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# Moral Injury, Suicidal Ideation, and Suicide Attempts in a Military Sample

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Moral injury entails emotional distress associated with perceived violations of one's moral code and has been proposed to be a possible contributor to self-injurious thoughts and behaviors (SITB) among military personnel. Three dimensions of moral injury have previously been empirically derived: transgressions committed by others (Transgressions-Others), transgressions committed by oneself (Transgressions-Self), and perceived betrayal by others (Betrayal). The current study examined the relationship of these dimensions of moral injury with SITB in a clinical sample of 151 active duty military personnel. Transgressions-Other and Transgressions-Self were significantly higher among personnel with a history of suicide attempt relative to history of suicidal ideation and no suicidality (Hedge's  $g$ 's  $> .64$ ). Transgressions-Self was associated with significantly more severe suicidal ideation during the past week ( $p = .018$ ).

*Keywords:* betrayal, military, moral injury, suicidal ideation, suicide, transgressions

The rate of suicides among United States military personnel continues to rise across all branches of service. Suicide is ranked the second leading cause of death in the U.S. Armed Forces and tenth for the general population in the United States (Hoyert & Xu, 2011). Since Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF), the suicide rate of military personnel has more than doubled and has recently surpassed the general population suicide rate despite historical trends for a lower suicide rate among military personnel (Department of Defense, 2011). This trajectory continues to perplex military leaders and the thousands of devastated families left behind. For military veterans who have been exposed to suicide, the emotional turmoil is often experienced through severe depression and posttraumatic stress (Cerel et al., 2013). Given that depression and posttraumatic stress can impair interpersonal relationship and interfere with occupational performance, the effects of suicide can be substantial when multiplied across the many individuals that typically comprise a military unit (Carr, 2011).

Over the past decade, studies have converged on a robust relationship between posttraumatic stress disorder (PTSD) and increased risk for SITB among military personnel and veterans (e.g., Bryan, Clemans, Hernandez, & Rudd, 2013; Jakupcak et al., 2009; LeardMann et al., 2013). Results investigating potential mechanisms that underlie the association of PTSD with SITB among military personnel and veterans have been mixed, however (Bell & Nye, 2007; Guerra, Calhoun, & MIRECC, 2011; Tarrier & Gregg, 2004), which could be due to limitations in traditional models of PTSD. Among military personnel and veterans with PTSD, for instance, experiences such as guilt and shame, negative changes in ethical attitudes and behavior, changes in spirituality, difficulty with forgiveness, and reduced ability to trust others are frequently reported (Drescher et al., 2011; Vargas, Hanson, Kraus, Drescher, & Foy, 2013). Because these experiences have not traditionally been included as diagnostic criteria for PTSD, traumatologists have recently proposed an alternative model for understanding PTSD among military personnel and veterans, referred to as *moral injury* (Drescher et al., 2011; Litz et al., 2009; Maguen & Litz, 2012).

Morally injurious experiences include events in which an individual perpetuates, fails to prevent, bears witness to, or learns about acts that transgress deeply held moral beliefs and experiences (Drescher et al., 2011; Litz et al., 2009 pp. 1-3). As noted by Litz et al., an important condition for moral injury "is an act of transgression which shatters moral and ethical expectations that are rooted in spiritual, cultural-based, organizational, and group-based rules about fairness and the value of life." Early empirical work suggests that experiences characterized by betrayal (e.g., leadership failure, betrayal by peers or by civilians), acts of disproportionate violence (e.g., revenge), excessive violence or cruelty toward civilians (e.g., needless destruction of property, as-

