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DEVELOPMENT AND INITIAL VALIDATION OF THE VETERANS EDUCATIONAL TRANSITION SCALE (VETS): A BRIEF SCALE TO PREDICT SUCCESSFUL TRANSITION OF STUDENT VETERANS TO COLLEGE

 $\mathbf{B}\mathbf{y}$

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Bachelor of Arts - Human Development Metropolitan State University of Denver 2014

A dissertation submitted in partial fulfillment of the requirements for the

Doctor of Philosophy in Clinical Psychology

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Abstract

Development and Initial Validation of the Veterans Educational Transition Scale (VETS): A Brief Scale to Predict Successful Transition of Student Veterans to College

By

Lisa M. Beckman, M.A.

Dr. Daniel N. Allen, Examination Committee Chair Professor of Psychology University of Nevada, Las Vegas

The aim of this dissertation was to develop and validate a scale to assess factors that interfere with veterans' successful transition from military life to the college environment. Student veterans are a unique population in the student body and often have unique challenges assimilating to the college environment, including difficulties making social connections, multiple life responsibilities, and unique mental health presentations. Currently, there is no measure to assess and identify transition challenges that student veterans may experience, and yet significantly more veterans are enrolling in college to take advantage of their post-9/11 GI bill benefits. This dissertation includes two studies. The first was a phenomenological qualitative study designed to better understand the specific areas that may affect student veteran transition. The results of Study 1 yielded 9 domains specific to student veterans' college transition which were operationally defined. Items were developed to assess each of these 9 domains. Through expert panel review, it was determined that the domains, operational definitions, and domain items were relevant to the student veteran experience and culturally sensitive. This process resulted in 110 items and these items formed the preliminary version of the Veterans Educational Transition Scale (VETS). In the study 2, the 110 preliminary VETS items and other measures were administered to 82 student veterans in order to identify items that were the best indicators of each of the nine domains and to examine convergent and discriminant validity. Participants were recruited via electronic survey from around the United States. Results of item to total correlations identified 60 items that assessed a total of 12 domains rather than 9. Five items were selected to assess each domain and most domains demonstrated good internal consistency (range - .54 - .91). The VETS internal consistency for the total score was strong (α = .91). Correlations between the VETS and other validated measures of college retention, psychological functioning, and peer social support provided convergent and discriminant validity evidence supporting the VETS domains. Regression analysis indicated that the VETS accounted for 10% of the variance in predicting total semesters attended. The results suggest that the VETS hold some promise for identifying factors that may interfere with veterans' transition to college. The VETS is the first assessment tool designed for specifically for student veterans. Future research is recommended to complete exploratory and confirmatory factory analyses of the VETS, examine its usefulness in predicting other outcomes relevant to college success, and to develop and guide interventions that target risk factors for poor college transition that are identified by the VETS.

Dedication

This work is dedicated to my mom and dad who sacrificed so much out of love. Thank you for your never-ending support. To my little brother whom I respect and admire and can always count on for a round of Mario kart.

And to my Booboo. None of this would have happened if it weren't for you. I love you my precious girl.

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Chapter 1

Introduction

It is estimated that over 2 million soldiers have served in Afghanistan (Operation Enduring Freedom; OEF) and Iraq (Operation Iraqi Freedom; OIF) since 2001. Approximately 1.09 million have separated from active duty service and obtained veteran status (United States Department of Veterans Affairs, 2012). As a result, there is an increasing number of student veterans enrolling in college to take advantage of the GI bill which provides full tuition and fees associated with attending college and provides a monthly housing allowance. With an increasing presence of student veterans on campuses across the country, college administration, staff, and faculty need to be informed of the potential challenges this unique population experiences when transitioning from military service into the university setting. Compared to nonveteran students, Student Service Member/Veterans (SSM/V) tend to have increased work and family obligations, less social support, and more consequences related to drinking behaviors (DiRamio, Ackerman, & Mitchell, 2008). SSM/V also report difficulty in assimilating to college culture after serving in the armed forces, as well as not feeling able to relate to their peers (Barry, Whiteman, & Wadsworth, 2014; Raumann & Hamrick, 2010). Furthermore, SSM/V experience mental health symptoms, such as depression, anxiety, and posttraumatic stress that can have an impact on their academic abilities (Schonfeld et al., 2015). Currently, there are very few research studies that have addressed student veteran achievement in college (Borsari et al., 2017).

The current body of research that exists with student veteran populations, much of which is qualitative, attempts to determine how they are different from nonveteran students in terms of demographics, assimilation to college culture, mental health (including substance use), and social support. The few studies that consider academic achievement are limited and typically focus on

factors that are not unique to veterans (such as how posttraumatic stress disorder affects academic performance). Furthermore, research that has examined academic performance or college achievement have relied on responses to surveys that may or may not be unique to veterans or surveys that have not been validated.

In civilian student populations, persistence, GPA, engagement on campus, and participation in educational activities have been identified as important predictors of student performance (York, Gibson, & Rankin, 2015). These predictors were identified in general college populations and thus may not account for the unique challenges that student veterans who attend college or university experience. To address this limitation, the current study proposed to increase understanding of the unique challenges student veterans face as they transition from military culture to civilian life and further consider how they may impact academic adjustment. To begin initial development of the Veterans Educational Transition Scale (VETS) a systematic literature review was completed. After the literature review, a phenomenological qualitative study was able to identify challenges and themes that are part of the student veteran experience as they transitioned to life as a college student. The domains identified were mostly consistent with the previous research literature. The findings of the qualitative data were summarized and domains were operationally defined. Results from the qualitative study are presented in Study 1. Consultation with experts, including a veteran service center director and student veteran leadership panels, informed the question development and assisted in reviewing culturally appropriate terminology. Study 2 was an online survey where SSM/V were recruited to test the psychometric properties of the final version of the scale. Results of the study are important for evaluating transition to college in veterans attending college, and may have some utility in identifying those who may be at risk for poor academic

adjustment. Since there is an increasing numbers of student veterans going to college separating from the military and utilizing the GI Bill, this research may provide college administrators increased understanding of the unique needs of this student population so that they may develop and provide appropriate services to support student veteran success (American Council on Education, 2008; Barry, 2015; Whitley, Tschudi, & Geiber, 2013).

Chapter 2

Literature Review

The Post 9/11 Veterans Educational Assistance Act of 2008, more commonly known as the "Post 9/11 GI Bill," provides active duty service members and honorably discharged veteran's education benefits. These benefits include 36 months of financial assistance to attend college, university, or other specialized training. The benefits also include up to 100% tuition and fee reimbursement, up to \$1000 per year in books and supplies, and a monthly housing allowance. The U.S. Department of Veterans Affairs (2012) estimates that more than 773,000 veterans have received these benefits. Due to this dramatic increase in student service members/veterans (SSM/V) on campuses in America, it generates a number of questions and concerns for university administrators as to what types of programs and services this unique population may require.

In 2012, the National Survey of Student Engagement sought to assess how SSM/V were integrating inside and outside the classroom compared to other students. Several key findings emerged including, SSM/V were more likely than non-veterans to be first generation college students and that SSM/V were more selective about campus events and activities they chose to attend. In addition, SSM/V were significantly older than nonveteran students thus increasing their responsibilities outside of education and putting more limitations on their time. Other findings included SSM/V had a tendency to only participate in academic areas they believed were directly related to their degree or academic progress. This could be due to the fact that the Post 9/11 GI Bill benefits can only be used towards classes that will be applied towards the individual's chosen major and degree; nonetheless, this may mean that veterans are less engaged on campus compared to traditional nonveteran students. In a similar report, The Million Records

Project, a survey completed by more than 1 million SSM/V from 2002-2010, primarily sought to gather information about postsecondary graduation rates among veterans who used the Post 9/11 GI Bill. Results indicated that veteran graduation rates are comparable to those of traditional students (51.7%); however, veteran students tend to have unique differences such as being older, having families to support, and balancing full time work and responsibilities of being a college student (Cate, 2014). These surveys provide some useful information about unique aspects of SSM/V college experiences, but are limited by only assessing postsecondary academic outcomes such as completion rates (e.g. completing a vocational certificate, associate's degree, and bachelor's degree) and time to completion. Though valuable information, the study does not address the potential barriers for the individuals who did not achieve degree completion.

Factors contributing to college maladjustment in SSM/V

The following sections review what is currently known regarding factors that may contribute to adjustment difficulties experienced by veterans who transition from the military to college and university settings. Cultural differences, mental health concerns, and social support are the primary areas of focus, because there is information unique to SSM/V in the existing literature.

Transition from military to college culture.

Transition, according to Schlossberg (1981), is an event (or lack thereof) that produces changes in roles, routines, and relationships. Concerns that arise during a transition period include how one makes meaning of the event, employs coping mechanisms, and explores all options and opportunities. As service members separate from active duty and transition back to life as a civilian, they often experience a significant transition in the form of unique challenges; and, at times, distress (Gettleman, 2005; Mallen, Schumacher, Leskela, Thuras, & Frenzel,

2014). Moreover, while age norms and age-based stages have become more fluid in recent years, engaging in roles outside of the expected age range can be distressing (Schlossberg, Waters, & Goodman, 1995). SSM/V are generally older than their peers, attending college at a later time in adulthood when one generally has more life responsibilities (e.g. full time employment, children, etc.), which may have a negative impact on the transition experience and adjustment (Walton-Radford, 2009). The environment can have a notable impact on the transition phase as well, highlighting the need for institutions of higher learning to be equipped and prepared to support SSM/V. When SSM/V experience difficulties transitioning it is generally because the differences from the military to the academic environment are vast (Tinto, 1988; Pascarella, Terenzini, & Wolfe, 1986).

The culture imbued in institutions of higher education are quite different than the culture in the military (Baumann, 2009). In general, college students are expected to be active learners who are encouraged to seek alternate viewpoints, create and structure their time to satisfy academic requirements, and are often encouraged to pose challenging questions to their professors (Shen & Tian, 2012). Civilian students typically experience less structure in their daily lives and as a result learn to rely upon internal drives, motivation, and persistence in learning (Ellison et al., 2012). In direct contrast to this individualistic mentality, SSM/V have been trained to wholly accept their commanding officers' directions and leadership. They are often given explicit manualized instructions on how to complete tasks negating the need to employ creative thinking or novel problem solving skills. In addition, service members follow strict daily schedules beginning in boot camp and continuing throughout the duration of their service, in contrast to the unstructured nature of being a student (Hopkins, Hermann, Wilson, Allen, & Malley, 2010). Ultimately, military culture expects the individual to become part of the

larger group to create a collectivist environment. These differences can create challenges for individuals who have separated from the military and are assuming a new role as a student (Smith, Vilhauer, & Chafos, 2017). Ultimately, SSM/V consistently report feeling overwhelmed during the transition from military life to student life and report difficulty navigating services available outside of a military setting (Allen, Armstrong, Saladiner, Hamilton, Conard, 2014; DiRamio et al., 2008; Griffin & Gilbert, 2015; Messina, 2015; Ureno, 2015).

While the transition experience itself is recognized as a stressful experience (see review above), SSM/V face additional challenges compared to civilian students such as social and emotional difficulties (Whiteman, Barry, Mroczek, MacDermid, & Wadsworth, 2013; Smith, Vilhauer, & Chafos, 2017), more mental health symptoms (Blosnich, Kopacz, McCarten, & Bossarte, 2015), consequences associated with substance use (Whiteman & Barry, 2011), and other stressors such as working full-time and having a family (Ness, Middleton, & Hildebrant, 2015).

Mental Health

While the literature regarding SSM/V transition and performance in higher education is minimal, the research on how mental health may be impacting academic achievement is even sparser. The Department of Veterans Affairs (VA) estimates that of the nearly 300,000 veterans returning from Operation Iraqi Freedom/Afghanistan Operation Enduring Freedom (OIF/OEF), approximately 37% have received a psychiatric diagnosis. Recent studies report rates of posttraumatic stress symptoms (PTS) in military service members and veterans ranging between 18-22% in those returning from deployment (Hoge, Clark, & Castro, 2004; Seal et al., 2009) which are more than double the rates of PTS in the general population which are estimated at 6.8% (Kessler et al., 2005). Nyaronga and Toma (2015) conducted a cross-sectional survey of

144 student service members and veterans to determine what factors were associated with symptoms of PTS. Results supported previous findings that SSM/V have higher rates of PTS than civilian students. Findings also indicate that demographic factors associated with increased PTS symptoms include more deployments, service in the Army or Marines, being less than 27 years of age, being divorced or never married, and lack of social support. Alarmingly high rates of suicide ideation (46%) were reported in a nationwide sample of 628 student veterans. Results from that study also indicated that SSM/V with symptoms consistent with a diagnosis of posttraumatic stress disorder had higher rates of suicidal thoughts (Rudd, Goulding, & Bryan, 2011). In direct contrast to that study, Pease and colleagues (2015) found suicide ideation rates in SSM/V to be 7.3% and not significantly different than their nonveteran peers by using a comparison sample of nonveteran students matched for gender and age. In the Rudd et al., study data was obtained from OIF/OEF veterans referred for mental health services which could be accounting for the elevated estimates of suicide risk. Although the results of the Pease et al. study are more consistent with previous research indicating that approximately 6% of university and/or college students report suicidal thoughts (American College Health Association, 2011; Center for Collegiate Mental Health [CCMH], 2010), findings should be interpreted cautiously as military demographics are generally comprised of young adult males with a wide range of racial diversity. Thus, to make direct comparisons between veteran and nonveteran populations, demographic variables would need to be adjusted to reflect the general population (Eaton, Messer, Garvey-Wilson, & Hoge, 2006).

In general, veterans are typically at higher risk for experiencing depression, anxiety, PTSD, and other psychological symptoms compared to the general public (Nelson-Goff, Crow, Reisbig, & Hamilton, 2007). Indeed, SSM/V have a wide range of mental health concerns

although it does not always appear that these concerns occur at higher rates compared to their civilian peers (Glover-Graf, Miller, & Freeman, 2010; Rudd, Goulding, Bryan, 2011; Smith, Vilhauer, & Chafos, 2017). It has also been noted in the literature that the presentation of symptoms in these disorders are different among veteran and nonveteran students. For example, research indicates that SSM/V diagnosed with PTSD exhibit more hostility in intimate relationships (Johnson, Graceffo, Hayes, & Locke, 2014), engage in significantly more physical altercations (Widome, Laska, Gulden, Fu, & Lust, 2011), and report more feelings of alienation on campus compared to SSM/V without a PTSD diagnosis (Elliott, Gonzalez, & Larson, 2011). Research has also indicated that SSM/V with symptoms of depression and anxiety have less academic persistence (Weber, 2012; Grossbard et al., 2014). Alternatively, some researchers contend that perhaps the coping skills developed during deployment may improve the ability to cope with distress and increase resiliency (Cleveland, Branscum, Bovbjerg, & Thorburn, 2015). A recent study indicated that SSM/V who have experienced trauma tend to have better emotional adjustment compared to nonveteran students with trauma (Smith, Vilhauer, & Chafos, 2017). Smith et al. suggest that one possible explanation for this finding was that SSM/V may have an expectancy of experiencing trauma which thereby facilitating a resilience or immunization effect. It may also be that because trauma is an anticipated experience in active service members who are deployed and because it is experienced by many of their fellow service members, there is less isolation following trauma, greater social support, and active use of coping strategies that other service members have found effective in dealing with trauma.

