



Research paper

Expressive flexibility in combat veterans with posttraumatic stress disorder and depression



Rebecca Rodin^{a,b,c,*}, George A. Bonanno^d, Nadia Rahman^b, Nicole A. Kouri^b, Richard A. Bryant^e, Charles R. Marmar^b, Adam D. Brown^{b,f}

^a Michael G. DeGroote School of Medicine, McMaster University, Canada

^b Steven and Alexandra Cohen Veterans Center for Posttraumatic Stress and Traumatic Brain Injury, Department of Psychiatry, New York University Langone Medical Center, United States

^c The Mach-Gaensslen Foundation of Canada, Canada

^d Department of Counseling and Clinical Psychology, Teachers College, Columbia University, United States

^e School of Psychology, University of New South Wales, Australia

^f Department of Psychology, Sarah Lawrence College, United States

ARTICLE INFO

Keywords:

Emotional flexibility
Expressive flexibility
Posttraumatic stress disorder
Major depressive disorder
Veterans

ABSTRACT

Background: A growing body of evidence suggests that the ability to flexibly express and suppress emotions (“expressive flexibility”) supports successful adaptation to trauma and loss. However, studies have yet to examine whether individuals that meet criteria for posttraumatic stress disorder (PTSD) or depression exhibit alterations in expressive flexibility. The present study aims to test whether lower levels of expressive flexibility are associated with PTSD and depression in combat-exposed veterans.

Methods: Fifty-nine combat veterans with and without PTSD completed self-report measures assessing symptoms of depression, PTSD, and combat exposure. Participants also completed an expressive flexibility task in which they were asked to either enhance or suppress their expressions of emotion while viewing affective images on a computer screen. Expressive flexibility was assessed by both expressive enhancement ability and expressive suppression ability.

Results: Repeated measures ANOVA's showed that both PTSD and depression were associated with lower levels of emotional enhancement ability. In addition, a series of linear regressions demonstrated that lower levels of emotional enhancement ability were associated with greater symptom severity of PTSD and depression. The ability to suppress emotional responses did not differ among individuals with and without PTSD or depression.

Limitations: of the study include a cross-sectional design, precluding causality; the lack of a non-trauma exposed group and predominantly male participants limit the generalizability to other populations.

Conclusions: Alterations in expressive flexibility is a previously unrecognized affective mechanism associated with PTSD and depression. Clinical strategies aimed at enhancing emotional expression may aid in the treatment of these disorders.

1. Introduction

It is now well established that a majority of individuals maintain healthy functioning in the wake of a traumatic event, but a significant minority will develop mental health issues, such as posttraumatic stress disorder (PTSD) and major depressive disorder (MDD; e.g., Bonanno et al., 2004; Breslau, 2009; Kessler et al., 1995). There is considerable comorbidity between PTSD and MDD (e.g., Breslau et al., 1997; Caramanica et al., 2014; Kessler et al., 1995; Rytwinski et al., 2013), which has been reflected in recent studies reporting that US veterans who served in Iraq and Afghanistan are at elevated risk for both

disorders (Hoge et al., 2004; Kang and Hyams, 2005; Seal et al., 2007; Tanielian and Jaycox, 2008). Developing a better understanding of the mechanisms that underlie both PTSD and depression are critical, as the presence of both disorders in veterans has been linked with greater economic, social, and personal burden (e.g., Kramer et al., 2003; McCrone et al., 2003; Zatzick et al., 1997).

Over the past decade a growing body of research has been aimed at identifying shared mechanisms and risk factors underlying both PTSD and MDD (for reviews see: Flory and Yehuda, 2015; Stander et al., 2014). These include a history of childhood abuse, high levels of neuroticism, and low levels of extraversion (e.g., for a review see: Flory

* Correspondence to: 2 Undermount Avenue, Apt 1a, Hamilton, ON L8P 3Z6, Canada.
E-mail address: rebecca.rodin@medportal.ca (R. Rodin).

and Yehuda, 2015). More broadly, initiatives such as the National Institute of Mental Health's (NIMH) Research Domain Criteria (Cuthbert and Insel, 2013) emphasize the importance of identifying neurobiological, affective, and cognitive processes that underlie trauma-related psychopathology.

A growing body of research suggests that difficulties in emotion regulation may be associated with both PTSD and MDD. For example, depressed individuals exhibited difficulties identifying, tolerating, and modifying negative emotions (Campbell-Sills et al., 2009; Rude and McCarthy, 2003) and longitudinal findings have shown that deficits in emotion regulation are associated with greater depressive symptom severity over time (Kraaij et al., 2002). Furthermore, PTSD has also been associated with impairments in emotion regulation (e.g., Cloitre et al., 2002, 2005; Tull et al., 2007). Deficits in emotion regulation have been linked with fear conditioning (Berking and Wupperman, 2012) and individuals with PTSD have difficulty employing emotion regulation strategies (Cloitre et al., 2005; Tull et al., 2007). Despite the growing number of findings suggesting a link between emotion regulation and PTSD and MDD, it has been recently suggested that the concept of emotion regulation has had limited impact on the understanding and treatment of these clinical disorders. This has been, in part, due to the reliance on self-report measures used in such studies (Berking and Wupperman, 2012).

