Student Veterans: A National Survey Exploring Psychological Symptoms and Suicide Risk

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The current study explored psychological symptoms, symptom severity, and suicide risk in a national sample (N = 628) of student veterans. We hypothesized that the rates, types, and severity of problems experienced by student veterans on campus would in many ways mirror those reported by active duty service members as well as the Operation Iraqi Freedom/Operation Enduring Freedom veteran population. Almost 35% of the sample experienced “severe anxiety,” 24% experienced “severe depression,” and almost 46% experienced significant symptoms of posttraumatic stress disorder. Of particular concern, there were significant numbers of participants thinking about suicide (46%), with 20% having a plan, 10.4% thinking about suicide “often or very often,” 7.7% making an attempt, and 3.8% believing that suicide is either “likely” or “very likely.” Implications of the findings are discussed, with a particular focus on college and university campuses.

Keywords: veteran, suicide, depression, anxiety, posttraumatic stress

As nearly two million veterans return home from deployments overseas, the decade-long wars in Iraq and Afghanistan will have unanticipated impact on college and university campuses, with large numbers separating from military service and making use of available higher education benefits to return to campus (Ackerman, DiRamio, Garza, & Mitchell, 2009; Cook & Young, 2009; U.S. Government Accounting Office, 2011). As student veteran numbers grow nationwide, an important question emerging is whether or not campuses will be ready for the potentially unique challenges faced by student veterans as they assimilate to campus life; the first such transition for many. Over the past few years, increasing attention has been focused on the serious physical, psychological and emotional issues faced by student veterans following combat exposure and military service during wartime, with estimates that over 20% of recent veterans have struggled with posttraumatic stress disorder (PTSD) or depression and 19% have experienced some form of traumatic brain injury (TBI) (Hoge, Auchterlonie, & Miliken, 2006; RAND Corporation, 2011). However, little discussion has emerged about how these issues are, or will be, handled on college and university campuses, not to mention the expected frequency, severity, and potentially unique nature of problems.

The U. S. Department of Defense (DoD) has expended considerable resources examining and responding to the escalating rates of psychological problems among active-duty service members that have emerged over the last decade of combat in Iraq and Afghanistan, with a particular focus on suicidality (U.S. DoD, 2010). These issues have also received considerable attention in the popular press. DoD has acknowledged that military life during wartime is remarkably stressful, not just for service members but also their families. Despite DoDs best efforts to enhance well-being, promote resilience and related life skills (cf. Casey, 2011), 10 years of combat across two different war zones has resulted in escalating rates of PTSD, substance abuse, depression, and suicide (U.S. DoD, 2010). The recent DoD report on suicide prevention attributed the escalating suicide rates to a host of factors including sharp increases in operational demands, repeated deployments, and insufficient quantity and quality of “dwell” time (i.e., time at home between deployments), noting a natural fatigue (physical and emotional) and reduced resilience among active-duty soldiers. The report also indicated less than optimal support, coordination, and effectiveness among military leadership at all levels of command.

Overall, suicide rates among active-duty military serving as a part of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) in Afghanistan have doubled since the beginning of the wars (U. S. Army, 2010), with suicide now the second leading cause of death among U.S. military service members (Ritchie, Keppeler, & Rothberg, 2003; U.S. DoD, 2010). In particular, studies have indicated that active-duty males with combat exposure are at greater suicide risk than their male civilian counterparts (Institute of Medicine, 2010; Kang & Bullman, 2008).
This finding is in stark contrast to suicide risk prior to OIF and OEF, when risk was markedly lower among active-duty service members in contrast to the comparable civilian population. Not surprisingly, available data also indicate that veterans struggling with psychiatric disorders are at markedly higher risk for suicide than the general veteran population (Kang & Bullman, 2008). PTSD, in particular, has been found to be associated with increased risk for suicidal thinking and suicide attempts (Jakupcak et al., 2009; Sareen et al., 2007). There is considerable evidence indicating that PTSD commonly co-occurs with other psychiatric problems, most often with major depression and substance abuse (e.g., Keane & Wolfe, 1990; Stewart, 1996).

