UNIVERSITY OF SOUTH ALABAMA

UNIVERSITY of WEST FLORIDA

From Boots to Books:

Understanding the Mental Health and Academic Needs of Student Veterans at USA and UWF

Joseph M. Currier, PhD, University of South Alabama, Psychology Department

Marc Churchwell, EdS, University of West Florida, Military & Veterans Resource Center

Lori Milkeris, LCSW, University of West Florida, Military & Veterans Resource Center

Ryon C. McDermott, PhD, University of South Alabama, Department of Counseling and Instructional Sciences

ACKNOWLEDGEMENTS

First and foremost, we are grateful for the veterans and military-connected students who supported this project over the past two years. This report would not have been possible if these men and women were unwilling to devote the necessary time to share their experiences and perspectives. Second, this project was made possible from generous funding via the University of South Alabama's Research and Scholarship Development Program. In particular, we thank Drs. Kim Littlefield and Lynne Chronister in the Office of Research and Economic Development for their support and flexibility. Third, we thank Tom Curtis for his consistent willingness to support initiatives to help veterans and military-connected students; this project would have never progressed if Tom were not so responsive to our questions and requests for information. We also thank Suriya Thongsawat and Dr. Raj Chaudury in the Innovation and Learning Center for offering their time and expertise to develop this report.

Finally, we acknowledge that the successful completion of the many components of this research project was a team effort from start to finish. In addition to the four authors of this report (Joe Currier, Marc Churchwell, Lori Milkeris, Ryon McDermott), students in the Trauma Reactions and Interpersonal Loss (TRAIL) Lab fulfilled many crucial roles over the duration of the project. Most notably, we thank Brook Sims for serving as a committed and capable project manager over the past two years. Other important contributions were made by Wes McCormick, Timothy Carroll, Brett Slagel, Darrien Hawkins, Taylor Anderson, Jessie Deiss, and Joshua Moore. We are grateful for all of the behind-the-scenes work that each of these students performed at numerous points.

EXECUTIVE SUMMARY

Record numbers of military veterans and service members are making their way to college campuses across the U.S. to pursue new educational and vocational goals. The purpose of the "Boots to Books" project was to obtain foundational knowledge on mental health needs, academic distress/retention, and rates of service utilization among student veterans and service members enrolled at the University of South Alabama (USA) and University West Florida (UWF). The project utilized a mixed method approach of collecting and interpreting the empirical information, consisting of psychometrically-validated assessments in a quantitative survey and in depth qualitative interviews with selected participants who met pre-determined inclusion criteria. In total, 538 student veterans completed the survey and 39 participated in a qualitative interview with a member of the research team.

This process yielded several findings that could support development of programming aimed at enhancing psychological wellness and academic retention with student veterans at USA and UWF. Overall, over three-quarters of the sample were confident about their academic success, enjoyed their classes, and endorsed a strong probability of earning a degree and re-enrolling the next semester. However, in keeping with other work, over one-third exceeded a well-established threshold for gauging problem drinking. In addition, over one-third endorsed clinical levels of PTSD, MDD, and/or risk of suicidal behavior that indicated a probable need for treatment. Of this clinical subset, 62% had utilized health care services in the Department of Veterans Affairs (VA) since serving in the military. In addition, nearly half of this clinical subgroup had utilized psychotropic medication in the past year. However, while over half of these veterans with mental health problems had also pursued psychotherapy/counseling in this time frame, only one in three had participated in an adequate number of sessions to yield progress in treatment.

The following seven recommendations are offered in light of these findings:

- Improve access and coordination with VA Health Care
- Strengthen options for community-based mental health services
- Develop effective and culturally-sensitive services on campus
- Educate faculty/staff on experiences of student veterans
- Promote mental health literacy in student veterans
- Develop network of peer support specialists for at-risk veterans
- Enhance access and availability of academic support service

There is a long history of residents of the Gulf Coast accepting the call to defend our nation in times of need via military service. We hope this report will contribute to supporting military veterans who are entrusting their post-secondary education with the University of South Alabama and University of West Florida.

TABLE OF CONTENTS

PURPOSE

The purpose of the "Boots to Books" project was to obtain foundational knowledge on mental health needs, academic distress/retention, and rates of service utilization among student veterans and service members enrolled at the University of South Alabama (USA) and University West Florida (UWF). This project was funded through USA's Research and Scholarship Development Program and represented a collaboration between USA and UWF. Looking ahead, findings will ideally inform the development of programs to enhance psychological well-being and academic success of students from USA/UWF who served in the U.S. military.

BACKGROUND

Recent military conflicts in Iraq (i.e., Operation Iraqi Freedom) and Afghanistan (i.e., Operation Enduring Freedom) mark the longest sustained ground combat operations in our nation's history. Given changes in philosophy/strategy across the U.S. Armed Forces since these wars, over 200,000 persons will transition annually from military life to negotiating civilian roles and responsibilities until 2019 (National Center for Veterans Analysis and Statistics, 2016). Obtaining post-secondary education represents a crucial component to meeting post-military professional goals. As such, the U.S. Department of Veterans Affairs (VA) implemented the post-9/11 GI Bill to facilitate military-to-civilian transitioning via financial support for tuition, books, and housing costs. At a national level, over one million veterans have utilized the post-9/11 GI Bill or other VA education benefits (U.S. Governmental Accountability Office, 2014). As steady numbers of service members continue to separate from the military, participation in these educational benefit programs will increase exponentially over the coming years (U.S. Governmental Accountability Office, 2014). However, questions persist as to whether post-secondary institutions are prepared to adequately address the academic and psychosocial needs of veterans who are making their way to their campuses.