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sault), and violence among peers (e.g., military sexual trauma) are often associated with the signs and symptoms of moral injury, which include guilt, shame, social problems, spiritual/existential issues, self-deprecation, and emotional distress (Drescher et al., 2011). Efforts to operationalize the measurement of moral injury have led to the recent development of the Moral Injury Event Scale (MIES; Nash et al., 2013), which has been found to be comprised of two factors that align with these experiences: perceived transgressions (i.e., committing acts or witnessing acts that violate one's moral beliefs) and perceived betrayals (i.e., feeling that one has been betrayed by others). Preliminary analyses indicate that the transgressions and betrayal scales of the MIES demonstrate only small to moderate correlations with measures of PTSD severity, suggesting that moral injury may be an overlapping but distinct construct from PTSD. A more recent psychometric evaluation of the MIES (Bryan, Bryan, Etienne, Morrow, & Ray-Sannerud, 2013) have further differentiated the transgressions factor between transgressions committed by the self (i.e., Transgressions-Self) versus transgressions committed by others (i.e., Transgressions-Other). Subsequent analyses suggest the Transgressions-Self scale overlaps the most with PTSD, and both the Transgression-Self and Transgressions-Other scales are moderately associated with pessimism and hopelessness. The Betrayal scale, in contrast, is not significantly associated with measures of psychopathology.

Indeed, the indicators of moral injury that have been proposed by traumatologists (i.e., guilt, shame, social problems, spiritual/existential issues, self-deprecation, and emotional distress) are also associated with SITB. For instance, believing that one is a burden on others, a specific form of self-deprecation, is now a well-established risk factor for SITB among military personnel (Bryan, 2011; Bryan, Clemans, & Hernandez, 2012; Bryan, Morrow, Anestis, & Joiner, 2010; Kanzler, Bryan, Morrow, & McGeary, 2012; Selby et al., 2010). Guilt and shame are also associated with the incidence of suicidal ideation and suicide attempts in Vietnam veterans (Hendin & Haas, 1991) and with the severity of suicidal ideation among Iraq- and Afghanistan-era military personnel (Bryan, Morrow, Etienne, & Ray-Sannerud, 2013). Further supporting the proposed link between moral injury and SITB are studies suggesting a relationship between combat exposure and SITB (Fontana, Rosenheck, & Brett, 1992; Maguen et al., 2012; Rudd, in press). In particular, killing and failing to prevent the death of a friend, two particular combat experiences that have been proposed to be especially pronounced in moral injury (Litz et al., 2009) show relatively stronger relationships with SITB than other combat experiences (Fontana et al., 1992; Maguen et al., 2012). Other studies suggest there is little or no direct relationship between combat and SITB, however, but there may be an indirect effect through other associated risk factors or consequences of combat exposure, especially PTSD (Bryan, Hernandez, Allison, & Clemans, 2013; Department of Defense, 2011; Griffith, 2012; LeardMann et al., 2013). More recently, guilt has been shown to mediate the relationship of PTSD symptoms with SITB among military personnel with direct combat exposure (Bryan, Ray-Sannerud, Morrow, & Etienne, 2012), which supports the hypothesis that moral injury plays an important role in the development of SITB among military personnel and veterans exposed to combat-related trauma.

Taken together, these findings suggest that moral injury may be a risk factor for SITB in military personnel. However, to date there

have been no studies that have explored this specifically. The primary aim of the current study was therefore to explore the association of moral injury with SITB in a general clinical sample of military personnel receiving mental health treatment. Two hypotheses were specifically tested:

1. MIES scores will be significantly higher among military personnel with more severe histories of SITB;
2. MIES scores will be significantly associated with severity of current suicidal ideation; and
3. Because of their previously demonstrated associations with hopelessness, Transgressions-Self and Transgressions-Others will show relatively stronger relationships with SITB than Betrayal.

