

Morally Injurious Experiences and Mental Health: The Moderating Role of Self-Compassion

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Introduction: Military veterans are at heightened risk for developing mental and behavioral health problems. Morally injurious combat experiences have recently gained empirical and clinical attention following the increased rates of mental and behavioral health problems observed in this population. **Objective:** Extending extant research, the current investigation assessed the relationship between morally injurious experiences and mental and behavioral health outcomes. Furthermore, it examined the potential protective role of self-compassion in these relationships. **Method:** Participants were 203 military veterans (M age = 35.08 years, 77.30% male) who completed online questionnaires. **Results:** Analyses indicated that self-compassion significantly moderated the relationship between exposure to morally injurious experiences and posttraumatic stress disorder, depression severity, and deliberate self-harm versatility. **Conclusions:** These results highlight the potential clinical utility of self-compassion in military mental health, particularly in the context of morally injurious experiences.

Clinical Impact Statement

Military veterans experience various stressors while deployed, one of which is exposure to events that are perceived as morally transgressive. Exposure to morally transgressive events has been linked to various negative outcomes. The current study examined whether the relation between morally injurious event exposure and negative mental health outcomes would be lower for individuals high in self-compassion. We found that individuals high in self-compassion (vs. low) had significantly fewer of these negative mental health symptoms after exposure to these events, including fewer posttraumatic stress disorder symptoms, depression symptoms, and deliberate self-harm versatility. This study emphasized that self-compassion may be an important consideration in military mental health, and more research is needed to examine the potential clinical utility of self-compassion.

Keywords: moral injury, posttraumatic stress disorder, substance misuse, military, self-compassion

Military veterans experience high rates of psychiatric (20% of veterans; Fulton et al., 2015) and behavioral health problems (10% of veterans; Kimbrel, DeBeer, Meyer, Gulliver, & Morissette, 2016; Seal et al., 2011), including posttraumatic stress disorder (PTSD; Hoge et al., 2004), depression (Gadermann et al., 2012), alcohol (Burnett-Zeigler et al., 2011) and drug (Jeffery, Babeu, Nelson, Kloc, & Klette, 2013; Seal et al., 2011) misuse, and deliberate self-harm (DSH; Klonsky, Oltmanns, & Turkheimer, 2003; Bryan & Bryan, 2014). Moreover, findings suggest that military veterans are disproportionately affected by such psychiatric problems and maladaptive behaviors as compared with civil-

ians (Gadermann et al., 2012; Gates et al., 2012; Hoge et al., 2004; Milliken, Auchterlonie, & Hoge, 2007; Seal et al., 2011). Notably, these mental and behavioral health concerns are associated with a wide array of negative outcomes among military veteran populations (e.g., impairment in social and occupational functioning, suicidality; Monson, Taft, & Fredman, 2009; Prigerson, Maciejewski, & Rosenheck, 2001; Bryan, Rudd, Wertenberger, Young-McCaughon, & Peterson, 2015). Thus, it is critical for research to identify factors that contribute to these outcomes among military veterans as well as to identify those that have the potential to alter the strength and direction of these relations. Elucidating these associations can better inform prevention and treatment efforts for this population.

Combat is a robust predictor of mental and behavioral health outcomes (Hoge et al., 2004; Thomas et al., 2010). Yet research and clinical attention on combat-related psychological injuries have been primarily concerned with combat stressors that induce fear (e.g., being ambushed in combat), and the subsequent development of PTSD, a primarily fear-based disorder (American Psychiatric Association, 2013); less attention has been given to combat stressors that are believed to transgress moral and ethical standards of behavior (Litz et al., 2009). The consequences asso-