Potentially due to operational demands, exposure to stress/trauma, and/or accumulation of stressors in the military-to-civilian transition, findings indeed suggest that a substantive portion of student veterans meet criteria for a range of mental health conditions (Borsari et al., 2017). For example, when focusing on samples from across the U.S., 9% to 45.6% screened positive for posttraumatic stress disorder (PTSD) and 11.5% to 23.7% had a probable diagnosis of major depression (e.g., Barry, Whiteman, MacDermid, & Hitt, 2012; Currier, McDermott, & Sims, 2016; Fortney et al., 2016; Grossbard et al., 2014; Rudd, Goulding, & Bryan, 2011; Widome et al., 2011). In addition, risk of suicidal behavior has been well-documented in student veterans (e.g., Rudd et al., 2011) along with high rates of alcohol misuse (Grossbard et al., 2014; Widome et al., 2011). However, consistent with an under-utilization of available mental health services on college campuses in general, other findings suggest that less than half of student veterans with these types of problems will seek treatment (Currier et al., 2016; Fortney et al., 2016). While it is not clear whether non-veteran students experience similar levels of difficulties (Eisenberg et al., 2013;

Gallagher, 2014), the association between academic failure/dropout in college and untreated mental health conditions has been well-documented in general (e.g., Gruttadaro & Crudo, 2012).

Addressing mental health and academic concerns is particularly important for post-secondary institutions in the Alabama/Florida portion of the Gulf Coast. At a national level, the U.S. Census Bureau (2014) estimates that less than 1% of the general population served in the military. However, potentially due to a strong cultural value on military service along with geographic proximity to major bases/installations of nearly all branches of the U.S. Armed Forces, at least 10% of the residents in this region have a personal history of military service. It is not surprising therefore that approximately 10 to 15% of students at USA and UWF have served in the military at some point in their lives, many of whom supported military operations in Iraq/Afghanistan over the past decade. As such, it is imperative that our universities provide and/or coordinate appropriately-rigorous and culturally-sensitive services for this substantive subset of the student bodies.

METHODOLOGY

Recruitment

Following independent IRB approvals from the two universities, this project recruited students from USA and UWF who had served in U.S. military at some point in their lifetime (including present). Namely, at start of the 2015-16 and 2016-17 academic years, contact information was obtained for students who were utilizing sources of G.I. Bill® funding that might denote veteran status (e.g., Post 9/11 GI Bill). An adapted version of Dillman and colleagues' (2009) mail survey procedure was then implemented. Specifically, after sending a letter describing the study and directions for opting out, a packet with the study questionnaire, consent form, and lists of available mental health resources for veterans in the respective communities was mailed with a return-postage envelope. A reminder letter was mailed one week later, followed by an email invitation to non-responders one month later with a link to an online version of the survey via Qualtrics. For those students who did not respond to this online invitation, three reminders were sent at one-week intervals over the next month. Of the 2,031 student veterans from USA/UWF who were invited to participate over the two-year period, 538 completed the study questionnaire (paper-and-pencil = 274, online version = 264) for a total response rate of 26.4% (USA = 25%, UWF = 27%).

Respondents were offered a $25 gift card for supporting the project along with a list of mental health resources that might be available for them in the Mobile or Pensacola areas. While many of the questions addressed sensitive topics that might activate distress (e.g., suicide), this study provided a rare opportunity for members of the research team to connect with student veterans who had not yet engaged with available resources both on and off-campus. Namely, whether through conversations in which veterans were provided with emotional support or direct referrals to service providers, this project seemed to encourage a handful of veterans to become more engaged in their health and success.

Sample Description

Demographic characteristics. The demographic characteristics of the sample are presented in Table 1. In keeping with the changing representation of different genders in the U.S. military (Department of Defense, 2010), nearly four in ten of the participants were women. However, unlike the ethnic breakdown of military service branches, two-thirds of the sample described themselves as being from a White or Caucasian background. While this proportion does not mirror the racial/ethnic diversity of the U.S. military (Department of Defense, 2010), it reflects the demographics of this region of the country. When compared to college students who did not participate in the military, there was a greater representation of older individuals in the sample who were married and/or had children. From a religious and/or spiritual standpoint, about one-fifth of the sample did not endorse ties to a religiously conventional group/tradition or endorsed a clear identification along these lines. Instead, consistent with national demographics of veterans (e.g., McLaughlin, McLaughlin, &VanSlyke, 2010), the vast majority of participants had affiliations with Christian groups/traditions and endorsed a salient religious and/or spiritual identification of some sort.

Table 1 Demographic Characteristics of Study Sample

	Percentage (%)
Gender	
Male	61.7%
Female	38.3%
Age (in years)	
18 to 22	4.1%
23 to 25	10.1%
26 to 30	28.5%
31 to 35	21.2%
36 to 40	10.4%
41+	25.5%
Race	
African American	15.9%
Caucasian	67.5%
Hispanic/Latino	1.7%
Native American	2.1%
Asian American	0.2%
Pacific Islander	4.1%
Multiracial	5.6%
Other Group	1.3%
Marital Status	
Single or never married	26.6%
Married	55.2%
Divorced	13.1%
Living with domestic partner	4.6%
Any Children?	
Yes	52.8%
No	46.3%
Religious Affiliation	
Agnostic/Atheist	21.9%
Catholic	17.5%
Baptist	19.6%
Methodist	8.1%
Other Christian	23.7%
Other Non-Christian	11.3%
Spiritual Identification	
Both religious and spiritual	38.3%
Religious but not spiritual	7.0%
Spiritual but not religious	34.6%
Neither religious or spiritual	19.7%

Educational backgrounds. As highlighted in Table 2, over half of the sample had transferred to USA or UWF from other institutions and there was a near even representation of students from different years in their degree programs (including graduate students and non-degree seekers). In addition, two-thirds were raised in families in which a parent or sibling attained a post-secondary degree of some sort. However, about one in three of the participants were first-generation college students.

Table 2 Educational Backgrounds of Participants

	Percentage (%)
Highest Level of Education by Family Member	
8 or fewer years of formal education	1.7%
Some high school but did not graduate	4.1%
High school graduate or G.E.D.	28.8%
Degree from 2-year college	17.1%
4-year, Bachelor's degree	27.5%
Master's or Doctoral degree	20.3%
Year in Program	
1st year	6.4%
2nd year	10.3%
3rd year	20.5%
4th year	28.8%
5th year+	6.8%
Graduate student	25.4%
Not seeking a degree	1.9%
Transfer Student?	
Yes	52.9%
No	47.1%

Military backgrounds. Military backgrounds of the sample are presented in Table 3. With the exception of Coast Guard, all branches of the US military were represented in the sample. Nearly the entirety of the sample had served in the capacity of Active Duty, with smaller subsets serving with the National Guard, Military Reserves, or multiple capacities during their military careers. Although two in three participants had served in the recent Iraq/Afghanistan eras and/or ongoing Global War on Terror, a substantive minority served in older military eras as well (e.g., Desert Storm, Desert Shield). In addition, most of these participants completed at least one war-zone deployment during their period of military service. In total, nearly half had obtained a service-related disability of some sort and over half were receiving monetary compensation from the VA.