It is estimated that over 900,000 OIF/OEF veterans have separated from military service since the beginning of the wars, with approximately 42% seeking care from the Department of Veterans Affairs (Kang, 2009). Of those seeking care, it is estimated that 45% have received an initial diagnosis of PTSD (Kang, 2009). How many of these individuals will eventually transition to college and university campuses is unknown, but the number is expected to be high given the availability and attractiveness of post-9/11 GI Bill benefits (Church, 2009).

The question of whether or not college and university counseling centers are prepared to handle students’ serious emotional and psychological problems is not necessarily new, having received attention in the extant literature. The last several decades have witnessed a continuing dialogue among clinicians, with the perception being that the severity of psychopathology among university students is increasing, although precise estimates and rates are lacking (e.g., Gallagher, Zhang, & Taylor, 2004; Kettmann et al., 2007; Stone & Archer, 1990). Erdur-Baker, Aberson, Barrow, and Draper (2006) convincingly argued that the severity and chronicity of college students’ presenting problems have been increasing over time, identifying five primary domains that can be longitudinally tracked (i.e., academic concerns, relationship/adjustment issues, depression/romantic relationships, sexual issues, and eating concerns), along with providing baseline measures for subsequent comparisons. They emphasized the need for counseling centers to plan for and engage in regular staff development and training to target the increasing severity of presenting problems. However, Kettmann et al. (2007) raised important questions about the accuracy of such perceptions, particularly in the absence of objective clinical data. They found no meaningful increase in the severity of student psychopathology from 1999 to 2005 using objective markers, in sharp contrast to clinician subjective ratings. In speculating about their findings, Kettmann et al. (2007) suggested increased service demand could be an important variable, particularly among seriously distressed students, a possibility also noted by Cornish et al. (2000).

The latest report from the Association for University and College Counseling Center Directors (AUCCCD; Barr, et al. 2011) revealed another increase in the reported number of clients with severe psychological problems. AUCCCD has been conducting annual surveys since 2006, with an identified goal of improving “understanding of those factors critical to the functioning of college and university counseling centers” (pp. 2, AUCCCD, 2011). With respect to identified presenting problems at college and university counseling centers, survey results indicated that 38% presented with depression, 40% with anxiety, 9% with self-injury (nonsuicidal), 11% substance abuse/dependence, 7% eating disorders, and 15% suicidal thoughts and/or behaviors. It is important to note, however, that survey results are not indicative of “rates” in the general student population, rather problems reported by those presenting for services at the counseling center on campus. As Kettmann et al. (2007) pointed out, these survey approaches rely on subjective appraisals (by counseling center directors and/or staff clinicians) rather than objective markers of problem severity.

The latest report from the Center for Collegiate Mental Health (CCMH, 2010) raises similar concerns. The CCMH report provided comparisons of those seeking treatment at college and university counseling centers and the general student population, offering some insight into overall problem rates on campus. In particular, those presenting to counseling centers reported nonsuicidal self-injury rates (during college years) of 3%, in contrast to the general student population of 2%. A total of 6% of those presenting to counseling centers reported “seriously” considering suicide, while the nonclinical population reported a rate of 2%; one third of the clinical population. The CCMH report provides some limited data to compare clinical and nonclinical samples.

The American College Health Association’s (ACHA, 2011) most recent national college health assessment provides additional insight into the general college and university student population, although the data is not specific to clinical diagnosis. With respect to mental health findings (i.e., students reporting the problems within “the previous 12 months”), the report indicated that a total of

- 43.9% “felt things were hopeless”
- 83.6% “felt overwhelmed by all they had to do”
- 28.4% “felt so depressed it was difficult to function”
- 46.4% “felt overwhelming anxiety”
- 6% “seriously considered suicide”
- 1.3% “attempted suicide”
- 5.1% “intentionally cut, Burned, Bruised or Otherwise Injured themselves.”

