



Research report

Shame, pride, and suicidal ideation in a military clinical sample

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ABSTRACT

Background: Suicide risk among U.S. military personnel has been increasing over the past decade. Fluid vulnerability theory (FVT; [Rudd, 2006](#)) posits that acute suicidal episodes increase in severity when trait-based (e.g., shame) and state-based (e.g., hopelessness) risk factors interact, especially among individuals who have been previously suicidal. In contrast, trait-based protective factors (e.g., pride) should buffer the deleterious effects of risk factors.

Methods: 77 active duty military personnel (95% Air Force; 58.4% male, 39.0% female; 67.5% Caucasian, 19.5% African-American, 1.3% Native American, 1.3% Native Hawaiian/Pacific Islander, 1.3% Asian, and 5.2% other) engaged in outpatient mental health treatment completed self-report surveys of shame, hopelessness, pride, and suicidal ideation. Multiple generalized regression was utilized to test the associations and interactive effects of shame, hopelessness, and worst-point past suicidal ideation on severity of current suicidal ideation.

Results: Shame significantly interacted with hopelessness ($B = -0.013$, $SE = 0.004$, $p < 0.001$) and worst-point suicidal ideation ($B = 0.027$, $SE = 0.010$, $p = 0.010$), augmenting each variable's effect on severity of current suicidal ideation. A significant three-way interaction among shame, worst-point suicidal ideation, and pride was also observed ($B = -0.010$, $SE = 0.0043$, $p = 0.021$), indicating that pride buffered the interactive effects of shame with worst-point suicidal ideation.

Limitations: Small sample size, cross-sectional design, and primarily Air Force sample.

Conclusions: Among military outpatients with histories of severe suicidal episodes, pride buffers the effects of hopelessness on current suicidal ideation. Results are consistent with FVT.

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1. Introduction

In the United States Armed Forces, suicide is the second leading cause of death, with rates among military personnel doubling since the initiation of military operations in Afghanistan and Iraq ([Ramchand et al., 2011](#)). Since 2004, the number of suicides by military personnel has steadily increased, surpassing the suicide rate of the general U.S. population for the first time in history ([Department of Defense Task Force on the Prevention of Suicide by Members of the Armed Forces, 2010](#)). In response to this growing problem, researchers have worked to identify factors for the full range of suicide-related thoughts and behaviors among military samples, although many of these risk factors are not necessarily specific to military populations: e.g., depression ([Skopp et al., 2012](#); [Bryan et al., 2012a](#); [Rudd et al., 2011](#)), insomnia ([Luxton et al., 2011](#)), interpersonal stressors ([Bryan and](#)

[Rudd, 2012](#); [Department of Defense Task Force on the Prevention of Suicide by Members of the Armed Forces, 2010](#)).

Of the many risk factors for suicide, past suicide risk and hopelessness have garnered extensive empirical evidence as a highly reliable risk factor for understanding suicidal thoughts and behaviors ([Beck et al., 1989, 1990, 2000](#); [Osman et al., 2010](#); [Rudd et al., in press](#)), and are considered vital for the assessment and management of suicidal individuals ([Bryan and Rudd, 2006](#)). Of particular importance is the “worst-point” suicidal episode, which is the period of time in an individual's life during which their suicidal desire, thoughts, and intentions were the most intense. Worst-point suicidal ideation is a better predictor of future suicide attempts and death by suicide than current suicidal ideation and hopelessness ([Beck et al., 1999](#); [Joiner et al., 2003](#)). In terms of hopelessness, [Rudd et al. \(in press\)](#) have recently expanded the hopelessness model of suicide by differentiating between state-based and identity-based forms of hopelessness. Identity-based hopelessness, also referred to as unlovability ([Wenzel et al., 2009](#)), consists of trait-like self-perceptions of worthlessness and defectiveness that are viewed by the individual as enduring and unchangeable. Critically, this trait hopelessness incrementally predicts current and future suicide

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attempts above and beyond other common risk factors for suicide, including state hopelessness (Rudd et al., *in press*).

Similar to Rudd and colleague's concept of trait hopelessness is the construct of shame, which is similarly comprised of global punitive judgment of the self that is not necessarily linked to any particular action or event. Phenomenologically, shame is often associated with the desire withdraw and/or to conceal oneself from others, and to "hide" something embarrassing or negative about the self. In contrast to shame, guilt entails a negative emotional state that occurs in response to a specific action or behavior. It is therefore a state-based emotional experience that is generally considered to be adaptive, whereas shame is generally considered to be maladaptive. Shame has been proposed to be an especially painful and dysphoric emotional state (Tangney, 1990) that may be central to the suicidal experience (e.g., Orbach, 1997), and has been shown to correlate with suicidal ideation, plans, and attempts (Dutra et al., 2008).