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ciated with navigating moral and ethical ambiguities of combat have recently gained traction in research and clinical contexts because the perceived failure to adhere to an internalized moral standard has been conceptually and empirically linked to various psychological, spiritual, and existential complications (Drescher et al., 2011; Drescher & Foy, 2008; Litz et al., 2009). Experiences that have the capacity to lead to moral injury are defined as morally injurious events (Litz et al., 2009). These actions can include committing, witnessing, or failing to prevent acts of violence that are perceived as inappropriate or disproportionate (e.g., death to civilians), accidental (e.g., friendly fire), or within-in rank (e.g., military sexual trauma; Drescher et al., 2011). Betrayal-based conceptualizations, as defined by Shay (2014), involve the perceived failure of an authority figure (e.g., military leader) to uphold moral expectations in a high-stakes situation, resulting in a breach of trust and damage to previously held expectations of others (e.g., witnessing a superior violate rules of engagement). These events are considered morally injurious only if there is a perceived violation of a deeply held moral or ethical standard because some individuals are able to contextualize combat-related experiences and justify their actions and the actions of others.

According to the moral injury framework (Litz et al., 2009), these morally injurious experiences are thought to lead to more severe mental and behavioral consequences through an inability to justify morally incongruent experiences. The dissonance between an internal moral standard and morally discrepant behaviors can lead to inner conflict, and the process of reconciliation can have important implications for mental and behavioral outcomes. Specifically, explanatory interpretations of the morally injurious experience that are global (generalized beyond the context), stable (permanent and long lasting), and internal (attributed to dispositional characteristics) are theorized to lead to more severe outcomes. Consistent with this theoretical framework, preliminary findings consistently demonstrate that morally injurious experiences are associated with PTSD and depression symptoms (Bryan et al., 2016; Currier, Holland, & Malott, 2015; Wisco et al., 2017). Furthermore, work evaluating specific transgressive experiences (often considered morally injurious), such as killing in combat, have found that these experiences are related to elevated risk of alcohol and drug misuse (Currier, Holland, Jones, & Sheu, 2014; Maguen et al., 2010) and DSH (Maguen et al., 2011). Hence, there is a need to identify factors that can alter the strength and direction of these associations.

Self-compassion may minimize the negative impact of morally injurious stressors. Self-compassion has been conceptualized by Neff (2003) as an adaptive attitude that involves treating oneself with kindness and understanding during times of hardship, being receptive to both negative and positive emotions without exaggeration or avoidance, and recognizing that suffering, failure, and inadequacy are inevitable human experiences. Research suggests that those who are more self-compassionate are able to approach hardship from a realistic perspective, one that allows them to view themselves accurately but respond with warmth and acceptance instead of overly harsh self-criticism. As a result, self-compassion is thought to counteract negative self-assessments and engender positive feels toward oneself and promote well-being and resiliency from negative outcomes. Notably, self-compassion is less contingent on self-worth or self-enhancement but, rather, is moti-

vated by a sympathetic understanding, acceptance, and caregiving orientation toward the self (Neff, 2003).

Self-compassion has shown clinical relevance (Wilson, Mackintosh, Power, & Chan, 2018), as both a protective factor (Trompetter, de Kleine, & Bohlmeijer, 2017) and through interventions aimed at increasing self-compassion (Mak et al., 2018; Wilson et al., 2018). It has been found to be beneficial in a wide variety of health contexts (MacBeth & Gumley, 2012) and is associated with lower rates of PTSD (Finlay-Jones, 2017; Müller-Engelmann, Schreiber, Kümmerle, Heidenreich, Stangier, & Steil, 2018), depression (Finlay-Jones, 2017; Kaurin, Schönfelder, & Wessa, 2018), alcohol and drug use (Paniagua, Phelps, Rosen, & Potter, 2017), and deliberate self-harm behavior (Xavier, Pinto-Gouveia, & Cunha, 2016). Self-compassion is also associated with various positive experiences that are inversely related to negative emotional experiences, such as greater life satisfaction, emotional intelligence, and social connectedness (Neff, 2003).

Interventions that teach individuals to be more self-compassionate have shown promise in increasing self-compassionate attitudes (Neff & Germer, 2013) and reducing negative mental health symptoms (Kearney et al., 2013) among veterans. Lastly, although self-compassion interventions have yet to be tested among veterans exposed to morally injurious experiences, self-compassion has shown to be efficacious in related constructs, such as trauma-related shame (Müller-Engelmann et al., 2018) and guilt among veterans (Held & Owens, 2015), both of which are considered to be important drivers in moral injury (Vermetten & Jetly, 2018).

