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Variables Affecting Student Veterans' and Student Service Members' Success in Higher Education

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by

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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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"The greatest ally to academic achievement is humility."

Author-Me

Abstract

The researcher recognized four independent variables identified as post-traumatic stress disorder, depression, mild traumatic brain injury, and traumatic brain injury which influenced the educational attainment of student veterans and student service members in post-secondary education. There were six dependent variables identified as integration, transitioning, social learning, social cognition, quality of life, and perceived self-efficacy which were recognized by the researcher as having influenced the educational attainment of student veterans and student service members in post-secondary education. The researcher posited higher education institutions did not fully understand or acknowledge the combat or service-related independent variables organic to student service members or student veterans when establishing and instituting assistive protocols.

Most higher education institutions were not mandated to amass data regarding the success rates of this demographic of student which hindered these venues abilities to introduce sound research-based protocols designed to effectively assist student veterans and student service members in educational attainment. Data pertaining to success rates and combat/service-related detriments were not compiled by education or government entities. This research attempted to determine if the independent and dependent variables were mitigating influences critically affecting student veterans' and student service members' success rates in higher education. The research also attempted to establish a hierarchical order of both variable sets for the purpose of influencing future academic protocols.

A hierarchical order of independent variables affecting the educational attainment of student veterans and student service members was attainable. The establishment of a

hierarchical order of the dependent variables was unattainable. Although both variable sets were instrumental in influencing educational proficiencies, all dependent variables seemed equally important regarding the educational attainment and success of this demographic of student. A useful taxonomy of both variable sets affecting the educational attainment of student veterans and student service members in post-secondary education and influencing protocols designed to assist these students was unattainable.

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Chapter One: Introduction

With the de-escalation of hostilities abroad at their peak in 2013, American veterans and active duty military personnel who served in Iraq and Afghanistan caused significant shift expectations in higher education, with a substantial number of veterans and service members electing to pursue post-secondary academic endeavors (Salzman, 2014). Academic administrators in higher education recognized student veterans and student service members as a re-emerging sub-group, resulting in the analysis of specific factors contributing to difficult transitions for veterans (Tinoco, 2015). The GI Bill, better known as the Serviceman's Re-Adjustment Act of 1944, as well as other supported resources such as psychiatric rehabilitation programs, were deemed instrumental in positive post-war outcomes (Osborne, 2012). Well established administrative protocols meeting the unique and exclusive needs of student veterans and student service members were not specifically or formally designed and introduced by higher academic institutions, though many institutions had expressed enthusiastic and willful notions to assist this distinct demographic of student in their efforts to transition back to civilian life (O'Herrin, 2011).

The independent and dependent variables attributed to the success or failure of student veterans and student service members in higher academics and the accuracy of specific qualitative and quantitative data related to academic success and failure for this demographic were not well-defined (O'Herrin, 2011). The enormous challenges encountered by student veterans and student service members in their transitions to academic life and the self-perception and cultural stigma of being non-traditional college students did foster a compilation of data studied and analyzed by higher academia

through qualitative and quantitative methods (Norman et al., 2015). Some risk factors for academic failure among student veterans and student service members were related to negative self-inferred notions concerning academic inadequacy and the cultural indignity of being non-traditional first-time college students (Norman et al., 2015). McCaslin et al. (2014) suggested the conditioned psyches of military personnel through military experiences also created challenges as student veterans re-acclimated to civilian settings and academic life.

De La Garza, Manuel, Wood, and Harris (2016) indicated the most reliable indicators and determinants for student veterans' and student service members' educational success was exhibited through high school grade-point averages (GPA's), the concept of self-efficacy, and the discovery of intrinsic interests and values. Perceived self-efficacy influenced personal, professional and educational experiences through fundamental belief systems and their relationship to individual talents and abilities (Bandura, 1994). Professional and academic accomplishment were prognosticated through the evaluation of cognitive abilities and skillsets, with no elaboration on how personality manifested acceptable performance outcomes (Fosse, Buch, Safvenborn, & Matinussen, 2015). The social cognitive theory identified the intensity of human reaction as the determining catalyst where personality traits were enhanced and performance, action plans, and strategies were positively affected (Bandura, 2005). Academic advisors could apply Schlossberg's transition model, which specifically addressed major changes or transitions in one's life, as a component of the social cognitive theory to address general life transitions for student veterans and student service members attempting to acclimate and

succeed in higher academic settings (Bandura, 1982; Ryan, Carlstrom, Hughey, & Harris, 2011).