## Methods

### Participants

One hundred fifty-one Air Force and Army personnel who were currently receiving outpatient mental health care at two military clinics completed a packet of self-report surveys. Participants were predominantly (98%) active duty (2% National Guard or Reserve). Gender distribution was 63.8% male and 36.2% female, racial distribution was 68.2% White, 20.9% African American, 2.0% American Indian, 1.4% Pacific Islander, 1.4% Asian, and 5.4% other; 9.5% additionally endorsed Hispanic ethnicity. Age ranged from 20 to 54 years ( $M = 34.12$ ,  $SD = 8.41$ ). Rank distribution was 20.5% junior enlisted (E1–E4), 38.4% noncommissioned officers (E5–E6), 15.2% senior noncommissioned officers (E7–E9), 1.3% warrant officers, and 17.2% officers (O1–O6). Personnel had served an average of 8.62 ( $SD = 6.17$ ) years in the military and had deployed a mean of 1.15 times ( $SD = 1.35$ , range: 0 to 6) to either Iraq and/or Afghanistan.

### Procedures

Patients receiving outpatient mental health care were invited to participate in the current study by clinic staff, who provided them with an information sheet and briefly summarized the study's purpose and procedures. Interested patients signed an informed consent document and were then given a survey packet that was completed anonymously in the clinic waiting room. Participants returned completed survey packets to a clinic staff member, who then placed the surveys in a centralized box located in a secured area of the clinic accessible only to approved staff members. Data were then shipped to the National Center for Veterans Studies at the University of Utah for entry into an electronic database and subsequent analysis. Approval for the current study was obtained from the Institutional Review Board located at Wright-Patterson Air Force Base.

### Measures

**Moral injury.** The MIES (Nash et al., 2013) measures psychological distress associated with moral injury across three inter-related factors (Bryan et al., 2013): Transgressions-Other (two items), which assesses distress due to witnessing or learning about

others' actions that are perceived to be morally wrong (e.g., "I am troubled by having witnessed others' immoral acts"); Transgressions-Self (four items), which assesses distress due to committing acts or making decisions that are perceived to be morally wrong (e.g., "I am troubled by having acted in ways that violated my own morals or values"); and Betrayal (three items), which assesses distress due to perceived deception or treachery by others (e.g., "I feel betrayed by fellow service members who I once trusted"). Each item is rated on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). All three scales have good internal consistency ( $>.79$ ) and differentially correlate with other indicators of psychopathology, consistent with theoretical conceptualizations. The Transgressions-Other and Betrayal scales can differentiate between military personnel with and without a likely PTSD diagnosis, although the Transgressions-Other scale has a relatively stronger relationship with PTSD (Bryan et al., 2013).

**SITB.** SITB were assessed using two separate instruments. Lifetime incidence of suicidal ideation (i.e., "Have you ever had thoughts of killing yourself?") and suicide attempts (i.e., "Have you ever made an actual attempt to kill yourself in which you had at least some intent to die?") were assessed with the self-report version of the Self-Injurious Thoughts and Behaviors Interview (Nock et al., 2007), which is a structured interview that assesses the presence, frequency, and characteristics of self-injurious thoughts and behaviors over the individual's life span. The interview has good interrater reliability, test-retest reliability, and demonstrates strong convergent validity with other measures of suicidal ideation (Nock et al., 2007), but the self-report version's psychometric properties have not been published.

Severity of current suicidal ideation was assessed with the Beck Scale for Suicide Ideation (BSSI; Beck, 1991), which is a 19-item self-report measure of the individual's beliefs and attitudes about suicide such as frequency and duration of ideation, specificity of planning, and preparations for death. Responses are summed to a total score ranging from 0 to 38, with higher scores indicating more severe suicidal ideation. The BSSI has very good internal consistency and convergent validity and has been found to predict future suicide attempts and death by suicide (Beck & Steer, 1991). Internal consistency for the BSSI in the current sample was .89.

**Depression.** The Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) was used to assess depression symptom severity. The PHQ-9 directs respondents to indicate the frequency of experiencing the nine symptoms of major depressive disorder during the past two weeks, with total scores ranging from 0 to 36. The PHQ-9 is widely used in clinical and research settings

and has demonstrated good internal consistency and sensitivity and specificity for major depressive disorder (Kroenke et al., 2001). Internal consistency for the PHQ-9 in the current sample was .92.