Table 3 Military Backgrounds of Study Samples

	Percentage (%)
Military Branch	
Army	36.0%
Marine Corps	9.8%
Navy	25.2%
Air Force	31.1%
Coast Guard	0.0%
Capacity of service	
Active Duty	92.0%
Military Reserves	15.6%
National Guard	8.0%
Military era	
Vietnam Conflict	1.7%
Post-Vietnam War	2.1%
Cold War	10.1%
Peace Keeping Missions	10.1%
Desert Storm	16.4%
Desert Shield	14.7%
Global War on Terror	63.6%
Operation Iraqi Freedom	69.2%
Operation Enduring Freedom	65.0%
Number of war-zone deployments	
One	49.7%
Two	23.1%
Three	11.5%
Four	5.6%
Five or more	10.1%
Disabled Veteran?	
Yes	45.5%
No	54.5%
Is Disability Service-Connected?	
Yes	55.6%
No	44.4%

Note. Percentages add up to more than 100% because veterans' could endorse more than one category.

Quantitative Assessments

Participants completed a battery of psychometically-validated assessments of mental health symptoms, academic distress and retention, help-seeking and mental health service utilization. We will now briefly describe the instruments that provide the basis for this report.

***Posttraumatic stress*.** The PCL-5, a 20-item self-report measure that captures PTSD symptoms experienced during the past month in accordance with DSM-5 criteria (Belvins et al., 2015; Wortmann et al., 2016), was incorporated in the project. Participants were instructed to complete the PCL-5 with respect to the most stressful life event in their lifetime, which was identified with a life event checklist. Items were rated on a five-point scale, ranging from 0 = N*ot at all* to 4 = *Extremely*, and summed for a total symptom severity score. Total scores at or above 32 suggest probable cases of PTSD.

***Depression*.** The Patient Health Questionnaire (PHQ-8; Kroenke & Spitzer, 2002; Kroenke, Spitzer, & Williams, 2001) was used to assess symptoms of MDD. The PHQ-8 is a widely used instrument that asks respondents to rate the frequency of these symptoms over the past month, with scores ranging from 0 = *Not at all* to 3 = *Nearly everyday*. Total scores at or above 10 on the PHQ-8 indicate moderately severe levels of depressive symptomatology.

Alcohol misuse. Veterans completed the AUDIT-C (Bush et al., 1998; Bradley et al., 2003) for assessments of drinking frequency (i.e., "How often do you have a drink containing alcohol?"), quantity (i.e., "How many drinks containing alcohol do you have on a typical day when you are drinking?"), and problem drinking (e.g., "How often do you have six or more drinks on one occasion?"). In keeping with typical scoring recommendations (e.g., Bush et al. 1998; Bradley et al., 2003), these three items can create a total alcohol use score for study analyses. Total scores at or above 4 indicate hazardous drinking.

Suicidal behavior. The revised version of Osman et al.'s (2001) Suicidal Behavior Questionnaire (SBQ-R) was used to assess risk for suicidal behavior. This measure includes items assessing lifetime suicidal ideation and/or prior suicide attempts, frequency of suicidal ideation over the past twelve months, threat of making a suicide attempt, and likelihood of suicidal behavior in the future. We followed the scoring procedures as recommended by Osman et al. for computing an overall estimate of risk for suicidal behavior. Total scores of 7 or greater on the SBQ-R suggest clinical levels of risk on this measure.

Academic retention. Two subscales were incorporated to assess key dimensions of academic retention. First, academic distress was assessed using a subscale of the College Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62; Locke et al. 2011). The scale instructions ask participants to indicate how well each item describes them during the past two weeks on a five-point scale ranging from 0 (*Not at all*) to 4 (*Extremely well*). Next, institutional commitment was assessed with a subscale of College Persistence Questionnaire (CPQ; Davidson et al., 2009). Verbal labels for these response scales depended on the wording of the question. For example, a question

that asked “how satisfied” students are with something used a response scale with “very satisfied” and “very dissatisfied” as anchors. Another question that asked “how much” students liked something was answered with anchors of “very much” and “very little.” All items were rated on a five-point scale, and higher scores indicated greater institutional commitment. A sample is, “How likely is it that you will re-enroll here next semester?".

Mental health service utilization. Utilization of mental health services was assessed with items asking about the number of appointments that student veterans had completed with mental health professionals for therapy/counseling and/or psychotropic medications during the previous year and since joining the military (4 questions in total). Responses to these items were based on this scale: 1 = *Never*, 1 = *1 or 2 times*, 2 = *3 to 5 times*, 3 = *6 to 8 times*, and 4 = *9 or more times*.

Utilization of VA healthcare services. We also assessed whether student veterans had utilized any of these VA healthcare services since serving in the military: counseling/therapy for PTSD, other mental health counseling/therapy, medication for PTSD or mental health care, primary care visit(s) with physician(s), and other health care service(s). Responses to these items were based on a yes/no format in which “No” = 0 and “Yes” = 1.

Qualitative Interviews

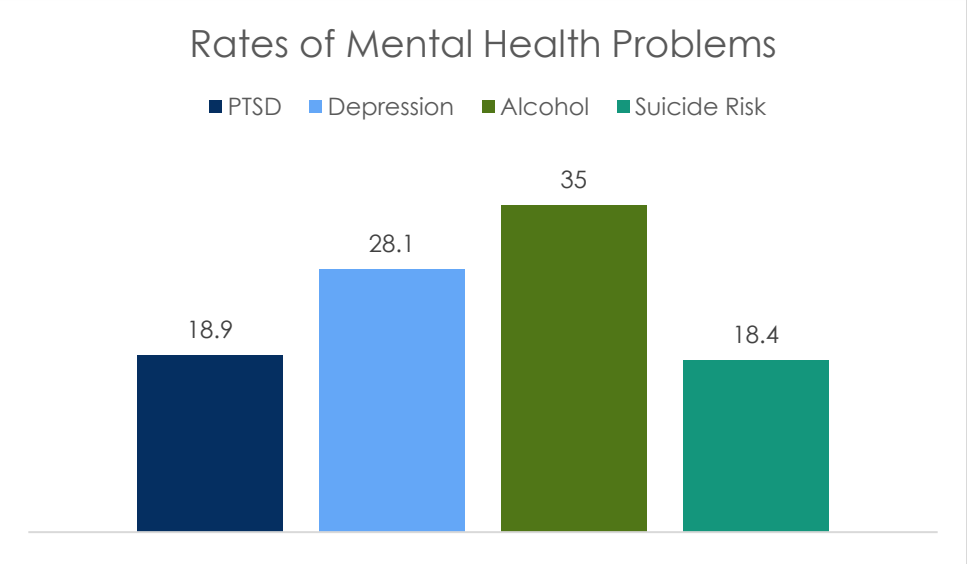
In addition to these quantitative measures, 39 participants were selected to share their views and experiences in more depth in a 20- to 60-minute qualitative interview. A semi-structured format was utilized for these interviews, with questions focusing on military culture and beliefs/values, military-to-civilian transitioning, life as a college student, and help-seeking barriers and mental health stigma. We will draw upon portions of these interviews to illustrate major findings in this report; additional qualitative analyses will be performed at a later date.

OVERVIEW AND FINDINGS

Mental Health Problems

In total, student veterans endorsed clinical levels of mental health symptoms at these rates on the aforementioned measures: PTSD = 18.9%, depression = 28.1%, alcohol misuse = 35%, and risk for suicidal behavior = 18.4% (see Figure 1). Overall, 56.9% of the sample endorsed at least one of these problems. When excluding the subset of participants who exceeded a well-established threshold for problem drinking, over one-third of the sample (37.2%) had clinically elevated scores on at least one of the three assessments of traditional mental health problems that would indicate a probable need for treatment.

Figure 1: Rates of Mental Health Problems



Participants' shared the following comments regarding experiences with mental health problems in the qualitative interviews:

"I just do what I do with every stressful situation. I bottle it up as tight as it will go. I wait until everything breaks so bad that I have to fix it. That point has not come yet. I'll probably be paying this price in . . . . . I don't know . . . . . five years maybe."

"I guess people just want to hide any mental health problems. Even if they do not hide, I would say they don't want to accept the fact that they have mental problem."

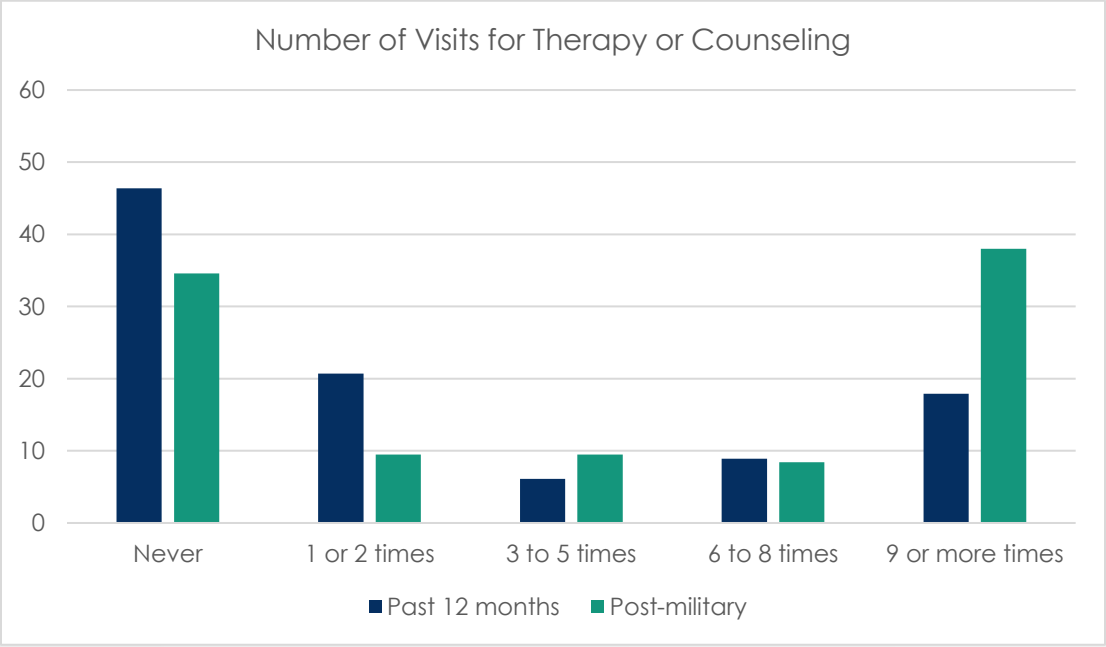
"A lot of stuff I just internalize . . . . . unless it's to the point where I just got to talk about it. Typically, I'll talk about it with other veterans . . . . . guys who have served like me."

"I have been conditioned over 23 years of being in leader in the military service that you can't show weakness to those that are under you. I had to be able to jump right back in, even after my vehicle was hit with an IED. The next day I was like – 'Okay, we are not going to sit around and think about this. Let's go right back into the mission again, let's go right back into the fight' – or else I would have lost it."

Mental Health Service Utilization

Therapy/counseling. Focusing on the 37.2% of participants with a probable need for mental health treatment, Figure 2 displays the number of visits for psychotherapy or counseling in the past year and since serving in the military. In total, over half of this clinical subgroup had consulted with a professional therapist or counselor in the preceding year and two-thirds utilized these services to some degree since their military service. However, when reviewing the "dosages" of treatment, less than one-third had participated in an adequate number of sessions that could facilitate appreciable progress in treatment in the past year (i.e., 6 or more total visits).

Figure 2: Number of Visits for Psychotherapy/Counseling for Clinical Subgroup



Participants' offered these qualitative comments about seeking and utilizing therapy/counseling in the interview portion of the study:

"You know I would love to get help. I believe in what psychiatrists do, I do. I advocate for the importance of counseling. I think it's excellent, I really do . . . . . maybe if I found the right person that could wrangle me into it . . . . . maybe if it wouldn't go on my record forever. That's a pretty big deal I guess. I keep coming back to that when I think about seeking help".

"It would have been a little bit of embarrassment for me . . . . . just that the problem was something that I couldn't have handled on my own. I know it's silly but ego, you know, runs a lot of things in this world I think. It's just that embarrassment that I couldn't handle something on my own that keeps guys from seeking help."

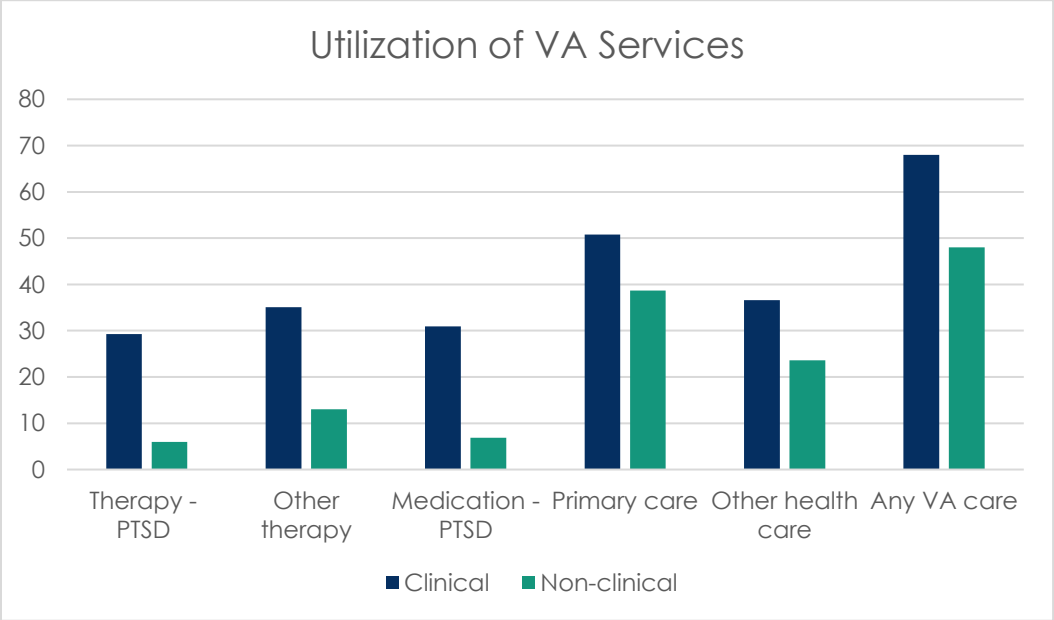
"It's a very frustrating process because you have to get to the point and say 'I need help.' Then, when you see the mental health professional, their job is to evaluate you. The whole evaluation process is one of the most frustrating experiences I've ever had. My buddy walked out because it was all like – 'How does this make you feel?'"

"If I needed help now, I would go and talk to somebody. I would not be hesitant or I would not stay behind and hide my problem. However, I would not go straight to see a doctor . . . . . I'd talk to my wife, or someone, like my friends or somebody. I'd start from there to get help."

"I've actually wanted to go for help, but I haven't done it because I haven't had the time . . . . . I am very interested in talking to someone who's trained you know to listen to people, who knows about mental health. I think it's a healthy thing for everyone to do. It's unfortunate that there is this stigma in a lot of societies in our world about mental health. You get check ups for your physical body . . . . . the scary thing with mental health is that you can sometimes not realize that things are wrong and plan ways to rationalize things you're doing crazy."

Utilization of VA health care services. Since serving in the military, 62% and 48% of clinical and non-clinical subgroups had utilized one of the forms of VA health care assessed in the study, respectively (see Figure 4). Of these categories of health care services, primary care was the most commonly utilized in both subgroups. When focusing on the clinical subset in particular, rates of VA mental health services were: psychotherapy/counseling for PTSD = 29.3%, therapy for other mental health problem = 35.1%, medication for PTSD or other problem = 30.9%.

Figure 4: Rates of Utilization of VA Health Care Services



Participants' shared the following comments about perceptions of VA health care in the qualitative interviews:

"I don't think they really fail . . . . I mean at least with respect [to VA clinicians] that I've had. I've had some great ones. I would say of the VA system that the mental health has probably been the best . . . . . I mean they relate to me. I guess because they see so many veterans, they relate to me . . . . . they know what I'm going through. Some are actually veterans themselves, some aren't. They never made me feel like they didn't understand or anything like that."

"For myself, it has taken me a long time . . . . my wife being persistent on me and telling me that there is something wrong . . . . that I needed to talk to somebody that I needed to get help. It's like going to the VA and actually telling them how I feel that there is something wrong . . . . . this is not right . . . . . I'm not the way I'm supposed to be."

"There are a lot of people who have PTSD, but they have PTSD very mildly. But, in order for them to actually get treated, unless they voluntarily go to the group sessions that are offered, they would have to have some type of chronic symptoms for them to actually be prescribed an actual treatment."

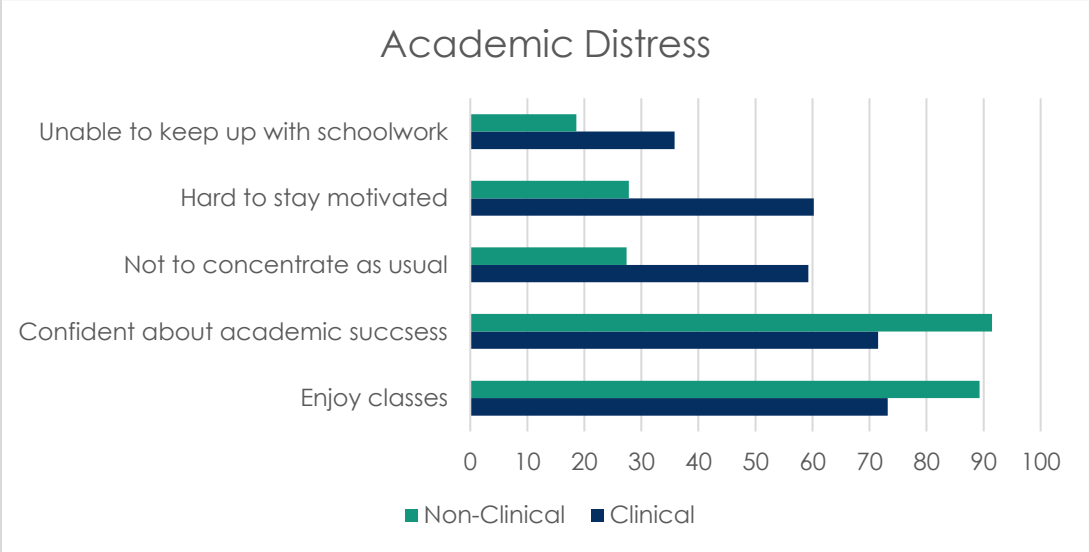
"I haven't had any encounters with the VA, but if you talk within the Army about the VA system, I think the people are trained well enough to find your problem."

"The counselors are often veterans at the VA. I think it would be a barrier for me to talk to somebody who wasn't a veteran . . . . . you know the military has so much service-specific lingo that when you start talking about it, you need somebody who has been there and understands. I probably would have struggled more with opening up to somebody if he wasn't somebody like that."

Academic Retention

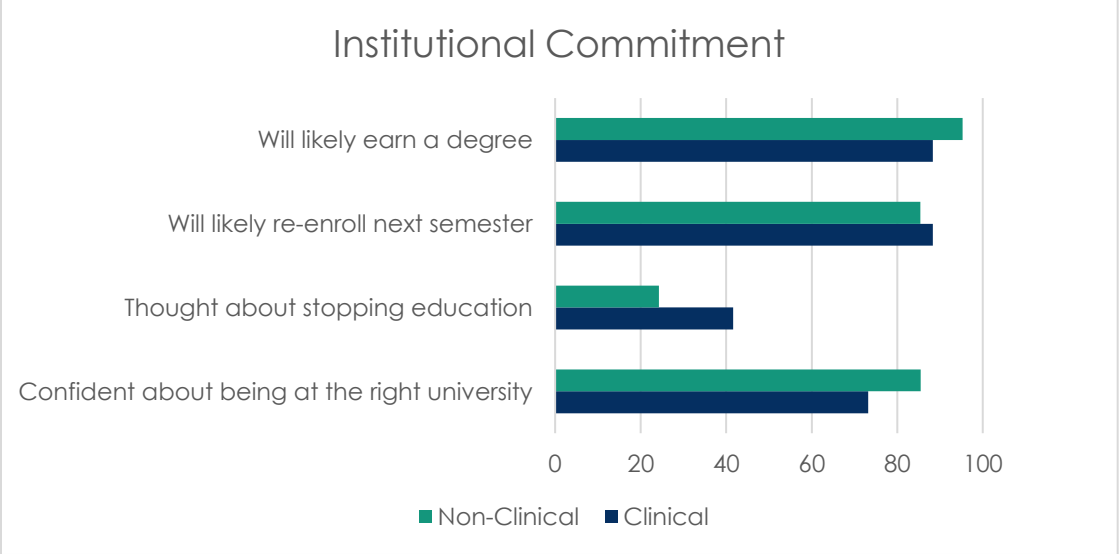
Academic distress. Figure 5 displays manifestations of academic distress based Locke et al.'s (2011) CCAPS-62 for clinical and non-clinical subgroups. When focusing on students with a probable need for treatment, nearly 60% reported difficulties with motivation and concentration, and one-third experienced difficulty keeping up with the schoolwork. These warning signs of academic failure/dropout were roughly 50% less in the non-clinical sample. In addition, when compared to the 90% of veterans in the the non-clinical sample who were confident about their academic success and enjoyed their classes, these two indices were 20% less for veterans with clinical levels of mental health symptoms.

Figure 5: Manifestations of Academic Distress



Institutional commitment. In total, drawing on the institutional commitment subscale of Davidson et al.'s (2009) CPQ, 80 to 90% of both samples reported confidence they would earn a degree and re-enroll in courses the next semester (see Figure 6). In addition, regardless of the presence of mental health symptoms, approximately three in four veterans were confident that their university was right for them. However, when compared to 22% of veterans in the non-clinical group who had contemplated stopping their education, nearly twice as many (41.6%) of the sample who needed treatment endorsed this response.

Figure 6: Dimensions of Institutional Commitment



Participants' discussed the following comments regarding academic functioning in the qualitative portion of the study:

"I don't really connect with a lot of people apart from my wife and my real close friends. I really just don't connect with people, especially with these college students . . . . . I'm never going to connect with them. It can get a little difficult for me in classroom situations, because I have to sit off by myself where I can be in the back of the room. So, if I don't find myself in the back of room, I get a little anxious. If people are talking, I have concentration issues . . . . . and if they're talking, I can't really hear the professor that well."

"Serving in the military put me on a path that made me a more reliable person. I wouldn't go to class before . . . . . now I'm showing up to class everyday . . . . . I don't miss a class unless it's like emergency. Being on time, being early actually . . . . . I'll be 15 minutes early, being reliable and it just – has a whole made me a better person."

"Well, I guess I never had the young college life. I started college when I was already an adult . . . . I guess and had challenges before college. So, going into it was kind of nerve wracking at first. I don't want it to be like high school again. But, it's not been that way at all at. It's been great. I love it."

"My experience as a veteran has allowed me to be adaptable. I'm going to adapt to whatever situation. If nobody talks to me, then I'll figure it out myself and I'll get through it . . . . . I'll figure out another pathway because the traditional pathway that I thought would be open was not. I missed the boat or I'm too late or I'm too old or whatever. Generation gap . . . . I'm not sure what it was, but coming into the traditional college life just wasn't what I expected. I had a tough time . . . . . a really tough time."

"My biggest stress when I came into the college was that I didn't have an orientation . . . . I didn't have anyone there to guide me around. I really had to feel everything out for myself and learn it. But, once I did find things out, especially about the Veteran Resource Center, and started coming here, I was able to find my way around things. That's been my only support. If I hadn't come here and started asking questions, I probably would still be lost."

"Finding paths to success along the way are harder than I thought they would be. My hope is that I'll eventually reach it. But, as a veteran, it's brought out that drive that I already had in me and still makes it possible for me to keep going. If I would not have had all those experiences coming in, I probably would have given up, and just say – 'forget it, I'll just stay right here and do this and not try and make myself a better person'."

