



Contents lists available at ScienceDirect

Journal of Behavior Therapy and Experimental Psychiatry

journal homepage: www.elsevier.com/locate/jbtep



A comprehensive examination of delayed emotional recovery in borderline personality disorder



Skye Fitzpatrick, Janice R. Kuo*

Ryerson University, Department of Psychology, 350 Victoria Street, Toronto, Ontario M5B 2K3, Canada

ARTICLE INFO

Article history:

Received 22 February 2014
Received in revised form
21 October 2014
Accepted 9 November 2014
Available online 18 November 2014

Keywords:

Borderline personality disorder
Emotion dysregulation
Emotion regulation
Emotional recovery

ABSTRACT

Background and objectives: Despite growing attention to emotion processes in borderline personality disorder (BPD), little research has examined delayed emotional recovery (i.e., long-lasting emotions after the termination of an emotionally evocative stimulus) in this population. The extant data on delayed emotional recovery in BPD are limited by a lack of assessment across a range of indices and emotions. The present study addresses these gaps by comparing emotional recovery between individuals with BPD, social anxiety disorder (SAD), and healthy controls (HCs) using a multi-modal assessment approach.

Methods: Participants underwent fear, anger, and sadness inductions followed by a 5-min “washout” phase wherein emotional recovery was assessed via self-report, respiratory sinus arrhythmia (RSA), and skin conductance responses (SCR).

Results: After controlling for state dissociation, the BPD and SAD group exhibited decreases in RSA, while the HC group showed no changes in RSA after the anger induction only. Groups did not differ in rate of emotional recovery across self-report, RSA, or SCR after fear and sadness inductions.

Limitations: The present study is limited by a solely female and small sample, and the short time frame in which emotional recovery was assessed.

Conclusions: Findings indicate that individuals with BPD generally do not exhibit delayed emotional recovery, but may show decreases in parasympathetic activity during the recovery period after experiencing anger. However, this pattern may not be specific to this disorder.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

Borderline personality disorder (BPD) is a serious health concern, as 84% of individuals with BPD exhibit suicidal behaviors (Soloff, Lynch, & Kelly, 2002) and 10% commit suicide (Paris & Zweig-Frank, 2001). Theorists posit that BPD is a disorder of various emotional disturbances (e.g., Baird, Veague, & Rabbitt, 2005; Bradley & Westen, 2005; Linehan, 1993; Selby & Joiner, 2009) including sensitivity to emotional stimuli, magnitude and speed of an emotional response, and emotional recovery (Davidson, 1998). Accordingly, a wealth of research has investigated sensitivity and magnitudes of emotional responding in BPD. Findings have been mixed, with some studies reporting heightened sensitivity to emotional stimuli and magnitude of emotional responses in BPD (Austin, Riniolo, & Porges, 2007; Baskin-

Sommers, Vitale, MacCoon, & Newman, 2012; Domes, Grabe, Czeschnek, Heinrichs, & Herpertz, 2011; Glaser, Van Os, Mengelers, & Myin-Germeys, 2008; Gratz, Rosenthal, Tull, Lejuez, & Gunderson, 2010; Herpertz et al., 2000; Herpertz, Kunert, Schwenger, & Sass, 1999; Lobbetael & Arntz, 2010; Lynch et al., 2006; Sadikaj, Russell, Moskowitz, & Paris, 2010; Tragesser, Lipman, Trull, & Barrett, 2008) and others indicating no differences in sensitivity to emotional stimuli and magnitudes of emotional responding between BPD or high BPD feature youth compared to other groups (e.g., Jovev et al., 2011; Kuo & Linehan, 2009; Staebler, Gebhard, Barnett, & Renneberg, 2009).

The mixture of findings to date may be due to methodological differences across studies such as variability in the types of stimuli and indices used to assess emotional responding. Moreover, whereas some studies elicited “general” negative emotional responding using generalized negative emotion inductions (e.g., Austin et al., 2007; Gratz et al., 2010), others elicited specific emotions such as fear, anger, and sadness (e.g., Baskin-Sommers et al., 2012; Kuo & Linehan, 2009). Emerging evidence suggests

* Corresponding author. Tel.: +1 416 979 5000x2624.
E-mail address: jkuo@psych.ryerson.ca (J.R. Kuo).

that some alterations in emotion-related processes in BPD might be specific to the emotion elicited or the context used to elicit it. Indeed, studies have suggested that individuals with BPD may show elevated magnitudes of emotional responding in response to fear, anger, and sadness inductions (Koenigsberg et al., 2002; Kuo, Neasciu, Fitzpatrick, & MacDonald, 2014). Other studies have shown that BPD-relevant content such as themes of abuse or neglect elicits heightened magnitudes of emotional responding in BPD (e.g., Lobbstaël & Arntz, 2010). Thus, specificity, and in particular emotion specificity, may be a critical component to evaluating emotion dynamics in this population.

1.1. Emotional recovery in BPD

In contrast to the research base on sensitivity and magnitude of emotional response, little research has examined delayed emotional recovery in BPD. Emotional recovery refers to “moment-to-moment” rates of decrease in emotional responding after the termination of an emotionally-evocative stimulus (Davidson, 1998). Emotional recovery is similar to slow return to baseline, which has also been cited in theories of BPD (Linehan, 1993), but is a distinct concept. Return to baseline refers to the extent to which, following an emotion induction, one returns to their baseline level of arousal from prior to the emotion induction. Conversely, emotional recovery reflects *rate of change*, or slope, after the termination of an emotion induction. Thus, though they capture similar phenomena, examining emotional recovery reflects an assessment of moment-to-moment emotional responding over time (i.e., emotional response trajectories).