**Posttraumatic stress.** The PTSD Checklist, Military Version (PCL-M; Weathers et al., 1993) was used to assess PTSD symptom severity. The PCL-M uses a Likert scale ranging from 1 (*never*) to 5 (*extremely*) to measure the severity of each of the 17 diagnostic criteria for PTSD as established by *DSM-IV*, with higher scores indicating more severe symptoms. The PCL-M has good convergent and discriminant validity and high internal consistency as well as test-retest reliability. Internal consistency for the PCL-M in the current sample was .97.

**Hopelessness.** The Negative Focus Subscale of the Future Dispositions Inventory (Osman et al., 2010) was used to assess intensity of hopelessness and pessimism. The negative focus subscale consists of eight items (e.g., "I worry that things will never go well for me no matter what I do," "I doubt whether things will ever get better for me in life," "I fear that I will run into more difficulties in the years ahead") that respondents rate on a 5-point Likert scale ranging from 1 (*not at all true*) to 5 (*extremely true*). The scale is reliable ( $>.83$ ), correlates strongly in the expected directions with measures of hopelessness, adaptive coping, and psychological symptoms, and can differentiate between suicidal and nonsuicidal groups (Osman et al., 2010).

## Results

### Is Moral Injury Associated With Lifetime Incidence of SITB?

Forty-three of the 151 (28.5%) participants endorsed thinking about suicide at some point during their lives and 11 (7.3%) had made a suicide attempt, based on responses to the Self-Injurious Thoughts and Behaviors Interview. Participants were classified into three groups according to history of SITB: suicide attempt ( $n = 11$ ), suicidal ideation ( $n = 32$ ), and control ( $n = 106$ ). Multivariate analysis of variance was used to identify omnibus group differences in MIES scores across the three groups, with results indicating significant between-groups differences,  $F(6, 290) = 2.956, p = .008$ , partial  $\eta^2 = .058$ . Results remain unchanged when covarying for gender, age, posttraumatic stress symptoms, depression, and hopelessness. Between-groups effect sizes (bias-corrected Hedges  $g$ ) with 95% confidence intervals were calculated for each MIES scale score to identify magnitudes of difference in scale scores. As can be seen in Table 1 and Figure 1, none of the three MIES scales significantly differed between the

Table 1  
Moral Injury Event Scale Scores According to History of SITB, With Between-Group Effect Sizes

Scale	M (SD)			Hedges $g$ (95% CI)		
	None ( $n = 106$ )	SI ( $n = 32$ )	SA ( $n = 11$ )	None vs. SI	None vs. SA	SI vs. SA
Transgressions-Other	3.45 (1.74)	3.97 (1.69)	5.15 (1.13)	.30 (-.10, .70)	1.00 (.36, 1.63)	.74 (.03, 1.44)
Transgressions-Self	2.28 (1.66)	2.78 (1.74)	3.90 (1.62)	.30 (-.10, .69)	.97 (.34, 1.60)	.64 (-.06, 1.34)
Betrayal	3.19 (1.72)	3.08 (1.51)	3.57 (1.74)	.07 (-.46, .33)	.22 (-.40, .84)	.31 (-.38, .99)

Note. SITB = self-injurious thoughts and behaviors; CI = confidence interval; None = no SITB history; SI = suicidal ideation history; SA = suicide attempt history.