Self-compassion may then be particularly relevant for counteracting the mechanisms that drive the relation between moral injurious experiences and negative mental and behavioral health outcomes. Specifically, because self-compassion is nonevaluative in nature and involves recognition and acceptance of negative aspects of self (Leary, Tate, Adams, Allen, & Hancock, 2007; Neff, 2003), it may mitigate the formation of overly negative self-evaluations that can precipitate the development of mental and behavioral health problems following morally injurious events. These negative evaluations may form through attributional processes about the causes and consequences of such events. Specifically, the perpetration of a transgression (or the failure to prevent a transgressive act) may challenge a person's self-perceptions because it may be interpreted as an indication of a lack of self-worth or as a failure to act in a just manner. Self-compassionate individuals may be more capable of approaching morally challenging experiences from a more understanding and less critical perspective because self-compassion is incompatible with self-directed hostilities (Gilbert & Procter, 2006). Similarly, self-compassion involves the understanding that humans are flawed, and feelings of failure, inadequacy, and suffering are inevitable. This acknowledgment may help contextualize an individual's involvement with morally injurious experiences because it may help integrate the experience into preexisting standards of behavior through an understanding that they are an imperfect human who had to make tough decisions in a challenging situation. As a result, this may buffer against strong reactions in the aftermath of these experiences.

The goal of the current study was to examine the relation between morally injurious experiences and mental (i.e., PTSD and depression) and behavioral (i.e., alcohol and drug misuse and deliberate self-harm) health outcomes. Numerous studies have demonstrated that combat-exposed veterans are at an increased

risk for developing numerous psychological disorders and behavioral problems, with PTSD, depression, alcohol and drug misuse, and deliberate self-harm being the most notable (e.g., Bonde et al., 2016; Fulton et al., 2015; Kimbrel et al., 2016; Seal et al., 2011). Extending research, we examine the moderating role of self-compassion in the relation between exposure to moral injurious experiences and these important mental and behavioral health outcomes. We hypothesized that morally injurious experiences would be positively associated with mental and behavioral health outcomes. We expected that this relation would be weaker among those with higher (vs. lower) self-compassion.

Method

Participants and Procedures

The sample included military veterans who had deployed to Iraq or Afghanistan. Participants were primarily male ($n = 157$, 77.30%) and White ($n = 143$, 70.40%) with a mean age of 35.08 years. Majority of the sample indicated that they were in the Army ($n = 106$, 52.20%), with the remaining indicating Air Force ($n = 39$, 19.20%), Navy ($n = 32$, 15.80%), and Marine Corps ($n = 26$, 12.80%).

An online survey was administered using Qualtrics software and was advertised on Amazon's Mechanical Turk (MTurk) platform. MTurk is an Internet marketplace that is capable of generating reliable data (Buhrmester, Kwang, & Gosling, 2011; Shapiro, Chandler, & Mueller, 2013). The study was advertised as a survey about combat experiences and moral, emotional, and psychological well-being. Validation measures were included in the prescreen to verify military status. Participants were first asked to respond to questions about their service (e.g., branch of service, deployments). Participants that indicated no prior military service or selected 0 for the number of deployments were not eligible to participate. Second, following recommendations by Lynn and Morgan (2016), participants were asked to respond to military-specific questions that are not generally common knowledge to civilians (e.g., "What is the acronym for the locations where final physicals are taken prior to shipping off for basic training?"). In addition to verifying military status, questions were included throughout the survey to verify that participants were reading and comprehending the questions being asked (e.g., "Please select the color red from the options given"). To ensure quality of the data, participants who failed to correctly respond to these questions were excluded. The average time to complete the survey took about 45 min. Participants were compensated \$2.00 for their participation, which is comparable with other rates of compensation used on MTurk.