Chapter One will begin with a background of the study identifying the existence of contradictory data and its relationship to student veterans' and student service members' success rates. The conceptual model identifying the dependent variables of social and psychological theory and the independent variables of combat related detriments will follow. The problem statement exploring the protocols used by higher academics in aiding student veterans and student service members in educational attainment will precede the purpose of the study. The purpose of the study identifying the independent and dependent variables as they pertained to student service members' and student veterans' academic success, research questions, significance of the study, the definition of key terms, and summary will conclude Chapter One.

Background of the Study

The end of World War II saw considerable numbers of veterans returning home and taking advantage of the newly established GI Bill advocating a viable avenue toward educational attainment for this group (De La Garza et al., 2016). Presently, veterans and service members have taken advantage of the 2008 passage of the Post-9/11 GI Bill, with higher education institutions offering transitional support to assist student veterans in adapting to an impending variant lifestyle after leaving military service (McCaslin et al., 2014). Recent estimates indicated over one million Operation Iraqi Freedom and Operation Enduring Freedom veterans utilized the Post-9/11 GI Bill since 2008 to pursue higher education credentials, with 17% of those veterans experiencing mental and

physical health disorders negatively affecting scholastic performance (see Table 1) (Norman et al., 2015).

Table 1

Service-connected Disabled Veterans by Disability Rating Group: FY 2009 to FY 2016

Year	Total Veterans Disabled	0-20%	30-40%	50-60%	70-100%
2009	3,069,652	1,244,230	665,211	427,902	732,309
2010	3,210,261	1,258,882	689,599	459,657	802,123
2011	3,354,741	1,258,987	711,305	492,692	891,757
2012	3,536,802	1,266,501	729,813	532,192	1,008,296
2013	3,743,259	1,281,492	749,531	572,421	1,139,815
2014	3,949,066	1,294,797	765,587	609,450	1,279,232
2015	4,168,774	1,308,597	778,182	647,025	1,434,970
2016	4,356,443	1,318,939	785,687	675,865	1,575,952

Note: Table 1 shows the increase of service-connected disabilities from FY 2009 to FY 2016, with each year broken down by disability ratings. Increases in disability ratings of 70-100% for veterans between the years 2012 to 2016, showed the rate for this disability category double between these years. *Source:* Department of Veterans Affairs, Veterans Benefits Administration; 1985-1998: COIN CP-127 Reports; 1999-2016: Annual Benefits Reports. Prepared by the National Center for Veterans Analysis and Statistics, Office of Enterprise Integration, Department of Veterans Affairs.

Higher education institutions made significant improvements by taking initiatives to develop and subsidize programs to assist veterans with disabilities, though identification and documentation of disability-related entities proved complex and exhausting due to the limited experiences higher education institutions had in addressing disabilities incurred through military service and combat (Glover-Graf, Miller, & Freeman, 2010). One inferential epiphany made by the researcher was the identification of inaccurate and non-existent data concerning student veterans' and student service members' success rates, denying higher education the ability to establish thorough and efficient protocols addressing the needs of this demographic of student. Though many wounds suffered during Operation Iraqi Freedom and Operation Enduring Freedom were deemed survivable due to the technological advances in body armor and medical care, mild

traumatic brain injury (mTBI), traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), major depression, related complications with substance abuse and troubled family relations, tested the academic capability and social environmental survivability of student service members' and student veterans' attempts at garnering academic success while pursuing a post-secondary education (Tinoco, 2015).

There were many inconsistencies concerning data representing the success rates of student veterans and student service members in higher academia. Borsari et al. (2017) stated "Evidence exists student veterans and student service members are not experiencing the academic success attained by students who are non-veterans" (p. 166). Nearly one-third of 20 school systems designated as two-year institutions nationwide having enrolled 100, or more, degree eligible veterans using the GI Bill, did not present degrees to this demographic of student (Marcus, 2017). Accurate data related to post-secondary outcomes of today's student service members' and student veterans' completion rates was difficult to assess due to inconsistent methods in collecting data by state, federal and academic entities (Cate, 2014).