Fluid vulnerability theory (Rudd, 2006) proposes a model for understanding how these trait-like, identity-based factors (i.e., shame) interact with state variables (i.e., hopelessness) to create and sustain acute suicidal episodes. According to fluid vulnerability theory, "an individual's vulnerability to suicide is variable but nonetheless identifiable and quantifiable" (page 358; Rudd, 2006), with some individuals being innately at increased risk for suicide due in part to chronic, negative self-schemas that are core to their sense of identity. These core schemas tend to be shame-based (i.e., feeling bad about who one is) and confer long-term vulnerability to suicide risk even during periods of relative calm and stability. In the presence of a life stressor, these core schemas become activated, resulting in the emotional distress and state hopelessness characteristic of acute suicide risk. Individuals who lack protective factors are also at increased suicide risk, as they lack dispositional and/or environmental conditions that buffer the effects of risk factors such as shame and hopelessness. For instance, Pompili et al. (2012) found temperamental style among psychiatric inpatients is associated with hopelessness and suicide risk independent of psychiatric symptoms. Specifically, a hyperthymic temperament was associated with decreased hopelessness and suicide risk, whereas a cyclothymic-depressive-anxious temperament was associated with increased hopelessness and risk. Consistent with fluid vulnerability theory, the active suicidal crisis (referred to as the suicidal mode) is resolved only when risk factors are reduced and/or protective factors are increased.

Unfortunately, in contrast to the extant research on suicide risk factors, much less research has empirically identified protective factors associated with reduced suicide risk (Bryan and Rudd, 2006), although interest in protective factors seems to be growing (Johnson et al., 2011; Osman et al., 2010). Protective factors (also sometimes referred to as resilience to suicide risk) have been described as "an ability, perception, or set of beliefs which buffer individuals from the development of suicidality in the face of risk factors or stressors" (page 964; Johnson et al., 2011). Given that shame consists of a global punitive judgment of the self, it seems reasonable that global positive appraisals of the self, such as pride, might counteract or buffer the effects of shame. Identity-based pride (sometimes referred to as alpha pride or positive self-bias) entails feelings of pride in the entire self or who one is (Tangney, 1990; Tracy and Robins, 2011), and is associated with the attribution of events to internal abilities and "the self" more than to one's actions and effort (Tracy and Robins, 2011). Studies finding that identity-based pride correlates with greater neuroticism and narcissism and lower agreeableness and self-esteem among undergraduate samples have led some theorists to conceptualize such pride as negative or "hubristic" (Tracy and Robins, 2011) When considered in relation to suicide risk, however, other studies have found that positive self-bias buffers the effects of

hopelessness on suicidal intent and suicide attempt status (Holden et al., 1989; Ivanoff and Jang, 1991). Given that the military culture values and explicitly fosters a sense of superiority, self-sufficiency, and elitism (Bryan et al., 2012b; Bryan and Morrow, 2011), it is possible that pride similarly functions in a protective manner among service members. Indeed, previous research with military personnel has suggested pronounced differences in temperamental style, as compared to civilians, that have in turn been associated with decreased risk for suicide (Maremmani et al., 2010). As an identity-based construct, pride might therefore play a protective role for military personnel, especially among those who are actively engaged in mental health treatment, for whom issues of pride and shame are especially salient.

Consistent with the propositions of fluid vulnerability theory, the primary aims of the present study were to test the interactive effects of shame on robust risk factors for current suicidal ideation (i.e., worst-point suicidal ideation and state hopelessness) and to explore the buffering effects of pride on these risk factors in a clinical sample of military personnel currently engaged in outpatient mental health treatment.

2. Method

2.1. Procedures

Patients were recruited from two outpatient military mental health clinics, one located in the South U.S. and the second located in the West U.S. Patients were invited to participate by clinic staff following their regularly-scheduled mental health appointments. Out of 98 patients invited to participate, 77 (78.6%) provided informed consent and then completed an anonymous survey packet. Completed packets were returned to collection boxes located at the check-in desks of each clinic. The current study was reviewed and approved as exempt research by the Wright-Patterson Air Force Base Institutional Review Board.