To ensure the quality of the data, the data were carefully evaluated. A total of 696 individuals accessed the survey. Of those, 431 were ineligible for the study based on the prescreen questions, and 62 failed attention checks. The remaining sample included 203 participants. The study procedures were approved by the Institutional Review Board at [redacted].

Measures

Morally injurious events. The Moral Injury Events Scale (Nash et al., 2013) is a 9-item self-report scale measuring exposure to morally injurious experiences: perceived transgressions com-

mitted by self (e.g., "I am troubled by having acted in ways that violated my own morals or values"), others (e.g., "I am troubled by having witnessed others' immoral acts"), and betrayal (e.g., "I feel betrayed by fellow service members whom I once trusted"). Responses are given on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). A score was obtained by summing all items; Higher scores reflect greater exposure to events that have the capacity to lead to moral injury. The scale has shown good internal consistency and convergent validity (Bryan et al., 2016; Nash et al., 2013). Reliability in the current study is $\alpha = .93$.

PTSD symptoms. The PTSD Checklist (PCL-5; Weathers et al., 2013) is a 20-item self-report assessment used to assess *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition, criteria for PTSD. Participants were asked to indicate how often they have been bothered by each of the symptoms over the past month in reference to their most stressful deployment-related experience. Responses are given on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). A score was calculated by summing all the items; higher scores indicated greater PTSD symptom severity. The PCL-5 has shown good reliability and validity (Blevins, Weathers, Davis, Witte, & Domino, 2015). In the current study, the PCL-5 demonstrated excellent reliability ($\alpha = .97$).

Depression symptoms. The Patient Health Questionnaire (Kroenke & Spitzer, 2002) is a 9-item self-report scale assessing depressive symptoms over the last 2 weeks (e.g., "Little interest or pleasure in doing things"). Respondents are asked to respond to questions on a 3-point Likert scale ranging from 0 (*not at all*) to 3 (*nearly every day*). A score was obtained through summing the items; higher scores indicated greater depression severity. The Patient Health Questionnaire demonstrated excellent reliability in the current study ($\alpha = .93$).

Drug misuse. The Drug Abuse Screening Test (Skinner, 1982) is a 10-item self-report assessment used to screen for potential abuse on a wide variety of substances other than alcohol. Respondents are asked to indicate (yes/no) whether they have experienced certain problems associated with drug use in the past 12 months (e.g., inability to stop using drugs). A composite score of drug misuse was obtained by summing the items; higher scores indicated greater drug misuse. The Drug Abuse Screening Test demonstrated decent reliability in the current study ($\alpha = .69$).

Alcohol misuse. The Alcohol Use Disorders Identification Test (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998) is a 10-item self-report scale that assesses alcohol consumption, behaviors, and problems. (e.g., "How often do you have six or more drinks on one occasion?"). Responses are given a score between 0 and 4. A score was calculated by summing all the items; higher scores indicated greater alcohol misuse. The Alcohol Use Disorders Identification Test has demonstrated good test-retest reliability and internal consistency (Searle et al., 2015) and excellent reliability in the current study ($\alpha = .91$).

Deliberate self-harm. The Deliberate Self Harm Inventory (Gratz, 2001) is a 17-item self-report scale assessing different forms of DSH (e.g., cutting, burning). Responses were dichotomized to indicate history of DSH ($n = 86$). Additionally, a DSH versatility score was computed by summing all items for a total score of the number of unique forms of DSH.

Self-compassion. The Self-Compassion Scale (Neff, 2003) is a self-report questionnaire with 26 items assessing individuals in six areas: self-kindness (e.g., "I try to be understanding and patient

toward those aspects of my personality I don't like"), self-judgment (e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), common humanity (e.g., "I try to see my failings as part of the human condition"), isolation (e.g., "When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world"), mindfulness (e.g., "When something painful happens, I try to take a balanced view of the situation"), and overidentification (e.g., "When I'm feeling down, I tend to obsess and fixate on everything that's wrong"). Responses are given on a 5-point Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). A total sum score was computed. Higher scores indicated more self-compassion. The Self-Compassion Scale has been shown to have good convergent and discriminant validity (Neff, 2003) and good internal consistency in both civilian (Neff, 2003) and military samples (Meyer et al., 2018). Reliability in the current study was excellent ($\alpha = .90$).