With the possibility unsubstantiated and inaccurate reports existed which emphasized low success rates of student veterans and student service members, the Student Veterans of America (SVA) conducted independent research. With increasing confidence this number would grow as time passed, the SVA indicated 51.7% of today's veterans had completed their degree programs in post-secondary education (O'Brien, 2014). Veterans attending school between 2002 and 2010 using the GI Bill appeared to have graduated at rates comparable to non-veteran students, attended mostly public institutions, and may have taken slightly longer to complete their degree programs (Sander, 2014). Data

analysis conducted by the U. S. Department of Veterans Affairs reported 71% of veterans used a portion of their GI Bill entitlements, with six percent of student veterans and student service members depleting their entire benefits, leading to the conclusion 65% of those student veterans and student service members pursuing post-secondary or vocational endeavors using the GI Bill were not completing their degree programs (Ryan et al., 2011). The researcher made the inference that recognized unsubstantiated and contradictory data related to student veterans and student service members success rates did not support definitive conclusion's or provide formal evidence proving student veterans and student service members consistently attained academic success or failure. A supplementary inference proposed by the researcher concluded the transitional protocols established and designed by higher education administrations to benefit student veterans and student service members to enhance positive academic outcomes could not be deemed helpful facilitators to academic success. The researcher suggested that genuine quantitative data pertaining to the success rates for these students may be valid indicators of the effectiveness or non-effectiveness of academic protocols.

The non-physical obstacles encountered by student veterans and student service members pursuing their education at post-secondary institutions were identified as lack of support systems, administrative barriers, an inability to fit in with traditional college students, and difficulty transitioning from a structured military environment to the less structured life of a civilian (Semer & Harmening, 2015). Higher academic institutions and their communities were governed and mandated by administrative policy to understand the culture, needs, strengths, skills, and vulnerabilities of student service members and veterans (Bonar, 2016). Post-secondary venues faced new issues related to

providing service to an ever changing and diverse student body, including the assurance of access to technologies, quality instruction, and appropriate support systems (Madaus, 2011).

Another inference the researcher rendered was attributed to the lack of formal statistical data supporting veteran success rates in higher academics as it related to social transitions. Without definitive and formal data correlated to student service members' and student veterans' success rates, protocols expressly designed and implemented by higher education institutions to enable transitioning and integration could be deemed ineffective. An additional inference made by the researcher concluded higher education institutions did not recognize the psychological norms and psychological irregularities related to the integration and transition of student veterans and student service members, or how these norms and irregularities correlated to why some student veterans were at risk for academic failure and why inabilities to transition to higher academic settings existed. Academic protocols designed to accommodate transitioning and integration, while concurrently addressing the detriments organic to military service and combat, could yield greater academic outcomes for this demographic of student.

Conceptual Framework

The conceptual framework of this research was constructed using psychological theory under the premise generalized and/or subjective approaches to student academic determinants regarding success or failure could be established using the social learning theory (Bandura, 1969); the self-efficacy model (Bandura, 1994); the social cognitive theory (Bandura, 2005); Maslow's hierarchy of needs and quality of life (Lester, Hvezda, Sullivan, & Plourde, 1983); and Schlossberg's transitioning model (Ryan et al., 2011).

This framework was intended to examine some physical and psychological independent and social dependent variables affecting student veterans' and student service members' transitions, integrations, and academic successes in higher education. Generalized inferences to these determinants were deliberated further in this chapter.

Schlossberg emphasized the preparation of academic advisors as a practical protocol in the transition model (Ryan et al., 2011). Through proper advising, Schlossberg's theory iterated personal and academic successes were achieved through four main components related to situation, self, support and strategies. The narratives for these four components are: (a) helping student veterans gain a greater sense of control and hopefulness about making academic transitions (situation); (b) developing academic motivation, identity, and skills (self); (c) building, identifying, and utilizing support skills (support); and (d) helping student veterans develop and employ coping skills (strategies) (Ryan et al., 2011). Currently, colleges and universities should be properly preparing and aiding with the transition, matriculation and social and psychological assimilations of student veterans and student service members in higher education, though many veterans pursue higher education after military service and do not earn a degree (Ryan et al., 2011). From a social cognitive perspective, self-regulated learners directed their learning processes and attainments by setting challenging goals for themselves (Zimmerman, Bandura, & Pons, 1992). Perceived self-efficacy was defined as an individual belief concerning people's capacity to produce designated levels of performance exercising influence over events affecting a person's life and assisting in helping the person understand how he/she comprehend feelings, thoughts, motivations, and behavior.