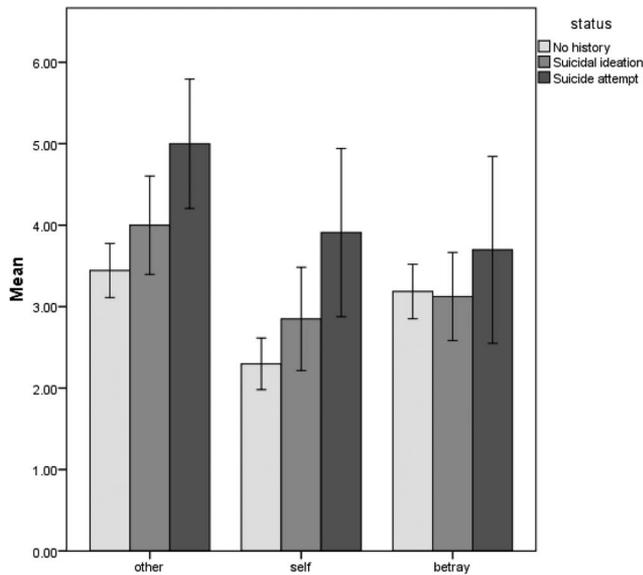


Figure 1. Mean Moral Injury Event Scale scores with 95% confidence intervals for participants with no history of self-injurious thoughts and behaviors, history of suicidal ideation, and history of suicide attempt.

suicidal ideation and the control groups ( $g$ 's  $< .30$ ), but scores on the Transgressions-Other ( $g = 1.00$ ) and Transgressions-Self scales ( $g = .97$ ) were significantly higher for the suicide attempt group relative to the control group. The suicide attempt group also scored significantly higher than the suicidal ideation group on the Transgressions-Other ( $g = .74$ ) and the Transgressions-Self ( $g = .64$ ) scales, with a relatively larger effect for the Transgressions-Other scale. No differences across groups were found for the Betrayal scale.

### Is Moral Injury Associated With Severity of Current Suicidal ideation?

Generalized linear regression with robust maximum likelihood estimation (due to skewed data) was used to test the association of

MIES scores with severity of current suicidal ideation, as measured by the BSSI. In the first step, the following covariates were entered: gender, age, PCL-M score, PHQ-9 score, and Future Dispositions Inventory score. Results indicated that posttraumatic stress severity ( $B = .048$ ,  $SE = .023$ ,  $p = .040$ ,  $\beta = .245$ ) and hopelessness ( $B = .116$ ,  $SE = .049$ ,  $p = .018$ ,  $\beta = .237$ ) were significantly associated with more severe suicidal ideation (see Table 2, Model A). We next added each MIES scale score separately to the model to test their independent associations with suicidal ideation. Transgressions-Self ( $B = .424$ ,  $SE = .171$ ,  $p = .014$ ,  $\beta = .203$ ) was associated with significantly more severe suicidal ideation and Transgressions-Other ( $B = .301$ ,  $SE = .171$ ,  $p = .081$ ,  $\beta = .146$ ) showed a nonsignificant trend toward more severe suicidal ideation, but Betrayal ( $B = -.102$ ,  $SE = .175$ ,  $p = .560$ ,  $\beta = -.047$ ) was not associated with current suicidal ideation. In the final step (Table 2, Model B), we entered all three MIES scale scores into the model simultaneously. Tolerance (.56–.68) and variance inflation factors (1.47–1.77) for these three scales were acceptable, suggesting that multicollinearity was not a significant concern. Results indicated that higher Transgressions-Self scores were associated with significantly more severe suicidal ideation ( $B = .468$ ,  $SE = .195$ ,  $p = .018$ ,  $\beta = .224$ ), whereas higher Betrayal scores were associated with significantly less severe suicidal ideation ( $B = -.504$ ,  $SE = .208$ ,  $p = .017$ ,  $\beta = -.235$ ). Transgressions-Other scores showed a nonsignificant trend toward more severe suicidal ideation ( $B = .360$ ,  $SE = .211$ ,  $p = .091$ ,  $\beta = .174$ ).