Data Analysis

Preliminary analyses were conducted to evaluate assumptions of skewness and kurtosis among the primary study variables. Descriptive information and Pearson correlations were calculated to examine correlations among the primary study variables. For the primary analysis, six moderation analyses were conducted to test the main and interactive effects of exposure to morally injurious experiences and self-compassion on PTSD, depression, alcohol misuse, drug misuse, DSH history, and DSH versatility. First, we standardized the primary variables to each have a mean of 0 and a standard deviation of 1. Second, we created an interactive term by creating a variable equal to the product of morally injurious experiences and self-compassion. For each of the analyses, the standardized main variables (morally injurious experiences and self-compassion) and the interaction variable (morally injurious experiences $\times$ self-compassion) were entered into the analysis as predictors. Next, each of the outcomes of interest was added into a separate analysis. A significant interaction indicated that self-compassion moderated the relation between morally injurious experiences and the respective mental or behavioral health outcome.

Results

Preliminary Analyses

See Table 1 for descriptive information and correlations. Morally injurious events were significantly positively associated with PTSD,

$r = .64, p < .001$, depression, $r = .59, p < .001$, alcohol misuse, $r = .42, p < .001$, drug misuse, $r = .39, p < .001$, DSH history, $r = .23, p = .001$, and DSH versatility, $r = .27, p < .001$, and significantly negatively related to self-compassion, $r = -.21, p = .001$.

Primary Analyses

See Table 2 for unstandardized estimates, standard errors, t scores, and p values.

Mental health outcomes. The main and interactive associations of morally injurious experiences and self-compassion predicted PTSD. Analysis of simple slopes revealed that morally injurious experiences were associated with PTSD when participants were low, $t = 10.07, p < .001$, and high, $t = 5.60, p < .001$, in self-compassion, although the latter relation was weaker (see Figure 1). The main and interactive associations of morally injurious experiences and self-compassion also predicted depression. Analysis of simple slopes revealed that morally injurious experiences were associated with depression when participants were low, $t = 9.18, p < .001$, and high, $t = 4.33, p < .001$, in self-compassion, although the latter relation was weaker (see Figure 2).

Behavioral health outcomes. Morally injurious experiences and self-compassion were significant predictors of alcohol and drug misuse and DSH history. However, the interaction of morally injurious experiences and self-compassion did not predict alcohol or drug misuse or DSH history. Conversely, the main and interactive associations of morally injurious experiences and self-compassion predicted DSH versatility. Analysis of simple slopes revealed that morally injurious experiences were associated with DSH versatility when participants were low, $t = 4.14, p < .001$, but not high, $t = .56, p = .577$, in self-compassion (see Figure 3).

Discussion

The goal of the current study was to assess the relation between morally injurious experiences and mental and behavioral health outcomes in a veteran sample as well as to evaluate the moderating role of self-compassion in these associations. Self-compassion was found to moderate the relations between morally injurious experiences and PTSD, depression, and DSH versatility. Although preliminary, these results suggest the potential clinical utility of targeting self-compassion in treatments aimed at reducing mental and behavioral health outcomes among individuals who report morally injurious experiences; however, additional research is needed to evaluate the clinical utility of self-compassion.