(Bandura, 1994). A major function of thought was to enable people to predict events and to develop ways to control those events perpetuating desired outcomes (Bandura, 1994).

Maslow's hierarchy of needs evolved around the basic constructs of motivational development resulting in the attainment of self-actualization, with self-actualization referring to an unobservable cognitive transformation characterized by reaching one's potential (Rouse, 2004). Maslow theorized self-actualization was achieved through satisfying the following: (a) physiological needs such as food, water, and sleep; (b) safety needs such as shelter and protection from danger; (c) belongingness needs referring to the need to be part of a group and the need to love and be loved; and (d) esteem needs related to feeling good about one's self, one's abilities, and one's physical and psychological characteristics (Rouse, 2004). According to Lester et al. (1983), "Students reporting a strong belief in chance control had little satisfaction of these needs. Students with a strong belief in control by others had little satisfaction of their physiological, safety, and esteem needs" (p. 84).

The social cognitive theory explained psycho-social functioning as it related to personal initiative, behavior, cognition, environmental events and how the interacting determinants of each influenced the other (Bandura, 1988). Bandura (2005) stated:

> The exercise of personal agency over the direction one's life takes varies depending on the nature and modifiability of the environment. The environment is not a monolith bearing down on individuals unidirectionally. Operative environments take three different forms: those that are imposed, selected, and created. There is the physical and socio-structural environment that impinges on people whether they like it or not. They do not have much control over its presence, but they do have leeway

in how they construe it and react to it. (p. 18)

The psycho-social effects of traumatic experiences during armed conflict was the subject of special scrutiny because of the pervasive and serious nature of battlefield experiences (Benight & Bandura, 2004). Theories of human development differed in their conceptions of human nature and what was regarded as the basic determinants and mechanisms of personal adaptation and change (Bandura, 1996). Social cognitive theory analyzed human self-development, adaptation, and change from an agentic perspective where individuals acted as their own agents to facilitate individual social and psychological modification (Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001). Current research identified likely paths of influence whereby self-regulatory factors contributed to higher levels of behavioral transgression (Bandura, et al., 2001).

The researcher conceived an inference concerning transgressive behavior suggesting transgressive behavior could be deemed a determining variable in whether student veterans and student service members transitioned thoroughly into academic settings. Furthermore, the researcher hypothesized whether student veterans and student service members took control of their own learning before transgressing by adapting to their academic environments through socialization and a personal recognition of pre-existing or newly discovered intrinsic values and beliefs, resulting in actionable epiphanies related to talent and ability. Intrinsic interests may play a valuable role in motivating student veterans and student service members in finding greater academic relevance in their educational environments whereby transitioning, integration, and psychological and social assimilations become less cumbersome and stressful. Under this premise, the opportunity to nurture perceived self-efficacy may become more attainable. The

conceptual theories proposed by Bandura, Maslow and Schlossberg and advocated by Lester, Rouse and Ryan, could be viewed as viable paths in developing meaningful protocols perpetuating positive academic outcomes for student veterans and student service members.

Statement of the Problem

A precursory residual inference made by the researcher concerned the differentiation in data regarding the success rates of student veterans and student service members in higher education, and the possible negative effects this contradictory data had on the educational outcomes of students. A second residual inference was made citing higher education's inability to establish research-based protocols founded on the most dominant independent and dependent variables affecting the academic outcomes of student veterans and student service members at post-secondary institutions. These noteworthy inferences were influenced by the possible existence of prevailing independent variables known as PTSD, depression, mTBI, and TBI. Transitioning, integration, social learning, social cognition, quality of life (QoL), and perceived self-efficacy were identified as the possible prevailing dependent variables. Both variable sets may have correlated to educational outcomes. Protocols at higher education institutions were developed by administrators in the effort to address the exclusive needs of student service members' and student veterans' populations, with the efficacy of these services remaining unknown (Borsari et al., 2017).

Recently, student veterans have been entering the venues of higher academics, and many counselors responsible for advising these students were not prepared with the proper training, background, and administrative protocols necessary to enable scholastic

success (Wurster, Rinaldi, & Liu, 2013). Military leaders specifically identified TBI as one of the signature injuries of the wars in Afghanistan and Iraq, with over a quarter of a million service members diagnosed with TBI from 2000 to 2012 (Helms & Libertz, 2014). Combat exposure during deployment represented significant risk factors specifically associated with poorer health status and shorter life spans for returning veterans in the aftermath of armed conflict abroad (Barry, Whiteman, & Wadsworth, 2012). Despite the fact wars in Iraq and Afghanistan have been going on for over a decade, colleges and universities were found to be woefully underprepared for the influx of the unique demographic distinction's student veterans represented (Jones, 2013).

American college campuses were deemed a curious place for those who served in Iraq and Afghanistan and have not been deemed remarkable from previous times (Bateman, 2008). Forty years after anti-military protests first gained traction on campuses during the Vietnam war, those who were occasionally the subject of anti-military sentiment, have been continuously and consistently ostracized (Bateman, 2008). While student veterans shared characteristics with other student populations, they also brought to higher academic venues a host of unique gifts, experiences, and challenges impacting other veterans, the institutions they attended, and the administrative individuals who worked with them (Francis & Kraus, 2012). Post-traumatic stress disorder and TBI became urgent topics for higher academic institutions, as well as the efforts expended to address student veterans' needs related to these conditions (Lopez, Springer, & Nelson, 2015). Student veterans in higher academic cultures faced the challenges of relocation, the inadequacies of academic skillsets needed for scholastic success, lack of continuity in their educational backgrounds, physical detriments, psychological issues, and the

preponderance of social isolation (Falkey, 2016). Green and Van Dusen (2012) found that once a veteran enrolled in a college, university, or other academic venue, institutions had to be committed to understanding how student veterans developed their identity and assist them in inferring meaning to intellectual endeavors as it related to their transition. Adding an office of military student services or a litany of military initiatives on college campuses and universities did not make a campus home to veterans or ensure student veterans' successful transition to academic learning or the civilian workforce (Wilson, 2014). When active duty military personnel became veterans, they underwent a process of "role exit" in which they disengaged from a role central to their identity and replaced it with a new one (Naphan & Elliot, 2015). This situation may have created adjustment problems for student veterans and student service members, with integration, transitioning and psychological detriments being the central presumptions of academic protocols developed to assist in positive outcomes for this demographic of student.

Purpose of the Study

The purpose of the study was to recognize and define PTSD, depression, mTBI, and TBI as the dominant independent variables affecting student veterans' and student service members' abilities to academically attain some levels of success. The correlating purpose of this study was to recognize and define the dependent variables of socialization, integration, social learning, social cognition, QoL, and perceived self-efficacy as they related to the independent variables and academic outcomes. The concluding purpose of this research was to put the independent and dependent variables in hierarchical order, with the culminating result being an effective taxonomy positively and constructively influencing post-secondary protocols meeting the needs of most

student veterans and student service members in their journeys toward academic attainment.

Many student service members and student veterans affected by PTSD and TBI had diminished interactions with others and a decrease in positive outlooks on life not usually apparent to those interacting with this classification of student (Falkey, 2016). Although many psychiatric clinicians believed veterans naturally recovered from adverse psychological conditions over time, long-term individual and societal costs from those not recovering have often resulted in lost productivity, reduced QoL, homelessness, domestic violence, family strain, and suicide (Lopez et al., 2015). Whereas military personnel lacked control over their daily lives and had to comply with military authority, directives, and orders, non-veteran college students were given greater choices in how they lived their lives, with the autonomy to work and meet individual goals (Naphan, 2015). The renewal of a self-sufficient nature in student veterans and student service members may enable these students to take control of their own learning and help to embellish the existence of individual perceived self-efficacy.

