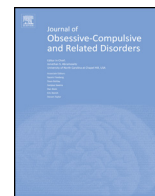




ELSEVIER

Contents lists available at ScienceDirect

## Journal of Obsessive-Compulsive and Related Disorders

journal homepage: [www.elsevier.com/locate/jocrd](http://www.elsevier.com/locate/jocrd)

## An initial examination of emotion regulation and obsessive compulsive symptoms



Max R. Stern<sup>a</sup>, Jacob A. Nota<sup>a,\*</sup>, Richard G. Heimberg<sup>b</sup>, Robert M. Holaway<sup>c</sup>,  
Meredith E. Coles<sup>a,\*</sup>

<sup>a</sup> Department of Psychology, Binghamton University, Clearview Hall, PO Box 6000, Binghamton, NY 13902-6000

<sup>b</sup> Department of Psychology, Temple University, USA

<sup>c</sup> PGSP-Stanford PsyD Consortium, Palo Alto University, USA

### ARTICLE INFO

#### Article history:

Received 2 November 2013

Received in revised form

22 February 2014

Accepted 25 February 2014

Available online 12 March 2014

#### Keywords:

Emotion regulation

Obsessive-compulsive disorder

Mood repair

### ABSTRACT

Emotion regulation deficits may contribute to the maintenance of anxiety and distress for individuals with generalized anxiety disorder and other emotional disorders. Recent work suggests a similar model for obsessive-compulsive disorder (OCD); however, the associations between obsessive-compulsive (OC) symptoms and emotion regulation deficits require further empirical support. The present study examined whether understanding of emotion, attention to emotion, negative reactivity (i.e., fear) to emotion, and ability to repair mood states were related to distress associated with OC symptoms. Analyses were conducted using self-report data collected from an undergraduate sample ( $N=170$ ). Consistent with expectations, OC symptom distress was significantly related to poor understanding of emotions and fear of emotions including both negative (anxiety, anger, and depressed mood) and, unexpectedly, positive emotions. However, excessive attention to emotions and deficits in mood repair were not significantly related to OC symptoms. Comparison of an analog OCD group to controls revealed significantly poorer understanding of emotions and greater fear of emotions in the analog OCD group. Future research on emotion regulation deficits in relation to OC symptoms and OCD appears warranted.

© 2014 Elsevier Ltd. All rights reserved.

### 1. Introduction

Each particular emotion (e.g., anger, fear, happiness, sadness, disgust, shame) is associated with physiological and behavioral correlates that are typically adaptive in situations that activate that emotion (Panksepp, 1982). Although physiological and behavioral correlates of emotions may occur in a seemingly reflexive way in certain circumstances, emotions are generally subject to elaborative (e.g., cognitive) processing and regulation. Emotion regulation can be defined as the manner in which individuals influence, experience, control, and express their emotions (Gross, 1998). This elaborative processing can modulate the impact of emotions on behavior, fine-tuning responses to a given context; however, poor emotion regulation can also negate the adaptive benefits of emotions. Poor emotion regulation has been associated with worse functioning (Mayer, Salovey, Caruso & Sitarenios, 2001). For example, poor emotion regulation is associated with impaired

decision making (Bechara, 2004; Heilman, Crisan, Houser, Miclea & Miu, 2010), deficits in goal-directed behavior (Gray, 2004; Johnson, 2009), and difficulty reacting adaptively to life's demands (i.e., emotional intelligence; Lyons & Schneider, 2005; Montes-Berges & Augusto, 2007). These impairments can negatively impact social, academic, and career functioning.

