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Change in emotional processing during a dialectical behavior therapy-based skills group for major depressive disorder

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ABSTRACT

Across studies, paying attention to and analyzing one's emotions has been found to be both positively and negatively correlated with depression symptoms. One way of reconciling these seemingly contradictory findings is the possibility that attending to emotions in a skillful manner may help to reduce depression whereas attending to emotions with limited skill may be counterproductive. Dialectical behavior therapy (DBT) is a clinical intervention designed to foster adaptive awareness, expression, regulation, tolerance, and acceptance of emotions. Results of the present report come from a pilot study of a 16-week DBT-based skills training group for treatment-resistant major depressive disorder (MDD) as an adjunctive treatment to pharmacotherapy. Patients were randomized to treatment or a waitlist control group. A significant interaction revealed that increases in emotional processing were associated with decreases in depression symptoms in the DBT-based skills group; however, increases in emotional processing in the waitlist condition were associated with increases in depression. Results offer preliminary support for the idea that participating in DBT-based skills training may help individuals with treatment-resistant MDD to develop skills that facilitate processing emotions in a way that helps to reduce rather than exacerbate depression symptoms.

Introduction

Emotional processing has been defined as volitional efforts to acknowledge and understand one's emotions and is generally believed to be an adaptive emotional approach coping strategy (Stanton, Kirk, Cameron, & Danoff-Burg, 2000). However, empirical studies of the association between emotional processing and depressive symptoms have yielded inconsistent results. Specifically, across studies, paying attention to and analyzing one's emotions has been found to be both positively and negatively correlated with depression symptoms and psychological well-being. For example, emotional processing has been found to be predictive of greater mental and physical health in individuals coping with a range of medical conditions including breast cancer (Stanton, Danoff-Burg, et al., 2000), infertility (Berghuis & Stanton, 2002), and HIV (Bower, Kemeny, Taylor, & Fahey, 1998). A second line of experimental research suggests that individuals assigned to a brief emotional processing intervention following a depressing event experience fewer depression symptoms than those assigned to a control condition or a brief cognitive restructuring intervention without emotional focus (Hunt, 1998; Hunt, Schloss, Moonat, Poulos, & Wieland, 2007). In contrast, other studies have found self-reported emotional processing to be associated with increases in distress over time (Stanton, Danoff-Burg, et al., 2000) and less adaptive outcomes including depressive rumination (Stanton, Kirk, et al., 2000).

One approach to reconciling these seemingly discrepant findings within the literature has focused on the construct of depressive rumination, defined as the tendency to respond to depressed mood by passively and repetitively focusing on one's emotional state and its causes, meaning, and consequences (Nolen-Hoeksema, 1991). In contrast to emotional processing, which is seen as a more active process that takes into account a broad range of emotions, depressive rumination is believed to be more passive in nature, more negativistic in content, and tied exclusively to the experience of dysphoric moods (Stanton, Danoff-Burg, Cameron, & Ellis, 1994). Individual differences in depressive rumination are predictive of greater self-reported depression symptoms following negative life events, such as an earthquake (Nolen-Hoeksema & Morrow, 1991) and the death of a family member (Nolen-Hoeksema, Parker, & Larson, 1994). Rumination also predicts the onset of future episodes

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of depression, as assessed by clinical interview (Nolen-Hoeksema, 2000), and prolonged duration of episodes of depression symptoms, as defined by cut-off scores on a self-report symptom measure (Just & Alloy, 1997).

Yet more recently, the construct of depressive rumination has been further revised. There is considerable evidence that some forms of rumination may not be as harmful as originally thought and may even be helpful in reducing distress. Responding to sad moods with reflection (i.e., active resolution-oriented rumination and written expression) is associated with decreases in depression symptoms over time and better adaptation to stressful events whereas brooding (i.e., passive, negativistic rumination) is associated with increased depression symptoms (Nolen-Hoeksema & Davis, 2004; Treynor, Gonzalez, & Nolen-Hoeksema, 2003). This more nuanced line of research suggests that attending to and thinking about negative moods can be adaptive *or* maladaptive—the difference depends in part on the way in which one attends to and regulates the experienced mood state (for a comprehensive review, see Watkins, 2008).

It is also possible that some individuals may attempt to engage in reflection and adaptive emotional processing as described by Stanton et al. (1994) and Stanton, Kirk, et al. (2000), but this analysis of emotions degrades into brooding and depressive rumination. Indeed, individuals who ruminate indicate that they do so in order to gain greater understanding of themselves, their emotions, and their life circumstances (Lyubomirsky & Nolen-Hoeksema, 1993; Papageorgiou & Wells, 2001; Watkins & Baracaia, 2001). One possibility is that these attempts to understand emotions become derailed as the individuals become overwhelmed by emotions and negative thoughts. This idea is supported by past research suggesting that the efficacy of emotional processing in reducing distress is moderated by the skillful use of other emotion-focused coping strategies such as expression of emotions (Austenfeld & Stanton, 2004).