Academic failure was inferred by the researcher as the inability to transition and adapt to a given academic environment, learn, and gain exclusive and applicable knowledge regarding areas of interest being of intrinsic value to the learner. Further inference proposed by the researcher construed that achievement of receipt or failure to achieve receipt of a degree or credential was not an adequate indicator of academic success or failure. According to Gregg, Howell, and Shordike (2016) veterans felt underprepared for academia, with challenges stemming from the psycho-social effects of war causing difficulties in connecting socially with the colleges and universities they

attended and with other students. With this understood, the researcher inferred the existence of a social disconnect experienced by student veterans and student service members which correlated to their transitions, integration, academic performance, and educational attainment.

Tsai, El-Gabalwy, Sledge, Southwick, and Pietrzak (2015) defined post-traumatic growth (PTG) as a positive and meaningful psychological change an individual experience's resulting from struggles with traumatic and stressful events. There was an increased recognition that in addition to the negative psychological consequences of trauma such as PTSD, some student veterans may have developed PTG following such experiences, although the relationship between PTG and PTSD remains unclear. Post-traumatic growth was known to emerge from basic cognitive processes and had functional and dysfunctional aspects associated to it, with PTG being stimulated through responsive social supports (Benetato, 2011; Schubert, Schmidt, & Rosner, 2016). The notion of PTG led to the emergence of a growing interest in the relationship between positive and negative trauma outcomes, with theories positing such positive consequences existed independently of, and simultaneous to, negative outcomes (Schuettler & Boals, 2011). Due to the existence of PTG, the researcher suggested successful transitions, productive academic performance, and educational attainment was possible while student veterans and student service members performed under the debilitating detriments of PTSD, depression, TBI, and mTBI, provided effective, and in some cases subjective, research-based protocols were established and implemented using accurate data regarding success rates, and the recognition of dominant independent and dependent variables related to student veterans and student service members.

Research Questions and Hypotheses

The following research questions guided the study:

Research Question 1: What were the predominant independent and dependent variables related to student veterans' success in higher education?

Null Hypothesis 1: Depression was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 1: Depression was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 2: Post-traumatic stress disorder was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 2: Post-traumatic stress disorder was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 3: Mild traumatic brain injury was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 3: Mild traumatic brain injury was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 4: Traumatic brain injury was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 4: Traumatic brain injury was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 5: The ability of student veterans to transition into higher academic settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 5: The ability of student veterans to transition into higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 6: The ability of student veterans to integrate into higher academic settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 6: The ability of student veterans to integrate into higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 7: The social cognitive ability of student veterans in higher education settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 7: The social cognitive ability of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 8: The social learning ability of student veterans in higher academic settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 8: The social learning ability of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 9: The perceived self-efficacy of student veterans in higher academic settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 9: The perceived self-efficacy of student veterans in higher academic settings, was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 10: The quality of life of student veterans in higher academic settings, was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 10: The quality of life of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Research Question 2: What was the hierarchical order of independent variables related to student veterans' success in higher education?

Null Hypothesis 11: A hierarchical order of independent variables related to student veterans' success in higher education does exist.

Alternate Hypothesis 11: A hierarchical order of independent variables related to student veterans' success in higher education does not exist.

Research Question 3: What was the hierarchical order of dependent variables related to student veterans' success in higher education?

Null Hypothesis 12: A hierarchical order of dependent variables related to student veterans' success in higher education does exist?

Alternate Hypothesis 12: A hierarchical order of dependent variables related to student veterans' success in higher education does not exist.

Significance of the Study

According to Glover-Graf et al. (2010) higher education institutions did not establish well founded protocols designed to effectively assist veterans in attaining academic success. The significance of this study was derived from the inability of leader's at

higher education institutions to establish and implement research-based protocols positively affecting many student veterans' and student service members' outcomes in post-secondary education. Higher education institutions may not have established research-based protocols using: 1) current and reliable data related to the success rates correlated to student veterans and student service members; and 2) the independent and dependent variables most commonly suspected of influencing academic success or failure among student veterans and student service members (Glover-Graf, 2010; Osborne, 2013).