Mennin, Holaway, Fresco, Moore, and Heimberg (2007) identified three factors involved in emotion dysregulation: (1) poor understanding of emotions, (2) negative reactivity to present emotional state and (3) maladaptive regulation responses. There is evidence that poor emotion regulation may play a role in the development and maintenance of psychopathology (Mennin, Heimberg, Turk & Fresco, 2005; Taylor, Bagby, Parker, & Alexander, 1997). Turk, Heimberg, Luterek, Mennin, and Fresco (2005) theorized that poor understanding of emotions diminishes an individuals' confidence in their ability to control their emotions. Low confidence spurs fear of their emotional states, prompting the use of maladaptive coping strategies. These maladaptive coping strategies prevent the disconfirmation of negative beliefs about emotion, creating a maladaptive cycle which may lead to or exacerbate psychopathology (Turk et al., 2005). Indeed, emotion regulation deficits have been demonstrated in several psychiatric disorders including: unipolar depression

\* Corresponding authors.

E-mail addresses: [jnota1@binghamton.edu](mailto:jnota1@binghamton.edu) (J.A. Nota),  
[mcoles@binghamton.edu](mailto:mcoles@binghamton.edu) (M.E. Coles).

(Rottenberg, Kasch, Gross, & Gotlib, 2002), generalized anxiety disorder (GAD; McLaughlin, Mennin & Farach, 2007; Roemer et al., 2009), eating disorders (Svaldi, Greipenstroh, Tuschen-Caffier & Ehring, 2012), and borderline personality disorder (Glenn & Klonsky, 2009). In a recent meta-analysis of 114 studies, Aldao, Nolen-Hoeksema, and Schweizer (2010) found that internalizing symptoms were correlated with maladaptive emotion regulation strategies (e.g., rumination, avoidance, and suppression).

The common presence of emotion regulation deficits across a wide range of disorders suggests that emotion dysregulation may be a transdiagnostic process associated with interference in adaptive function. A number of studies have examined emotion regulation in relation to symptoms of anxiety (Aldao et al., 2010; Mennin et al., 2005; Silk, Steinberg, & Morris, 2003; Suveg & Zeman, 2004; Turk et al., 2005; Werner, Goldin, Ball, Heimberg, & Gross, 2011) and internalizing disorders (Aldao et al., 2010; Joorman & Gotlib, 2010; Roemer, Litz, Orsillo, & Wagner, 2001). Across studies, small to medium correlations have been documented between measures of emotion regulation and worry (Mennin et al., 2005; Turk et al., 2005) and symptoms of depression (Mennin et al., 2005, 2007). Taken together, it appears that poor emotion regulation may be associated with an increase in repetitive efforts to avoid emotional experiences (i.e., worry, rumination, thought suppression). Indeed, poor understanding of emotions, and/or perceptions of emotional experiences as unacceptable may be related to a myriad of maladaptive patterns of behavior aimed at decreasing the presence of strong emotions.

Calkins, Berman, and Wilhelm (2013) recently suggested an extension of the emotion regulation model to describe the maintenance of compulsions (repetitive mental or overt acts performed with the goal of reducing anxiety), as seen in obsessive-compulsive disorder (OCD). Specifically, they suggest that individuals with OCD interpret intrusive thoughts as possessing heightened negative salience and potential consequences and that a destructive cycle is created when attempts to quell anxiety in fact raise the amount of attention paid to distressing thoughts and the emotions with which they are associated. They propose that this cycle engenders poor confidence in one's ability to regulate distressing moods and thereby leads to the continued use of maladaptive coping strategies (i.e., compulsions). Continued use of compulsions prevents the individual from confronting distressing emotions and inhibits access to disconfirmatory information. This model is consistent with initial data presented by Allen and Barlow (2009) examining the efficacy of exposure to emotion-cues (independent of content) for OCD. Indeed, their intervention sought to reduce avoidance of emotions in individuals with OCD through the use of emotion-provocation exercises.