Differences in negative consequences of substance use between SSM/V and college peers have also been investigated. For example, SSM/V are more likely to use alcohol as a coping strategy and experience worse outcomes (such as being told they should reduce their drinking

use, feel bad or guilty after drinking, and drinking first thing in the morning to get rid of a hangover or reduce anxiety; Whiteman & Barry, 2011). Barry, Whiteman, MacDermid-Wadsworth, and Hitt (2012) found that SSM/V do not differ from civilian students in terms of drinking behaviors; however, SSM/V binge drinking behaviors were indicative of increased consequences and a potential increased risk for developing alcohol use disorders. Other research has found that SSM/V are more likely engage in risky behaviors due to alcohol use such as being a passenger in a vehicle where the driver is intoxicated or driving drunk (Widome et al., 2011).

Studies have also demonstrated a statistically significant negative correlation between psychiatric distress and academic performance (Hysenbegasi, Hass, & Rowland, 2005; Stallman, 2010; Campbell & Riggs, 2015; Ness, Middleton, Hildebrandt, 2015). Schonfeld and associates (2015) also found that SSM/V who reported difficulties in adjusting to attending college had significantly higher rates of PTSD, depression, and other mental health disorders as compared to SSM/V who did not report difficulties in adjustment. A recent nationwide survey found that although SSM/V have high rates of mental health problems, they are less likely than nonveteran students to see treatment (CCMH, 2009). Similarly, in 2015, Bonar et al. found that SSM/V had low mental health service utilization rates (46.9%) and were less likely to seek treatment at the VA or Veterans Centers compared to nonstudent veterans.

Taken together, the findings from these studies of mental health issues in SSM/V suggest that there are high rates of psychiatric problems among this population. While prevalence rates between veteran and nonveteran students may not be statistically significant, there are differences among symptom presentations, including an increase in hostile and risky behaviors. Furthermore, the presence of mental disorders in SSM/V are having a direct negative consequence on academic adjustment.

Social Support

Social support has been demonstrated to be important during times of transition and stress and can have an impact on overall health and wellness (Berkman, Glass, Brissette, & Seman, 2000; Hefner & Eisenberg, 2009; Kent de Gray, Uchino, Trettevik, Cronan, & Hogan, 2018). Social support, among both peers, faculty, and administration, has also been found to be an important component in academic persistence (Lau, 2008; Reason, 2009). Research indicates that when SSM/V have current social support, they have significantly better academic adjustment (Campbell & Riggs, 2015). In a longitudinal study of 380 students (n=199 SSM/V; n=181 civilian), Whiteman and colleagues (2013) found that SSM/V reported significantly less peer emotional support compared to nonveteran students. Over the course of one year, peer support increased similarly for both groups; however, the SSM/V group did not achieve the same level of support as their civilian peers at any time. The results of this study also found an association between increased peer support and better mental health and academic outcomes in both SSM/V and civilian college students (Whiteman et al., 2013). Consistent with the results of this longitudinal study, research also has demonstrated that family and peer support among veterans is associated with lower levels of psychiatric distress (Boscarino, 1995; Pietrzak et al., 2010; Elliott, Gonzalez, & Larsen, 2011; Bolkan et al., 2013; Romero, Riggs, & Ruggero, 2015).

There are a number of studies examining the perceived chasm that SSM/V feel from their civilian college peers, noting that civilian peers often lack knowledge of military culture, hold misperceptions about wartime affairs, and do not understand the difficulties associated with transition from active duty service to civilian or college life (DiRamio, Ackerman, & Mitchell, 2008; Raumann & Hamrick, 2010; Libin et al., 2017). This perception that nonveteran students are "just kids" can leave SSM/V feeling unable to connect to their peers and often times, SSM/V

report a preference of spending time with other veterans (Ellison et al., 2012; McBrain, Kim, Cook, & Snead, 2012; Smith-Osborne, 2012). In fact, a feeling of connection to other veterans on campus has been shown to be an essential part of a successful transition (Ellison et al., 2012). A recent study showed that civilian students tend to have significant misperceptions about recent missions (OIF/OEF) and associated foreign policies and as a result, engage in intrusive peer interactions that cause SSM/V to feel uncomfortable or increase difficulties integrating with their peers (Dunwoody, Plane, Trescher, & Rice, 2014). For example, DiRamio, Ackerman, & Mitchell (2008) found that nonveteran peers would ask SSM/V if they had ever killed anyone, or whether or not they supported the war in Iraq. It is understandable then that SSM/V are more likely to feel alienated in the college environment and more likely to feel supported by other students who have served in the armed forces (Aikins, Golub, & Bennett, 2015).

Taken together, it is evident that student veterans are experiencing a number of unique problems. Research has indicated that veterans often use enrolling in college as a strategy to reintegrate into civilian life (Libin et al., 2017); however, they often find themselves in an unfamiliar environment of individualistic values. Veterans also experience interpersonal difficulties on campus where they feel misunderstood, unable to connect, and distant from their civilian peers due to interactions regarding their time in the military. Furthermore, research indicates that veterans have unique mental health needs compared to nonveteran students (Cleveland et al., 2015). Ultimately, these distinct challenges can have an impact on academic achievement and retention, which necessitates a way to identify at-risk SSM/V before they are on academic probation, or drop-out of school.

Academic Success in Nonveteran Student Populations

In direct contrast to the amount of research of academic success with SSM/V, the body of literature with nonveteran students is abundant and spans decades. Much of the existing research relies on grade point average (GPA), college entrance exams (i.e. SAT, ACT), and credits earned to measure academic achievement and are modest predictors of graduation from college (Kuh, 2003; Braxton et al., 2004; Pascarella & Terenzini, 2005). Current models of academic achievement integrate both cognitive and noncognitive variables which provide a more holistic approach to understanding student success. For example, some research indicates that noncognitive factors including institutional integration and academic motivation and important in college completion (Scheuneman & Oakland, 1998).

Retention

Tinto (1975; 1987) provide an interactionist model of college retention beginning with the consideration of preexisting conditions unique to the student such as family background, existing cognitive abilities and previous schooling, and other factors independent to the individual. Tinto suggests that when students enter college, they undergo a transition period and must learn to interact with new members of a novel group. The model further suggests that when students also enroll in institutions of higher learning, they do so with goal commitments. For example, goal commitments can include the expected highest degree and the importance of graduation. The preexisting characteristics and the goal commitments become a part of how the student experiences and interacts with the academic system (including grade performance and knowledge attainment) and the social system (peer and faculty interactions). Tinto suggests that it is the integration into these two systems that have the most impact on student persistence. Research has generally supported this model, and in 1980, Pascarella and Terenzini developed a multidimensional instrument to predict college freshman academic persistence based on Tinto's

model. Using five scales, the Institutional Integration Scale (IIS) was show to correctly identify individuals who will eventually graduate from college, or "persisters," and those who will eventually discontinue enrolling without completing a degree, called "dropouts." The IIS predicts both persisters and dropouts at a rate of 81.4% and 75.8% respectively. The results from this initial validation study also highlighted the impact student-faculty interactions which was one standard deviation higher for the persisters.

Student Success

Academic achievement, as stated above, is typically measured by traditional cognitive measures, such as class grades, GPA, etc.; however, they generally only account for 25% of the variance in student academic performance and thus are not sufficient to completely understand what influences student success (Sparkman, Maulding, & Roberts, 2002). Noncognitive factors which have been identified as important in terms of academic functioning include educational self-efficacy, motivation to attend, and satisfaction with the college experience (Whiteman et al., 2013; Campbell & Riggs, 2015; Valadas, Almeida, & Araujo 2016). Kuh (2001) proposed an expanded definition for student success by considering the following categories: academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and post-college performance.

Engagement in educational activities generally entails campus-related activities with peers and faculty (such as joining a club), going to university sporting events, attending speaking events, and voting in campus elections. Research indicates that when students make a psychosocial investment in during their time in college they become more socially integrated into college culture (Astin, 1993). Student engagement on campus is often found to be a key

variable in whether students will ultimately graduate or dropout of college (Hughes & Pace, 2003; Kuh, 2001, 2003; Pascarella & Terenzini, 2005). Group identification, including sense of belongingness and attachment, was recently found to be an important variable in campus involvement (Jackson, Miller, Frew, Gilbreath, & Dillman, 2011).

Limitations of current research

The extant research suggests that social support, mental health, and differences between military and college culture are all important factors that may contribute to academic success or failure in SSM/V. However, these studies are limited to the extent that they employ survey instruments developed to assess academic adjustment in civilian college students when attempting to identify factors that contribute to academic success for SSM/V. While survey instruments designed to assess academic adjustment in civilian college students may assess shared factors in common with SSM/V, they do not assess factors unique to SSM/V which appear to account for a significant portion of variance in SSM/V academic success. In order to better understand those factors that contribute to academic successes and failures in SSM/V, there is a discernable need to develop an assessment instrument that is sensitive to their unique concerns. Qualitative research based on interviews with SSM/V may be particularly useful in the initial development of such an assessment instrument because of its ability to provide insights into how SSM/V perceive their social interactions on campus. These considerations provided the impetus for the proposed study.

The Current Study

Due to the rapidly increasing number of SSM/V on college campuses across the country, there are two important areas which require attention. First, it is vital to understand the unique challenges and stressors SSM/V may face as they transition to life as a student as it may have an

impact on their retention and academic achievement. Second, it is necessary to have a validated measure which considers the challenges of this nontraditional student population to predict academic adjustment. Given that SSM/V are a unique population and that previous research has shown that (a) the transition period brings about changes in social relationships, routines, and roles, particularly after military service (DiRamio et al., 2008) (b) SSM/V may have increased academic difficulties due to mental health symptoms (c) feel more isolated from their peers due to age, increased responsibilities, and feeling misunderstood, resulting in less social support and inability to integrate within the institution, we proposed to develop and psychometrically validate a brief assessment measure that can be used to predict SSM/V successful transition to college.

The current study, utilized a two-phase approach to develop the VETS. Study 1 was a qualitative study used to identify areas of difficulty (domains) that student veterans experience during the transition to college. Study 2 involved testing the sample questions based on the themes identified in Study 1, and examined the reliability and validity of the final scale.

Strategic Plan for Test Development

Test format

The Veterans Educational Transition Scale (VETS) was designed for administration by educators, university administrators, veterans support service centers, and other support service personnel. Examiners will follow administration, scoring, and interpretation instructions in the test manual. There will not be special training requirements for administration and interpretation. The test was designed for group administration, so it can be used to screen a large number of individuals entering college who have previously served in the military. However, the instructions and test format are also suitable for individual administration. The scale is appropriate for individuals 18 years of age and older, but will most likely be administered to

individuals in their mid to late 20's given the demographics of SSM/V (Walton-Radford, 2009). The assessment was developed for paper and pencil administration as well as computerized administration. The VETS consists of 60 items that measure 12 domains demonstrated to be important for academic adjustment in veterans.

Domains selected for inclusion in the proposed test were identified based on 1) a review of relevant literature, 2) qualitative research results (see Study 1), and 3) consultation with experts involved in providing support services to SSM/V. Literature review included comprehensive searches of databases using the key terms such as student, veteran, service member, transition, reintegration, campus, college, university, higher education, academic, and success. Subsequently, the reference sections for relevant articles identified in these searches were reviewed to locate other relevant articles.

Internal Structure

The VETS was interpreted using raw scores representing the sum of relevant items. The VETS produced a total score as well as 12 domain scores that reflect each of the domains identified for inclusion in the scale. The total score may be used as an index to reflect overall adjustment to the college environment, while the domain scores may be useful for identifying areas of greater adjustment and maladjustment that may serve as resiliency factors (adjustment) or targeted for interventions (maladjustment). It was expected that there would be significant shared variance between the domains (*r*'s ranging from .30-.50), but also that there will be enough non-shared variance to justify conceptualizing the domains as separate in their ability to predict different outcomes. Dissimulation scales will not be utilized as it is not expected that the targeted audience will have sufficient motivation or desire to malinger.

Item Format

The scale attempts to measure both overt and covert behaviors, as well as thoughts and feelings. Selected response items (e.g. Likert Scale) were used to increase scoring reliability. A 6-point format was used with the following response descriptors: 1 = strongly disagree; 2 = disagree; 3 = somewhat disagree; 4 = somewhat agree; 5 = agree; 6 = strongly agree. Positively worded questions were reversed scored, such that a higher score will indicate greater problems with academic adjustment.

Chapter 3: Study 1

Methods

Participants

Participants included 11 student veterans but one individual was excluded early on in the interviews because they refused audio recording. Participants were recruited through an online psychology subject pool. Student veterans participated in this study for research credit for a course in which they were enrolled. To be included in the study, participants had to be at least 18 years of age, a current college student, and a military veteran. The 10 student veterans included in the final sample had a mean age of 27.4 years old (sd = 5.1), 80% were male, and 50% were White/Caucasian, 20% Hispanic/Latino, 20% Asian, and 10% Biracial. Sixty percent of the sample reported they were single, 30% were married, and 10% were divorced. They had served an average of 6.4 years (sd = 3.7) in the Armed Services and each branch of the US Armed Services were represented in the sample: Navy (n = 3), Army (n = 3), Marines (n = 2), Air Force (n = 1), Coast Guard (n = 1). All participants were enlisted during their military service. One veteran received a medical discharge and all others were honorably discharged. Sixty percent of the veterans had been deployed in combat theater and number of deployments ranged from 1-6 total, with an average duration of 5.5 months (sd = 4.6).

College attendance was measured by completed semesters as some of the students reported intermittent attendance. These student veterans had completed an average of 2.6 semesters (sd = 2.6), their GPAs ranged from 2.1 - 3.9 (mean = 3.4; sd = .7), and the time between discharge from active duty to university admission was less than one year in 70% of the sample. Two of the veterans interviewed indicated they were eligible for the GI Bill, however,

they were saving their benefits so that they could attend graduate school after completing their Bachelors' degrees.

Procedures

This qualitative study used a phenomenological qualitative research approach with the goal of obtaining a description of the student veterans' lived experiences and examination of common patterns among individuals (Groenewald, 2004). The themes and patterns elicited from the participants were used to identify major concepts which informed the development of the VET Scale in Study 2. Based on a review of the literature, a question set was developed for administration in a qualitative research study. This question set was designed to assess transitions experiences of student veterans (see Appendix I). Consistent with qualitative research methods, the questions were left open ended for participants' initial responses, and follow-up questions were asked for clarity when necessary. Interviews were audio recorded for later coding. In line with qualitative research procedures, the interviews were continued until saturation was achieved (Kuzel, 1992; Creswell, 1998). All interviews were conducted by the primary investigator (LMB).

The phenomenological qualitative research approach was used as it allowed identification and understanding the essence of the student veteran experience (Moustakas, 1994). To best understand the unique experience of each participant, the primary investigator listened to the recordings three times to capture the gestalt of what the interviewe was sharing. After listening to the interviews, an interview summary was written to reconstruct the experience of the individual participant (Appendix B). A thorough literature review and themes that were presented in the interviews were then used to begin development of domains for the VETS, as well as operational definitions for each domain.

Study 1: Results

Based on literature review and qualitative research results, nine domains were identified and operational definitions were developed for each. Operational definitions described how the domains were measured. The definitions for the domains were initially derived by LMB and DNA. LMB developed test questions designed to measure the domains and the test questions were reviewed by DNA. From the original bank of test questions, a miscellaneous category was created to retain some of the test questions that were experimental in nature. These items may have been perceived to sample across multiple domains, over sample a particular domain, or sampled potentially relevant experiences that may have not been included in the original domains. Rather than discard these items, they were administered and reviewed along with the domains during data analysis. The domains, operational definitions, and test questions were then provided to six experts for review, comment, and modifications. These experts included student veterans from a large southwestern metropolitan university, as well as the director of a university veteran support center.