Although not indicative of specific clinical diagnoses, the ACHA findings are alarming and provide some limited basis for comparison of results to a general college and university student population.

The current study represents the first national survey targeting student veterans’ emotional adjustment, psychological symptoms, and suicide risk on college and university campuses. The National Center for Veterans Studies (NCVS) at the University of Utah conducted the study in partnership with the Student Veterans of America (SVA). Partnering with the SVA allowed for broad national distribution of the survey, making it possible to gather a more diverse and nationally representative sample and improve the overall accuracy of findings. The survey targeted four domains: demographic information (identifying information, including geographic location and college or university affiliation), college experience (ratings of quality of services currently provided), military service history (deployments, combat exposure, and related disability information), and psychological problems (including severity of combat exposure, insomnia, depression, anxiety, posttraumatic stress symptoms, and suicidality). The survey was developed to be brief but accurate, taking 15–20 min to complete on average. In general, we hypothesized that the rates, types, and severity of problems experienced by student veterans on campus would, in many ways, mirror those reported by DoD for active-
duty service members as well as the OIF/OEF veteran population more generally. Although specific hypotheses are not appropriate for an exploratory survey of this type, among the most critical questions posed are the following:

- What are the expected types and rates of emotional and psychological problems among student veterans?
- Are the emotional and psychological problems experienced by student veterans different from the modal college student?
- How severe are the problems and are there serious limitations in functional capacity among some student veterans?
- Do universities have the needed personnel in place to provide appropriate transition, support and psychological services to student veterans?
- Are college and university counseling centers equipped and appropriately trained to address the unique psychological problems associated with combat-related trauma?

**Method**

The NCVS survey (34-item total, with multiple questions for some items) was distributed electronically by the SVA to all member groups (i.e., all college and university member groups around the country). Opportunities for participation were presented to member groups via Web links embedded in electronic communications over a 6-month period, along with a designated story and link on the SVAs Webpage. It is important to note that the survey was sent to all student veterans for each member group. The statement of purpose for the survey, before the presentation of any survey items. On the first page of the survey, there was no indication in the solicitation that the survey targeted veterans’ experience on the college or university campus.” There was no indication in the solicitation that the survey targeted veterans’ experience on the college or university campus.”

The SVA, founded in 2008, is a national organization with voluntary membership and representation in every state, with the exception of Idaho, Montana, Wyoming, and Louisiana. The stated mission of the SVA is “to provide military veterans with the education and following graduation” (www.studentveterans.org). Given the goal of the SVA, it is believed that the organization attracts a representative group of student veterans from around the nation.

As mentioned above, the survey took about 15–20 min on average to complete and included basic demographic information, several items allowing participants to rate their satisfaction with currently available services at their college or university, along with the following clinical instruments: Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006), the Combat Exposure Scale (CES; Keane et al., 1989), the PTSD Checklist (military version) (PCL-M; Weathers et al., 1993), the Suicidal Behaviors Questionnaire—Revised (SBQ-R; Osman et al., 2001), the Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001), and several items from the Insomnia Severity Index (ISI) (Bastien et al., 2001).

Informed consent for participants was completed on the first page of the survey, before the presentation of any survey items. On the informed consent document student veterans were invited to participate “in a study examining student veteran experiences on college and university campuses.” Appropriate emergency contact information was made available to all participants if needed. The study was reviewed and approved by the appropriate institutional review board.

Each measure, including appropriate psychometric information is presented below. Characteristics of participants are presented in the results section.

**Instruments**

**GAD-7.** The GAD-7 is a brief measure of anxiety severity, with a focus on generalized anxiety disorder symptoms. The GAD-7 total score for the 7-items ranges from 0 to 21, with cutting scores for mild, moderate and severe anxiety. Despite its original focus on generalized anxiety disorder, the GAD-7 has reported good operating characteristics for detection and severity ratings of panic disorder, social anxiety disorder, and PTSD and has demonstrated good psychometric properties (Spitzer et al., 2006). Cronbach’s alpha for the current sample (N = 439) was excellent at .95.

**CES.** The Combat Exposure Scale was developed to assess the presence and severity of combat-related exposure (Keane et al., 1989). The 7-item scale assesses a range of characteristics of combat exposure including being under enemy fire; percentage of soldiers in unit killed, wounded or missing in action; how often enemy rounds were fired; seeing others hit by incoming or outgoing rounds; and being personally in danger of being wounded or killed in action. Scores are weighted, with the subsequent total identifying exposure as ranging from light to moderate to heavy. The CES has been demonstrated to have good psychometric properties (Keane et al., 1989). Cronbach’s alpha for the current sample (N = 253 with combat exposure) was .86. It is important to note that the CES was not presented to participants that indicated they had not been in combat.

**PCL-M.** The PTSD Checklist-Military Version was developed to assess symptoms in response to “stressful military experiences.” The PCL-M is a 17-item self-report measure, with scores ranging from 17–85. The PCL-M provides for the assessment of both symptom type and severity, along with providing cutting scores for diagnosis. The scale has demonstrated excellent reliability, validity, and diagnostic utility (Weather et al., 1993). Cronbach’s alpha for the current sample (N = 425) was excellent at .97.

**PHQ-9.** The PHQ-9 is a 9-item brief self-report measure of depression, with total scores ranging from 0 to 36 (Kroenke et al., 2001). The scale provides cutoff scores for mild, moderate, moderately severe, and severe depression. The PHQ-9 has demonstrated good psychometric properties, including sensitivity, and specificity (Kroenke et al., 2001). Cronbach’s alpha for the current sample (N = 434) was .93.

**SBQ-R.** The Suicide Behavior Questionnaire—Revised is a 4-item scale that taps into four dimensions of suicidality including lifetime ideation, ideation frequency over the past year, suicide attempt history, and the self-reported likelihood of a suicide attempt in the future (Osman et al., 2001). The SBQ-R has demonstrated good operating characteristics for several at-risk samples and has demonstrated good psychometric properties (Osman et al., 2001). Cronbach’s alpha for the current sample (N = 436) was .84.

**ISI-A.** Three items were used from the Insomnia Severity Index (Bastien et al., 2001), including an assessment of initial, middle, and terminal insomnia. These three items comprised what
we identified as the ISI-A, which is, the Insomnia Severity Index-Abbreviated. The ISI is a well-established and psychometrically sound instrument (Bastien et al., 2001). Given our interest in constructing a brief survey, and because sleep disturbance was covered by items in other instruments in the survey, we selected three items covering the insomnia construct. The correlation matrix presented in Table 1 would appear to support the construct validity of the brief scale, Cronbach’s alpha for the current sample \((N = 444)\) was .87 indicating good reliability.

**Sample characteristics.** A total of 628 individuals completed the informed consent. Of that total, 525 completed the vast majority of survey items, including 415 males (79%) and 110 females (21%). The male–female distribution is actually considerably higher than current estimates from the U.S. Department of Veterans Affairs (U.S. DoVA), with 2011 projections indicating a female veteran population of approximately 8% (U.S. DoVA, 2011). Given variable rates of response to the various sections of the survey, there is some difference in the total \(N\) for comparisons and, accordingly, the total \(N\) will be reported in each case (see Table 1).

