

# Student Veteran Transitions from Combat to College: A Nationwide Analysis

Janet Bagby, Lucy Barnard-Brak, Aaron Baggett, Tracey Sulak, Mary Walter, and Kelsey Ragan

*The current study evaluated the experiences and perceptions in a national sample of post-9/11 veterans enrolled in institutions of higher education. Participants (N = 500) included men and women from each service branch, but did not include individuals currently in active duty. Each participant completed a 34-item survey instrument measuring perceptions and experiences in higher education. The results indicated the presence of a veteran coordinator, being married, and location contributed to self-reported college retention. Implications for college campuses, staff, and faculty include the need to dedicate personnel for services to veterans, to educate staff and faculty about the unique characteristics of student veterans, and to identify student veterans on campus.*

As soldiers transition to becoming students, the process can be dramatic and challenging, not only for the student but also for administrators and staff in higher education (Rumann & Hamrick, 2009). American colleges and universities have observed an unprecedented increase in student veteran enrollment since the reauthorization of the GI Bill that was first instituted in 1944 (Alexander & Thelin, 2013; Garmezey & Crose, 1948; Hillway, 1945; Holloway, 2009; Kraines, 1945). With two million veterans having returned to civilian life since 2001 and an additional million expected to leave the military within the next five years (Petraeus & Goodfriend, 2013), increased benefits are allowing veterans to pursue higher education as never before (Caspers & Ackerman, 2013). Colleges and universities seek answers as they come face to face with the challenges of accommodating student veterans into their academic, financial, and student-life programs geared toward traditional students.

Student veterans may bring with them complex needs that are atypical of

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those normally encountered by faculty, staff, and administrators of colleges and universities (Barnard-Brak, Bagby, Jones, & Sulak, 2011; Rumann & Hamrick, 2010). These needs include addressing physical and psychological challenges resulting from their experiences during military deployment (Madaus, Miller, & Vance, 2009; Ruh, Spicer, & Vaughan, 2009; Church, 2009; Shackelford, 2009; Vance & Miller, 2009). Symptoms of post-traumatic stress disorder (PTSD), anxiety, and depression combine with stressors inherent in adjusting to civilian life, often producing significant challenges for student veterans enrolling in a college or university (Ackerman, Diramio, & Garza Mitchell, 2009; Auchterlonie, Hope & Milliken, 2006; Bertenthal, Miner, Seal Sen, & Marmar, 2007; Department of Defense Task Force on Mental Health, 2007; Ford, Northup, & Wiley, 2009; Zinger & Cohen, 2010). Combined with the normal academic, social, and financial challenges of higher education, any physical and psychological difficulties can be overwhelming, prompting student veterans to drop classes or withdraw their enrollment temporarily or even permanently (Zinger & Cohen, 2010). Administrators in higher education must identify best practices for meeting the needs of this unique population in order to provide services and increase retention. Research on how those in higher education can best assist returning military personnel can be traced to the years following World War II.

After the end of World War II, Hillway (1945) predicted and documented a variety of curricular and student-support-related changes that were either taking place or needed to take place to accommodate student veterans. Hillway found that larger universities tended to be more flexible and welcoming to changes and other modifications to curricula as well as admissions procedures. Smaller colleges and universities appeared to take more of a legalistic stance when accommodating transferred course credit and appeared to consider such accommodations as a threat to rigorous academic standards (Burnett & Segoria, 2009).

Facilities related to mental health, medical, and vocational referrals for the student veteran population were created and staffed that cut across universities regardless of size (Hoge, Auchterlonie, & Milliken., 2006). Kraines (1945) posed the idea that US colleges and universities have a responsibility to the returning veteran. Kraines further noted inherent differences between student veterans and students who have not served in the military, suggesting the former were more appreciative, focused, and aware of the functions of higher education. In support of this claim, Garmezy and Crose (1948) compared grade point averages of matched groups of veteran and non-veteran freshmen enrolled full time at the University of Iowa in 1946. Results indicated student veterans were slightly, yet consistently, superior in terms of academic achievement than their non-veteran counterparts, although values of Cohen's *d* as the measure of effect size appeared to be small, ranging from .12 and .14.