All experts were veterans who had transitioned from active military service to the college and were currently engaged in providing direct services to veterans who themselves were transitioning from military service to the university environment. The experts were instructed to comment on the sufficiency of the definitions in accurately describing the domains and to identify any additional domains that should be included. For example, it was recommended that the term "mental health" not be included because it is stigmatizing among military and veteran populations. Thus, operational definitions presented in the following sections were based on comprehensive review of the research literature, qualitative interviews with veterans, and expert feedback. These definitions provided a framework for writing and selecting items and

interpreting scores in Study 2. Based on these sources of information, the following domains were selected for inclusion:

- 1) Transition to college navigating bureaucracy
 - a. <u>operational definition:</u> challenges and obstacles related to the multilayered systems and processes that a person has encountered in a college environment
- 2) Transition to college culture shock
 - a. operational definition: distress due to the unfamiliar cultural environment
- 3) Identity conflict:
 - a. operational definition: sense of conflict between military and civilian identities
- 4) Academic efficacy
 - a. operational definition: confidence in one's ability to achieve an educational goal
- 5) Academic perseverance
 - a. <u>operational definition:</u> commitment to educational goals regardless of perceived difficulties
- 6) Peer Social support
 - a. operational definition: perception of being supported by other people both on campus and off campus
- 7) Work obligations
 - a. operational definition: the commitments to an employer one must attend to outside of an academic setting
- 8) Family obligations
 - a. <u>operational definition</u>: the commitments to family one must attend to outside of an academic setting

- 9) Psychological functioning
 - a. operational definition: a person's condition with regard to their emotional and psychological well-being that impairs functioning

Study 1: Discussion

The purpose of this study was to use a qualitative research approach to examine stressors specific to SSM/V and how they relate to college adjustment. The domains identified in the study are largely consistent with those recorded in previous literature. However, prior studies have not reported in a more comprehensive matter on all domains that may contribute to veteran's adjustment to the college environment. Furthermore, other studies have not attempted to operationalize the domains specific to the SSM/V experience. One advantage of our approach is that we were able to identify what would appear to be comprehensive set of domains that veterans themselves acknowledge as creating obstacles when returning to college after serving in the Armed Forces.

With regard to the prior literature, certain factors appear to be consistent in the SSM/V transition experience. Veterans in our study echoed previous research indicating they experience interpersonal difficulties on campus where they feel misunderstood, unable to connect, and distant from their civilian peers due to interactions regarding their time in the military.

Additionally, student veterans in our sample reported observations that are similar to findings from previous research studies that found civilian students to be significantly younger than SSM/V (Ellison et al., 2012). In fact, each of the veterans interviewed in our study noted the age difference between themselves and their classmates, oftentimes referring to their peers as "kids." Although it should be noted that not all participants indicated that it bothersome. Others reported feeling that their peers were misusing their time in college to drink and party, instead of studying and learning. These observations were often made spontaneously throughout the interview process and further consideration should be given to whether or not this perceived age difference may impact the student veteran's desire to participate in social events held on campus. Previous

research has found that SSM/V tend to be more selective about events they attend on campus and elect to only participate in activities directly related to their academic area of study (National Survey of Student Engagement, 2012). Furthermore, research has also indicated that campus engagement is a strong predictor of civilian student performance (Kuh, 2001) and more research would be needed to understand whether that would predict SSM/V success.

Additionally, veterans in our study often noted the differences between their experiences in the military and their experiences in college. Examples provided ranged from the type of thinking they needed to engage in (critical thinking vs. rote memorization), commute to campus, and daily structure and routines. Previous research has indicated that veterans often use enrolling in college as a strategy to reintegrate into civilian life (Libin et al., 2017). Participants in this study, averaged less than one year from military separation to college enrollment, with some students beginning college after one month or less from discharge. At this time, it is unknown whether the duration between military discharge and the start of college has an effect on the academic experience or achievement potential in student veterans.

Compared to factors identified by non-veteran students that facilitate or impede academic adjustment, the current results suggest some overlap in these factors between veterans and nonveterans, including academic efficacy and perseverance. Several individuals in the current sample demonstrated desire to learn and intent to pursue degrees beyond their Bachelor's degree. Because student veterans have an obligation to achieve a minimum 2.0 GPA when using their GI Bill benefits, it is possible that there are extrinsic factors influencing motivation unique to SSM/V. If these extrinsic factors exist, whether or not they impact the overall student performance or college experience remains to be seen.

The extent to which the factors that are unique to SSM/V have greater predictive validity for academic adjustment is unknown at this time. It may be that that most important predictors of academic adjustment are similar to veteran and nonveterans students, although the unique factors identified here might suggest otherwise. Future research examining the predictive validity of the VETS and other similar scales would help address this matter as would studies comparing predictive factors for veteran and nonveteran students

A notable strength of this study was the ability to identify areas of the student veteran college experience that are unique to this population, as well as areas of overlap with civilian students. Implementing the results of this study and through expert review and collaboration with student veterans who provide services to their peers on college campuses, we were able to develop operational definitions for all nine domains. The student veteran experts agreed that the definitions to be presented in this paper were good descriptors of the nine domains and were an accurate reflection of the SSM/V experience.

Future research may wish to examine whether these domains are useful in predicting important outcomes for veterans transitioning to college. Also, the extent to which these results represent domains that are unique to student veterans or maybe more general areas that are important for all college students remains to be seen. Some domains, such as transition to college may have unique application for student veteran populations. Possibly, these domains may be useful for developing measurement tools designed to identify potential obstacles veterans experience when returning to college, and develop interventions to increase retention and graduation.

The degree to which currently available measures and approaches to assessing and predicting academic adjustment are applicable to veterans remains to be seen. These results

suggest unique factors for veterans such as navigating bureaucracy, culture shock, work and family obligations. The next step is to develop a psychometrically sound measure that can be used to assess common and unique factors to academic adjustment in SSM/V to understand if these variables are predictive of student performance.

Chapter 4: Study 2

Methods

Participants

A total of 84 student veterans participated in this study. Student veterans were recruited from a southwest university psychology subject pool (n = 29%), the other participants came from email outreach to veteran service centers in the United States. Students in the subject pool received research credit for their participation. Responses of two participants were excluded from the final sample due to erroneous answers to military specific questions likely indicating they were not military veterans. Demographic information for the final sample (n = 82) is presented in Table 1. Participants' mean age was 32 years old (sd = 9.8). The sample consisted primarily of males (81.7%) and most of the participants were Caucasian (54.9%) followed by Hispanic/Latino (17.1%). Most veterans reported a marital status of "single" (43.9%) although 35.4% reported being married. Of the total sample, 56.8% reported that they did not have dependents living at home. The majority of student veterans reported working part time or not having current employment (63.4%), followed by full time employment status (19.5%). The most common reported annual income was less than \$20,000 (31.7%). Table 2 presents information on military and academic history. As indicated in the table, all branches of service were represented in the final sample, with just 1 participant from the Coast Guard. A large number (88%) of veterans reported being deployed at least once (M = 1.76, SD = 1.77). All levels of class rank were represented (including graduate students) and the majority of participants (92.7%) were full time students. Current GPA was self-reported (M = 3.21, SD =0.57).

Measures

Participants first completed a demographic questionnaire that included information regarding military service and college history. The questionnaire is included in Appendix C. Veterans were then presented with 110 sample items for the VETS. Questions for the VETS were presented randomly. Scale items were worded as statements and responses ranged from 1 (strongly disagree) to 6 (strongly agree).

Transition to college: acculturation

Institutional Integration Scale (IIS). The IIS (Pascarella & Terenzini, 1980) was utilized to determine student self-reported levels of social and academic integration. This scale is made up of 30 questions that encompass five subscales: Peer-group interactions, Interactions with faculty, Faculty concern for student development and teaching, Academic and intellectual development, and Institutional and goal commitment. The scale has been shown to have good predictive validity and an internal consistency of .83 (French & Oakes, 2004).

Social support

Multidimensional Scale of Perceived Social Support (MSPSS). The MSPSS (Zimet et al., 1988) was used to measure an individual's subjective feelings of social support. The measure is a 12-item scale consisting of three subscales which have four questions each. Participants rated responses on a 7-point Likert scale (1 = very strongly disagree to 7 = very strongly agree). The items are divided into subscales to indicate the source of the social support (family, friends, or significant other). The three subscales can be totaled for scores ranging from 4-28. The MSPSS has good reliability (r = .85) and internal consistency ($\alpha = .88$).

Psychological Functioning

The Patient Health Questionnaire (PHQ-9). Symptoms of depression were measured using the Patient Health Questionnaire (Kroenke, Spitzer, & Williams, 2001). This 9-item self-

report measure of depression asks about how frequently individuals have experienced symptoms (i.e. not at all, several days, more than half the days, nearly every day) during the past two weeks. Total scores range from 0 to 36 and cutoff scores for provided for minimal (1-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe depression (20-27). For the purposes of this study, only the first 8 questions were administered as the final question asks about suicidal thoughts. The PHQ-9 has good sensitivity and specificity (both 88%) and excellent internal reliability ($\alpha = .89$) (Kroenke et al., 2001).

The Generalized Anxiety Disorder 7-item (GAD-7). To measure symptoms of Generalized Anxiety Disorder, the GAD-7 (Spitzer, Kroenke, Williams, & Lowe, 2006) was utilized. The GAD-7 is a brief self-report measure where respondents answer questions regarding the frequency of symptoms (such as feeling nervous, anxious or on edge, trouble relaxing, and becoming easily annoyed or irritable) during the past two weeks. A cut score of 10 or greater indicates GAD is likely; however, level of severity can be assessed using cut points of 5 (mild), 10 (moderate), 15 (severe). This measure has good validity and reliability as well as sensitivity (89%) and specificity (82%).

PTSD Checklist for DSM-5 (PCL-5). The PCL-5 assesses for DSM-5 symptoms of posttraumatic stress disorder. The measure has 20 items to which respondents reply how often they experience symptoms related to PTSD as "not at all," "a little bit," "moderately," quite a bit," and "extremely." The PCL-5 can be interpreted by symptom cluster severity scores or by using a cut-score of 33; for the purposes of this study, a cut-score was utilized. The PCL-5 has strong internal consistency ($\alpha = .94$), test-retest reliability (r = .82), and validity (Blevins, Weathers, Davis, Witte, & Domino, 2015).

Procedures

Prior to conducting any research procedures, the study was approved by the local institutional review board for protection of human subjects.

Participants were recruited in a number of different ways. Some participants were recruited from a large southwestern university psychology department subject pool. These participants were enrolled in an introductory psychology course and participated in research as one means to fulfill course requirements. Subject pool participants were compensated with course credit for participation in this study. Participants were also recruited with the assistance of the veteran service center on the university campus through listserv emails. No compensation was provided to participants who were recruited from through the veteran service centers.

Lastly, a snowball technique was used to solicit participation through email to veteran services centers in the United States. An email was sent to veteran service center directors providing the rationale for the study as well as a request to forward the email to student veterans. A request was also made for student veteran participants to forward the email to any student veterans that they personally knew. No compensation was provided to these participants.

The informed consent, demographic questionnaire, and sample items were completed online using Qualtrics. Participants first completed a consent to participate followed by demographic questions. Each item on the demographic form was presented individually, and a response was required before the next item appeared. After completion of the demographic form, the VETS sample items were presented, followed by the standardized measures.

Data Analysis

Data Entry and Screening

All measures administered were entered by the participant into an online software program (Qualtrics) which was exported to an SPSS database. Participants were not able to

proceed with the questionnaire until all questions were answered, thus eliminating missing data.

Data was then double-entered to ensure accuracy.

Prior to conducting the main analyses, variables were inspected for outliers. Skewness and kurtosis were evaluated to determine whether the data was normally distributed. Frequency distributions and box plots were also used to determine if the variables were normally distributed. No univariate outliers were found and all items met criteria for normality based on the recommendations of Tabachnick and Fidell (2012). Data analysis included examination of descriptive information from the demographics questionnaire.

Reliability

Item selection and Internal Consistency

For the Item-to-domain score consistency estimates corrected item-total correlations were used to select items for each domain in the VET Scale. For the item-to-domain consistency estimates, items making up each domain were correlated with the corrected total scores for their respective domains. The consistency estimates were used to select the final set of five items to measure each of the VET scale domains. It was anticipated that the item-to-domain consistency estimates would be higher than the item-to-total score consistency estimates because of the VET scale's heterogeneous content (e.g. 12 different domains). When scales had items with item to domain consistency < .31, those items were removed from the analysis. If there were fewer than five items in a given domain with item to domain consistencies of > .30, items from the miscellaneous category were selected if they were conceptually and theoretically appropriate.

After this second analysis, the top 5 items were retained for the final domain items. The purpose of limiting items was to produce a brief and easy-to-administer scale that could be utilized by individuals without any previous training or experience.

Internal consistency

Chronbach's alpha was used to examine the internal consistency of the VET scale.

Because the VET is designed to assess 12 distinct domains, it was anticipated that alpha might be lower than would be the case for a test with homogeneous content. An alpha above .70 was considered acceptable (Peterson, 1994).

Validity

Construct validity: Convergent and Discriminant analysis. To examine convergent and discriminant validity of the VETS domain scores, correlations were calculated between the domain scores and the measures of academic/institutional integration, mood, anxiety, trauma and social support (i.e. IIS, PHQ-9, GAD-7, PCL, MSPSS).

Criterion related validity (concurrent). Regression analyses were used to examine the criterion validity of the VETS. In these analyses the total VETS score was used to predict current GPA, age, and number of semesters completed in higher education were the dependent variables. Three separate regression analyses were conducted, one for each predicted variable. Regression analyses for the IIS were also completed with the same dependent variables.

Chapter 5

Study 2: Results

Item Selection

Results of the item selection process are presented in Tables 3 - 14 which include the corrected item-total correlations for each of the 12 VETS domains. In these Tables, items in bold faced font were selected to be included in the final version of the VETS that was used in subsequent analyses. For the 11 items designed to assess the Bureaucracy domain, item-total correlations ranged between .15 and .56, with the top five items ranging from .42 - .56 (see Table 3). For the Culture Shock domain, 7 initial items and 2 miscellaneous items had item-total correlations that ranged between .01 and .58, with the top five items ranging from .21 - .58 (see Table 4). There were seven items used to assess the Identity Conflict domain with item-total correlations that ranged between .09 and .64, with the top five items ranging from .35 - .64 (see Table 5). The Academic Efficacy domain had five items and two miscellaneous items and had item-total correlations that ranged between .37 and .57, with the top five items ranging from .47 - .57 (see Table 6). For the Academic Perseverance domain there were six items and one from the miscellaneous category with item-total correlations that ranged from .48 and .73, with the top five items ranging from .55 to .73 (see Table 7). The Peer Social Support domain had 14 items with one from the miscellaneous category with item-total correlations ranging between -.16 and 0.53, with the top five items ranging between .36 - .53 (see Table 8). For the eight items on the Work Obligations domain, item-total correlations ranged from .20 and .72, with the top five items ranging between .51 and .72 (see Table 9). For the Family Obligations domain, there were 8 initial items with item-total correlations between .38 - .82, with the top five ranging between .76 and .82 (see Table 10). The Psychological Functioning Domain initially had 28 items, and

four domains were identified. The Depression item-total correlations ranged from .57 - .86 (see Table 11). The Anxiety item-total correlations ranged from .50 - .69 (see Table 12). The Aggression domain item-total correlations ranged from .46 - .66 (see Table 13). The Substance Use item-total correlations ranged from .18 - .42 (see Table 14).