The age range was 18–73, with a mean age of 26. A total of 98% of deployed participants reported having participated in OIF/OEF. With respect to ethnicity, the majority of participants were White \((N = 396, 77%)\), with good representation of other groups: African American \((N = 36, 7\%)\), Hispanic \((N = 60, 12\%)\), Asian \((N = 17, 3\%)\), and Native American \((N = 7, 1\%)\). Again, this distribution is not noticeably different than current Department of Veterans Affairs estimates (2011) that indicate the current veteran population to be 77% White, 11% African American, 6% Hispanic, and 4% all other groups. Geographic distribution for survey participants was quite good, with the following breakdown across census regions: Northeast \((N = 177, 34\%)\), Southeast \((N = 97, 19\%)\), Midwest \((N = 103, 20\%)\), South Central \((N = 39, 7\%)\), and West \((N = 106, 20\%)\). Representation was also good across branches of military service including Army \((N = 179, 34\%)\), Air Force \((N = 66, 13\%)\), Marines \((N = 95, 18\%)\), Navy \((N = 101, 19\%)\), Coast Guard \((N = 9, 2\%)\), and National Guard \((N = 53, 10\%)\). Of the total sample responding to a question about active VA educational benefits \((N = 514)\), 417 (81%) indicated they are currently using educational benefits. All participants indicated they are currently enrolled in a college or university. A total of 252 (60% of \(N = 420\) participants reported direct combat exposure during deployment(s), that is, they answered positively to a question about whether or not they had seen combat. However, a total of 244 (58% of total sample) responded to CES items in a manner indicating actual combat exposure. Accordingly, an \(N\) of 244 is reported in Table 1 below.

**Results**

Table 1 provides a summary of the severity of reported symptoms, along with indications of how frequent symptoms were reported among participants. Consistent with our original hypothesis, symptom severity was surprisingly high in the sample, with most mean scores falling in clinically elevated ranges. As indicated in Table 1, mean scores for anxiety, depression, suicidality, combat exposure, and PTSD were all at clinical levels. More specifically, the GAD-7 mean score indicated moderate anxiety, the PHQ-9 mean score was consistent with moderately severe depression, and the PCL-M mean score was above the cutoff (for Iraq and Afghanistan veterans) for PTSD diagnosis. Formal diagnosis of PTSD, however, requires a careful and thorough clinical interview, something that was not possible in the current study. The SBQ-R mean fell slightly below the cutoff of 7 (for college students) indicating suicide risk, while the CES mean score indicated light to moderate combat exposure. Additionally, 34.6% of the sample

### Table 1

**Markers of Symptom Severity in Sample**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Total (N)</th>
<th>Range</th>
<th>Mean</th>
<th>(SD)</th>
<th>Clinical interpretation of mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD-7</td>
<td>439</td>
<td>7–28</td>
<td>13.6</td>
<td>6.4</td>
<td>Moderate anxiety</td>
</tr>
<tr>
<td>PHQ-9</td>
<td>434</td>
<td>9–36</td>
<td>15.6</td>
<td>6.7</td>
<td>Moderately severe depression</td>
</tr>
<tr>
<td>PCL-M</td>
<td>425</td>
<td>17–85</td>
<td>33.0</td>
<td>17.1</td>
<td>Above cutoff for PTSD diagnosis</td>
</tr>
<tr>
<td>SBQ-R</td>
<td>436</td>
<td>4–21</td>
<td>6.3</td>
<td>3.5</td>
<td>Cutoff of (&gt;7) for suicide risk</td>
</tr>
<tr>
<td>CES</td>
<td>253</td>
<td>7–41</td>
<td>15.7</td>
<td>10.0</td>
<td>Light-moderate combat exposure</td>
</tr>
</tbody>
</table>

**SBQ-R items**

<table>
<thead>
<tr>
<th>Symptom type</th>
<th>Total (N)</th>
<th>% Total sample ((N))</th>
<th>Clinical interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide ideation</td>
<td>204</td>
<td>46% (441)</td>
<td>Experienced suicidal thoughts</td>
</tr>
<tr>
<td>Ideation with plan</td>
<td>88</td>
<td>20% (441)</td>
<td>Suicidal thinking with a plan</td>
</tr>
<tr>
<td>Thought of suicide often/very often</td>
<td>46</td>
<td>10.4% (441)</td>
<td>Suicidal thinking on frequent basis</td>
</tr>
<tr>
<td>Suicide attempt in past</td>
<td>34</td>
<td>7.7% (441)</td>
<td>Made a previous suicide attempt</td>
</tr>
<tr>
<td>Suicide attempt likely in the future</td>
<td>17</td>
<td>3.8% (441)</td>
<td>Rated likelihood of suicide likely or very likely</td>
</tr>
<tr>
<td>Experienced severe anxiety ((GAD7 &gt;15))</td>
<td>152</td>
<td>34.6% (439)</td>
<td></td>
</tr>
<tr>
<td>Significant symptoms of PTSD ((PCLM &gt;28))*</td>
<td>194</td>
<td>45.6% (425)</td>
<td></td>
</tr>
<tr>
<td>Experienced severe depression ((PHQ9 &gt;20))</td>
<td>103</td>
<td>23.7% (434)</td>
<td></td>
</tr>
<tr>
<td>Exposed to combat</td>
<td>244</td>
<td>58% (420)</td>
<td></td>
</tr>
<tr>
<td>Exposed to moderate or higher (heavy) combat ((CES &gt;17))</td>
<td>109</td>
<td>44.6% of those with combat exposure</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** GAD7, Generalized Anxiety Disorder-7; PHQ9, Patient Health Questionnaire-9 (depression); PCLM, PTSD Checklist (military version); SBQR, Suicidal Behaviors Questionnaire-Revised; CES, Combat Exposure Scale.

* PCLM cutting score is 28 or \(>\) for Iraq and Afghanistan veterans.
likely in the future, those with heavy combat exposure, those with severe depression, those making an attempt with intent to die and those with significant symptoms of PTSD all scoring significantly higher on the GAD-7, the PHQ-9, and the SBQ-R.

Hierarchical multiple regression was used to explore main effects, along with possible mediators and moderators. In particular, the role of PTSD and depression in predicting potential suicide risk is a critical question. Analysis to test the moderating and mediating effects was consistent with suggestions by Baron and Kenny (1986). To test for the potential moderating effect of PTSD, we regressed “likelihood of a suicide attempt in the future” on the moderator (PCL-M), the predictor (PHQ-9), and the interaction term for depression and PTSD symptoms. Consistent with Baron and Kenny’s (1986) work, a significant interaction term indicates moderation. The interaction proved significant, $F(1, 405) = 14.21, p < .001$, consistent with the notion that the severity PTSD symptoms moderates the relationship between suicidality and depression. No additional moderating or mediating effects were identified.

**Discussion**

The purpose of the current study was fairly simple and straightforward: to explore the emotional adjustment, psychological symptoms, and suicide risk in a national sample of student veterans. As the first study exploring these issues with student veterans on college and university campuses, results should provide a useful foundation for future research and hopefully help guide clinical service delivery. Although consistent with our original hypothesis, we were quite surprised by the frequency and severity of psychological symptoms and suicide risk in this sample, with almost 35% of the sample experiencing severe anxiety, 24% experiencing severe depression, and almost 46% evidencing significant symptoms of PTSD. Of particular concern, there are significant numbers of participants thinking about suicide (46%), with 20% having a plan, 10.4% thinking about suicide “often or very often,” 7.7% making an attempt, and 3.8% believing that suicide is either likely or very likely. These numbers are alarming, not only in comparison to the modal college or university student, but also in contrast to VA clinical populations (e.g., Jakupcak et al., 2010; Pietrzak et al., 2010). Current results would appear to indicate that large numbers of student veterans are experiencing significant psychiatric symptoms, with a considerable number at heightened risk for suicide. It would also appear that PTSD is a particularly significant factor, with 82% of those making a suicide attempt experiencing significant symptoms. Initial findings indicate that PTSD symptoms moderate the relationship between depression and suicidality, something for all clinicians to be mindful of in day to day practice. PTSD symptoms can often times be overlooked when comorbid with significant depression, hopelessness, and suicidality.