Table 1
Intercorrelations Among Morally Injurious Experiences, Self-Compassion and Mental and Behavioral Health Outcomes

Variables	1	2	3	4	5	6	7	<i>M (SD)</i>	Range
1. Morally injurious experiences	—	—	—	—	—	—	—	26.58 (12.66)	7–54
2. Posttraumatic stress symptoms	.64**	—	—	—	—	—	—	28.47 (22.27)	0–80
3. Depression	.59**	.81**	—	—	—	—	—	9.18 (7.61)	0–27
4. Alcohol misuse	.42**	.49**	.53**	—	—	—	—	10.39 (9.14)	0–40
5. Drug misuse	.39**	.44**	.48**	.64**	—	—	—	2.19 (1.90)	0–9
6. Deliberate self-harm history	.23**	.36**	.38**	.27**	.21*	—	—	—	0–1
7. Deliberate self-harm versatility	.27**	.34**	.36**	.30**	.28**	.63**	—	1.31 (2.41)	0–17
8. Self-compassion	-.22**	-.29**	-.41**	-.27**	-.21*	-.18*	-.25**	80.23 (19.50)	29–130

* $p < .05$. ** $p \leq .001$.

Table 2
Summary of Moderation Analyses

Variables	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Posttraumatic stress disorder symptom severity				
Self-compassion	-4.16	1.23	-3.24	.001
Morally injurious experiences	13.19	1.21	10.92	.001
Self-compassion × morally injurious experiences	-3.42	1.19	-2.87	.005
Depression symptom severity				
Self-compassion	-2.48	.42	-5.88	.001
Morally injurious experiences	3.90	.41	9.44	.001
Self-compassion × morally injurious experiences	-1.31	.41	-3.22	.002
Alcohol misuse				
Self-compassion	1.67	.61	-2.75	.006
Morally injurious experiences	3.47	.60	5.83	.001
Self-compassion × morally injurious experiences	-.06	.59	-.09	.922
Drug misuse				
Self-compassion	-.27	.13	-2.04	.043
Morally injurious experiences	.68	.13	5.32	.001
Self-compassion × morally injurious experiences	-.12	.13	-.97	.331
Deliberate self-harm versatility				
Self-compassion	-.20	.06	-3.14	.002
Morally injurious experiences	.21	.06	3.41	.001
Self-compassion × morally injurious experiences	-.16	.06	-2.63	.009
	<i>b</i>	<i>SE</i>	Wald	<i>p</i>
Deliberate self-harm history				
Self-compassion	-.33	.17	3.99	.046
Morally injurious experiences	.41	.16	7.06	.008
Self-compassion × morally injurious experiences	-.16	.17	.92	.338

Note. Boldfaced text represents significant findings.

As expected, morally injurious experiences, self-compassion, and their interaction significantly predicted PTSD and depression symptom severity. Regarding the interaction, those high in both morally injurious experiences and self-compassion experienced less severe PTSD and depression symptoms, as compared with those high in morally injurious experiences and low in self-compassion. These findings further support the protective role of self-compassion and the relevance of self-compassion in combat veteran mental health. Consistent with prior work, self-compassion appears to offer mental health benefits (e.g., MacBeth et al., 2012) and seems to be associated with lower levels of negative mental health symptoms. Self-compassion may be particularly relevant in

the context of events that hold moral implications because events that can be considered morally transgressive typically involve hostile self-assessments (i.e., self-criticism) and aversive states (i.e., shame and guilt; Tangney, Stuewig, & Mashek, 2007) associated with the appraisal of one's own action or inactions; a self-compassionate perspective may prevent these negative appraisals from becoming internalized. Future work should examine whether teaching individuals who experienced morally injurious events to be self-compassionate can reduce mental health symptoms.

Self-compassion involves a more realistic appraisal of self (Leary et al., 2007) and is considered an emotion regulation

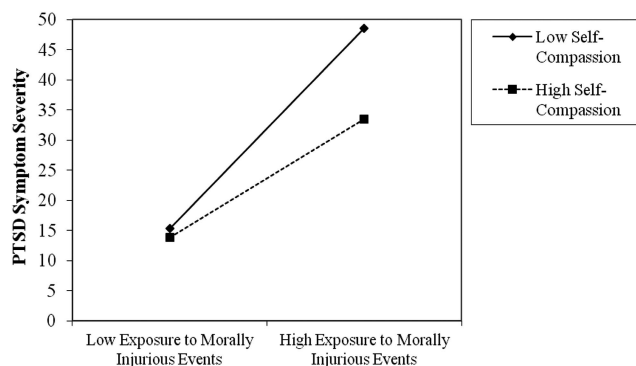


Figure 1. Moral injurious experiences by self-compassion for posttraumatic stress disorder symptom severity.