2.2. Participants

Participants included 77 active duty military (95% Air Force) personnel receiving outpatient mental health treatment. Gender distribution was 58.4% male, 39.0% female, and 2.6% unknown. Self-reported racial identity was 67.5% Caucasian, 19.5% African-American, 1.3% Native American, 1.3% Native Hawaiian/Pacific Islander, 1.3% Asian, and 5.2% other. Five participants (6.5%) additionally endorsed Hispanic/Latino ethnicity. Participants ranged in age from 21 to 54 years ($M=33.57$, $SD=8.98$), and had deployed to Iraq and/or Afghanistan multiple times ($M=1.90$, $SD=1.37$, range: 0–6 deployments). Patients were diagnosed by licensed psychiatrists, clinical psychologists, and clinical social workers with the following psychiatric disorders: any depressive disorder (29.9%), any anxiety disorder (39.0%), any substance use disorder (6.5%), any somatic or eating disorder (1.3%), adjustment disorder (18.2%), and any personality disorder (13.0%). Patients were diagnosed with zero to four psychiatric conditions ($M=1.21$, $SD=0.65$).

2.3. Measures

2.3.1. Depression

The PHQ-9 (Kroenke et al., 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).

2.3.2. Hopelessness

The negative focus subscale of the Future Dispositions Inventory (FDI; Osman et al., 2010) was used to assess intensity of hopelessness. The negative focus subscale consists of 8 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 has good internal consistency, correlates strongly with other measures of hopelessness, and can differentiate between suicidal and non-suicidal groups (Osman et al., 2010).

2.3.3. Shame and pride

Shame and pride were measured using the shame and alpha pride subscales of the Test of Self-Conscious Affect, version 3 (TOSCA-3; Tangney et al., 2000), which is a self-report measure that presents 16 brief scenarios (11 negatively and 5 positively valenced). Following each scenario is four or five possible cognitive, affective, and behavioral responses, each of which are rated on a 5-point scale ranging from 1 (“not likely”) to 5 (“very likely”) by respondents to indicate the likelihood of experiencing each type of response. An example scenario is “you are out with friends one evening, and you are feeling especially witty and attractive; your best friend’s spouse seems to particularly enjoy your couple”. The shame response to this scenario is “you would probably avoid eye contact for a long time” and the pride response to this scenario is “you would feel happy with your appearance and personality”. Scores are summed to provide an overall indicator of proneness to experiencing shame and pride. The shame scale has demonstrated better internal consistency (> 0.77) than the pride scale (0.48), and scores correlate in the expected directions with psychological symptoms such as depression (Stromsten et al., 2009; Tangney and Dearing, 2002).

2.3.4. Worst-point suicidal ideation

Worst-point suicidal ideation was assessed with the Self-Injurious Thoughts and Behaviors Interview (SITBI; 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 lifespan. Participants were asked if they had ever experienced suicidal ideation during their lives, and if so, they were asked to rate the intensity of their suicidal desire during their “worst” suicidal episode on a scale ranging from 0 (“low/little”) to 4 (“very much/severe”). The interview has good interrater reliability, test-retest reliability over six months, and demonstrates strong convergent validity with other measures of suicidal ideation (Nock et al., 2007).

2.3.5. Current suicidal ideation

Severity of current suicidal ideation was assessed with the Beck Scale for Suicidal Ideation (BSSI; Beck et al., 1988), 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 et al., 1999).

2.4. Data analyses

Generalized linear regression with robust estimation was utilized to test the associations among predictors and severity of current suicidal ideation. Depression, hopelessness, and worst-point suicidal ideation were entered as covariates due to their well-known relationship with current suicidal ideation. Because results remained unchanged when controlling for age and gender, results are reported without these variables entered as covariates. A power analysis for multiple regression conducted with the G*Power 3.1 software (Faul et al., 2009) indicated that for a sample size of 77 and a planned two-tailed p -value < 0.05 , power was sufficient (0.85) to detect medium-sized effects.

3. Results

3.1. Descriptive statistics

Means, standard deviations, and intercorrelations of the five predictor variables are reported in Table 1. As can be seen, shame was positively correlated with both depression ($r=0.25$, $p=0.031$) and hopelessness ($r=0.24$, $p=0.039$), but not worst-point suicidal ideation ($r=-0.12$, $p=0.285$). Pride did not correlate with depression ($r=-0.13$, $p=0.262$), hopelessness ($r=0.05$, $p=0.646$), or worst-point suicidal ideation ($r=-0.07$, $p=0.514$). Interestingly, pride and shame were positively correlated with one another ($r=0.40$, $p<0.001$), indicating that patients who reported greater shame also tended to report more pride.