Concurrent inspection of the predictors' beta weights and structure coefficients in the final model revealed a number of important patterns. First, hopelessness, posttraumatic stress symptoms, and depression severity showed the relative strongest relationships with current suicidal ideation, followed by Transgressions-Other and Transgressions-Self. The large beta weight but very small structure coefficient for Betrayal suggests a suppressor effect. In other words, inclusion of Betrayal improves overall model fit by removing error variance from another variable, but in and of itself it does not have a strong relationship with suicidal ideation. Specifically, when Betrayal was removed from the regression equation, Transgressions-

Table 2  
Regression Coefficients Predicting Severity of Current Suicidal Ideation

Model	R	R <sup>2</sup>	Predictor	B	SE	$\beta$	p	Zero-order r	Partial r	Structure coefficient
A	.357	.128	Gender	-.178	.604	-.024	.769	-.015	-.025	-.042
			Age	.007	.035	.016	.852	.027	.016	.076
			PCL-M	.048	.023	.245	.040	.298	.174	.835
			PHQ-9	-.040	.066	-.077	.545	.231	-.052	.647
			FDI	.116	.049	.237	.018	.303	.200	.849
B	.451	.204	Gender	-.262	.586	-.035	.655	-.015	-.034	-.033
			Age	-.001	.034	-.003	.971	.027	-.003	.060
			PCL-M	.054	.023	.275	.024	.298	.176	.661
			PHQ-9	-.019	.066	-.037	.769	.231	-.023	.512
			FDI	.071	.049	.146	.145	.303	.113	.672
			Trans-Other	.360	.211	.174	.091	.209	.131	.463
			Trans-Self	.468	.195	.224	.018	.188	.185	.417
			Betrayal	-.504	.208	-.235	.017	-.029	-.187	-.064

Note. PCL-M = PTSD Checklist, Military Version; PHQ-9 = Patient Health Questionnaire-9; FDI = Future Dispositions Inventory (Negative Focus subscale); Trans = Transgressions.

Other was no longer significantly associated with suicidal ideation ( $B = .131$ ,  $SE = .193$ ,  $p = .496$ ,  $\beta = .064$ ) and the relationship of Transgressions-Self with suicidal ideation weakened ( $B = .362$ ,  $SE = .194$ ,  $p = .064$ ,  $\beta = .173$ ). Taken together, these findings indicate that Transgressions-Self has a significant and moderately sized relationship with severity of suicidal ideation beyond the effects of other risk factors, especially when considered concurrent with Betrayal.

### Discussion

Results of the current study were largely consistent with expectations, and support the hypothesis that certain aspects of moral injury serve as a risk factor for SITB. Traumalogists have proposed that moral injury is associated with several risk factors for SITB, including guilt, shame, social problems, spiritual/existential issues, self-deprecation, and emotional distress (Drescher et al., 2011; Litz et al., 2009; Maguen & Litz, 2012). Transgressions-Self (i.e., acting in ways that violate one's moral code) and Transgressions-Other (i.e., witnessing others act in ways that violate one's moral code) showed stronger relationships with SITB than betrayal, which did not show a strong relationship with SITB. Results suggest that certain dimensions of moral injury may indeed serve as risk factors for SITB in military personnel and veterans.

Military personnel with a history of suicide attempts reported higher levels of Transgressions-Other and Transgressions-Self as compared to military personnel with no history of SITB. Scores on these two scales were also higher among military personnel who had made a suicide attempt relative to those who had previously thought about suicide, suggesting that these scores could differentiate between those who have thought about suicide and those who have made a suicide attempt. Transgressions-Other demonstrated the largest difference between personnel with and without a history of suicide attempt, suggesting that psychological distress associated with witnessing others' immoral acts and/or the troubling consequences of others' actions may be an especially important dimension of moral injury within the context of understanding SITB among military personnel. Previous research has suggested that Transgressions-Other has a relatively stronger relationship with indicators of emotional distress such as PTSD symptoms and insomnia, whereas Transgressions-Self has a relatively stronger relationship with hopelessness, guilt, and shame (Bryan, Bryan, Etienne, Morrow, & Ray-Sannerud, 2013). Transgressions-Other may therefore differentiate between military personnel according to history of SITB for different reasons. In contrast, Betrayal did not significantly differ between military personnel according to history of SITB and was not associated with severity of current suicidal ideation, suggesting that inner conflict secondary to perceived deception or treachery by others may not be a significant contributor to SITB, most likely because of the relatively weak relationship of Betrayal with emotional distress and risk factors for SITB (Bryan et al., 2013). However, this is not to suggest that Betrayal plays no role in understanding the relationship of moral injury with SITB. Results of the current study indicate that Betrayal has a suppressing effect on Transgressions-Other, which suggests that Betrayal helps to clarify the relationship of Transgressions-Other with suicidal ideation.