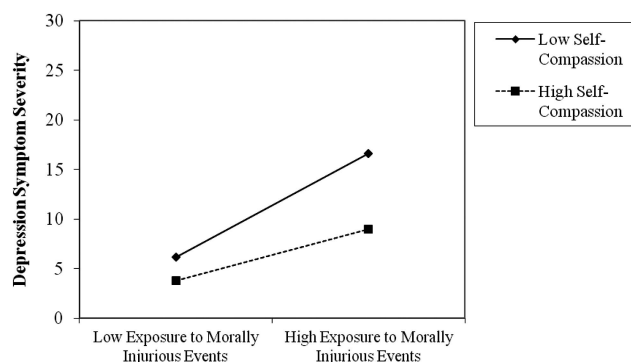


Figure 2. Moral injurious experiences by self-compassion for depression symptom severity.

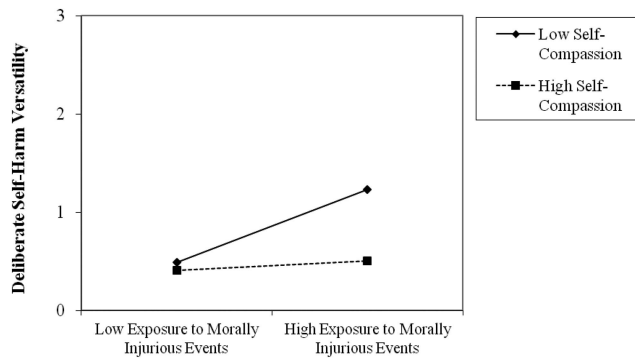


Figure 3. Moral injurious experiences by self-compassion for deliberate self-harm versatility.

strategy (Neff, 2003) and thus may counteract mechanisms that typically contribute to the onset of PTSD and depression and help promote more adaptive coping mechanisms that can limit the duration or severity of trauma-related mental health symptoms. Prior research has shown that self-compassion is a promising construct in trauma-exposed individuals (Thompson & Waltz, 2008). Our findings provide further support for the utility of self-compassion in posttraumatic mental health outcomes as well as suggest that self-compassion may be relevant to combat experiences that involve moral and ethical conflicts. However, more research is needed to examine self-compassion directly in relation to morally injurious experiences. Furthermore, the protective role of self-compassion in these associations may suggest that self-compassionate individuals are able to employ more adaptive coping strategies and are potentially more capable of dealing with aversive and uncomfortable emotional and cognitive experiences, as suggested in previous work (Neff, 2003). These findings highlight the potential clinical utility of self-compassion.

The moderating role of self-compassion in the relation between morally injurious experiences and behavioral health outcomes, specifically drug and alcohol misuse and DSH, was also assessed. Whereas the main effects of both morally injurious experiences and self-compassion were significant for alcohol and drug misuse, self-compassion was not found to moderate the relations between morally injurious experiences and these outcomes. Furthermore, whereas morally injurious experiences and self-compassion were predictive of DSH history and DSH versatility, the interaction between morally injurious experiences and self-compassion was significant for DSH versatility only. Specifically, the relation between morally injurious experiences and DSH versatility was lower for those higher (vs. lower) in self-compassion. This suggests that self-compassion may not have the same protective role when it comes to behavioral health outcomes, although it may be protective against more severe forms of DSH. Future research is needed to better understand the relation of morally injurious experiences and behavioral health outcomes.