Several BPD theories underscore the relevance of some form of delayed reductions in emotional responding following an emotion induction, whether it be slow return to baseline or emotional recovery. For example, while Linehan (1993) has posited that BPD is characterized by slow return to baseline, Selby and Joiner (2009) posit that BPD is characterized by ruminative feedback loops, which results in the maintenance or increase in emotional responding after emotion evocation. Several studies have examined emotional recovery in BPD, and the earliest ones primarily used self-report. Gratz et al. (2010) assessed emotional trajectories after a generalized stressor and reported no differences between individuals with BPD and outpatients without a personality disorder in change in self-reported shame, anxiety, irritability, and hostility from their peak intensity during the stressor to 5-min post-stressor (Gratz et al., 2010). Jacob et al. (2009) found no differences between individuals with BPD, major depressive disorder, and healthy controls (HCs) in change in self-reported anger, joy, shame, anxiety, and sadness during, 3 min, and 6 min after hearing an anger-inducing story (Jacob et al., 2009). More recently, Scheel et al. (2013) assessed changes among individuals with BPD, major depressive disorder, and HCs in self-reported shame, anger, anxiety, sadness, joy, annoyance, and boredom immediately after, and 3, 6, and 8 min after a shame induction. Similar to the other studies, there were no between-group differences in change across time. While the assessment of several different emotions is a strength of Jacob et al.'s (2009) and Scheel et al.'s (2013) investigations, these authors only examined emotional recovery in response to inductions targeting anger and shame, respectively. Thus, it is unclear whether their findings are generalizable across other emotions. Additionally, these studies examined change between only two or three assessment points separated by lengthy periods of time (e.g., 3 min; Jacob et al., 2009) and thus might not have sufficiently captured the more nuanced “moment-to-moment” change that is central to the emotional recovery construct.

Four studies examining emotional recovery in BPD have incorporated physiological assessment. Hazlett et al. (2012) reported

that individuals with BPD exhibit a prolonged amygdala blood oxygen level dependent response curve across a 30-s period following negative, pleasant, or neutral image presentation compared to schizotypal personality disorder and HC groups. These authors also controlled for dissociation, which is common in BPD (Ross, 2007) and can dampen physiological indices of emotional responding (Ebner-Priemer et al., 2005). It is important to note that, in this study, images continued to be presented during the 30-s period in which emotional recovery was assessed. Thus, it is likely that these findings are confounded by other emotions that were elicited during this time frame. Scott, Levy, and Granger (2012) examined rates of change in cortisol and salivary-alpha amylase (i.e., an indicator of sympathetic activity) while individuals with BPD, trait-matched HCs (i.e., HCs with comparable scores to the BPD group on negative affect and impulsivity), and non-trait-matched HCs gave a speech and performed tasks in front of “judges.” After controlling for levels of dissociation, there were no group differences in rate of change in cortisol and salivary-alpha amylase across five 10-min intervals following the stressor (Scott et al., 2012). Weinberg, Klonsky, and Hajcak (2009) compared individuals high in BPD features with HCs in rate of change in respiratory sinus arrhythmia (RSA; a measure of parasympathetic responding; Beauchaine, 2001) and cardiac sympathetic index (i.e., sympathetic measure based on heart rate variability; Toichi, Suigura, Murai, & Sengoku, 1997) across 5-min periods before, during, and after negative feedback stressors. The authors found no between-group differences in rate of change for either index. In addition, examination of a subset of participants indicated that the groups did not differ in change in self-reported frustration from before, during, and after the stressors. While a notable strength of this study includes the use of multiple indicators of emotional responding, the authors did not assess formal diagnoses or emotion specificity, and self-reported changes were only examined in a small subsample of participants.

Moreover, though it is notable that some studies have incorporated clinical control groups such as outpatients without a personality disorder (Gratz et al., 2010) or individuals with depression (Jacob et al., 2009; Scheel et al., 2013), none of the studies to date have included an anxiety disorder clinical control group. Emerging research highlights that anxiety disorders may also be characterized by alterations in emotion-related processes such as heightened negative emotional intensity (Brown, Chorpita, & Barlow, 1998) and the tendency to engage in suppressive emotion regulation behaviors (Campbell-Sills, Barlow, Brown, & Hofmann, 2006). In light of this, comparing emotional recovery across BPD, HC, and an anxiety disorder group would help delineate whether delayed emotional recovery is unique to BPD, or is a pattern that is shared with other disorders also characterized by alterations in emotion dynamics.

Thus, using an existing data set previously collected to assess magnitudes of emotional reactions in BPD (Kuo & Linehan, 2009), the current study addressed the limitations in the BPD emotional recovery literature to date. We examined whether individuals with BPD demonstrate a slower rate of emotional recovery relative to HCs and individuals with social anxiety disorder (SAD) as indexed by self-report, RSA, and skin conductance responses (SCR; a measure of sympathetic responding; Dawson, Schell, & Filion, 2007) and across three discrete emotion inductions (i.e., fear, anger, and sadness inductions). Dissociative state was also controlled for in all physiological analyses. Consistent with prominent theoretical models of BPD (Linehan, 1993; Selby & Joiner, 2009), we hypothesized that individuals with BPD would exhibit a delayed emotional recovery as indicated by slower rates of decrease in self-reported emotions and SCR, and slower rates of increase in RSA compared to the HC and SAD groups across all inductions.

Download English Version:

<https://daneshyari.com/en/article/7267851>

Download Persian Version:

<https://daneshyari.com/article/7267851>

[Daneshyari.com](https://daneshyari.com)