Given the type, frequency, and severity of psychiatric symptoms, and the simple fact that these veterans are on college and university campuses, it is important to consider whether or not universities are adequately staffed and prepared to assist and treat them when needed. Treating combat-related trauma and suicide risk require special training, clinical exposure, supervision, and experience (e.g., Rudd, 2000). Given our findings, it would appear to be a reasonable assumption that some, if not many, of these

experienced “severe anxiety,” 23.7% experienced “severe depression,” and 45.6% exceeded the cutoff score for PTSD (in accordance with the PCL-M cutting score for OIF/OEF veterans). In short, the “average” student veteran participant reported experiencing moderate anxiety, moderately severe depression, significant symptoms of PTSD, and evidencing at least some noticeable suicide risk. It is important to remember that this survey targeted student veterans in general, not those presenting for clinical services at the VA or elsewhere on college and university campuses.

Consistent with the elevated SBQ-R mean, a more detailed review of SBQ-R items reveals significant suicide risk in the sample. Rates of suicidal ideation were remarkably high, with 46% of the student veteran sample indicating suicidal thinking at some point in the past. Similarly, 20% of the sample reported suicidal thoughts with a plan, 10.4% reported thinking of suicide often or very often, and 7.7% reported a previous suicide attempt. Of particular concern, 3.8% of the sample reported that a suicide attempt was either likely or very likely. Markers of suicide risk are noticeably higher than those in the most recent ACHA (2011) data, with 6% of the general student population reporting “seriously considering suicide” and 1.3% a suicide attempt.

The frequency and severity of clinical symptoms in the student veteran sample are very serious. Actually, survey data indicate problems comparable or more severe than those of veterans actually seeking mental health services from VA medical centers (e.g., Jakupcak et al., 2010; Pietrzak et al., 2010). Jakupcak et al. (2010) found 13% of veterans seeking mental health services to be at elevated risk for suicide. In the current sample it is at least 20% (i.e., ideation with a plan) and arguably higher. Pietrzak et al. (2010) found 12.5% of veterans to have thought about suicide in the two weeks before completing survey questions. These numbers are in stark contrast to the current sample in which 20% have experienced suicidal thoughts with a plan, along with 10.4% reporting thinking of suicide often or very often, and 7.7% having made an attempt.

**Understanding Suicide Risk in the Sample**

Over the course of the past 5 years, considerable effort has been expended exploring the relationship between PTSD and suicide in active duty military service members (Guerra & Calhoun, 2011). We found a very strong relationship between PTSD and suicide attempts in our sample, with 82% of those reporting a previous suicide attempt reporting significant symptoms of PTSD, $\chi^2(1) = 21.29, p < .001$. The same relationship was true using those qualifying for severe depression, capturing 60% of those making a suicide attempt, $\chi^2(1) = 27.35, p < .001$. The severity of combat exposure did not differentiate suicide attempters from the rest of the sample.

In an effort to explore suicide risk in more depth, we compared mean scale scores (i.e., GAD-7, PHQ-9, and SBQ-R) across a number of identified groups including: suicide attempters, those indicating that a suicide attempt is “likely” in the future, those with “heavy” combat exposure, those with severe depression, those making a suicide attempt indicating that they had “intent to die” at the time of the attempt, and those experiencing significant PTSD symptoms. All comparisons across groups were significant, with suicide attempters, those indicating another suicide attempt as

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student veterans will eventually make their way to student services
and/or the counseling center.

We are unaware of any data describing the preparedness of
college and university counseling centers to meet such unique
demands. At a minimum, training and supervision specific to these
problems should be considered. Given the potentially unique
nature of student veterans’ issues, attention would appear warranted
across several domains including training and education, screen-
ing, clinical care, and overall administration. From an administra-
tive perspective, it would appear essential for colleges and univer-
sities to be attentive to the unique needs of student veterans. Many
campuses have already responded with Student Veteran Service
Centers emerging across the nation. We would suggest training
across campuses, including not just clinical personnel in counsel-
ing centers, but also those in student services and others that have
significant contact with student veterans. The focus of trainings
could target a number of important issues, including recognizing
the unique experiences and needs of student veterans, engaging
student veterans, warning signs (including PTSD, depression, sub-
stance abuse, and suicidality), understanding the nature of clinical
problems, and responding in a caring and effective manner that
facilitates the transition to clinical care if needed.