In terms of severity of current suicidal ideation, results suggest that of the three dimensions of moral injury assessed, Transgressions-Self was the strongest correlate. This is partially consistent with our hypothesis, which was that both Transgressions-Other and Transgressions-Self would show significant and relatively stronger associations with severity of current suicidal ideation. As noted previously, this finding aligns with recent work suggesting that Transgressions-Self has a stronger relationship with hopelessness, guilt, and shame as compared to Transgressions-Other and Betrayal (Bryan et al., 2013). Transgressions-Self entails inner conflict and emotional distress about one's own acts and decisions that are perceived to be immoral. Because suicidal individuals have extremely negative self-perceptions and tend to be highly self-critical about perceived defectiveness (Bryan, 2011; Bryan, Clemans, & Hernandez, 2012; Bryan, Morrow, Anestis, & Joiner, 2010; Kanzler, Bryan, Morrow, & McGeary, 2012; Rudd, in press; Selby et al., 2010), these findings suggest the possibility that Transgressions-Self may be related more strongly to the proposed self-deprecatory aspect of moral injury (Drescher et al., 2011) than the other dimensions of moral injury, but further research is needed to confirm this possibility.

From a clinical perspective, the current findings suggest that military personnel and veterans who express distress regarding the "rightness" or "wrongness" of their actions may be at increased risk for SITB and may experience more intense suicidal crises. It is important to keep in mind that, consistent with the theory of moral injury (Drescher et al., 2011; Litz et al., 2009), such inner conflict can occur even among military personnel and veterans who have not directly experienced life-threatening situations. For instance, medical professionals who have experienced patient deaths may question their decision-making (e.g., "I should have been able to save him/her"), as may combatants who have killed in ambiguous situations and/or out of revenge (e.g., "Should I have pulled the trigger after all?"). It is also possible that the inner distress experienced by military personnel about their own actions may not be associated with military service at all, such as in the case of a parent who was unable (or too afraid) to prevent his or her child's injury at the hands of an abusive spouse. As research on the construct of moral injury continues to build, it is likely that greater understanding about the conditions and circumstances under which this particular form of psychological distress occurs will be more clearly differentiated. Regardless of this progress, the current study suggests that military personnel who are troubled by a personal act of commission or omission that is perceived to violate their sense of right versus wrong are more likely to have experienced SITB. Clinicians may therefore benefit from identifying if their patients' source of distress is related to perceived transgressions of their moral code.

Conclusions based on results from the current study should be made cautiously and within the context of its limitations. First, the sample was relatively small and homogeneous, being comprised primarily of active duty Air Force personnel seeking outpatient mental health care services. Results may not necessarily generalize the wider military and veteran communities and should therefore be considered preliminary until replicated in a larger and more heterogeneous military and veteran sample. Second, data were collected using self-report methodology, which may be vulnerable to response bias. Future studies that use clinician-administered scales and behavioral tasks to measure constructs of interest are needed to lend further support to these initial

findings. Finally, the current study was only cross-sectional in nature, which restricts conclusions about how moral injury and SITB are interrelated over time. Future studies that implement longitudinal designs are therefore required. Despite these limitations, the current study provides further information about the construct of moral injury among military personnel and offers a new perspective for understanding SITB in this population.

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