A newer, emergent body of research has been addressing these limitations through the development of experimental tasks that measure emotional flexibility performance across situational contexts. Bonanno and Burton (2013) proposed that emotional flexibility in such contexts is comprised of three sequential components: 1) sensitivity to context, 2) availability of a diverse repertoire of emotion regulation strategies, and 3) responsiveness to feedback. They postulated that deficits in any of these areas might increase vulnerability to stress-related psychopathology. Extending this reasoning, Levy-Gigi and colleagues (2015) employed a behavioral task to examine sensitivity to context in firefighters with and without PTSD. They found that those with PTSD were less able to identify the appropriate regulatory strategy for a given stimulus (Levy-Gigi et al., 2015).

Another behavioral paradigm that has been used to experimentally assess positive adaptation to stress and adversity is that of expressive flexibility, recently conceptualized as the ability to both enhance and suppress emotional expression as demanded by situational constraints (Gupta and Bonanno, 2011). In a study of New York City university students exposed to the September 11th terrorist attacks, Bonanno et al. (2004) presented participants with affective images and instructed them to suppress or enhance their emotional responses to the stimuli. Observer ratings of the facial expressions of these participants showed that greater difficulties expressing and suppressing their emotional response were associated with poor long-term psychological adjustment (Bonanno et al., 2004; Westphal et al., 2010). A similar experimental study among bereaved adults who had recently lost a spouse demonstrated that increased levels of emotional flexibility were less likely to meet criteria for complicated grief (Gupta and Bonanno, 2011).

The construct of expressive flexibility may be particularly germane to PTSD and MDD, as these disorders are characterized, in part, by affect dysregulation and social isolation (American Psychiatric Association, 2000). In this regard, Gupta and Bonanno (2011) suggested that the ability to appropriately enhance or suppress emotions may aid emotion regulation, foster social support, and provide important complimentary feedback in social interactions. However, no previous studies have yet examined expressive flexibility in individuals with depression and/or PTSD.

The current study was designed to experimentally examine potential alterations in expressive flexibility associated with PTSD and MDD among combat-exposed veterans. We hypothesized that combat-exposed veterans with PTSD and/or MDD would exhibit less expressive flexibility than those without PTSD and MDD.

2. Method

2.1. Participants

Fifty-nine Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) combat veterans with and without PTSD were recruited for this study. Veterans were recruited from the Mental Health Services of the Manhattan, Bronx, and Brooklyn Veterans Affairs Medical Centers, other regional VA medical centers, veterans Service Organizations, National Guard, reservist agencies and organizations, and from the general community. Recruitment methods included flyers, in-person presentations, media advertisements, internet postings (e.g. Craigslist) and referrals from clinicians. All study procedures were approved by NYU's IRB and all participants provided written informed consent. Participants were excluded if they had a lifetime history of psychosis, bipolar disorder, major depression with psychotic features, obsessive compulsive disorder, or were less than two months stable on psychiatric medications. Participants with exposure to trauma within the past month or with active suicidal ideation were also excluded. Participants received \$15 USD for their participation.

2.2. Procedure

2.2.1. Posttraumatic Diagnostic Scale (PDS, Foa et al., 1997)

The PDS is a 17-item self-report comprised of DSM-IV PTSD criteria. Each response is rated on a 4-point scale ranging from 0 (not at all) to 3 (almost always). Individuals screened positive for PTSD diagnosis if they scored ≥ 24 (Sheeran and Zimmerman, 2002).

2.2.2. Beck Depression Inventory-II (BDI-II, Beck et al., 1996)

The BDI-II is a 21-item self-report measure of depression that assesses the severity of various cognitive, behavioral, and physiological symptoms associated with depression. Participants screened positive for depression if they scored ≥ 13 .

2.2.3. Combat Exposure Scale (CES, Keane et al., 1989)

The CES is a 7-item self-report measure assessing exposure to combat on a scale of 1 (e.g. no) to 5 (e.g. more than 50 times).

2.2.4. Expressive flexibility task (Bonanno et al., 2004)

The procedures for this task were identical to those used in Bonanno et al.'s (Bonanno et al., 2004) study with the exception of the memory task. Participants were seated before a desktop computer and filmed through a one-way mirror positioned above their line of vision. Software displayed blocked sequences of five digitized picture stimuli selected from the International Affective Picture System (IAPS, Lang et al., 1999) and balanced across blocks for valence and arousal ratings based on pre-established norms. Within each block, a fixation cross first appeared, followed immediately by a masking stimulus (an XXX pattern) for 500 ms. One of the stimulus pictures was then presented for 10 s. Stimulus offset were followed by 4 s of blank screen before the onset of another trial. Practice sessions involved viewing randomly presented blocks of positive or negative stimuli and then rating the degree to which that each block evoked negative and positive affect, each rated on a seven-point scale. Following practice trials, participants were told that they were being filmed because another research participant would be watching them from a video monitor in an adjacent room. The participants were told that this other participant could see, but not hear, them and would be attempting to gauge the participants' emotional reactions based on their facial expressions. The participants were also told that the monitor would be turned off for some of the trials (i.e., sometimes the other team member would not be able to view them) and that they would always be informed when the monitor was on and when it was off. Finally, participants were informed that when the experiment began, the computer would (1) sometimes ask them to enhance their expression of emotion, so the

Download English Version:

<https://daneshyari.com/en/article/6229516>

Download Persian Version:

<https://daneshyari.com/article/6229516>

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