3.2. Does shame augment the effects of hopelessness and past suicidal ideation on current suicidal ideation?

An initial regression model was constructed with depression, hopelessness, worst-point suicidal ideation, shame, the shame-by-hopelessness interaction, and the shame-by-worst point suicidal ideation entered as predictors. Both interaction terms were significant, indicating that shame augmented the effects of both hopelessness ($B=-0.013$, $SE=0.004$, $p<0.001$) and worst-point suicidal ideation ($B=0.027$, $SE=0.010$, $p=0.010$) on current suicidal ideation.

3.3. Does pride buffer the effects of hopelessness and past suicidal ideation on current suicidal ideation?

A second regression model was constructed with depression, hopelessness, worst-point suicidal ideation, pride, the pride-by-hopelessness interaction, and the pride-by-worst point suicidal ideation entered as predictors. Neither interaction term was significant, indicating that pride did not suffer the effects of either hopelessness ($B=-0.004$, $SE=0.005$, $p=0.408$) or worst-

Table 1
Means, standard deviations, and intercorrelations of all variables.

	1.	2.	3.	4.	5.	6.
Current SI	–					
Depression	0.31**	–				
Hopelessness	0.38**	0.55**	–			
Worst SI	0.07	0.07	0.06	–		
Shame	0.02	0.25*	0.24*	–0.12	–	
Pride	0.01	–0.13	0.05	–0.08	0.40	–
M	2.73	10.96	10.74	0.99	43.53	18.29
SD	4.73	7.40	7.77	1.57	12.60	4.19

* $p < 0.05$;

** $p < 0.01$. SI=suicidal ideation.

point suicidal ideation ($B=0.003$, $SE=0.025$, $p=0.920$) on current suicidal ideation.

3.4. Does pride buffer the augmenting effects of shame on hopelessness and suicidal ideation?

To determine if pride buffers the augmenting effects of shame on hopelessness as it relates to current suicidal ideation, a third regression model was constructed with two three-way interactions: hopelessness–shame–pride and worst point suicidal ideation–shame–pride. All relevant main effects and two-way interaction and main effect terms were included as well. Results indicated that the three-way worst point suicidal ideation–shame–pride interaction was statistically significant ($B=-0.010$, $SE=0.0043$, $p=0.021$) but the hopelessness–shame–pride interaction was not ($B<0.001$, $SE=0.0007$, $p=0.522$). Comparisons of the Akaike's Information Criterion (AIC) value for this final model relative to the previous models suggested improved data fit based on the smaller-is-better interpretation. Results are displayed in Table 2.

The form of the three-way worst point suicidal ideation–shame–pride interaction is displayed in Fig. 1 with four slopes indicating the curve forms at two standard deviations above (high

value) and below (low value) the mean scores for each predictor: (A) high shame/high pride, (B) high shame/low pride, (C) low shame/high pride, and (D) low shame/low pride. Comparisons of these four slopes (summarized in the figure) revealed that the high shame/high pride slope (A) significantly differed from all other slopes ($t>2.360$, $p>0.021$). The high shame/low pride slope (B) significantly differed from the low shame/high pride slope (C) ($t=2.263$, $p=0.027$) but not from the low shame/high pride slope (C) and the low shame/low pride slope (D) also did not significantly differ from one another ($t=0.905$, $p=0.369$). This pattern indicates that greater pride was associated with less severe current suicidal ideation among those participants who reported more severe past suicidal episodes and were currently experiencing very severe levels of shame. In contrast, less pride was associated with increased severity of current suicidal ideation among those with more severe past suicidal episodes and very severe levels of shame. For participants who were experiencing lower levels of shame, however, pride did not have a noticeable impact on the relationship of past suicidal ideation with current suicidal ideation.

4. Discussion

Our findings indicate that the deleterious effects of hopelessness and past suicidal ideation on current suicidal ideation were especially pronounced for military patients with higher levels of shame. Results are consistent with Rudd's suicidal mode theory (2006), which posits that the severity of a suicidal episode is dependent on the interaction between trait-based (i.e., baseline) and state-based (i.e., acute) risk factors, with the central pathway to suicide risk being cognition. Individuals with negative self-judgments are therefore especially vulnerable to the deleterious effects of past cognitions (i.e., worst-point suicidal episodes) and current cognitions (i.e., hopelessness), resulting in more severe current suicidal episodes.