Understanding the role of self-compassion in the associations between morally injurious experiences and mental and behavioral outcomes may inform interventions to help veterans cope with morally injurious experiences. Functional differences in the symptoms that characterize morally injurious stressors and traditional fear-based stressors have been theorized (Farnsworth, Drescher,

Evans, & Walser, 2017) and may have important implications for treatment. In the context of common posttraumatic symptoms, avoidance-related behaviors may function to escape or alleviate feelings of shame in the aftermath of morally injurious experiences versus protect against perceived threats to physical safety in fear-based stressors (Farnsworth et al., 2017). Negative trauma-related thoughts often include distorted perceptions, such as the wrongful attribution of self-blame, but in the context of morally injurious events, these trauma-related beliefs may indicate appropriate and accurate evaluations of culpability (Gray, Nash, & Litz, 2017). Although these beliefs may still be distressing, current PTSD interventions commonly used to address these dysfunctional cognitions (cognitive processing therapy [CPT]; Resick, Monson, & Chard, 2016) may not be a suitable approach for addressing these experiences because minimizing instances when perceptions of culpability are actually accurate may, in turn, lead to other patterns of blame and related difficulties (Gray et al., 2017).

However, this assertion has yet to be tested and has faced some opposition (Wachen et al., 2016). For instance, according to Wachen, Dondanville, and Resick (2017), assertions about CPT being an unsuitable approach is based on the false premise that CPT assumes distressing appraisals are inherently inaccurate or faulty. Instead, Wachen et al. (2017) argues that CPT helps guide patients to an accurate interpretation of the situation because misattribution of blame (as noted by Gray et al., 2017) can be harmful. Although the efficacy of CPT in treating moral injuries has yet to be tested, there may be important considerations that need to be taken into account when applying these treatments to individuals exposed to morally injurious events. Overall, more research is needed to address whether current treatments are suitable for addressing morally injurious events as well as identifying approaches that may be efficacious (i.e., teaching self-compassion).

Teaching individuals to be more self-compassionate may be particularly relevant in this context. Self-compassion is often part of mindfulness-based interventions, including mindfulness-based cognitive therapy and acceptance and commitment therapy (Hayes, Strosahl, & Wilson, 2011). Acceptance and commitment therapy, which has been considered an important therapeutic consideration in the context of morally injurious experiences (Farnsworth et al., 2017; Nieuwsma et al., 2015), is a transdiagnostic intervention that utilizes a mindful and value-based approach to achieve psychological flexibility and improve important areas of functioning. It encourages the use of techniques that cultivate aspects of self-compassion (Neff & Tirsch, 2013) by promoting a sense of mindfulness that requires experiencing emotions in a nonjudgmental and balanced perspective, which reflects Neff (2003) conceptualization of self-compassion. Newer approaches (e.g., adaptive disclosure; Litz, Lebowitz, Gray, & Nash, 2015) are also being designed specifically for addressing these morally injurious experiences. One of the goals of this approach is to challenge negative thinking patterns that are contributing to distress (e.g., blame) by promoting forgiveness and compassion (via corrective feedback) instead of trying to change perceptions that may, in fact, be rational. This approach is designed to help individuals forgive past transgressions, thus enabling them to move forward and live a more virtuous life and has shown promise in reducing various negative outcomes (Gray et al., 2012).

There are several important limitations that need to be considered when interpreting these study findings. First, the data are

cross-sectional and correlational; thus, the ability to draw causal inferences is limited. Future studies should implement prospective and longitudinal analysis to build on the current findings and to gain a better understanding of the nature and direction of these relations. Second, the use of self-report measures limits the findings because certain factors may affect an individual's willingness or ability to respond accurately. Future work should incorporate other methods of assessment (e.g., behavioral). Third, individuals were asked to reference their most stressful deployment-related experience when completing the PCL-5; therefore, it is impossible to assess whether the event that was driving the PTSD symptoms was indeed morally injurious. As such, while moral injury and PTSD symptoms are associated, they cannot be directly linked in the current study. Future longitudinal research should test these associations. Finally, the sample was collected using MTurk, which limits generalizability to those who have access to the Internet. Replication of these findings is needed in larger and more diverse military samples (e.g., community and clinical).

Overall, our findings suggest that morally injurious experiences are associated with a wide array of mental and behavioral health outcomes and that self-compassion moderates many of these relations. These results highlight the potential clinical utility of self-compassion and underscores the importance of future longitudinal and intervention research in this area.

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