Broad-based screening for student veterans is also worth con-
sidering, particularly during the early transition to campus, includ-
ing orientations. If student veteran-specific orientations are con-
ducted, it would provide greater potential for mass screening
efforts. The possibility of collaborating with the DoVA, both at the
national and local level should be considered. The ability to
coordinate and collaborate in providing clinical care to student
veterans is a particularly salient issue, one that has yet to gain
momentum given the lack of empirical evidence of significant
problems on college and university campuses.

Similarly, local studies and surveys of student veterans would be
helpful in guiding the process, particularly in terms of understand-
ing whether or not our numbers are consistent with local popula-
tions. Many college and universities have student veterans groups
that could facilitate such efforts. The SVA could possibly assist in
the process given their identified mission. It is also important for
college and university personnel to consider targeted outreach
efforts and campaigns for student veterans. Identifying and reach-
ing those in need are a critical first step, particularly for suicide
prevention.

On the clinical service side, counseling centers need to think in
strategic fashion about the potential for significant demand from
student veterans. As mentioned above, combat-related trauma re-
quires specific treatment approaches, with many clinicians outside
the DoVA system having limited exposure to such clinical models.
The need for experienced supervision is also important, particu-
larly in terms of developing and implementing new clinical skills.
DoD is currently funding the Strong Star initiative (https://
delta.uthscsa.edu/strongstar/research.asp), which includes a total
of eight clinical trials targeting the treatment of posttraumatic
stress symptoms in active-duty soldiers, a first in our nation’s
history. In accordance with emerging empirical support, it is
critical for clinicians on university and college campuses to be
appropriately trained in two primary domains if they are going to
work with combat veterans experiencing PTSD and associated
suicidality:

1. Treatments demonstrated to be effective with combat-
related PTSD, including cognitive processing therapy
and prolonged exposure (cf. Sharpless & Barber, 2011).

2. Suicide risk assessment approaches unique to veterans
with prominent PTSD symptoms (cf. Krysinska & Lester, 2010).

Undoubtedly, there will be a number of clinical protocols
emerging from the Strong Star effort that will have great relevance
to the treatment of student veterans on campus, particularly those
having served in Iraq and Afghanistan. Current results also create
an intriguing and unique opportunity for colleges and universities
to develop strategic partnerships with the DoVA, helping make the
transition to campus a smooth one, particularly for those in need of
clinical services.

Although we believe our results helpful, they are certainly not
without limitations. The brief survey nature of the study limits the
utility of findings, particularly our ability to evaluate anxiety,
depression, PTSD, insomnia, and suicide risk in depth. We have
purposefully used brief screening measures and, accordingly, it is
possible that we have not captured the constructs in true depth
necessary for clinical assessment. Although we have referred to
those “qualifying” for a PTSD diagnosis, we used a brief screening
tool only and cannot make a definitive diagnosis. The cross-
sectional nature of our data does not make it possible to explore
predictive relationships over time, something that would be clinically
useful when targeting suicidality. Participation in the survey
is biased by “self-selection,” something that could help explain the
alarmingly high rates of psychiatric symptoms uncovered. How-
ever, it is important to point out that recruitment material invited
student veterans to participate in a “study examining student
veteran experiences on college and university campuses,” with no
specific mention of emotional adjustment and psychological symp-
toms.

Although the study has a number of limitations, available data
indicate a significant problem among student veterans, consistent
with that experienced by the broader veteran population. The
unique context of college and university campuses requires a
unique approach to reaching student veterans in need, particularly
those at risk for suicide.

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