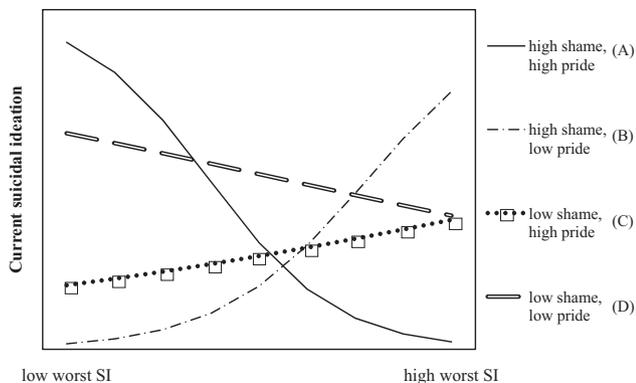
Along these same lines, the significant three-way interaction of pride with shame and worst-point suicidal ideation suggests that positive self-perceptions among military outpatients protects against the interactive effects of shame and past suicidal ideation. Interestingly, pride did not suffer the effects of shame or worst-point suicidal ideation in and of themselves, as indicated by the nonsignificant two-way interactions of pride with these two risk factors, but pride did attenuate the effects of shame among patients with more severe past suicidal ideation. Given that both shame and worst-point suicidal ideation function as trait-based risk factors for current suicidal ideation, results suggest that higher levels of pride might be especially protective for those with greater vulnerabilities to suicide risk.

Clinically, results suggest that psychological treatments that explicitly foster pride or positive self-judgments might be especially effective for reducing suicide risk. Cognitive therapy (Wenzel et al., 2009), for instance, directly targets identity-based shame (referred to as "unlovability") and reinforces positive self-perceptions. Cognitive therapy contributes to faster reductions in hopelessness and reduces suicide attempts by half as compared to other active treatments among patients with recent suicide attempts (Brown et al., 2005). In light of the current study's findings, cognitive therapy's superior effect on reducing hopelessness among previously suicidal patients could be due to the treatment's ability to foster pride. Similarly, the treatment's longer-term effects on suicide attempts might be due to mitigation of shame and enhancement of pride among patients. From a public health perspective, results suggest that suicide prevention efforts that foster pride or positive self-regard in addition to mitigating risk factors for suicide might yield better outcomes. Such approaches might be especially relevant

Table 2
Generalized regression coefficients predicting severity of current suicidal ideation.

	B	SE	p
Depression	0.078	0.032	0.013
Hopelessness	0.934	0.595	0.117
Worst SI	-8.820	3.351	0.008
Shame	-0.211	0.103	0.041
Pride	-0.401	0.233	0.085
Shame × pride	0.017	0.006	0.003
Shame × hopelessness	-0.009	0.011	0.427
Shame × worst SI	0.224	0.081	0.006
Pride × hopelessness	-0.002	0.033	0.940
Pride × worst SI	0.385	0.178	0.030
Pride × shame × hopelessness	< 0.001	0.001	0.522
Pride × shame × worst SI	-0.010	0.004	0.021

Note: Regression coefficients for negative binomial distribution; SI=suicidal ideation.



Slope difference tests		
Pair of slopes	t-value	p
(A) and (B)	2.360	.021
(A) and (C)	2.814	.006
(A) and (D)	4.568	.000
(B) and (C)	1.745	.086
(B) and (D)	2.263	.027
(C) and (D)	0.905	.369

Fig. 1. Form of the three-way interaction of worst-point suicidal ideation × shame × pride, with slope difference tests. Note: "high"=two standard deviations above the mean value, "low"=two standard deviations below the mean value.

within military populations given the military identity is strongly associated with concepts of pride, elitism, and superiority (Bryan et al., 2012a, 2012b). Prospective trials are required to test this hypothesized mechanism of change within treatments for suicide risk and suicide prevention programs, however.

Conclusions from the current study are limited by the relatively small sample size from a clinical setting. Although the sample was sufficiently large to test the planned hypotheses, additional studies with larger samples, both clinical and nonclinical, are required to determine the generality of observed results. Similarly, because the current sample was primarily comprised of Air Force personnel, additional studies with military personnel from multiple branches of service are required to determine if results apply across the military. Second, conclusions are limited to current suicidal ideation only. Future studies are needed to determine if pride buffers against future suicide attempts and death by suicide, which will require much longitudinal designs with larger samples. Third, our use of primarily self-report methodology might be vulnerable to response bias. Despite these limitations, the current study provides some useful information about possible factors that might protect against suicide risk among military personnel engaged in mental health treatment.

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Conflict of interest

None of the authors have any conflicts of interest.

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