Internal Consistency

Cronbach's alpha was then used to examine internal consistency for the total score and for each domain scores. Results of these analyses are presented in Table 15. As can be seen from the table, the alpha for the VETS total score was .91, suggesting that the items of this measure are highly related and appear to measure aspects of the same construct. Alpha results for the domains ranged from .54 for Substance Use to .91 for Family Obligations. With the exception of Substance Use, all other domains met or exceeded the acceptable alpha cutoff of .70 or greater.

Convergent and Discriminant Validity

Tables 16 and 17 contains descriptive statistics for the VETS domains and total scores, as well as scores for the scales administered to evaluate convergent and discriminant validity. To examine convergent and discriminant validity of the VETS, Pearson's correlation coefficients were calculated between the VETS scores and the scores from the other measures. Correlations were interpreted using effect size recommendations by Cohen (1988). The validity variables demonstrated medium (.20-.40), large (.40-.60), and very large (.60-1.00) effect sizes for correlations which can be seen in Table 18. All of the effect sizes were small for correlations between the VETS scores and age, and none were statistically significant.

As expected, there was a differentiated pattern of correlations between the VETS scores and the validity variables. The Bureaucracy domain demonstrated medium to large effect sizes with the total number of semesters attended, IIS: Faculty Concern for Student Development, and

IIS: Academic and Intellectual Development. Bureaucracy did not demonstrate significant correlations with the IIS: Institutional and Goal Commitment. Culture Shock demonstrated medium to large effect sizes with IIS: Institution and Goal Commitment, as well as the validated measures of depression and anxiety. Identity Conflict did not demonstrate an effect on GPA, Peer Group of Faculty interaction, although it did result in medium to large effect sizes with total semesters attended, IIS: Academic and Intellectual Development, and measures of depression, anxiety, and PTSD. Academic perseverance demonstrated medium to large effect sizes with GPA, IIS: Peer Group, Interaction with Faculty, and Academic Intellectual Development, and the MSPSS. As expected, the measure of social support (MSPSS) demonstrated significant negative medium to large effects with the VETS domains of Academic Perseverance, Peer Social Support, Depression, and Aggression. Very large effects were found between the PHQ-9 and GAD-7 with the VETS depression and anxiety domains. Other VETS domains, including Identity Conflict, Academic Efficacy, and Peer Social Support, showed effect sizes ranging from medium to large with measures of psychological functioning (i.e. PHQ-9, GAD-7, and PCL). As anticipated, the psychological variables did not result in effect sizes or significance with IIS: Interaction with Faculty and Faculty Concern for Student Development. GPA demonstrated small to medium effect sizes with the VETS domains Bureaucracy, Culture Shock, Academic Perseverance, Work Obligations, and Family Obligations, although none of these achieved statistical significance. The total score on the VETS demonstrated medium to large effects with total semesters attended, IIS: Peer Group, Interaction with Faculty, and Academic and Intellectual Development, MSPSS, and all of the psychological measures.

Regression Analyses

The VETS total score and the IIS total scores were entered into separate regression analyses to determine the degree to which they predicted a number of variables relevant to success in college, including age, semesters attended, and GPA. The only regression model that was significant was for the VETS total score, which was a significant predictor of semesters attended, F(1,80) = 9.70, p = .003, $R^2 = .10$. The correlation between VETS total score and semesters attended was positive, suggesting that higher scores on the VETS (greater transition difficulties) was associated with longer college attendance. To further examine this association, a second regression analyses (stepwise entry) was accomplished in which the VETS domain scores were used to predict semesters of college attended. Results of that analyses were also significant, F(2,79) = 9.74, p < .001, $R^2 = .20$. The VETS Bureaucracy domain was the strongest predictor in the model, $R^2 = .14$, $F\Delta(1,80) = 12.60$, p = .001, followed by the VETS Identity Conflict domain, $R^2 = .14$, $R^2\Delta = .06$, $F\Delta(1,79) = 6.08$, p = .016. None of the other VETS domains scores were significant predictors of total semesters attended.

The VETS total score was not a significant predictor of age, F(1,80) = .01, p = .942, $R^2 = .00$, or GPA, F(1,79) = 1.84, P = .179, P = .02. The IIS total score was not a significant predictor of semesters attended, P(1,80) = 1.13, P = .29, P = .01, age, P(1,80) = 2.56, P = .114, P = .03, or GPA, P(1,79) = 2.54, P = .115, P = .03.

Chapter 6

Study 2: Discussion

The purpose of this study was to develop and validate a brief assessment tool specifically for student veterans that may help predict successful transition from military to college life. The resulting scale, the VETS, displayed excellent internal consistency for both domain and total scores. In addition, external measures provided some evidence for convergent and discriminant validity. Regression analyses suggested that the VETS was as good at predicting college semesters completed as a more well established and widely used measure, the IIS. These results suggest that the VETS could be the first reasonable assessment tool designed specifically to assess education transition issues that are unique to student veterans.

Several features were identified in the development stage to ensure the VETS would be an efficient and useful method for assessing college student veterans, including: 1) it can be administered to large groups or student veterans; 2) there is no special training or equipment required to administer it: and 3) the scale is brief so that individuals would be able to complete it quickly. Indeed, the resulting VETS met these three overall goals for development. Other measures that are currently available to assess college student adjustment, are comparable to the VETS in terms of the number of items, however, the VETS is written specifically for the student veteran population and attempts to address the unique challenges that student veterans face as they transition to college. The VETS was also reviewed by veteran students and other veterans providing support for both the content and the verbiage of the domains and individual items. Given that much of the existing literature demonstrates the absence of specific evaluation and programs developed explicitly for SSM/V (Borarsi et al., 2017), this scale is one of the first steps

toward developing methods to identify factors that may contribute to problematic initial transition to a college campus for veterans.

Additionally, the item-total correlations were good for most items which provides support for the VETS domains ability to measure the underlying domains. At a minimum most items were correlated at the .30 level, but oftentimes correlations were much higher. The VETS also demonstrated excellent internal consistency providing evidence for the reliability of the total score. Internal consistencies of other measures of educational adjustment, such as the IIS, range from 71 - .84 for the domain scores.

There was also support for convergent and discriminant validity, particularly for the VETS psychological domains. While previous literature has mixed findings regarding the rates of mental health disorders in SSM/V and civilian populations, it does appear that depression, anxiety, trauma, and substance use tend to manifest uniquely in SSM/V. Previous research has found that SSM/V with PTSD and substance use disorders engage in more aggressive behaviors (Widome et al., 2011), and the VETS appeared to be able to find a relationship that was consistent between the Aggression domain and Substance Use domain with a validated measure of PTSD. Furthermore, the Depression domain was significantly negatively correlated with a measure of social support. This is also consistent with previous literature that found depression was negatively correlated with less social support (Quigley, 2015; Weber 2012). The Substance Use domain was the weakest in internal consistency of all the VETS domains. This domain had fewer items available to generate the subscale and the items that were selected may be measuring things that may be related to substance use behaviors, such as grief and loss and nightmares. Future factor analysis would be useful in determining whether or not items in this scale will load together. We anticipate they would not and perhaps that is why the overall internal consistency is low. However, given the medium effect size and significant correlations with the convergent measures, this scale does appear to have an impact on psychological functioning and social support.

An unexpected finding of this study was that the Work and Family Obligations domains did not demonstrate significant findings. Previous research has found that 45% of student veterans are married and 46% have children living at home (Student Veterans of America, 2016). In our sample, 35% were married and 57% of the participants did not have a dependent living at home. It would appear that our sample may have had less family obligations thereby decreasing the impact of this scale on the overall results. It could also be that 88% of our sample had been deployed at least once and perhaps the family unit had learned to adapt and adjust to various life changes and developed a family unit resiliency. Additionally, our sample was predominately male, which is typical in veteran populations, and perhaps the stereotypical gender roles of male household responsibilities did not add additional adjustment difficulties as they transitioned to college (Matud, 2004).

The VETS also accounted for 10% of the variance in college semesters attended, compared to the IIS, which accounted for 1 % of the variance. There were several other notable implications. The overall percent of variance for both of these measures is relatively small, and it is unclear why this is the case. It could be that this study yielded a higher functioning sample in several areas. Our sample had an average GPA of 3.2, which is higher than the national average for civilian students at 2.94 (Kuh, 2007). Our sample was also older (average age of 32 years) possibly indicating more maturity. Furthermore, our sample had an average length of service of 89 months, or approximately 7 years of military service. It could be possible that given the

increased age and length military service and training, our sample was able to have a more successful transition from active duty to college life.

Higher scores on the VETS Bureaucracy and Identity Conflict domains were associated with a longer time in college, which is somewhat counter intuitive in that higher scores on the VETS domains were expected to be associated with poorer outcomes. However, these findings suggest that some of the VETS domain scores reflect longer term education transition problems that are associated with increased time in school. For instance, the more time one spends in an educational environment, the more likely it is that they will have problems with paperwork processing or other bureaucratic processes. Similarly, longer time in the college environment may highlight differences between military and college environments, thereby increasing a sense of identity conflict for veterans. Other domains on the VETS may reflect shorter term adjustment problems and could possibly be more relevant to students who are underclassmen or have taken less college credit hours. The extent to which other domains are going to predict academic persistence, low GPA, or failure to attend should be explored in future studies. Furthermore, since most of the sample was composed of upper classmen (juniors and seniors) and graduate students, most of the sample had already successfully transitioned to college life. More robust findings might be present for underclassmen, particularly freshmen and those who have been admitted but not yet attended college. Whereas others VETS domain scores may be associated with more time in college.

It should also be noted that the underclassmen (freshman and sophomore) indicated attending between 0 and 16 semesters (with an average of 6 semesters completed). There are several reasons that could account for the discrepancy in semesters attended and self-reported class rank. It is not uncommon for veterans to attend college part time or take college courses

while on active duty. This may also increase the likelihood of a more successful transition as these student veterans could have more accurate expectations of the type of learning in a college environment. Future research should attempt to determine whether taking college coursework while on active duty status has an effect on overall transition to college after separation from the armed forces. Examination of credit hours completed (vs. semester completed) would be expected to provide additional insight into this area, although it is currently unclear whether the VETS would be a good predictor of credit hours completed.

Despite the low variance VETS performed better than IIS providing support for validity of the VETS. The extent to which greater variance accounted for by the VETS was attributable to the veteran specific content of the scale could not be directly evaluated, although this seems like a likely possibility. Additionally, when combined with the ease of administration and test efficiency, the VETS could be useful to improve decision making when it comes to providing extra support and assistance to student veterans.

Limitations

The current study had several limitations. While the internal consistency was good, the sample size did not allow for a factor analysis. As previously discussed, the low internal consistency of the Substance Use scale, as well as low item-total correlations, could indicate these items need revision, substitution, or deletion. Another limitation is that it appears our recruitment methods yielded higher functioning and more senior students through self-selection. While a minimum GPA of 2.0 is required to maintain GI bill benefits, our sample had an average GPA of 3.1. Given that our survey was administered online and the personal identify of participants was not disclosed, we could not verify self-report of important outcome variables

like GPA and college semesters attended. It is possible that participants could have incorrectly reported their GPA.

Strengths

The current study has produced a scale that is brief and easy to administer unique to student veterans. The VETS total score demonstrated strong internal consistency and can predict a small portion of the variance in total semesters attended. The VETS also appears to have identified domains that are important and relevant to student veterans. Through collaboration with an expert panel, these domains appear to have face validity and are sensitive to the unique culture of student veterans.

Future Research

The development and initial validation of the VETS scale is an important first step to increasing the unique challenges that SSM/V face. Future research is necessary to further validate this measure. It is recommended that future studies obtain a larger sample and complete exploratory and confirmatory factor analyses to provide further construct validity evidence for the VETS domains. It would also be useful to further examine whether these domains are specific to SSM/V populations and identify common areas with civilian students. Lastly, it is suggested that future research determine whether there are differences among class rank among the student veteran population. A particular focus on freshman who are just entering college with longitudinal data collected at the end of Freshman year may reveal that the VETS does quite well at predicting college success, i.e., account for more variance in important outcomes like semesters attended, GPA, etc. Additionally, future research could implement data collection methods to confirm GPA estimates.

In summary, the results provide preliminary evidence supporting the continued development of the VETS. The VETS displays excellent internal consistency, reasonable convergent and discriminant validity, and accounts for a meaningful portion of the variance in predicting the number of semesters attended. Further research is needed, including factor analysis, to further develop and evaluate the usefulness of the VETS. In doing so, we will increase our ability to better serve those individuals who have first served us.

Appendices

Appendix A

 $Demographic\ Question naire\ and\ Interview\ Questions\ for\ Study\ 1$

Demographic Information

Subject ID:
Age:
Sex: M F
Ethnicity: White non-Hispanic, Hispanic/Latino, African American, Asian/Pacific Islander,
Native American/Alaskan Native, Biracial, Other
Marital Status (circle): Single, Married, Living with Partner, Divorced (date:), Separated (date:)
College major/area of study:
College GPA:
High school GPA:
Do/did you use the GI bill? Yes No
Branch of service:
Rank:
Years served:
Type of discharge (circle): Honorable, Other Than Honorable, Entry level separation (ELS), General, Bad Conduct Discharge (BCD), Dishonorable
Deployment information:
Total number of deployments:
For each deployment, where were you deployed?
How long was each deployment?
Do you have a service connection rating from VA? Yes No
If yes, what is the percentage?
If yes, what is the rating for?

Interview Questions and Protocol

<u>Introductory statement</u>: Thank you for agreeing to talk with me today. I'd like to start by asking you to provide some basic demographic information about yourself on this form. After that is complete, I'd then like to ask you some questions about your experiences coming to college after your separation from the armed services. I am primarily interested in your thoughts, feelings, and experiences about your transition to college, including those things that may have made this process easy or created challenges for you. We should be able to cover all my questions in 30 minutes or so, but we can take longer if needed. Do you have any questions before we start?

process easy or created challenges for you. We should be able to cover all my questions in 30 minutes or so, but we can take longer if needed. Do you have any questions before we start?
What was your transition to college like after you separated from the armed services?
What do you think made the transition easy/challenging for you?
Do you have any personal theories about why the transition was easy/challenging for you?
Do you remember what was going on in your personal life at the time you transitioned to college?
Do you think any of these things helped make the transition to college easier/more challenging for you?
Have you had different theories over time about why your college transition was easy/difficult? For example, did you first think it was related to one thing and then change your mind? Tell me about it.

Appendix B

Interview Summaries: Study 1

Veteran 101

Veteran reported that after he separated from the military, he worked in the job force for

3 years before enrolling in college. He stated it was "extremely difficulty" and a "nightmare"

because of the documentation and paperwork requirements at the institution he was enrolling in.

He explained "the office was manned by kids working part-time who don't understand veterans."

Veteran shared that he is currently a full time student, works full time, and recently started a

small business. He noted that he finds it difficult to balance all of his commitments and chooses

to concentrate on his grades and his business. He reported "I don't really want to get involved

with friends. The way I see it, when it comes to my personal life, I have to make changes and for

me that means very little social life."

Veteran 102

Veteran reported that his transition was "weird because everyone is so young." He

acknowledged that although he is just a "few years older" he has had life experiences which

make him feel much older than his peers. Veteran also shared that he has found it difficult to

manage the workload because "there is no set schedule, so I struggle with time management. I'm

used to everything scheduled out, and here it is all on you." Other challenges with his transition

include losing financial security of pay checks twice a month, and being in large crowds of

people on campus. He indicated that he has a supportive partner and that he has made some

friends on campus which have helped him with the transition.

Veteran 104

48

Veteran reported that when she began the progress of separation from the armed services, that she was stationed in Guam and her paperwork was delayed. She reported having less than one month between moving back to the United States and beginning college classes. She reported that she anticipated separating to attend college and began saving money approximately two years in advance. Veteran reported that she did not have difficulty with time management and attributed it to her military training. She elaborated "in the military, we have a plan of the day, so if I don't do my job or meet my goals, I am delaying mission ready." She noted that she has found this mindset helpful in college. In contrast, she stated that "learning to ask for help" was more challenging because "being a female in the military, if you ask for help, you just look like a suck-up trying to get ahead. Now I have to remind myself, ask questions, or go to the tutor lab." Another challenge she noted was "not having a safety blanket" including full healthcare and easy access to medical providers, as well as steady employment. She also shared that she has noticed wearing the same clothes on a regular basis and called it her "new uniform." Finally, she shared some differences she has observed between herself and her peers:

I took this class, and there were some kids that just didn't want to be there and I realized "good thing I went to the military before I went to college, or I would just be like them. It seems like they just want to drink and do drugs. I overheard in a final exam one time, someone said "I'm so hung-over and high right now" and it was right before the exam. I hope they find what they really want to do. No judgment. But they don't really seem to care too much about college.

Veteran 105

Veteran stated that he is not currently using his GI benefits because he is saving them for graduate school. He reported that his family is helping support him through his undergraduate

studies. He noted a challenge with choosing not to use his GI bill at this time is not having priority registration for his classes. Veteran indicated another challenge was that when he began college, his SAT scores "were old" and he was placed in lower level courses. He indicated that he did not mind because "being out of school for so long, I forgot a lot of things and had to relearn." Veteran reported that during his time on active duty, he primarily worked in a hospital setting. He shared that it was an "intellectual" job as opposed to a "grunt" job and he attributes the critical thinking required to complete the job as something that made his transition easier. He did note a particular challenge was "relearning how to manage his time" and he had to employ a significant amount of self-discipline to reestablish study habits. Finally, veteran shared that he easily made a friend in his first class and they remain friends now. He specified that he did not feel he had to have veteran friends and was open to having civilian friendships.

Veteran 106

Veteran shared that he attended 2 other colleges prior to coming to his current university. He stated that his biggest challenge with transitioning to college was relating to his peers. He reported being surprised to see his peers complaining to professors and stated "I see the teachers as authority and I would never talk to them in a disrespectful way." He said "It's a little intimidating to go to college at an older age. I am unable to relate to the people around me. I'm not really sure if it is because of my age or my experiences." Veteran shared the following example:

There's this moment when you go into class and there is an ice breaker, introduce yourself, say what's something different about you? And I've pretty much based my entire life now on these five years and I became very proud of them, but I find I don't like talking about it to these people because typically people want to ask a lot of questions. They don't know

what kind of questions they're asking. So I find myself struggling, almost sweating, and figuring out what I'm going to tell these kids so that I'm not going to be bombarded with additional questions. I understand their curiosity, but my willingness to open up about it is different. I usually lie. I make it dull. If they say, 'how many people do you kill?' I lie and say 'oh I was never deployed I just trained people.' And then the climax of the conversation is gone and then they don't ask any more questions.

Veteran also shared that he finds learning to be "different" now. He explained that prior to the military, he felt that he had a more creative mind, but while he was serving in the Army, his though process became more "simplistic and concrete." He also indicated that he became used to operating with a "collective" way of thinking and college is more individualized. Furthermore, he indicated that math and science classes were "easier because they have more rules."

Veteran 107

Veteran reported that he expected coming to college would be easier than the military, but that there were many challenges as he began college. For starters, he explained that "being in the military, you aren't attuned to the civilian world. In the Air Force, every minute and hour is accounted for." He reported that he has had significant difficulty with the "learning curve." He elaborated that in the military, they use a phonetic alphabet and use technical manuals to do their job. In contrast, trying to "read books for class was hard. I used to read the manual, and once I knew how to do it, I could just do the job over and over. Now, I have to learn something new every week." He also shared that while in the military, his sleep schedule was disrupted and that there were times he would be up for 37 hours. He explained that he hasn't been able to regulate his sleep cycle and it contributes to his difficulty with studying and retaining information.

Furthermore, he described having to adjust to commuting to campus as opposed to living on a

ship, or having a room within 10 minutes of the base. Veteran also noted some useful skills that he learned in the military such as a good "work ethic. I had a technical job, so I'm used to doing a lot of administrative and paperwork type stuff. It actually translates good in college." Veteran noted that he does not have a lot of interactions with his classroom peers, and stated "they are just curious, they ask where I've gone, and if I've been deployed, what I did."

Veteran 108

Veteran shared that his expectation for his transition back to civilian life would be "easy." He explained that "in the military, we have contingencies for everything. So I had a plan, and plan B and C and D. And as soon as I got out, it went from A to J. I felt a lot of frustration and confusion because I didn't have enough contingencies. I forgot what it was like to be a person. When you look at your ID it says 'property of the US Government;' it doesn't mean the ID, it means the person in the picture. So leaving that and going back into democracy, it was so different." Veteran reported that after he retired from the military, he intended to begin taking classes at a technical instituted, however, there was a problem with his DD214 (Certificate of Release or Discharge from Active Duty). He stated it took 4 months for him to receive it which also delayed his ability to receive mental health treatment at the VA. Veteran noted that his wife was his "rock" and helped him through the challenging time. He noted "I'm proud now. We went through a lot as a family and we survived." Veteran reported that upon coming to college, he realized he need to have a different mindset, and viewed "going to school like a job." He shared that this increased his motivation to earn good grades and understand the material. Veteran explained that he sometimes finds it difficult to be in a class and watch other students attend, but not really care. He said "it's like high school except you are paying for it. So why go? I see these kids and just get upset that they aren't taking advantage of this opportunity. As a parent, I can see that they have so much potential." He further elaborated that "having real life experience" actually made coming to college "somewhat easier" and gave him more "perspective."

Veteran 109

Veteran reported that her long-term goal is to earn a medical degree and be commissioned on a health service officer. Veteran described her enrollment process as "tedious" but that the process was quicker than she expected. Overall, she stated the transition was "difficult at first" and attributed it to a "pretty big gap" since the last time she attended formal coursework. She elaborated that she felt "intimidated" due to being older than her peers and expressed worry that she would not be starting at the "same academic level." She noted that she was able to recognize that it was "all in my mind." Veteran noted that the academic environment is a "slower pace" than what she is used to and at times she feels restless. She explained that in the Army, "you crash learn everything and then you are expected to be a subject matter expert and use it immediately." She described feeling "restless at first" with not being able to apply her newly acquired knowledge immediately. She also described her strength and challenge as a full time college student as her family obligations. On the one hand, she noted that she is able to use her GI benefits and her husband works full time, allowing her to focus solely on her academic studies and be financially stable. On the other hand, she shared that her husband is currently serving on active duty, taking graduate level coursework and that they have three young children (ages 2, 3, and 4). She notes that her military experienced trained her to be able to cope with multiple demands on her time because she was taught to "backwards plan" her schedule. Lastly, she reported being surprised by her involvement on campus in veteran's groups, particularly because she can relate to them in numerous ways. In particular, she noted that some of the

similarities among her student veteran friends is that they also have families, are older in age, and can relate and bond over past military training and experiences.

Veteran 110

Veteran described his transition from the military to college as "smooth" and indicated that he felt it was a "simple process using all the benefits." Veteran reported that he currently working a full time job while being enrolled as a full time student. He stated that his primary challenge was finding a way to manage his schedule, including work, school, family, and social life. He was able to do so by finding a job working at night which allows him to take classes during the daytime. Veteran reported that his military training is an asset as he has a mentality to work diligently and utilize self-discipline. He also shared that he has not engaged in socializing with his classroom peers and shared "I go to get the classwork done, I will do group work and I'm friendly, but I'm usually in-and-out. I'm open to friendships, but the vibe on campus is kind of busy or 'let's party' and I'm here to get the work done."

Veteran 111

Veteran reported that from his discharge date to his first day in college, it was less than 1 month. He explained that the paperwork process was "tedious and confusing," but that he found support through the veteran service center on campus. Veteran also shared that the transition to college was "difficult at first, because I was used to being told what to do and how to do it. Professors doesn't force you to come, you have a schedule but there isn't accountability." He further explained that time management was challenge but that he had the support of his wife who guided him and held him accountable. Veteran noted that he is an older student in his classes, but that he saw himself as a mentor. He explained that he enlisted in the military immediately after graduating from high school and was living on his own at age 19. "I had to be

more responsible, pay my own bills. Compared to the kids in my classes, a lot of them still live with their parents. So a lot of them ask me questions, about the military and if I was deployed, but also about how VA home loans work for a class project. I want to help them, you know, see them succeed." Veteran indicated this position felt "weird" at times, but he felt good about his role.

Appendix C

Study 2 Questionnaires

Demog	raphic Information
Age:	
Gender	
	Male
	Female
Which	of the following best describes your ethnicity:
	White
	Hispanic, Latino, or Spanish
	Black or African American
	Asian
	American Indian or Alaskan Native
	Native Hawaiian or Other Pacific Islander
	Middle Eastern or North African
	Other Race/Ethnicity
What is	s your current marital status?
	Single
	Living with Partner
	Married
	Separated
	Divorced
	Widowed
How m	any dependents do you have living at home?
Do you	consider yourself to be a single parent?
	YES
	NO
	I do not have children

What is your current employment status?
Full time (30+ hours per week)
Part time (less than 30 hours per week)
Not currently employed, not retired
Retired
Disabled
Unable to work
What is your household income before taxes?
Less than \$20,000
\$20,000 - \$39,999
\$40,000 - \$59,999
\$60,000 - \$79,999
\$80,000 - \$99,999
\$100,000 or above
Military History
When did you serve in the armed forces?
Enlistment month and year
Discharge month and year
Branch of service:
Air Force
Army
Coast Guard
Navy
Marines
Final rank upon separation:
Total number of years served in the military:
Type of discharge:
Honorable
Medical Separation

Other than Honorable
Entry level separation (ELS)
General Discharge under Honorable Conditions
Bad Conduct Discharge (BCD)
Dishonorable Discharge
How many times were you deployed during active duty?
How many times were you deployed in combat theater?
For each deployment, where were you deployed?
How long was each deployment?
Do you have a VA service-connected disability rating?
YES
If yes, what is the percentage?
If yes, what is the rating for?
NO
Are you currently in the Reserves or the National Guard?
YES
NO
Education Information
How many months were there from the time you separated from active duty until the time you enrolled in college/university?
What is your current college enrollment status?
Full-time student (9 or more credits)
Part-time student (8 or less credits)
How many college credit hours are you currently enrolled in?
What is your current class rank?
Freshman
Sophomore
Junior

Senior **Graduate Student** How many semesters have you attended college or university (count all semesters regardless of whether they were at different institutions)? Did you take college courses while on active duty? YES if YES, how many semesters? _____ NO How many credit hours have you completed (not including this semester)? ______ How many education credits were you awarded from your military training? If none, put "0" zero What is your current college major/area of study? _____ What is the highest degree you hope to achieve? What is your current college GPA? _____ How likely are you to enroll in classes during the next semester (Fall or Spring)? Extremely unlikely Unlikely Likely Very Likely

Do you intend to commission as an officer upon graduating from college?

YES

Extremely Likely

NO

Do you currently apply GI Bill benefits to your education?

Yes

No

If no, why are you not currently using GI bill benefits? _____

Approximately, what was your High School GPA upon graduation?

below 1.0 1.0 - 1.4 1.5 - 2.0 2.1 - 2.4 2.5 - 2.9 3.0 - 3.4 3.5 - 4.0

What is the highest level of education your PRIMARY parent or guardian has completed?

Elementary school

Junior high school

High school

Some college

2 year degree or certificate (A.A. / A.S)

4 year degree (B.A. / B.S.)

Graduate Degree (M.A. / M.S. / M.B.A. / etc.)

Doctorate (Ph.D. / M.D. / J.D.)

What is the highest level of education your SECONDARY parent or guardian has completed?

Elementary school

Junior high school

High school

Some college

2 year degree or certificate (A.A. / A.S)

4 year degree (B.A. / B.S.)

Graduate Degree (M.A. / M.S. / M.B.A. / etc.)

Doctorate (Ph.D. / M.D. / J.D.)

Veteran Educational Transition (VET) Scale

Instructions: This test is designed to help us better understand your thoughts and experiences as a college student. Please indicate the extent to which you agree or disagree with the following statements by marking the appropriate number option, from 1 (strongly disagree) to 6 (strongly agree). There are no right or wrong answers. Select the answer that best reflects your own thoughts and experiences.

	1	2	3	4	5	6
	Strongly	Disagree	Somewhat	Somewhat	Agree	Strongly
	Disagree	J	Disagree	Agree	J	Agree
It was difficult to complete						
my college application						
I am aware of the veteran						
specific programs on						
campus that are available						
to me						
The armed services						
provided support to						
transition to college						
The armed services gave						
me instruction on how to						
apply for college						
The armed services gave						
me information about my						
GI bill benefits						
The administrative						
personnel at my college						
were helpful when I						
enrolled in college						
My advisor (or other						
administrative personnel)						
helped me in choosing a						
major						
My GI paperwork has been						
delayed						
My semester enrollment						
forms have been delayed						
My VA benefits have been						
delayed						
I got conflicting						
information about how to						
complete college						
enrollment paperwork						
The college environment is						
foreign to me						
College is very different						
than what I am used to						

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It was hard coming back to				
an educational				
environment				
College life seems foreign				
to me				
Military life and college				
life are very similar				
I like college better than				
the military				
I am older than most of my				
classroom peers				
College is different than				
what I am used to				
I try to blend in with my				
peers				
I have lost my sense of				
<u> </u>				
purpose since separating				
from the military				
I wish I was still on active				
duty				
I prefer the structure of				
military life				
It has been difficult to find				
my place after separating				
from the military				
I have kept many of the				
habits I developed in the				
military				
I wish I could wear my				
uniform on a daily basis				
I prefer the challenges of				
being on active duty				
I have effective study skills				
I have good critical				
thinking skills				
I am well-organized				
I am good at time				
management				
I am confident that I can				
achieve my academic goals				
I am committed to				
achieving my academic				
goals				
-				
Being successful in the				
classroom is a high priority				
for me		<u> </u>		

A college degree is an			
important part of my future			
success			
I commit significant time			
to excel in my studies			
I take responsibility for my			
failures			
It is important to me to			
earn good grades			
I feel supported by my			
peers peers			
I feel supported by my			
former unit			
I had a strong bond with			
my unit when I was in the			
military			
I feel connected to other			
veterans in college			
I have much in common			
with my classmates			
I have similar interests to			
my peers			
I feel supported by my			
peers			
I often refrain from			
speaking in class			
I try to go unnoticed in the			
classroom			
I seek out my professors			
outside of class to discuss			
my grade, ideas, or			
readings			
I work on assignments			
with my classmates outside			
of the classroom			
I only attend events with			
other veterans			
I only attend events on	 	 	
campus if they are for			
veterans			
I prefer to have friends that			
are veterans			
All of my friends are			
veterans			

I have work			
responsibilities outside of			
college			
My work obligations take			
away from my ability to			
perform well in college			
I have a hard time devoting			
myself to studying because			
of other obligations			
It is difficult to balance			
school and work			
obligations			
There are work demands			
requiring my attention and			
time			
Work related stress			
interferes with my ability			
to perform well in school			
I prioritize my education			
over my work obligations			
I have a long commute to			
campus			
I have many family			
responsibilities outside of			
college			
My family obligations take			
away from my ability to			
perform well in college			
I have a hard time devoting			
myself to studying because			
of family obligations			
It is difficult to balance			
school and family			
obligations			
There are family demands			
requiring my attention and			
time			
Family related stress			
interferes with my ability			
to perform well in school			
I prioritize my education			
over family obligations			
I am hopeful about the			
future			
I get enough sleep each			
night			

I know what health			
services are available to			
I know what health			
services are available to			
me on campus I know what health			
services are available to			
me at the VA			
I use alcohol to cope with			
stress			
I use prescription drugs to			
cope with stress			
I use nonprescription drugs			
to cope with stress			
Sometimes my anxiety get the best of me			
It is hard for me to manage stress			
I get in verbal arguments			
with people on campus			
I get in physical			
altercations with people on			
campus			
The world is out to get me			
I have lost people who are			
close to me			
I often think about people			
in my unit who died			
It is hard for me to relax			
People tell me I am			
irritable			
I feel irritable most of the			
time			
I feel sad and down most			
of the time			
I have difficulty sleeping			
I have nightmares at least			
once per week			
I tend to worry a lot			
It is difficult to be happy			
I have been arrested due to			
a physical altercation			
I have been arrested due to			
a verbal altercation			

Sometimes my anxiety			
interferes with my			
coursework			
I feel depressed most days			
of the week			
I feel indifferent about life			
I am trying to find a new			
mission in life			
I am optimistic about my			
ability to graduate			
I fit in with my peers in the			
classroom			
I fit in with other veterans			
on campus			
I can relate to my peers in			
the classroom			
I can relate to other			
veterans on campus			
I relate to my professors			
It bothers me that I am			
older than my classmates			
I have a high level of			
academic ability			
I am confident in my			
academic abilities			
I can master difficult			
challenges			
I am successful at			
completing difficult tasks			
I have learned from my			
past failures			
I view failure as a learning			

Institutional Integration Scale (IIS; Pascarella & Terenzini, 1980)

Scale 1: Peer-Group Interactions	1	2	3	4	5
	Strongly	Disagree	Neither	Agree	Strongly
	Disagree		agree nor		agree
			disagree		
1. Since coming to this university I have					
developed close personal relationships with					
other students.					
2. The student friendships I have developed at					
this university have been personally satisfying.					

3. My interpersonal relationships with other			
students have had a positive influence on my			
personal growth, attitudes, and values.			
4. My interpersonal relationships with other			
students have had positive influence on my			
intellectual growth and interest in ideas.			
5. It has been difficult for me to meet and			
make friends with other students.			
6. Few of the students I know would be willing			
to listen to me and help me if I had a personal			
problem.			
7. Most students at this university have values			
and attitudes different from my own.			

Scale 2: Interactions with Faculty	1	2	3	4	5
State 2: interdetions with racarty	Strongly	Disagree	Neither	Agree	Strongly
		Disagree		7.6100	0,
	Disagree		agree nor		agree
			disagree		
1. My non-classroom interactions with faculty					
have had a positive influence on my personal					
growth, values, and attitudes.					
2. My non-classroom interactions with faculty					
have had a positive influence on my					
intellectual growth and interest in ideas.					
3. My non-classroom interactions with faculty					
have had a positive influence on my career					
goals and aspirations.					
4. Since coming to this university I have					
developed a close, personal relationship with					
at least one faculty member.					
5. I am satisfied with the opportunities to					
meet and interact informally with faculty					
members.					

Scale 3: Faculty concern for student	1	2	3	4	5
development and teaching	Strongly	Disagree	Neither	Agree	Strongly
	Disagree		agree nor		agree
			disagree		
1. Few of the faculty members I have had					
contact with are generally interested in					
students.					
2. Few of the faculty members I have had					
contact with are generally outstanding or					
superior teachers.					
3. Few of the faculty members I have had					
contact with are willing to spend time outside					

of class to discuss issues of interest and			
importance to students.			
4. Most of the faculty members I have had			
contact with are interested in helping students			
grow in more than just academic areas.			
5. Most faculty members I have had contact			
with are genuinely interested in teaching.			

Scale 4: Academic and intellectual	1	2	3	4	5
development	Strongly	Disagree	Neither	Agree	Strongly
	Disagree		agree nor		agree
			disagree		
1. I am satisfied with the extent of my					
intellectual development since enrolling in this					
university.					
2. My academic experience has had a positive					
influence on my intellectual growth and					
interest in ideas.					
3. I am satisfied with my academic experience					
at this university.					
4. Few of my courses this year have been					
intellectually stimulating.					
5. My interest in ideas and intellectual matters					
has increased since coming to this university.					
6. I am more likely to attend a cultural event					
(i.e. concert, lecture, art show) now than I was					
before coming to this university.					
7. I have performed academically as well as I					
anticipated I would.					

Scale 5: Institutional and goal commitments	1	2	3	4	5
	Strongly	Disagree	Neither	Agree	Strongly
	Disagree		agree nor		agree
			disagree		
1. I am confident that I made the right					
decision in choosing to attend this university.					
2. It is likely that I will register at this					
university next fall.					
3. It is important to me to graduate from this					
university.					
4. I have no idea at all what I want to major in.					
5. Getting good grades is not important to me.					
6. It is not important to me to graduate from					
this university.					

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988).

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

	1	2	3	4	5	6	7
	Very	Strongly	Mildly	Neutral	Mildly	Strongly	Very
	Strongly	Disagree	disagree		Agree	Agree	Strongly
	Disagree						Agree
1. There is a special person							
who is around when I am in							
need.							
2. There is a special person							
with whom I can share my							
joys and sorrows.							
3. My family really tries to							
help me.							
4. I get the emotional help							
and support I need from my							
family.							
5. I have a special person							
who is a real source of							
comfort to me.							
6. My friends really try to							
help me.							
7. I can count on my friends							
when things go wrong.							
8. I can talk about my							
problems with my family.							
9. I have friends with whom							
I can share my joys and							
sorrows.							
10. There is a special person							
in my life who cares about							
my feelings.							
11. My family is willing to							
help me make decisions.							
12. I can talk about my							
problems with my friends.							

The Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).

Instructions: Over the last 2 weeks, how often have you been bothered by any of the following problems?

1	2	3	4
Not at all			

	Several days	More than half of the days	Nearly every day
1. Little interest or pleasure in doing		-	
things			
2. Feeling down, depressed, or hopeless			
3. Trouble falling or staying asleep, or			
sleeping too much			
4. Feeling tired or having little energy			
5. Poor appetite or overeating			
6. Feeling bad about yourself – or that			
you are a failure or have let yourself or			
your family down			
7. Trouble concentrating on things, such			
as reading the newspaper or watching			
television			
8. Moving or speaking so slowly that			
other people could have noticed. Or the			
opposite – being so fidgety or restless			
that you have been moving around a lot			
more than usual			

The Generalized Anxiety Disorder 7-item (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006).

Instructions: Over the last 2 weeks, how often have you been bothered by the following problems?

	0	1	2	3
	Not at	Several	Over	Nearly
	all	Days	half the	every day
			days	
1. Feeling nervous, anxious, or on edge				
2. Not being able to stop or control worrying				
3. Worrying too much about different things				
4. Trouble relaxing				
5. Being so restless that it's hard to sit still				
6. Becoming easily annoyed or irritable				
7. Feeling afraid as if something awful might				
happen				

PTSD Checklist for DSM-5 (PCL-5; Weathers, Litz, Keane, Palmieri, Marx, & Schnurr, 2013).

Instructions: This questionnaire asks about problems you may have had after a very stressful experience involving actual or threatened death, serious injury, or sexual violence. It could have been something that happened to you directly, something you witnessed, or something you

learned happened to a close family member or close friend. Below is a list of problems that people sometimes have in response to a very stressful event. If you have experienced multiple stressful events, keep the worst event in your mind. Please read each problem carefully and then select the number to indicate how much you have been bothered by that problem in the past month.

If you have never experienced an even as described above, please respond with "0" to each of the following questions.

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
1. Repeated, disturbing, an unwanted memories					
of the stressful experience?					
2. Repeated, disturbing dreams of the stressful experience?					
3. Suddenly feeling or acting as if the stressful					
experience were actually happening again (as if					
you were actually back there reliving it)?					
4. Feeling very upset when something reminded					
you of the stressful experience?					
5. Having strong physical reactions when					
something reminded you of the stressful					
experience (for example, heart pounding, trouble					
breathing, sweating)?					
6. Avoiding memories, thoughts, or feelings					
related to the stressful experience?					
7. Avoiding external reminders of the stressful					
experience (for example, people, places,					
conversations, activities, objects, or situations)?					
8. Trouble remembering important parts of the					
stressful experience?					
9. Having strong negative beliefs about yourself,					
other people, or the world (for example, having thoughts such as: I am bad, there is something					
seriously wrong with me, no one can be trusted,					
the world is completely dangerous)?					
10. Blaming yourself or someone else for the					
stress experience or what happened after it?					
11. Having strong negative feelings such as fear,					
horror, anger, guilt, or shame?					
12. Loss of interest in activities you used to					
enjoy?					
13. Feeling distant or cut off from other people?					
14. Trouble experiencing positive feelings (for					
example, being unable to feel happiness or					
having loving feelings for people close to you)?					
15. Irritable behavior, angry outbursts, or acting					
aggressively?					

16. Taking too many risks or doing things that			
could cause you harm?			
17. Being "superalert" or watchful or on guard?			
18. Feeling jumpy or easily startled?			
19. Having difficulty concentrating?			
20. Trouble falling or staying asleep?			

Appendix D

Final VETS

The Veterans Educational Transition Scale (VETS)

Instructions: This test is designed to help us better understand your thoughts and experiences as a college student. Please indicate the extent to which you agree or disagree with the following statements by marking the appropriate number option, from 1 (strongly disagree) to 6 (strongly agree). There are no right or wrong answers. Select the answer that best reflects your own thoughts and experiences.

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly Agree (6)
1. My GI paperwork has been delayed.						
2. My semester enrollment forms have been delayed.						
3. I got conflicting information about how to complete college enrollment paperwork.						
4. I am aware of the veteran specific programs on campus that are available to me.						
5. My VA benefits have been delayed.						
6. The college environment is foreign to me.						
7. College is different than what I am used to.						
8. It was hard coming back to an educational environment.						
9. I fit in with my peers in the classroom.						
10. It bothers me that I am older than my classmates.						

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly Agree (6)
11. I wish I was still on active duty						
12. I prefer the challenges of being on active duty.						
13. I prefer the structure of military life.						
14. It has been difficult to find my place after separating from the military.						
15. I have lost my sense of purpose since separating from the military.						
16. I have effective study skills.						
17. I am good at time management.						
18. I am successful at completing difficult tasks.						
19. I have a high level of academic ability.						
20. I am well-organized.						
21. I am committed to achieving my academic goals.						
22. It is important to me to earn good grades.						
23. Being successful in the classroom is a high priority for me.						
24. I am optimistic about my ability to graduate.						

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly Agree (6)
25. I take responsibility for my failures.						
26. I can relate to my peers in the classroom.						
27. I feel supported by my peers.						
28. I have much in common with my classmates.						
29. I have similar interests to my peers.						
30. I often refrain from speaking in class.						
31. My work obligations take away from my ability to perform well in college.						
32. It is difficult to balance work and school obligations.						
33. There are work demands requiring my attention and time.						
34. Work related stress interferes with my ability to perform well in school.						
35. I have work responsibilities outside of college.						
36. There are family demands requiring my time and attention.						
37. I have a hard time devoting myself to studying because of family obligations.						

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly Agree (6)
38. Family related stress interferes with my ability to perform well in school.						
39. I have many family responsibilities outside of college.						
40. My family obligations take away from my ability to perform well in college.						
41. I feel sad and down most of the time.						
42. I feel depressed most days of the week.						
43. I feel indifferent about life.						
44. It is difficult to be happy.						
45. I am hopeful about the future.						
46. Sometimes my anxiety gets the best of me.						
47. It is hard for me to manage stress.						
48. Sometimes my anxiety interferes with my coursework.						
49. People tell me I am irritable.						
50. I tend to worry a lot.						
51. I have been arrested due to a physical altercation.						
52. I have been arrested due to a verbal altercation.						

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly Agree (6)
53. The world is out to get me.						
54. I get in physical altercations with people on campus.						
55. I get in verbal arguments with people on campus.						
56. I often think about people in my unit who died.						
57. I have nightmares at least once per week.						
58. I have lost people who are close to me.						
59. I use alcohol to cope with stress.						
60. I use non-prescription drugs to cope with stress.						

Scoring the VETS

The Veterans Educational Transition Scale is a 60-item self-report measure. There are 12 domains and a total score that can be used to determine potential areas that a student veteran may be experiencing difficulty as they transition to college. The table below provides instructions on how to calculate domain scores. When a number has an "R," that indicates reverse scoring of the item. To reverse score, use the following:

1 = 6 2 = 5 3 = 4 4 = 3 5 = 2 6 = 1

To achieve the total score, sum the total for each domain.

Domain	How to Calculate
Bureaucracy	Sum items 1, 2, 3, 4R, 5
Culture Shock	Sum items 6, 7, 8, 9R, 10
Identity Conflict	Sum items 11, 12, 13, 14, 15
Academic Efficacy	Sum items 16R, 17R, 18R, 19R, 20R
Academic Perseverance	Sum items 21R, 22R, 23R, 24R, 25R
Peer Social Support	Sum items 26R, 27R, 28R, 29R, 30

Work Obligations	Sum items 31, 32, 33, 34, 35
Family Obligations	Sum items 36, 37, 38, 39 40
Depression	Sum items 41R, 42, 43, 44, 45
Anxiety	Sum items 46, 47, 48, 49, 50
Aggression	Sum items 51, 52, 53, 54, 55
Substance Use	Sum items 56, 57, 58, 59, 60

Content Measured by domain:

<u>Bureaucracy:</u> challenges and obstacles related to the multilayered systems and processes that a person has encountered in a college environment

<u>Culture shock:</u> distress due to the unfamiliar cultural environment

<u>Identity conflict:</u> sense of conflict between military and civilian identities

Academic efficacy: confidence in one's ability to achieve an educational goal

<u>Academic perseverance:</u> commitment to educational goals regardless of perceived difficulties

<u>Peer Social support:</u> perception of being supported by other people both on campus and off campus

<u>Work obligations:</u> the commitments to an employer one must attend to outside of an academic setting

<u>Family obligations:</u> the commitments to family one must attend to outside of an academic setting

<u>Depression:</u> low mood, can include feelings of sadness and decrease in normal activities

Anxiety: feelings of worry, fear, or stress

Aggression: hostile attitudes or behaviors

Substance Use: the use of maladaptive or problematic coping skills

Appendix E Tables

Table 1Demographic Information for Study 2

Demographic Category	n	%
Gender		
Male	67	81.7
Female	15	18.3
Age		
18-20	2	2.4
21-24	11	13.4
25-30	28	34.1
31-35	12	14.6
36-40	12	14.6
41-45	6	7.2
46-50	8	9.7
51 and over	4	4.8
Ethnicity		
White	45	54.9
Hispanic, Latino, Spanish	14	17.1
Black or African American	8	9.8
Asian	9	11.0
Native Hawaiian/Pacific Islander	2	2.4
Other	4	4.9
Marital Status		
Single	36	43.9
Living with Partner	4	4.9
Married	29	35.4
Separated	1	1.2
Divorced	12	14.6
Dependents living at home		
None	46	56.8
1 dependent	13	15.9
2 dependents	12	14.6
3 or more	10	12.2
Employment Status		
Full time	16	19.5
Part time (< 30 hours per week)	26	31.7
Not employed, not retired	26	31.7
Retired	5	6.1
Disabled	8	9.8
Unable to work	1	1.2
Annual Gross Income		
Less than 20k	26	31.7
\$20,000 - \$39,999	22	26.8
\$40,000 - \$59,999	13	15.9
\$60,000 - 79,999	11	13.4
\$100,000 and above	10	12.2

Table 2

Military and Academic History

Demographic Category	n	%
Branch of Service		
Air Force	17	20.7
Army	27	32.9
Coast Guard	1	1.2
Marines	18	22.0
Navy	19	23.2
Type of Discharge		
Honorable	70	85.4
Medical	7	8.5
Other than Honorable	1	1.2
Entry Level Separation	1	1.2
General Discharge under Honorable Conditions	3	3.7
Class Rank		
Freshman	13	15.9
Sophomore	20	24.4
Junior	17	20.7
Senior	20	24.4
Graduate Student	12	14.6
Current Enrollment Hours		
Full time (12+ credit hours)	76	92.7
Part time	6	7.3

Table 3 *Item-to-total statistics for the Bureaucracy domain items*

Item		Scale Mean	Scale	Corrected	Cronbach's
		if Item	Variance if	Item-Total	Alpha if
		Deleted	Item	Correlation	Item
			Deleted		Deleted
B8.	My GI paperwork has been delayed	29.3	48.9	0.56	0.63
B9.	My semester enrollment forms have been delayed	29.7	50.7	0.56	0.63
B11.	I got conflicting information about how to complete college enrollment paperwork	28.9	49.8	0.48	0.64
B2r.	I am aware of the veteran specific programs on campus that are available to me	29.0	52.1	0.44	0.65
B10.	My VA benefits have been delayed	29.2	50.2	0.42	0.65
B6r.	The administrative personnel at my college were helpful when I enrolled in college	29.3	55.2	0.31	0.67
B5r.	The armed services gave me information about my GI bill benefits	28.9	55.4	0.27	0.68
B3r.	The armed services provided support to transition to college	28.0	54.2	0.25	0.68
B7r.	My advisor (or other administrative personnel) helped me in choosing a major	27.7	55.1	0.18	0.70
B4r.	The armed services gave me instruction on how to apply for college	27.3	56.5	0.16	0.70
B1.	It was difficult to complete my college application	29.3	57.8	0.15	0.70

Table 4Item-to-total statistics for the Culture Shock domain items

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
CS1. The college environment is foreign to me	31.4	29.0	0.58	0.51
CS5. College is different than what I am used to	30.5	29.0	0.55	0.52
CS3. It was hard coming back to an educational	30.4	30.5	0.49	0.54
environment				
M3r. I fit in with my peers in the classroom	31.0	33.7	0.34	0.58
M8. It bothers me that I am older than my classmates	31.6	35.0	0.21	0.61
CS2r. Military life and college life are very similar	29.6	36.1	0.21	0.61
CS6r. I like college better than the military	31.5	34.9	0.19	0.62
CS7. I am older than most of my classroom peers	29.7	36.1	0.16	0.62
CS4r. I try to blend in with my peers	31.4	38.5	0.01	0.66

Table 5

Item-to-total statistics for the Identity Conflict domain items

Item	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
I2. I wish I was still on active duty	19.8	27.4	0.64	0.61
I7. I prefer the challenges of being on active duty	19.4	28.9	0.58	0.64
I3. I prefer the structure of military life	18.7	30.2	0.55	0.64
I4. It has been difficult to find my place after separating from the military	19.0	31.6	0.40	0.69
I1. I have lost my sense of purpose since separating from the military	19.6	32.5	0.35	0.70
I6. I wish I could wear my uniform on a daily basis	20.7	35.4	0.34	0.70
I5. I have kept many of the habits I developed in the military	18.0	38.7	0.09	0.75

 Table 6

 Item-to-total statistics for the Academic Efficacy domain items

Item	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
E1r. I have effective study skills	14.6	19.5	0.57	0.71
E4r. I am good at time management	14.4	18.5	0.56	0.72
M12r. I am successful at completing difficult tasks	15.4	22.6	0.53	0.73
M9r. I have a high level of academic ability	15.1	20.8	0.52	0.73
E3r. I am well-organized	14.9	20.6	0.47	0.74
E2r. I have good critical thinking skills	15.7	23.0	0.39	0.75
E5r. I am confident that I can achieve my academic goals	15.5	22.8	0.37	0.75

Table 7 *Item-to-total statistics for the Academic Perseverance domain items*

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
P1r. I am committed to achieving my academic goals	11.4	19.4	0.73	0.78
P6r. It is important to me to earn good grades	11.4	19.9	0.63	0.80
P2r. Being successful in the classroom is a high priority for	11.4	20.5	0.62	0.80
me				
M2r. I am optimistic about my ability to graduate	11.1	20.5	0.56	0.81
P5r. I take responsibility for my failures	11.5	21.6	0.55	0.81
P3r. A college degree is an important part of my future success	11.6	22.4	0.51	0.82
P4r. I commit significant time to excel in my studies	10.6	19.6	0.48	0.83

Table 8 *Item-to-total statistics for the Peer Social Support domain items*

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
M5r. I can relate to my peers in the classroom	45.4	67.8	0.53	0.58
S1r. I feel supported by my peers	46.1	68.5	0.51	0.58
S5r. I have much in common with my classmates	45.1	69.7	0.45	0.59
S6r. I have similar interests to my peers	45.6	71.2	0.43	0.60
S8. I often refrain from speaking in class	45.9	69.4	0.36	0.60
S9. I try to go unnoticed in the classroom	45.7	69.8	0.34	0.61
S10r. I seek out my professors outside of class to discuss my grade, ideas, or readings	46.2	71.9	0.34	0.61
S11r. I work on assignments with my classmates outside of the classroom	45.2	72.7	0.32	0.61
S7. All of my friends are veterans	46.6	72.0	0.27	0.62
S2r. I feel supported by my former unit	45.3	71.3	0.22	0.63
S14. I prefer to have friends that are veterans	45.5	74.0	0.20	0.63
S12. I only attend events with other veterans	46.8	76.9	0.12	0.64
S13. I only attend events on campus if they are for veterans	46.7	78.1	0.06	0.65
S4r. I feel connected to other veterans in college	45.9	78.9	0.03	0.65
S3r. I had a strong bond with my unit when I was in the military	46.4	83.8	-0.16	0.68

Table 9Item-to-total statistics for the Work Obligations domain items

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
W2. My work obligations take away from my ability to	22.5	49.0	0.72	0.74
perform well in college				
W4. It is difficult to balance work and school obligations	21.8	49.3	0.70	0.75
W5. There are work demands requiring my attention and	21.8	48.2	0.66	0.75
time				
W6. Work related stress interferes with my ability to perform well in school	22.5	49.4	0.64	0.75
W1. I have work responsibilities outside of college	21.4	48.2	0.51	0.78
W3. I have a hard time devoting myself to studying because of other obligations	21.7	55.1	0.42	0.79
W7r. I prioritize my education over my work responsibilities	22.4	58.6	0.29	0.80
W8. I have a long commute to campus	21.9	58.3	0.20	0.82

Table 10Item-to-total statistics for the Family Obligations domain items

Items		Scale Mean	Scale	Corrected	Cronbach's
		if Item	Variance if	Item-Total	Alpha if
		Deleted	Item	Correlation	Item
			Deleted		Deleted
	There are family demands requiring my time and attention	21.4	57.1	0.82	0.88
	I have a hard time devoting myself to studying because of family obligations	22.1	58.6	0.79	0.88
	Family related stress interferes with my ability to perform well in school	21.8	58.7	0.79	0.88
F1.	I have many family responsibilities outside of college	21.4	55.4	0.77	0.88
	My family obligations take away from my ability to perform well in college	22.0	58.7	0.76	0.89
F4.	It is difficult to balance school and family obligations	21.7	57.2	0.74	0.89
F7r.	I prioritize my education over family obligations	21.7	67.1	0.38	0.93

Table 11Item-to-total statistics for the Depression items

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
PSY19. I feel sad and down most of the time	11.7	23.6	0.86	0.83
PSY27. I feel depressed most days of the week	11.7	23.9	0.80	0.85
PSY28. I feel indifferent about life	11.5	23.6	0.78	0.86
PSY23. It is difficult to be happy	11.3	26.6	0.67	0.88
PSY1r. I am hopeful about the future	12.5	30.8	0.57	0.90

Table 12 *Item-to-total statistics for the Anxiety domain items*

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
PSY9. Sometimes my anxiety gets the best of me	14.9	21.0	0.69	0.76
PSY10. It is hard for me to manage stress	15.4	22.3	0.65	0.77
PSY 26. Sometimes my anxiety interferes with my coursework	15.1	20.8	0.65	0.77
PSY17. People tell me I am irritable	15.9	22.6	0.57	0.79
PSY22. I tend to worry a lot	14.8	23.8	0.50	0.81

Table 13 *Item-to-total statistics for the Aggression domain items*

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
PSY24. I have been arrested due to a physical altercation	6.5	9.5	0.66	0.66
PSY25. I have been arrested due to a verbal altercation	6.3	9.7	0.55	0.70
PSY13. The world is out to get me	6.1	9.6	0.50	0.72
PSY12. I get in physical altercations with people on campus	6.5	11.5	0.48	0.73
PSY11. I get in verbal arguments with people on campus	6.5	12.0	0.46	0.73

Table 14 *Item-to-total statistics for the Substance use domain items*

Items	Scale Mean	Scale	Corrected	Cronbach's
	if Item	Variance if	Item-Total	Alpha if
	Deleted	Item	Correlation	Item
		Deleted		Deleted
PSY15. I often think about people in my unit who died	11.8	14.9	0.42	0.40
PSY21. I have nightmares at least once per week	12.1	16.0	0.38	0.43
PSY14. I have lost people who are close to me	10.6	16.3	0.32	0.47
PSY6. I use alcohol to cope with stress	12.4	17.5	0.21	0.53
PSY8. I use non-prescription drugs to cope with stress	12.6	17.5	0.18	0.55

Table 15Cronbach's Alpha for VETS Domains

Domain	Alpha
Bureaucracy	0.78
Culture Shock	0.71
Identity Conflict	0.74
Academic Efficacy	0.75
Academic Perseverance	0.81
Peer Social Support	0.70
Work Obligations	0.81
Family Obligations	0.91
Depression	0.89
Anxiety	0.82
Aggression	0.76
Substance Use	0.54
VETS Total Score	0.91

Table 16Descriptive Statistics for the VETS

Domains	M	SD
Bureaucracy	12.20	5.33
Culture Shock	18.35	4.98
Identity Conflict	16.18	5.69
Academic Efficacy	13.59	4.31
Academic Perseverance	9.04	3.91
Peer Social Support	17.73	4.71
Work Obligations	15.67	6.44
Family Obligations	18.04	6.80
Depression	14.66	6.25
Anxiety	19.00	5.75
Aggression	7.98	3.93
Substance Use	14.85	4.80
VETS Total Score	177.28	33.87

Table 17Descriptive Statistics for Validity Measures

Validity Measures	M	SD
IIS: Peer Group Interactions	22.94	3.62
IIS: Interactions with Faculty	17.83	3.62
IIS: Faculty Concern for Student Development	17.16	4.65
IIS: Academic Intellectual Development	25.52	3.69
IIS: Institutional and Goal Commitment	18.41	3.01
IIS Total	101.87	12.18
PHQ9	16.22	6.50
GAD7	8.07	6.34
PCL	19.70	16.94
MSPSS	60.32	17.80

Note. IIS = Institutional Integration Scale. PHQ-9 = Patient Health Questionnaire. GAD7 = The Generalized Anxiety Disorder 7-item. PCL = PTSD Checklist for DSM-5. MSPSS = Multidimensional Scale of Perceived Social Support.

Table 18Validity Correlations with the VETS

Validity						VETS D	omains						
Variables	BURCY	CLSHK	IDCON	ACEFF	ACPER	SOCSP	WRKOB	FAMOB	DEP	ANX	AGG	SUB	VETTOT
Current GPA	0.20	0.13	0.03	0.02	0.21*	0.06	0.11	0.14	0.09	-0.10	0.12	0.00	0.15
Age	-0.07	0.00	-0.13	-0.04	0.11	-0.07	-0.02	-0.09	-0.01	0.09	0.20	0.08	-0.01
Total Semesters	0.37**	0.11	0.35*	0.08	0.23*	0.21	0.19	0.01	0.15	0.06	0.30*	0.15	0.33*
Attended													
IIS: Peer Group	-0.13	-0.17	-0.09	-0.18	-0.31*	-0.41**	-0.07	0.10	-0.13	-0.01	-0.11	-0.03	-0.21*
IIS: Interaction	-0.18	-0.18	-0.08	-0.14	-0.40*	-0.43**	-0.04	0.12	-0.23*	0.00	-0.04	-0.03	-0.22*
with Faculty													
IIS: Faculty	-0.22*	-0.12	0.13	-0.01	-0.16	-0.32*	0.08	0.06	-0.02	-0.07	0.07	-0.03	-0.08
Concern for													
Student													
Development													
IIS: Academic	-0.28*	-0.22	-0.29*	-0.20	-0.41**	-0.28*	-0.09	0.00	-0.30*	-0.12	-0.14	-0.17	-0.37*
Intellectual													
Development													
IIS: Institutional	0.02	-0.22*	-0.11	0.03	-0.16	-0.18	0.05	-0.17	-0.26*	-0.13	0.03	0.06	-0.17
and Goal													
Commitment			0.4544	0.071	0.4.4	0.044	0.4=	0.40	0 = 4444	0.4544	0.004	0.071	0.4444
PHQ9	0.21	0.32*	0.46**	0.25*	0.16	0.34*	0.17	0.12	0.74***	0.65**	0.33*	0.35*	0.64***
GAD7	0.11	0.35*	0.43**	0.12	0.03	0.35*	-0.02	0.05	0.73***	0.73**	0.28*	0.25*	0.54**
PCL	0.20	0.18	0.32*	-0.10	-0.01	0.31*	0.19	0.19	0.47**	0.51**	0.41**	0.36*	0.49**
MSPSS	-0.16	-0.10	-0.14	-0.06	-0.38*	-0.25*	0.08	0.15	-0.39*	-0.05	-0.27*	-0.16	-0.24*

Note: *medium effect size; **large effect size, ***very large effect size. With Bonferroni correction, r > .31 is significant at p < .05. BURCY = Bureaucracy. CLSHK = Culture Shock. IDCON = Identity Conflict. ACEFF = Academic Efficacy. ACPER = Academic Perseverance. SOCSP = Peer Social Support. WRKOB = Work Obligations. FAMOB = Family Obligations. DEP = Psychological Functioning: Depression. ANX = Psychological Functioning: Anxiety. AGG = Psychological Functioning: Substance Use.

VETTOT = VETS Total Score. IIS = Institutional Integration Scale. PHQ9 = Patient Health Questionnaire. GAD7 = The Generalized Anxiety Disorder 7-item. PCL = PTSD Checklist for DSM-5. MSPSS = Multidimensional Scale of Perceived Social Support

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- Zimet, G.D., Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30-31. doi:10.1207/s15327752jpa5201_2

Curriculum Vitae

Lisa M. Beckman

lisabeckman26@yahoo.com

303-931-5439

EDUCATION

Ph.D., Clinical Psychology (degree to be conferred: 12/2020)

08/2014 - 12/2020

University of Nevada, Las Vegas (APA Accredited)

Dissertation: Development and initial validation of the Veterans Educational Transition (VET) Scale: A brief assessment to predict student veteran success

M.A., Clinical Psychology

08/2014 - 05/2019

University of Nevada, Las Vegas (APA Accredited)

Thesis: Face affect perception in individuals with schizophrenia and posttraumatic stress disorder

B.A. (Summa cum Laude), Human Development

01/2010 - 05/2014

Metropolitan State University of Denver

Senior Thesis: The effects of religion on health and well-being in late adulthood

Clinical Training

James A. Haley Veterans' Hospital

08/2020 – current

Healthy Psychology Postdoctoral Resident Tampa, Florida

- **Primary Care Mental Health Integration**: supervisor: Dr. Benjamin Lord:_conduct functional assessments and collaboratively develop treatment goals and plan; participate on an interdisciplinary team with an emphasis on disease prevention, health promotion, and chronic disease management.

VA Sierra Nevada Health Care System

08/2019 - 07/2020

Doctoral Psychology Intern Reno, Nevada

- **PTSD Clinical Treatment Team:** *supervisors: Drs. Donald Yorgason and Adam C. Bradford*: providing individual, evidence-based treatment, including Prolonged Exposure and Cognitive Processing Therapy, co-facilitating therapy groups including Cognitive Processing, Seeking Safety, and Trauma Recovery. Conduct 2 diagnostic intakes per week, and administer a total of 4 comprehensive assessments. Attend weekly trauma and team meetings in an interdisciplinary setting.

- Addictive Disorders Treatment Program: *supervisor: Drs. Eric Diddy*: provide intervention, primarily in a group setting, utilizing CBT, motivational interviewing, and mindfulness-based approaches. Evaluation experiences include weekly psychodiagnostic intakes and comprehensive assessments with an emphasis on differential diagnosis and formulation of appropriate treatment recommendations. Participate in weekly meetings including consults, case conferences, and Suboxone clinic with a multidisciplinary team.
- **Mental Health Clinic**: *supervisor*: *Dr. Kris Harris*: deliver interventions, both individual and group, with individuals presenting with a wide range of concerns utilizing evidence-based treatments (CBT and ACT). Complete weekly psychodiagnostic intakes, and comprehensive psychological assessments, including personality, ADHD, and Learning Disorder testing. Attend weekly interdisciplinary team meetings relevant to patient care.
- **Behavioral Medicine Consultation and Liaison**: *supervisors: Drs. James D'Andrea, Valerie Williams, and Sheila Young:* consulting with medical and surgical units as well as the Community Living Center and hospice, administering cognitive assessments, risk assessments, and facilitating safety planning groups in an inpatient setting.

Sandstone Psychological Practice

08/2018 - 05/2019

Doctoral Practicum Student
Private Practice
Supervisor: Dr. Christina Aranda

- Provided individual therapy including ACT and CBT with clients diagnosed with anorexia, depression, anxiety, and adjustment disorders.
 - o supervised by video recordings
- Conducted psychodiagnostic intakes
- Observed Bariatric Weight Loss Surgery evaluations
- Attended an 8-hour seminar on suicide and homicide risk assessment
- Participated in monthly didactic seminars and case consultation meetings

UNLV Counseling and Psychological Services (CAPS)

08/2017 - 05/2018

Doctoral Practicum Student, Supervisor University Campus Counseling Center Dr. Prachi Sharma

- Provided individual, brief cognitive-behavior and interpersonal process therapy with clients who presented with PTSD, depression, anxiety, adjustment disorder, and panic disorder
 - o supervised by video recordings and live observation
- Conducted weekly psychodiagnostic intakes for services
- Participated and observed an 8-week didactic mindfulness and yoga group
- Engaged in campus-wide outreach services during orientation and tabling events
- Provided psychological first aid/trauma response following the October 1st mass-shooting (Las Vegas, Nevada) incident near campus
- Attended weekly interdisciplinary consultation meeting to discuss treatment disposition

Veteran's Affairs Southern Nevada Healthcare System

07/2016 - 06/2017

Doctoral Practicum Student Northwest Primary Care Clinic Supervisor: Dr. Jeffrey Gilliland

- Provided evidence-based individual psychotherapy (CBT, ACT, and CPT) to clients who served in wars ranging from Vietnam era to present, with presenting concerns including PTSD, grief, depression, bipolar I disorder, chronic pain, substance use, schizoaffective, and schizotypal
 - o supervised by live observation
- Completed comprehensive intake assessments
- Administered psychodiagnostic assessments and wrote comprehensive assessment reports
- Developed and implemented a short-term Acceptance and Commitment (ACT) therapy group
- Co-facilitated an ongoing, 4-week, skills based group focused on mindfulness, acceptance, and meaning-making (Life Paths: An Acceptance and Commitment Group)
- Actively participated in weekly multidisciplinary team meetings
- Consulted with health professionals on a primary care treatment team
- Engaged in didactic seminars on treatment modalities

The P.R.A.C.T.I.C.E. at UNLV

08/2015 - 06/2016

Doctoral Practicum Student Interdisciplinary Community Mental Health Clinic, Department-Sponsored Supervisor: Dr. Andrew Freeman

- Provided brief and long term psychotherapy to children, adolescents, and adults using evidence-based practice (primarily CBT) with clients who presented with PTSD, OCD, borderline personality disorder, ADHD, anger management, and depression
 - o supervised by video recordings
- Served as a process observer for a Depression and Anxiety group that focused on interpersonal dynamics
- Conducted psychodiagnostic and psychoeducational assessments for children and adolescents with concerns about ADHD, learning disabilities, and memory functioning
- Wrote comprehensive assessment reports, standardized testing accommodation forms, provided recommendations, and delivered comprehensive feedback and treatment recommendations to clients
- Provided feedback at weekly case rounds
- Presented and attended student case conferences

Professional Trainings Attended

ACT I – Introduction to Acceptance and Commitment Therapy Dr. Steven C. Hayes

10/2018

This workshop focused on setting a foundation and beginning skill set for ACT including the six basic processes, including flexible contact with the present, cognitive defusion, acceptance, self-as-context, values, and committed action. Other topics covered included ways to assess and influence client processes during session, how to use the model for case conceptualization, and ways to foster client openness and willingness to change.

The Center for Deployment Psychology (CDP)
The Summer Institute

06/2017

Applied and was invited to attend a 5-day training at the Uniformed Services University of the Health Sciences (USU). Training included didactics, experiential exercises, and panel and group discussions regarding assessment and intervention with active duty service members and veterans, deployment cycle stress, military culture, and ethical dilemmas working with service members/veterans.

Interprofessional Education Day (IPE) University of Nevada, Las Vegas 03/2014, 3/2015, 3/2016

This training was aimed at increasing the ability for mental health and other health providers to work collaboratively to promote, protect, and increase the health of the people in Nevada. Seven degree programs from the university participated in a series of didactics, group learning projects, simulations, and discussions. In addition to this one day per year training, a semester-long course was completed (*Integrated Behavioral Health Care*) to develop and reinforce critical skills of collaboration and consultation in health care delivery.

Research Experience

Veteran's Affairs Southern Nevada Healthcare System (VASNHS) 7/2016-8/2017 PACT to Improve Health Care in People with Serious Mental Illness (SMI-PACT); NCT01668355 Health Research Specialist, Supervisor: Dr. Olaf Fallye

A non-randomized clinical trial designed to transform the Patient Aligned Care Team (PACT) model based on Patient Center Medical Home (PCMH) concept. The goal was to improve quality, efficiency, and access to healthcare for individuals with severe mental illness (SMI), including schizophrenia, bipolar disorder, and posttraumatic stress disorder. Duties included screening potential participants, obtaining patient referrals from psychiatrists, and conducting structured assessment interviews, including neuropsychological assessments

Neuropsychology Research Program

1/2016-present

University of Nevada, Las Vegas; Supervisor: Dr. Daniel N. Allen Research primarily focuses on neuropsychological functioning in individuals with neuropsychiatric disorders such as schizophrenia and bipolar disorder. Duties include administering neuropsychological assessments and disseminating research through peerreviewed manuscripts and professional conferences.

Stressful Transitions and Aging Research Laboratory
University of Nevada, Las Vegas; Supervisor: Dr. Jason M. Holland

8/2014-12/2016

Research primarily focused on stressful life experiences and psychopathology during late adulthood. Duties included co-authoring manuscripts, assisting with literature reviews and data analyses, supervising undergraduate research assistants, and attending didactic seminars on a variety of topics (e.g., related to data analysis, APA style writing).

Relationships Studies Laboratory

8/2013-12/2014

University of Colorado, Denver; Supervisor: Dr. Elizabeth Allen

Child Health and Development Lab

5/2012-12/2012

University of Denver; Supervisors: Drs. Lisa Badanes and Sarah Watamura

Learning and Cognition Lab

1/2012-6/2014

Metropolitan State University of Denver; Supervisor: Dr. Bethany Fleck-Dillen

Publications

- Nunez, A., Holland, J. H., **Beckman, L.M.**, Kirkendall, A., Luna, N. (2017). A qualitative study of the emotional and spiritual needs of Hispanic families in hospice. *Palliative & Supportive Care*, 1-9. doi: 10.1017/S1478951517000190
- Fleck, B.K.B., Richmond, A.S., Rauer, H.M., **Beckman, L.M.,** Lee, A. (2017). Active reading questions as a tool to support college student's textbook reading. *Journal of the Scholarship of Teaching and Learning*, *3*(3), 220-232.
- Holland, J.M, Rozalski, V., **Beckman, L.M.,** Rakhkovskaya, L.M., Klingspon, K.L., Donohue, B., ... Gallagher-Thompson, D. (2015). Treatment preferences of older adults with substance use problems. *Clinical Gerontologist*, *39*, 15-24.
- Fleck, B.K.B., **Beckman, L.M.,** Sterns, J.L., & Hussey, H.D. (2014). YouTube in the classroom: A look at student preferences and learning outcomes. *Journal of Effective Teaching*, 14(3), 21-37.

Conference Presentations

- Emami, A.S., Paul, N.B., **Beckman, L.M.,** Favela, S., Mayfield, J.W., & Allen, D.N. (October 2016). *Complex Sequencing Predicts Broad Reading and Broad Math Achievement in Children and Adolescents with Traumatic Brain Injury*. Poster presentation at the 2016 Annual Conference of the National Academy of Neuropsychology, Seattle, WA.
- **Beckman, L.M.,** Rozalski, V., & Holland, J.M. (November, 2015). *Difficulties in Making Meaning of Health-Related Stressors as a Unique Predictor of Hopelessness*. Poster presentation at the 2015 Annual Scientific Meeting of the Gerontological Society of America, Orlando, FL.
- Holland, J. M., Klingspon, K. L., **Beckman, L.M.,** Plant, C., Rakhkovskaya, L., Rozalski, V., & Williams, C. D. (May 2015). *Family behavior therapy for substance abuse problems in*

- *later life.* Poster presentation at the 2015 National Veterans Administration Research Week Poster Presentation, Las Vegas, NV.
- **Beckman, L.M.,** Holland, J.M., & Currier, J.M. (April, 2015). *Bereavement and complicated grief among Veterans returning from Iraq/Afghanistan*. Oral presentation at the Western Psychological Association's Annual Meeting, Las Vegas, NV.
- Fleck, B.K.B., Hussey, H.D., & **Beckman, L.M**. (April, 2015). *Belly flop or pencil dive? How to create a successful flipped course*. Oral Presentation, Terman Teachning Conference at the Western Psychological Association's Annual Meeting, Las Vegas, NV.
- Hussey, H.D., & **Beckman, L.M**. (April, 2015). *Integrating Social Media into the Classroom*. Oral Presentation, Terman Teachning Conference at the Western Psychological Association's Annual Meeting, Las Vegas, NV.
- **Beckman, L.M.,** Bookhardt, S., Hopkins, A., Mann, T., Oliver, P., Rauer, H, ... Fleck, B.K.B. (April, 2014). *Predictive variables in homelessness in Colorado*. Poster presentation at the Rocky Mountain Psychological Association's Annual Meeting, Salt Lake City, UT.
- Fleck, B.K.B, Rauer, H., Richmond, A.S., & **Beckman, L.M.** (April, 2014). *Tools to promote Reading Comprehension vs. Powerpoint Lecture Notes*. Oral presentation at the Rocky Mountain Psychological Association's Annual Meeting, Salt Lake City, UT.
- Becknell, J., Whitmyre, J., **Beckman, L.M.,** & Wright, A., (April, 2014). *Building Resiliency and Facilitating Growth through Trauma*. Poster presentation at the Rocky Mountain Psychological Association's Annual Meeting, Salt Lake City, UT.
- **Beckman, L.M.**, Fleck B.K.B., & Sterns, J. (April, 2013). *Getting Class Started with YouTube Video Clips*. Poster presentation presented at the Rocky Mountain Psychological Association's Annual Meeting, Denver, CO.
- **Beckman, L.M.,** Broussard, K., Rutledge-Ellison, L., Stamps, A., Wharton, S., Wolf, M., & Fleck, B.K.B. (April, 2013). *Promoting Academics and Character Education (PACE) Outcome Data Analysis*. Poster presentation presented at the Rocky Mountain Psychological Association's Annual Meeting, Denver, CO.
- Fleck, B.K.B., & **Beckman, L.M.** (April, 2013). *Experiential Learning Explored: Practical Applications and Outcomes of Service Learning*. Oral presentation presented at the Rocky Mountain Psychological Association's Annual Meeting, Denver, CO.
- Fleck, B.K.B., Richmond, A.S., **Beckman, L.M.,** Sterns, J., & Brown, R. (April, 2013). *The Effects of Active Reading Questions on Student Learning*. Poster presentation presented at the Rocky Mountain Psychological Association's Annual Meeting, Denver, CO.

- **Beckman, L.M.,** Fleck B.K.B., & Sterns, J. (May, 2013). *Getting Class Started with YouTube Video Clips*. Poster presentation presented at the 2nd Annual MSU Undergraduate Research Conference, Denver, CO.
- **Beckman, L.M.,** Broussard, K., Rutledge-Ellison, L., Stamps, A., Wharton, S., Wolf, M., & Fleck, B.K.B. (May, 2013). *Promoting Academics and Character Education (PACE) Outcome Data Analysis*. Poster presentation presented at the 2nd Annual MSU Undergraduate Research Conference, Denver, CO.
- Fleck, B.K.B., Richmond, A.S., **Beckman, L.M.,** Sterns, J., & Brown, R. (May, 2013). *The Effects of Active Reading Questions on Student Learning*. Poster presentation presented at the 2nd Annual MSU Undergraduate Research Conference, Denver, CO.

Teaching Experience

Part-time Instructor
Introduction to Psychology
University of Nevada, Las Vegas
Teaching evaluation average = 4.53; Department average = 4.41

Spring 2019 (3 sections: 2 distance education, 1 in-person) Fall 2018 (3 sections: 2 distance education, 1 in-person) Spring 2018 (2 sections, in-person)

Fall 2018 (2 sections, in-person) Spring 2017 (2 sections, in-person) Fall 2017 (2 sections, in-person)

University of Nevada, Las Vegas Teaching Assistant

2015-2016 Introduction to Statistical Methods

Metropolitan State University of Denver

Teaching Assistant

Fall 2015 Introduction to Statistical Methods
Fall 2013 Senior Thesis in Human Development
Fall 2012 Developmental Research Methods
Spring 2012 Developmental Educational Psychology

Leadership

Council Representative, College of Liberal Arts Graduate and Professional Student Association (GPSA) University of Nevada, Las Vegas 08/2017-06/2018

Ad Hoc Reviewer

Death Studies2015-presentPalliative & Supportive Care2018-present

Volunteer Experience

PACE Program, Boys and Girls Club
Statistical Consultant
Denver, CO

Professional Memberships

- American Psychological Association (APA)
- Gerontological Society of America (GSA)
- National Academy of Neuropsychology (NAN)
- Rocky Mountain Psychological Association (RMPA)
- Western Psychological Association (WPA)