The significance of the study was grounded on four inferences made by the researcher and related to independent and dependent variables that seemed to most commonly initiate positive and/or negative educational outcomes for a significant number of student veterans and student service members. The first inference the researcher noted was higher education could not design, implement, and refine effective protocols for student veterans and student service members without recognizing the following factors: a) the specific psychological and physiological independent variables organic to students who have experienced combat; b) the specific dependent variables affected by the psychological and physiological independent variables; c) a well-defined understanding of what higher education institutions considered as academic achievement and attainment; d) legitimate data establishing the true success rates of this demographic of student; and e) the uniqueness of this educational entity within student populations. There were many tribulating variables facing student veterans and student service members going beyond the capabilities of higher education (Kurzynski, 2014). Most challenges facing higher academia garnered realistic solutions by recognizing and

appreciating the origins, history, and culture of this demographic of student (Kurzynski, 2014).

The second inference the researcher made was there were generalized approaches in defining the variables affecting student veterans and student service members' academic successes or failures. The third inference was this demographic of student was classified and treated as a group instead of as individuals. The fourth inference was there was a non-emphasis in addressing the needs of these students on a case-by-case basis through individual analysis of intrinsic values, QoL, self-perceived talents and abilities, the actions required to capitalize on individual cognitive traits, or gender. According to Raab, Macintosh, Gros, and Morland (2015) PTSD symptoms were not specific on a case-by-case basis, may have been comorbid and caused reduced QoL. Schnurr and Lunney (2008) emphasized fundamental gaps existed in knowledge accentuated by gender differences affecting QoL and PTSD. The significance of this study will be to expand the accumulation of knowledge related to the distinct variables affecting the academic attainment of student service members/veterans, and to enable higher education institutions to better serve this unique and growing population in the future.

Definition of Key Terms

For the purposes of this study, the following terms were defined:

Academic achievement. Academic achievement referred to student veterans achieving satisfactory or superior levels of academic performance as they progressed through and completed their college experiences (Cuseo, 2004).

Academic culture. Academic culture was described as academic outlooks, academic spirit, academic ethics, and academic environments in a post-secondary institution (Shen & Tian, 2012).

Administrative protocols. Administrative protocols referred to resources post-secondary institutions utilized to enable student to persist and achieve academically (Lange, Sear, & Osborne, 2016).

Campus culture. Campus culture was characterized by individuality, academic feature, opening, leading, variety, and creativity (Shen & Tian, 2012).

Community College Survey of Men (CCSM). The Community College survey of Men referred to a valuation instrument used in addressing the needs of veterans in community colleges through the advancement and upgrade of programs facilitating transition and success (De La Garza et al., 2016).

Comorbidity. Comorbidity referred to the identification and diagnosis of two or more physical or psychological disorders at the same time (Nugent, 2013).

Determinant. A determinant was referred to as an internal or external condition causing an event to occur (Nugent, 2013).

Educational attainment. Educational attainment referred to the post-secondary students' persistence in the completion and attainment of their degree, program, or educational goal (Cuseo, 2004).

Intrinsic motivation/values. Intrinsic motivation/values referred to humanistic mechanisms used to turn internally manifested goals of self-improvement into reality precluding external gain (Froiland, Orso, Smith, & Hirchert, 2012).

Maslow's hierarchy of needs. Maslow's hierarchy of needs was a proposed classification of human needs consisting of psychological, safety and security, belongingness, esteem, and love, resulting in self-actualization that must be achieved to attain psychological health (Lester et al., 1983).

Mild traumatic brain injury (mTBI). Mild traumatic brain injury was referred to as a traumatically induced physiological disruption of brain function (Kay et al., 1993).

Moral disengagement. Moral disengagement referred to a process by which an individual convinces themselves ethical standards do not apply to them within a specific situation or context (Bandura, 1999).

Motivational systems theory (MST). Motivational systems theory advocated 24 categories emphasizing the definition of motivation as goals, emotions, and personal agency beliefs regarding organic abilities exclusive to self and the surrounding environment (Rouse, 2004).

Perceived self-efficacy theory. Perceived self-efficacy theory referred to actions and emotional arousal in stressful situations being partially mediated through self-percepts of efficacy (Telch, Bandura, Vinniquerra, Agra, & Stout, 1982).

Post-traumatic growth (PTG). Post-traumatic growth was referred to as a positive and meaningful psychological change an individual experienced resulting from struggles with traumatic and stressful life events (Tsai et al., 2015).