Veterans of military conflicts subsequent to World War II have arrived in the classroom with the same variety of unique experiences and related needs as did their predecessors. An influx of student veterans results in a stirring of activity on the part of academia, for it is not just veterans who must adjust. Every time there is a surge of veterans negotiating new roles as students, colleges and universities

become aware of the need to implement and ameliorate campus and curricular services to support veterans. Contemporary colleges and universities are asking the same questions as did their predecessors. As US troops return from service in Iraq and Afghanistan, college administrators, faculty, and student affairs staff are seeking more information that will shed light on how they can meet the needs of this unique population of students. Despite the increasing enrollments of student veterans and the awareness for needed services, the research on this population remains limited (Vacchi & Berger, 2014).

## Challenges

For student veterans, shifting from military to campus culture is a transformative and challenging experience (Holloway, 2009), especially when reentering higher education after time away for deployment (Livingston, Havice, Cawthon, & Fleming, 2011; Ackerman, et al., 2009). Upon reentry to civilian life and entry to college, student veterans must adapt to the self-directed structure inherent in academia, which differs from the hierarchical structure of the military. Military life requires the following of rules and obeying orders in a highly structured environment. In contrast, college culture encourages autonomy and self-regulation (DiRamio & Jarvis, 2011).

Recent findings illustrate the challenges student veterans face when attempting to establish and negotiate their identity role as a college student (Rumann & Hamrick, 2010). Recent studies on student veterans (Bagby, Barnard-Brak, Sulak, & Walter, 2012; DiRamio, Ackerman, & Mitchell, 2008; Rumann & Hamrick, 2010) have used an adult transition model developed by Goodman, Schlossberg, and Anderson (2006) as the theoretical framework for their research. In this model, transition is defined as "any event that results in changed relationships, routines, assumptions and roles" that culminates in an impactful event in the individual's life (p.33).

In college, student veterans may find that their classes lack the structure they experienced in the military and often struggle with the autonomy that professors expect of students. Faced with due dates, but a lack of accountability for how they spend their time until the due date, student veterans must often reacquaint themselves with the rigors of studying (Ackerman, et al., 2009; DiRamio & Jarvis, 2011). At the same time, they may be frustrated with younger students in their classes who do not take their coursework seriously. Student veterans may feel more mature upon their return from military service, believing their experiences give them a focus and drive that other students lack (Rumann & Hamrick, 2010). Colleges and universities must assist student veterans to succeed academically. Success in the academic realm can positively impact a student veteran's transition and reintegration into higher education (Holloway, 2009).

Previous literature regarding student veterans' transition to college suggests several programs, initiatives, and services can be employed in order to facilitate a seamless and successful transition (Ford, Northup, & Wiley, 2010). Ford et al. (2010) suggested a committee composed of faculty, staff, and students

should evaluate current services available to student veterans and recommend any necessary changes. Others suggest campuses add fields for student veteran demographics in application materials, survey student veterans already enrolled in order to assess the state of current programs and services, and coordinate proactive campus-wide departments and programs to help ensure a seamless and successful transition (e.g., Ackerman et al., 2009; Lokken, Pfeffer, McAuley, & Strong, 2009; Moon & Schma, 2011; Rumann & Hamrick, 2009). Although programs are being implemented on many campuses, challenges in creating and maintaining quality support services for student veterans continue to exist (American Association of Collegiate Registrars and Admissions Officers, 2014; McBain, Kim, Cook, & Snead, 2012).

Higher education administrators and staff desiring to collect opinion data from student veterans in order to provide programs may find student veterans on their campus difficult to identify. Livingston et al. (2011) found student veterans reluctant to share with others their status as a veteran. Moreover, student veterans were less likely to seek academic support, choosing instead to pursue social support from associations with other student veterans with whom they were more comfortable. While many student veterans express a desire to feel connected with others on campus, they can often struggle to build connections with other students who have no military experience (Ackerman et al., 2009; Burnett & Segoria, 2009; Lokken et al., 2009). Additionally, the process of accessing and utilizing benefits from the Post-9/11 GI Bill can be complicated and cumbersome for student veterans to navigate (Cook & Kim, 2009), particularly when doing so alone (Zinger & Cohen, 2010). Student veterans appear to be appreciative of staff members who are designated to assist them with the administrative aspects of veteran benefits and enrollment procedures (Ackerman, DiRamio, & Garza Mitchell, 2009).

Relationships with students, faculty, and staff help student veterans feel anchored to their campus culture and promote retention (Holloway, 2009; Zinger & Cohen, 2010). After transition, student veterans may feel isolated or misunderstood by their peers who may not be able to appreciate or relate to their experience in the military (Cook & Kim, 2009; Holloway, 2009; Zinger & Cohen, 2010; Rumann & Hamrick, 2010). Opportunities where student veterans and non-student veterans can share experiences may help foster mutually beneficial learning experiences (Holloway, 2009; Cook & Kim, 2009; Burnett & Segoria, 2009). Rumann and Hamrick (2010) found that student veterans enjoy a greater sense of openness to new things and are more willing to accept diversity upon reentry. This characteristic can be an asset, especially for veterans becoming first-time students.

Do student veterans feel connected to their campuses, however? How can university administrators prepare for the influx of student veterans and increase retention? Are there elements of campus services that increase the likelihood that student veterans will be retained?

The purpose of the current study was to evaluate the experiences and perceptions of post-9/11 veterans enrolled in institutions of higher education throughout the United States in order to provide an overview of factors that predict self-retention, a stated intent to continue with their education at the higher

education institution where they are enrolled. We hypothesized that characteristics of the student veteran population and services provided at institutions of higher education would predict veterans' retention. Therefore, the following research questions were addressed: *What challenges and barriers do returning student veterans experience as they enroll and attend institutions of higher education? What campus services or other factors increase the likelihood that student veterans will plan to continue their education at the higher education institution where they are enrolled?*

## Methods

### *Data Collection*

Upon IRB approval, data were collected from student veterans throughout the United States via a 34-item online survey designed to assess student veterans' perceptions and experiences related to their post-military college enrollment and their plans to continue at their institutions of higher education. The instrument was created by the authors, given no extant instrument pertaining to the context of student veterans. The non-demographic items consisted of two factors relating to climate: climate from professors ( $k = 4$ ) and climate from campus ( $k = 9$ ).

The climate from professors items were measured with a Likert-type response format with values ranging from "never" to "often." The professor climate items were "I feel reluctant to voice my opinion in class," "It seems my professors and/or other students are skeptical of my ability to succeed as a student," "My professors and other students show me their appreciation for my military service," and "My professors often follow up with me to make sure I'm doing okay in my classes." The climate from professors subscale revealed a one-factor structure according to exploratory factor analysis results (e.g., principal axis factoring followed by a Promax rotation) with a Cronbach's alpha value of  $\alpha = .59$ . This value of Cronbach's alpha may be considered questionable, but not unacceptable, given that the scale is newly constructed (Nunnally, 1978). A Cronbach's value of at least .70 would be considered the desired level of acceptability.

Seven of the nine climate from campus items were measured with a Likert-type response format with values ranging from "never" to "often." The climate from campus items were "I believe my college/university cares about my success as a student," "My campus offers facilities and/or meeting space for student veterans to use," "Outside of my campus student veteran association, I participate in other campus activities," "I find it easy to meet and make friends with non student veterans on campus," "I would prefer to go unnoticed as a student veteran on campus," and "I doubt the sincerity of people who thank me for my service." One item was "How do you feel student veterans are perceived on your campus?" The Likert-type scale for this response was "very respected" to "very disrespected." The ninth climate from campus item was "Overall, how would you rate the services your college/university offers to student veterans?" with ratings ranging from "not helpful" to "extremely helpful." The climate from campus subscale revealed

another one-factor structure as well with a Cronbach's value of  $\alpha = .73$ , which may be considered more acceptable.

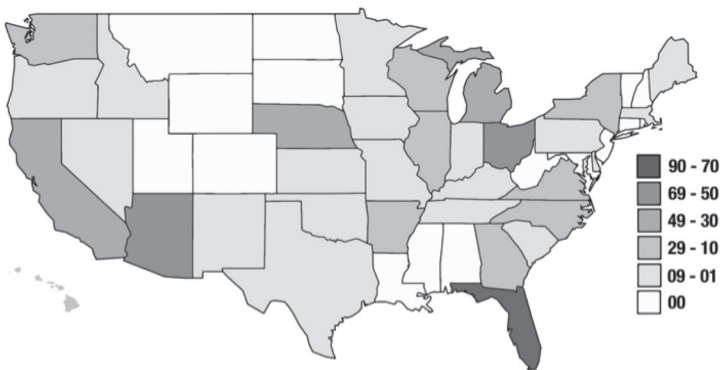
Only student veterans who were not currently serving in the military at the time of sampling were eligible for participation. Students reported the status of their military service by responding to a preliminary screening question. Students who indicated they were concurrently serving in a branch of the military were ineligible for full participation and were not allowed to complete the survey instrument. Military status for students who reported they were not currently serving in the military could not be verified due to institutional and legislative privacy constraints concerning a student's veteran status.

## Participants

Participants were recruited by contacting US campus chapters of the Student Veterans of America (SVA). Student Veterans of America is a national non-profit organization, which provides resources, support, and programs to a network of student veterans associations (SVA, 2012). There are currently approximately 500 SVA chapters in the US and Western Europe. The SVA maintains an interactive map on its website, with detailed contact information for each of its chapters. Information available on the SVA website (<http://www.studentveterans.org/>), including college or university name and location, chapter website (if provided), and name and email address of the chapter president, vice president, and faculty sponsor (if provided) were utilized to contact local chapters for participation. Of the 500 SVA chapters from colleges and universities in the US, the research team contacted the 460 chapters that had an email address for a contact to request cooperation in forwarding information about the survey to their members. Figure 1 provides a display of survey responses by state.

FIGURE 1

### Number of survey responses by state (N = 680).



Respondents ( $N = 680$ ) included approximately 59% men ( $n = 398$ ), 15% women ( $n = 102$ ), and 26% ( $n = 180$ ) who did not respond. Respondents self-identified as serving in either the Army ( $n = 169$ ), Air Force ( $n = 88$ ), Navy ( $n = 112$ ), Marine Corps ( $n = 117$ ), Coast Guard ( $n = 8$ ), or did not respond ( $n = 110$ ). Information related to type of institution (public:  $n = 442$ ; private:  $n = 61$ ; did not respond:  $n = 127$ ) and size (small [ $< 3,000$ :  $n = 36$ ], medium [ $>3,001 <10,000$ :  $n = 209$ ], large [ $>10,001$ :  $n = 306$ ], and did not respond [ $n = 129$ ]) were collected. Respondents also indicated the type of degree toward which they were working: certificate ( $n = 3$ ), associate's ( $n = 106$ ), bachelor's ( $n = 338$ ), master's ( $n = 68$ ), and doctorate ( $n = 23$ ) with  $n = 142$  non-respondents. Twenty-seven percent of respondents reported to be single ( $n = 186$ ), 33% reported as married ( $n = 227$ ), 10% reported as divorced ( $n = 66$ ), 2% reported as separated ( $n = 14$ ), and 1% reported as widowed ( $n = 6$ ), with 27% ( $n = 181$ ) non-respondents. Fourteen percent of respondents reported to be employed full time ( $n = 96$ ), 20% reported to be employed at least part time ( $n = 139$ ), 33% are unemployed ( $n = 226$ ), and 5% are retired ( $n = 36$ ). Twenty-seven percent of respondents ( $n = 183$ ) did not indicate their employment status. Table 1 provides the frequencies and percentages of sample respondents. Please note that non response may be considered permissible as participation was completely voluntary. Additionally, this population of students may be less willing to respond to personal questions, thus we appreciate the responses we did receive.

**TABLE 1**  
**Frequencies and percentages of sample demographics**

	Frequency	Percentage
<b><i>Employment Status</i></b>		
Full-time	96	14.12
Part-time	139	20.44
Not employed	225	33.24
Retired	36	5.29
Non-Response	183	26.91
<i>N</i>	680	100
<b><i>Private or Public College/University</i></b>		
Public	492	72.35
Private	61	8.97
Non-Response	127	18.68
<i>N</i>	680	100



TABLE 1 (cont.)

	Frequency	Percentage
<b><i>Reason for Joining the Military</i></b>		
Education benefits	114	16.76
Desire to serve my country	288	42.35
Career indecision	77	11.32
Non-Response	201	29.56
<i>N</i>	680	100
<b><i>Type of Degree Sought</i></b>		
Certificate	3	0.44
Associate's	106	15.59
Bachelor's	338	49.71
Master's	68	10
Doctorate	23	3.38
Non-Response	142	20.88
<i>N</i>	680	100
<b><i>Marital Status</i></b>		
Single/never been married	186	27.35
Married	227	33.38
Separated	14	2.06
Divorced	66	9.71
Widowed	6	0.88
Non-Response	181	26.62
<i>N</i>	680	100
<b><i>Ethnicity</i></b>		
Asian American	16	2.35
African American	28	4.12
Hispanic	36	5.29
Caucasian	373	54.89
Other	35	5.15
Non-Response	192	28.24
<i>N</i>	680	100



TABLE 1 (cont.)

	Frequency	Percentage
<b><i>Military Branch</i></b>		
Army	199	29.26
Air Force	102	15
Navy	123	18.09
Marine Corps	137	20.15
Coast Guard	9	1.32
Non-Response	110	16.18
<i>N</i>	680	100
<b><i>Reason for Separation</i></b>		
Discharged from military upon completion of term	184	27.06
Retired	83	12.21
Desire to pursue other things	158	23.24
Non-Response	255	37.50
<i>N</i>	680	100

*Note: Non-Response = Did not respond.*

## Data Analysis

Given the purpose of the current study, evaluating the reported experiences and perceptions of post-9/11 veterans enrolled in institutions of higher education and predicting self-reported retention, the survey was developed to allow the participants to respond to a variety of questions using a Likert 5-point scale. Descriptive statistics including frequencies and chi-square analyses were conducted using SPSS 21 as well as R version 3.1.0. Multivariate outliers were examined by values of Mahalanobis distance, which indicated that the presence of outliers was minimal and were retained in our analyses, as logistic regression requires no assumptions about the distributions of the predictor variables to be made (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2006). To answer our research questions, a hierarchical logistic regression was conducted to predict self-reported retention among student veterans according to a variety of variables contained in Table 1. In this hierarchical approach to logistic regression, variables are typically entered into blocks in order of conceptual or theoretical importance or in order of malleability, with less malleable variables entered first, which are statistically controlled before

entering other variables that may be more malleable. In Table 1, we denote the blocking of variables in order of hypothesized malleability. Model fit was evaluated according to values of Nagelkerke  $R^2$  (Mertler & Vannatta, 2005). The presence of multicollinearity was evaluated, yet given the large and diverse nature of the sample, this did not appear to be an analytical issue, with the exception of the relationship between marital status and age:  $r_{pb} = .34, p < .01$ . We retained both variables. Standardized regression coefficients with levels of statistical significance along with values of odds ratios ( $e^B$ ) were reported and interpreted.

## Results

### *Descriptive Findings*

More than half of the student veterans from our sample indicated they joined the military out of a desire to serve their country ( $n = 239, 59\%$ ). Some indicated a desire to take advantage of educational opportunities available with the Post-9/11 GI Bill ( $n = 99, 24\%$ ). Participants were asked to rate the process of using the Post-9/11 GI Bill. Many reported the process as being either somewhat difficult ( $n = 133, 31\%$ ) or extremely difficult ( $n = 86, 20\%$ ), while others reported the process as being neither easy nor difficult ( $n = 105, 24\%$ ). Student veterans were positive overall when rating the services their college or university offers (helpful:  $n = 148, 35\%$ ; very helpful:  $n = 90, 21\%$ ; extremely helpful:  $n = 96, 23\%$ ). This finding is possibly related to the presence of a student veteran coordinator being employed at the campus ( $n = 333, 78\%$ ). When asked to rate how student veterans are perceived on their respective campuses, results varied. Although a few student veterans believe they were respected on campus ( $n = 60, 12\%$ ), the majority were either unsure ( $n = 210, 40\%$ ), believed student veterans were somewhat disrespected ( $n = 168, 32\%$ ), or felt very disrespected ( $n = 85, 16\%$ ).

### *Inferential Findings*

Students at medium and large-sized universities were more likely to often participate in campus programs and activities outside of their campus student veteran association:  $\chi^2(6) = 20.32, p < .01, \phi = .23$ . Likewise, student veterans at medium and large sized colleges and universities reported finding it easy to connect with other non-student veterans on their campus:  $\chi^2(6) = 18.70, p < .01, \phi = .21$ . For students who reported feeling appreciated by their faculty and other students, there were no statistically significant differences observed among type of institution or size. Similarly, in spite of the majority of participants being unsure how they were perceived or believing they were not respected, student veterans reported feeling as if they generally fit in on their campus as well as believing that their college or university generally cares about their success. Further chi-square analyses revealed a statistically significant association between the size of an institution and a general preference for student veterans to remain anonymous as

veterans  $\chi^2(6) = 18.08, p < .01, \phi = .22$ . Student veterans at larger universities were more likely to doubt the sincerity of people who thank them for their service  $\chi^2(6) = 14.90, p < .05, \phi = .20$ .

In evaluating these variables, we hypothesized for predicting self-reported retention among student veterans, certain model fit statistics were small, indicating evidence toward a well-fitting model with a low -2 log likelihood value of 135.98 (a value of zero suggesting perfect fit). We found an estimated 86.5% of the participants were correctly classified based upon predicted values of the dependent variable, self-reported retention among student veterans. Taken as a whole, values for these statistics indicate that our model may be considered statistically reliable. Values for both the Cox and Snell along with Nagelkerke  $R^2$  values were .15 and .28 respectively, indicating a moderate to high proportion of the variability in self-reported retention among student veterans may be accounted for by the predictor variables. These values of  $R^2$  indicate acceptable model fit for the social sciences with values of .01, .09, and .25 and larger indicative of small, medium, and large respectively, according to Gravetter and Wallnau (2010).

In answering our research questions, we examined potential predictors of student self-reported retention. Among student veterans, there were three statistically significant predictors of self-reported retention: marital status, the location of the university, and the presence of a veteran's coordinator. For the variable of marital status, the odds ratio was  $e^b = 2.86$ , indicating that student veterans who were married were 2.86 times more likely to report remaining at the same university. For the variable of the location of the university as being the primary reason the student attended, the odds ratio was  $e^b = 4.24$ , indicating that student veterans were 4.24 times more likely to report remaining at the same university when location of the university was their primary reason for attending. For the variable of the presence of a full-time or part-time veteran's coordinator on campus, the odds ratio was  $e^b = 6.94$ , indicating that student veterans were 6.94 times more likely to report remaining at the same university when there was a veteran's coordinator on campus. Table 2 provides the parameter estimates for each model, along with standard errors and values for odds ratios.

## Discussion

Regarding post-9/11 student veteran effectiveness data, Vacchi and Berger (2014) stated, "these reports do not provide empirical evidence that any student veteran services contribute to student success; the reports merely document services present at sample institutions. Subsequent studies might test the correlation between these services and student veteran success" (p. 116). By accessing a nationwide cross-sample of 500 student veterans at various sizes and types of higher education institutions in the United States, our study contributes to this needed body of evidence. Our study provides insight into student veterans' perceived needs and the factors related to their intent to continue their education at the higher education institution where they enrolled. The perceptions and experiences surveyed included reasons for joining the military, the use of the GI

TABLE 2

## Summary Statistics for Logistic Regression Model

Variable	Block	<i>B</i>	S.E.	<i>p</i>	Odds Ratio
Public University	1	-1.278	1.201	.287	.279
University Size	1	-.362	.413	.381	.696
White (Ethnicity)	1	.016	.638	.981	1.016
Marital Status	1	1.052	.473	.026*	2.863
Gender	1	.217	.505	.668	1.242
Student Age	1	.009	.025	.731	1.009
Rating of GI Bill Process	2	.185	.211	.381	1.203
Perception of Student veterans on Campus	2	.460	.287	.108	1.584
Rating of Student veteran Services	2	-.435	.263	.098	.647
Employment Status	2	.408	.325	.208	1.504
Climate from Professors	2	-.396	.274	.149	.673
Climate from Campus	2	.300	.285	.292	1.350
Graduate Student Status	2	-1.764	1.385	.998	.000
Veteran's Coordinator on Campus	2	1.937	.713	.007*	6.939
Primary Reason: Location of University	2	1.445	.722	.045*	4.243
Primary Reason: University	2	.718	.933	.441	2.051

Bill, and campus climate for veterans. Though many student veterans reported joining the military out of desire to serve their country, many also had intended to use the GI Bill.

Perceptions of campus climate varied among the student veterans. Some of the variation appeared to be related to the size of the college campus. Students attending larger campuses appeared to prefer to keep their veteran status anonymous and reported greater participation in non-veteran specific activities and groups. Regardless of campus size, many veterans sampled reported feeling a lack of respect, with approximately 48% of the sample reporting feeling there was some level of disrespect towards student veterans on campus.

Location and marital status appeared to be statistically significant predictors of self-reported retention among student veterans. Married student veterans who chose a university because of its location were more likely to report staying. It is

possible that marriage and choice of a university location may be intertwined as the location of a spouse's job may determine the choice of the higher education institution and may discourage the exploration of other universities. Results also indicated an almost 700% increase in the likelihood in student veteran self-reported retention on those campuses with a veterans' coordinator.

## **Implications for Practice**

The results from this study provide several implications for practice. The results of the current study indicated many surveyed veterans felt disrespected on campus. Public demonstrations of support such as Veterans Day celebrations involving various campus entities might provide opportunities for administrators, staff, faculty, and non-veteran students to acknowledge the veterans among them. Student affairs professionals can also create veteran awareness campaigns on campus, personally invite student veterans to join organizations within student affairs, and creatively provide opportunities for staff and faculty to interact with student veterans.

Marital status appeared to contribute to higher levels of retention among student veterans. For married student veterans, a spouse may provide a connection to the world outside of the military and also serve as a friend or confidant. Including spouses in specialized activities such as an orientation "Family Day," may serve to meet the needs of this population. Because unmarried student veterans may be more likely to struggle with the transition to campus life, student affairs professionals should be especially sensitive to the needs of unmarried student veterans. Unmarried student veterans need a way of discovering other veterans or making connections on campus, yet they may not know how to discover these connections or establish these relationships within the context of a university. Past research has indicated that student veterans may prefer anonymity, which can make it challenging to identify the population and subsequently provide tailored services (Livingston et al., 2011). However for those who self-identify as veterans, services must begin as soon as the applications are processed. In addition to providing services for student veterans, training for staff and faculty concerning the difficulties faced by many of these students would improve the transition process. Staff and faculty on college campuses may not be aware of student veterans' needs or how to assist student veterans in being academically successful.

The presence of a veteran's coordinator on campus appeared to significantly increase retention for student veterans. Not all campuses may have the resources to create a full-time position to serve student veterans, but it may be possible to designate a staff member in financial aid, admissions, or student services to assist student veterans in their transition to higher education. If research is designed to inform practice, then perhaps findings such as the presence of a veteran's coordinator increasing retention should provide a clarion call for reallocating resources to better serve this worthy population.

By actively working to provide services and support to student veterans, colleges and universities may improve the likelihood that their student veterans

will continue at their institution and, in so doing, accomplish the intended purpose of the GI Bill. While implementing successful programs for student veterans, a byproduct for higher education institutions may be an improvement to services for all students (Rumann & Hamrick, 2013).

## Limitations

The exclusion from participation of students who were active duty and concurrently serving in a branch the U.S. military should be considered a limitation of the current study. Although these students may, indeed, share similar and no less significant experiences with post military student veterans, they are more likely to be enrolled on a part- or half-time basis due to their service commitments. Future research should consider examining this population of students who are currently serving in the US military. Another limitation is that there was a degree of non-response in the survey, as participation was voluntary and requested without any incentive (e.g., a gift card raffle). Additionally, this population of students may be especially sensitive to answering questions about their personal lives and their experiences as students. Rapport with this population may need to be further developed. Finally, one of the subscales of instrument (e.g., climate from professors subscale) revealed particularly low internal consistency of scores with a Cronbach's alpha value of  $\alpha = .59$ . As stated previously, this value of Cronbach's alpha may be considered questionable, but not unacceptable, given that the scale is newly constructed (Nunally, 1978). Therefore, future research should refine and examine this scale for its psychometric properties.

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