It is important to note that the above studies on rumination and emotional approach coping were generally conducted with non-psychiatric populations. Although some studies involve individuals coping with stressful circumstances and experiencing elevations of depression symptoms, it is not clear that the benefits of emotional processing would generalize to individuals with major depressive disorder (MDD). Indeed, some authors have suggested that emotional processing would be potentially maladaptive among individuals experiencing hopelessness or perseverative rumination (Austenfeld & Stanton, 2004; Smyth & Pennebaker, 1999), which are two traits that may characterize individuals with MDD. As suggested above, individuals with MDD may become quickly overwhelmed by negative emotions and thoughts when they attempt to engage in emotional processing. This problem may be compounded by the use of ineffective emotion regulation strategies such as thought suppression or emotional avoidance, which may paradoxically result in a rebound of intrusive ruminative and depression symptoms over time (Beevers, Wenzlaff, Hayes, & Scott, 1999; Wenzlaff & Luxton, 2003). As such, individuals with depression may find themselves caught in a vicious cycle of rumination and emotional avoidance (Hayes & Feldman, 2004) that precludes effective emotional processing.

However, it is possible that an intervention that provides training in the regulation, tolerance, and acceptance of negative emotions could help individuals with depression learn to attend to emotions more effectively. Indeed, several recently developed psychotherapies for MDD have placed a greater emphasis on the development of such skills. These include mindfulness-based cognitive therapy (MBCT; Segal, Williams, & Teasdale, 2002), dialectical behavior therapy for depression (DBT; Harley, Sprich, Safren, Jacobo, & Fava, 2008; Lynch, Morse, Mendelson, & Robins, 2003), exposure-based cognitive therapy (A.M. Hayes et al., 2007), and acceptance and commitment therapy (ACT; for a review, see S. Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Among the common objectives of these various approaches is to provide depressed individuals with strategies for engaging with negative emotions and thoughts without getting caught in depressive rumination or relying on emotional avoidance.

To examine the possibility that training in emotion management skills may moderate the relationship between emotional processing and depression symptoms in individuals with MDD, we draw on data from a recent pilot study of a group DBT-based skills training intervention for individuals with treatment-resistant MDD (Harley et al., 2008). DBT is an intervention, originally developed for treatment of borderline personality disorder (Linehan, 1993) that has recently been applied to the treatment of MDD. This intervention is particularly well-suited for developing effective emotional regulation as participants receive training in skills for acknowledging, understanding, tolerating, and modifying emotions. In this study, we hypothesized that increased emotional processing would be associated with decreased depression symptoms in individuals who received the DBT-based intervention; whereas increased emotional processing would be associated with increased depression symptoms in the waitlist control group.

Method

As noted previously, analyses for the present study were performed on data from a pilot randomized controlled study of a DBT-based skills group intervention for treatment-resistant depression. Full details of the study methodology and results can be found in the primary outcome paper (Harley et al., 2008). Details relevant to the present study are summarized below.

Participants

Participants enrolled in this study through referral by psychiatrists or therapists within the Massachusetts General Hospital Outpatient Psychiatry Division and its network of outpatient providers. To be eligible for the study, patients had to be between the ages of 18 and 65 and to have a principal diagnosis of MDD as measured by the Structured Clinical Interview for DSM-IV (SCID-I; First, Spitzer, Gibbon, & Williams, 2002) and be stabilized on an adequate dose of antidepressant medication before entering the study (i.e., no change in dosage for at least six weeks prior to study entry). Patients meeting criteria for the following DSM-IV diagnoses were excluded from the study: bipolar disorder, psychotic spectrum disorders, active substance abuse or dependence, borderline personality disorder, mental retardation or pervasive developmental disorder. In addition, patients with active suicidality requiring more intensive levels of care, severe or unstable medical conditions, and patients with previous or current cognitive-behavioral therapy experience were excluded. Patients attending current non-CBT individual therapy were not excluded.

Thirty-one participants were referred for baseline diagnostic interview. Of these, seven were excluded from study enrollment due to lack of principal MDD diagnosis ($n = 2$) or comorbid psychiatric disorders ($n = 5$). Twenty-four patients with ongoing depressive symptoms despite stable, adequate medication treatment for MDD enrolled in the study. The mean age was 41.8 years, with a mean education level of 16.0 years. 18 participants (75% of the sample) were female and 20 (83%) were Caucasian. Twenty (83%) participants were receiving individual non-CBT psychotherapy concurrent with study participation. Ten participants (42%) met Axis I diagnostic criteria for a current, comorbid anxiety disorder and eight participants (33%) met criteria for a current eating disorder.