DISCUSSION AND RECOMMENDATIONS

Several major findings emerged for mental health needs and service utilization for student veterans at USA/UWF. Numbers of veterans who were experiencing levels of PTSD (18.9%), depression (28.1%), and risk for suicidal behavior (18.4%) that indicate a probable need for treatment aligned with samples from other institutions (Borsari et al., 2017). However, when compared to previous work (e.g., Grossbard et al., 2014; Widome et al., 2011), problem drinking was more prevalent than anticipated across the two universities (35%). Encouragingly, roughly half to two-thirds of the overall sample had utilized health care services in the VA system since serving in the military. Moreover, over half of veterans who exceeded thresholds of mental health problems had utilized therapy/counseling or psychotropic medication in the preceding year, findings which also compare favorably to other studies (e.g., Currier et al., 2016; Fortney et al., 2016). However, when considering veterans who sought therapy/counseling, there was a pattern to only participate in minimal numbers of sessions. Given that PTSD, alcohol misuse, and other conditions often respond better to psychological approaches than biological ones, it is evident many veterans with a probable need for help are not receiving the appropriate type and amount of treatment. Although the vast majority of veterans at the two universities reported high institutional commitment (75% to 90%), there was indeed a pattern for the clinical subgroup to endorse warning signs of academic distress at twice the rates as peers who were not experiencing under-treated mental health conditions.

We will now offer seven recommendations for addressing these findings. Notably, when considering many of these suggestions, many efforts have already been initiated to support the psychological well-being and academic success of student veterans along these lines. Looking ahead, we call for ongoing implementation and potential expansion of these efforts. However, in other cases, additional and novel initiatives will be needed to meet the mental health and academic needs of veterans at USA and UWF. Keeping in mind that (1) equivalent to greater numbers of student veterans were not experiencing mental health problems and/or academic distress and (2) these issues are equally prevalent in college students who did not serve in the military (e.g., Eisenberg et al., 2013; Gallagher, 2014), there is nonetheless a clear need for promoting the accessibility and utilization of appropriately-rigorous and culturally-sensitive services for student veterans at USA and UWF.

Recommendation #1:
Improve access and coordination with VA Health Care

Honorably discharged veterans are frequently eligible for cost-free health care from the VA for certain period following their military service. Considering that nearly 50% of the sample had not utilized VA services, it is recommended that faculty/staff become knowledgeable about these resources and encourage veterans to consult with VA offices on campus about the availability and possible helpfulness of VA health care. In addition, beginning at new student orientation activities, veterans will benefit from education about VA health care as well as guidance about negotiating this complex system. These latter recommendations could also be addressed by more fully bridging VA providers on the USA/UWF campuses, whether in the form of a clinic or placing VA providers in existing offices on campus.

Recommendation #2:

Strengthen options for community-based mental health services

Record numbers of veterans are seeking mental health services in the Gulf Coast VA Health System, giving rise to an over-burdened system of care that cannot meet the needs of all veterans in this region. As highlighted by high rates of medication utilization in the sample, one solution to this issue entails a reliance on treatment approaches that do not require consistent, face-to-face appointments with providers. Importantly, while medication can lessen depressive and anxiety symptoms, biological treatments alone are frequently inferior to an evidence-based approach to therapy/counseling for prominent problems in this population (e.g,, PTSD, alcohol misuse). As such, there is a need for strengthening partnerships with non-VA, community-based options for student veterans to receive such services.

Recommendation #3:

Develop effective and culturally-sensitive services on campus

On-campus counseling centers at USA/UWF represent an untapped resource for addressing the needs of student veterans. Consistent with trends from colleges/universities across the country (Borsari et al., 2017), findings from a prior study suggest that student veterans in this region are generally reluctant to utilize institutionally-based options (Currier, McDermott, & McCormick, in press). Targeted outreach on the part of counseling center staff is likely needed to inform student veterans about therapy/counseling options and wellness services they might offer. Given findings that the vast majority of non-VA providers lack understanding about military culture and competency to provide evidence-based treatments for common mental health problems in this population (e.g. PTSD; Tanielian et al., 2014), specialized training for designated providers could also be needed before taking these steps.

Recommendation #4:

Educate faculty/staff on experiences of student veterans

It was encouraging that nearly nine in ten of the respondents were confident they would earn a degree and re-enroll the next semester, given these indices can serve as powerful predictors of academic retention (Davidson et al., 2009). However, beyond removing barriers and increasing options for care, social integration and quality of life during the college years could be enhanced by equipping faculty/staff to understand the potentially unique experiences of student veterans. In so doing, faculty/staff can learn how to connect with student veterans and provide emotional support as well as education about resources both on and off campus. However, as highlighted by high numbers of veterans who did not endorse mental health problems, any such trainings should avoid perpetuating stereotypes by not exclusively focusing on PTSD and other mental health conditions.

Recommendation #5:

Promote mental health literacy in student veterans

Mental health literacy entails the ability to accurately detect/name a mental health condition, identify ways and sources for seeking help for the issue, and correctly identify the cause of the difficulties (Jorm et al., 1997). While we did not assess for these factors, this knowledge might serve as a crucial facilitator of help-seeking. For example, inability to identify PTSD and lack of understanding about its causes, potential health consequences, and best practice treatments can hamper the ability to seek appropriate sources of help. In addition, whether due to poor reports from peers or personal experiences, pessimistic views about the efficacy of treatment approaches or providers themselves might deter help-seeking (Currier et al., in press). Educational programs are therefore needed at the institutional level to promote student veterans' mental health literacy and confront myths about potentially helpful treatments, particularly for problem drinking.

Recommendation #6:

Develop network of peer support specialists for at-risk veterans

Findings suggest that many student veterans in need of mental health treatment will not seek professional therapists or counselors. In addition to addressing mental health literacy and stigma, another solution is to develop models of care according to student veterans' preferred sources of help. Namely, veterans who are not immediately amenable to utilizing mental health services might seek help from other veterans who share a cultural background in the military and possibly experienced similar problems. In collaboration with VA offices, counseling centers, on-campus student veteran organizations, and faculty/administrators, programs could be developed to train and oversee a network of peer support specialists who can share their experiences/knowledge with student veterans who are struggling in the mental health domain and/or manifesting warning signs of academic failure/dropout. These individuals might provide emotional support and help veterans to utilize available services when indicated. In addition, peer support specialists could organize community-building activities and model healthy lifestyles that are not defined by binge drinking.