Despite reasons to believe that emotion regulation deficits could play a role in OCD, there is a lack of empirical information on the relation between emotion regulation and OC symptoms. For example, in Aldao et al. (2010) meta-analysis, only 1 of the 114 studies reviewed examined OCD. It is currently unknown if reports of compulsions and/or obsessions (thoughts images or impulses that are experienced as intrusive and distressing, but keep recurring to the individual) are correlated with the experience and regulation of emotions. Therefore, the present study examined the extent to which the three processes hypothesized to characterize emotion dysregulation by Mennin et al. (2007) are related to a broad sample of OC symptoms, including washing, checking, ordering, obsessing, hoarding and mental neutralizing. Specifically, we hypothesized that these OC symptoms would be positively correlated with fear of emotions and negatively correlated with understanding of emotions and the ability to repair distressing mood states. Based on prior findings examining relations between worry and emotion regulation, correlations between these emotion measures and OCD symptoms were expected to be small to

medium in magnitude. Further, we hypothesized that, in comparison to controls, participants with heightened OC symptoms would have a poorer understanding of emotions, have a greater fear of emotions, and report less ability to repair distressing mood states.

## 2. Methods

### 2.1. Participants

One hundred seventy undergraduates enrolled in an introductory psychology course completed the present study and were compensated with partial course credit. The sample consisted of 109 females (64.1%) and 61 males (35.9%) and was relatively diverse [African American (22.9%), Hispanic (3.5%), Asian American (13.5%), Caucasian (35.3%), other race (13.5%), chose not to disclose their race (11.2%)]. The average age of the sample was 19.8 years ( $SD=3.9$ ). This full sample was used to examine the magnitude of relations between emotion regulation indices, worry, and OC symptoms.

Given past research on emotion dysregulation among individuals with GAD (e.g., Roemer et al., 2009), participants who likely met criteria for GAD ( $n=36$ ) based on a score greater than or equal to 5.7 on the Generalized Anxiety Disorder Questionnaire for DSM-IV (GAD-Q-IV; Newman et al., 2002) were excluded from subsequent analyses. This course was chosen to minimize the likelihood that heightened worry would be confounded with heightened OC symptoms. Among the remaining participants, those scoring 40 or above on the distress scale of the Obsessive Compulsive Inventory (OCI; Foa, Kozak, Salkovskis, Coles, & Amir, 1998) ( $n=21$ ) were included in an analog OCD group. This cut-off is associated with an 80% sensitivity and 80% specificity for detecting a DSM-IV diagnosis of OCD (Foa et al., 1998). This group consisted of 12 females (57.1%) and 9 males (42.9%) and had a racial distribution similar to the full sample [African American (23.8%), Hispanic (4.8%), Asian American (14.3%), Caucasian (23.8%), other race (23.8%), chose not to disclose their race (9.5%)]. The average age of the analog OCD group was 19.3 years ( $SD=1.5$ ).

Participants scoring 0 or 1 on the OCI distress scale ( $n=26$ ) were used as a control sample in relevant analyses. As OC symptoms are common among healthy individuals (Gibbs, 1996), this cut-off was chosen to represent an extreme group, but also one that was similar in size to the analog OCD group. This group consisted of 15 females (57.7%) and 11 males (42.3%) and had a racial distribution similar to the full sample [African American (15.4%), Hispanic (7.7%), Asian American (23.1%), Caucasian (42.3%), other race (7.7%), chose not to disclose their race (3.8%)]. The average age of the control group was 19.8 years ( $SD=3.5$ ). The OCD and control groups did not significantly differ by race [Caucasian vs. all others:  $\chi^2(1, N=47)=1.77, p=.18$ ], gender [ $\chi^2(1, N=47)=.001, p=.97$ ], or age [ $t(45)=.64, p=.52$ ].

### 2.2. Measures

The distress associated with OC symptoms was assessed by the *Obsessive-Compulsive Inventory* (OCI; Foa et al., 1998). The 42 items measure a broad selection of intrusive thoughts and compulsions including washing, checking, ordering, obsessing, hoarding and mental neutralizing. Items were scored from zero (not at all) to four (extremely). Retest-reliability of OCI scores across two weeks was high in previous research ( $r=.87$ ; Foa et al., 1998). In the current sample, internal consistency was strong ( $\alpha=.96$ ).

Symptoms of worry were measured by the *Penn State Worry Questionnaire* (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990).

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات