Also, while adolescents in this sample identified difficulties managing a variety of emotions during the course of treatment (e.g. fear, sadness, guilt, anger, etc.), the symptom presentation of the sample was clearly dominated by those with anxiety versus depressive disorders overall, making the breadth of protocol application to the array of emotional disorders in youth unclear. Although a sample with a more varied pattern of emotional disorder presentation would have been ideal, recruitment of this sample was limited by the site's previous focus on screening and treating those with anxiety more solely. A primary goal of future research will be to examine future iterations of the protocol with samples presenting a greater diversity of emotional disorders, as well as a more socio-economically and ethnically diverse sample, in order to better understand the potential generalizability of this approach for youth. Further, from an anecdotal perspective, the adolescent who seemed to make the greatest treatment gains was Participant 3, the teen who initially presented with the greatest degree of emotional dysregulation and diagnostic complexity. Whether a unified approach is most relevant for adolescents like Participant 3, who seem to apply less effective emotion regulation skills while experiencing strong emotion more generally and for whom empirically-based treatments for anxiety or depression alone may be insufficient, is a possibility that will need to be examined further in future trials. The roles of age and gender in treatment outcome will also need to be explored.

Recent Modifications and Future Directions

With issues raised by this initial study in mind, we recently modified the *Unified Protocol for the Treatment of Emotional Disorders in Youth* (Ehrenreich & Barlow, 2007) significantly to make it more developmentally-sensitive and consistent with current research on emotion-related processes in children and adolescents, in preparation for our current open trial investigation of the resultant protocol. We have also modified our assessment methods to further consider change in emotion-related processes, rather than DSM-IV symptomatology alone. Unfortunately, a review of the growing body of emotion-focused research that informs these modifications is beyond the scope of the present article (see Suveg, Southam-Gerow, Goodman, and Kendall [in press] and Zeman, Klimes-Dougan, Cassano, and Adrian [in press] for recent reviews of treatment development and assessment issues, respectively, associated with the intersect between emotion theory and developmental psychopathology).

Broadly considered, the treatment modifications can be categorized as those to increase the protocol's developmental appropriateness for use with adolescents and those to better incorporate the context of an adolescent's emotional experience into treatment.

In terms of developmental appropriateness, feedback from the primary clinician in the initial study, along with parent and adolescent participant feedback, has prompted a large-scale overhaul of the Unified Protocol's format and presentation of potentially complex concepts associated with emotions and their regulation (emotional avoidance, negative reinforcement, cognitive reappraisal, etc.). Wherever possible, use of jargon-free language, experiential exercises and personalized examples are now used to illustrate these concepts throughout the protocol. Also based on initial feedback, time has been expanded in the initial session for rapport building and motivational enhancement of adolescents through the incorporation of goal-oriented discussions and a decisional balance exercise. It was also noted that several of the generalized emotion exposure triggers originally used during early sessions (an emotionally-evocative music CD and photographs) either failed to evoke relevant emotions in session or served an unclear purpose to adolescents in the pilot study. These exposure exercises have now been replaced by initial emotion exposure triggers that are jointly selected by the adolescent and clinician (with parent approval) from the media or other resources to evoke relevant emotional experiences that are salient and personally-meaningful for the individual adolescent. Similar to the previous iteration of the treatment, emotion exposure exercises become increasingly challenging as tolerance of emotional experiences and use of appropriate emotion regulation skills build through increased practice over time.

In addition, the role of parents in treatment has been expanded so that a parent is now briefly included at the end of each session and three 40-minute parent sessions allow them greater time to fully understand treatment concepts and incorporate them with their own parenting style. Given research suggesting that parents of children with internalizing disorders may employ strategies to overtly limit their child's experience of emotional distress through control or criticism strategies, teaching parents to appropriately facilitate treatment strategies that encourage appropriate emotion experiencing may be key to effective intervention approaches for youth with emotional disorders (Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006). Similar to an emotion-focused treatment for children by Kovacs and colleagues (2006), parents are also now given an explicit task of assisting adolescents in practicing appraisal and reappraisal of emotionally evocative interpersonal situations using problem-solving techniques. The addition of this strategy and use of the parent-child interaction context for practice is hoped to increase the appropriateness of the protocol for adolescents with anger and depression-related emotions, as well as to increase relevant parent involvement.

Perhaps the greatest challenge in developing and modifying a unified approach for adolescents has been the effort to maximally infuse the protocol with opportunities to incorporate the context of an individual teen's emotions into treatment. Several of the modifications noted above (increasing the flexibility of emotion exposure selection, incorporation of the interpersonal context into appraisal and reappraisal strategy practice) have aided in the effort to make this treatment approach relevant to the individual emotional experiences and regulation skills of adolescents. In addition, similar to Suveg, Kendall, Comer and Robin (2006), the protocol now explicitly directs the clinician to focus discussion of the treatment model and related strategies on a range of emotions identified (e.g., fear, anger, sadness, anxiety, etc.), with a particular focus on those identified as personally relevant for the adolescent. The treatment protocol initially accomplishes this by increasing awareness of these emotions and emotionally-driven behaviors or avoidance behaviors that may be curtailing or preventing, respectively, the natural course of emotional experience. Examples relevant to several of these emotions are then provided, as appropriate, throughout treatment to allow the clinician flexibility in tailoring the treatment to the individual adolescent's emotional experience.

As a result of these modifications, the revised Unified Protocol for Youth is now 16 sessions in length, with the latter portion of treatment explicitly dedicated to engagement in personally-relevant emotion exposure activity and the reinforcement of emotion regulation skills learned in the first half of treatment (e.g., emotional awareness, strategies for preventing emotional avoidance and usage of unhelpful emotionally-driven behaviors, cognitive appraisal and reappraisal, etc.). We are currently piloting the revised protocol in an open trial format with a group of 12 adolescents exhibiting a more diverse array of anxiety and depressive disorders, in preparation for a planned randomized control trial of the protocol. With data from these forthcoming studies in hand, we hope to elucidate one manner of effectively incorporating emotion concepts into an intervention approach for youth.

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Table 1
A Summary of Original Unified Protocol Treatment Components Listed by Session

Session	Description
1	Introduction of the three-component model of emotions; listen to audiotape designed to evoke emotion to identify different emotions; 30-minute parent session added which includes an overview of treatment
2	Discussion of the role of avoidance and negative reinforcement in maintaining emotional disorders; desire to engage in avoidance normalized; view evocative pictures in order to identify forms of avoidance
3	Introduction of awareness and acceptance with accompanying exercises; emotional exposure script written and read frequently
4	Introduction of cognitive appraisal skills, including common “thinking mistakes”; “Thinking Clearly” exercise introduced; emotional exposure script recorded on audio tape and listened to by participant repeatedly
5	Cognitive Reappraisal and “Thinking Clearly” continued
6	Rationale for interoceptive exposure discussed; interoceptive exposures practiced; 30-minute parent session added which includes a discussion of exposure and how parents can support participants and encourage non- avoidant behavior
7	Rationale for engaging in activities inconsistent with disordered emotional states discussed and first in-session exposure; discussion of engaging in behaviors inconsistent with disordered emotional states
8	Review of assigned activities inconsistent with disordered emotional states; continued in-session or in-vivo emotion exposures
9	Review of assigned activities inconsistent with disordered emotional states; continued in-session or in-vivo emotion exposures
10	Review of assigned activities inconsistent with disordered emotional states; continued in-session or in-vivo emotion exposures
11	Review of assigned activities inconsistent with disordered emotional states; continued in-session or in-vivo emotion exposures
12	Review of assigned activities inconsistent with disordered emotional states; continued in-session or in-vivo emotion exposures
13	Discussion of lapse and relapse; review of treatment gains; processing of termination

Note. Out-of-session assignments were reported under the description of the session in which they were assigned. Sessions were designed to occur weekly with the exception of a two-week break between sessions 11 and 12 and between sessions 12 and 13 in order to allow extended time for exposure practice and engagement of behavioral activation. With the exception of the additional parent sessions in weeks one and six, parents were intended to be included during the last 10 to 15 minutes of each session, during which participants were asked to review with their parent(s) the material they learned during the session.

Table 2
Clinician Severity Rating (CSR) at Each Assessment Point

Participant	Initial Assessment	Post-Waitlist	Post-Treatment	6-Month Follow-Up
1	AnxNOS (4)	AnxNOS (4)	AnxNOS (2)	Dx not present
2	Soc (5)	Soc (5)	Soc (4)	Soc (2)
3	GAD (6)	GAD (6)	GAD (5)	GAD (2)
	MDD (5)	MDD (5)	MDD (4)	Dx not present
	Soc (4)	Soc (5)	Soc (4)	Soc (2)

Note. CSR presented in parentheses. AnxNOS = Anxiety Disorder, Not Otherwise Specified; Soc = Social Phobia; GAD = Generalized Anxiety Disorder, MDD = Major Depressive Disorder.