Recommendation #7:

Enhance access and availability of academic support services

Rates of academic distress (e.g., inability to keep up with schoolwork, concentration problems) also highlight the need for academic support services to support adjustment to college and promote connections with faculty and other students. For instance, veterans might benefit from academic skills training and developing a "degree map" that clearly outlines a course of study. Contextual factors (e.g., time-limited tests, and group assignments) might engender challenges in some cases. As such, student veterans might benefit from specialized tutoring and study groups with other veterans. Given stigma-related barriers to mental health care, seeking these academic supports might represent a less threatening step. Hence, veterans may consider sources of psychological help more strongly if they first have a successful experience with USA/UWF addressing their potential academic challenges. In turn, similar to peer support specialists serving as gatekeepers, academic support staff might play a crucial role in building trust and encouraging service utilization on campus or in the community (when indicated).

REFERENCES

Barry, A. E., Whiteman, S., Wadswroth, S. M., & Hitt, S. (2012). The alcohol use and associated mental health problems of student service members/veterans in higher education. *Drugs: Education, Prevention & Policy*, *19*, 415–425.

Borsari, B., Yurasak, A., Miller, M. B., Murphy, J. G., McDevitt-Murphy, M. E., Martens, M. P., Darcy, M. G., & Carey, K. B. (2017). Student service members/veterans on campus: Challenges for reintegration. *American Journal or Orthopsychiatry, 87,* 166-175.

Blevins, C. A., Weathers, F.W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress, 28*, 489-498.

Bradley, K. A., Bush, K. R., Epler, A. J., Dobie, D. J., Davis, T. M., Sporleder, J. L., et al. (2003). Two brief alcohol-screening tests from the Alcohol Use Disorders Test (AUDIT): Validation in a female Veterans Affairs patient population. *Archives of Internal Medicine, 163,* 821-830.

Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): An effective brief screening test for problem drinking. *Archives of Internal Medicine, 158,* 1789-1795.

Currier, J. M., McDermott, R. C., & McCormick, W. H. (in press). Mental health treatment-related stigma and professional help-seeking among student veterans. *Psychological Services.*

Currier, J. M., McDermott, R. C., & Sims, B. M. (2016). Patterns of help-seeking in a national sample of veterans: A matched control group investigation. *General Hospital Psychiatry, 43,* 58-62.

Department of Defense (2010). *Population representation in the military services: Fiscal year 2010 summary report.* Office of the Under Secretary of Defense, Personnel, and Readiness: Washington, DC.

Davidson, W. B., Beck, H. P., & Milligan, M. (2009). The College Persistence Questionnaire: Development and validation of an instrument that predicts student attrition. *Journal of College Student Development*, *50*, 373–390.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York, NY: Wiley.

Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: Variation across student subgroups and across campuses. *Journal of Nervous and Mental Disease*, *201*, 60–67.

Fortney, J. C, Curran, G. M., Hunt, J. B., et al. (2016). Prevalence of probable mental disorders and help-seeking behaviors among veterans and non-veteran community samples. *General Hospital Psychiatry, 38,* 99-104.

Gallagher, R. (2014). *National Survey of Counseling Centers 2014*, Alexandria, VA: The International Association of Counseling Services. Retrieved from: http://www.collegecounseling.org/wp-content/uploads/NCCCS2014_v2.pdf

Grossbard, J. R., Widome, R., Lust, K., Simpson, T. L., Lostutter, T. W., & Saxon, A. (2014). High-risk drinking and academic performance among college student Veterans. *Journal of Alcohol and Drug Education*, *58*, 28–47.

Gruttadaro D, Crudo D. *College Students Speak: A Survey on Mental Health*. Arlington, VA: National Alliance on Mental Illness; 2012.

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). 'Mental health literacy': A survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal Of Australia, 1665*.

Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, *32*, 509–515.

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*, 606–613.

Locke, B. D., Buzolitz, J., Lei, P., Boswell, J. F., McAleavey, A. A., Sevig, T. D., & Hayes, J. A. (2011). Development of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62). *Journal of Counseling Psychology, 58*, 97-109.

McLaughlin S. S., McLaughlin, A. D., & VanSlyke J. A. (2010). Faith and religious beliefs in an outpatient military population. *South Med Journal, 103,* 527-531.

National Center for Veterans Analysis and Statistics (2016). *Profile of Post-9/11 Veterans: 2014.* Retrieved from https://www.va.gov/vetdata/veteran_population.asp.

Osman, A. Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The suicidal behavior questionnaire-revised (SBQ-R): Validation with clinical and non-clinical samples. *Assessment, 8,* 443-454.

Rudd, M. D., Goulding, J., & Bryan, C. J. (2011). Student veterans: A national survey exploring psychological symptoms and suicide risk. *Professional Psychology: Research and Practice*, *42*, 354–360.

Tanielian, T., Farris, C., Batka, C., Farmer, C. M., Robinson, E., Engel. C. C.,…Jaycox, L. H. (2014). *Ready to serve: Community-based provider capacity to deliver culturally competent, quality mental health care to veterans and their families*. Santa Monica, CA: RAND Corporation.

United States Government Accountability Office. (2014). *VA education benefits: VA should strengthen its efforts to help veterans make informed education choices.* (Report No. GAO-14-324). Retrieved from: http://www.gao.gov/assets/670/663152.pdf

Widome, R., Kehle, S. M., Carlson, K. F., Laska, M. N., Gulden, A., & Lust, K. (2011). Post-traumatic stress disorder and health risk behaviors among Afghanistan and Iraq war veterans attending college. *American Journal of Health Behavior*, *35*, 387–392. doi:10.5993/AJHB.35.4.1

Wortmann, J. H., Jordan, A. H., Weathers, F. W., Resick, P. A., Litz, B. T. (2016). Psychometrics analysis of the PTSD Checklist-5 (PCL-5) among treatment-seeking military members. *Psychological Assessment*.