Post-traumatic stress disorder (PTSD). Post-traumatic stress disorder referred to an anxiety disorder occurring following the experience or witnessing of a traumatic event (National Center for PTSD, 2010).

Psychological assimilation. Psychological assimilation referred to a process where persons are stimulated by new information or experiences and incorporate the stimuli into their existing ideas (Richardson, 1967).

Quality of life. Quality of life referred to a concept of living standards encompassing social, environmental, psychological, and physical values describing the parameters of living quality below, at, or above the norm (Paraskevi, 2013).

Self-actualization. Self-actualization was referred to as the process of fulfilling one's potential (Rouse, 2004).

Self-regulated learning. Self-regulated learning referred to the process students used to initiate and direct their own efforts to acquire knowledge and skill (Zimmerman, 1989).

Social assimilation. Social assimilation referred to a gradual process by which a person or group belonging to one culture adopts the practices of another, thereby becoming a part of that culture (O'Flannery, 1961).

Social cognitive theory. Social cognitive theory referred to an agentic perspective insisting individuals were producers of experiences and shapers of events (Bandura, 2000).

Social integration. Social integration referred to the process where individuals are assimilated into a group (Nugent, 2013).

Social learning theory. Social learning theory referred to the concept individuals learned by interacting with others in a social context and developed similar behaviors of those they observed (Nebavi, 2012).

Student advancement. Student advancement referred to a student's ability to proceed and succeed at subsequent educational and occupational endeavors their college degree program was designated to prepare them for (Cuseo, 2004).

Transition theory. Transition theory referred to any perceived event or non-event resulting in changed relationships, routines, assumptions, and roles as defined by the person experiencing them, and an individual's ability to cope with perceived events or non-events (Evans, Forney, & Guido-DeBrito, 1998).

Traumatic brain injury. Traumatic brain injury was defined as an injury resulting from the disruption of normal brain function caused by a bump, blow, jolt to the head, or penetrating head injury (Center for Disease Control and Prevention, 2017).

Veteran. Veterans were referred to as individuals who have served in the active military, naval, and/or air service and who were discharged or released under honorable conditions other than dishonorable (United States Department of Veterans Affairs, 2009).

Limitations

The following limitations were identified in this study and given consideration during the valuation of the raw data collected from the respondent survey. The first limitation was the unavailability of official data. Post-secondary institutions were not mandated by federal or state entities to compile data reflecting success or fail rates of student veterans or student service members. The researcher made inferences based on qualitative data identified in the literature review. The availability of qualitative and quantitative data regarding the successes or failures of this demographic of student in post-secondary education had no effect on the independent and dependent variables proposed in this research. The lack of official and formal data had bearing on whether

post-secondary venues instituted sound protocols based on success and fail rates which may have hindered this student population's ability to academically attain

The second limitation of this research was the availability of sites willing to sponsor research of a controversial nature and subject their student populations in remembering difficult and traumatic events. Though many extension campuses existed throughout the state of Missouri, few were in the proximity of military installations where the availability of student veterans seeking post-secondary attainment subsisted. Drury University in St. Robert, Missouri maintained the reputation of hosting many veterans in the area.

The third limitation of this research was instrumentation. The instrumentation was designed by the researcher through inferences construed in the literature review, with validity based on these inferences and their applicable nature to each question. Although every attempt was made to design a thorough questionnaire encompassing every possible, imagined, and inferred variable, irregularities and thoroughness in design may have existed due to causal variations regarding additional independent and dependent variables affecting the relationships between both variable sets. Additional causal variations may have derived from the possible existence, yet unavailability, of formal or specific data unknown to the researcher. The specificity and brevity of the instrumentation did not allow respondents to contradict themselves through redundant questioning due to the identification of specific independent and dependent variables and their use in an exclusive contextual manner regarding the educational attainment of student veterans in higher education.

The fourth limitation of this research was the possibility of excessive non-responses by participants which limited the accumulation of raw data and altered the researcher's ability to make qualitative and quantitative conclusions. In the event of excessive non-responses, the researcher may have made considerations for redistributing the survey instrument until viable and conclusive data were amassed. Due to the sensitive nature and specificity of the survey questions, respondents may have found it difficult to complete the survey process which may have compounded the possibility of excessive non-responses.

The fifth limitation of this research was influenced by institutional protocols at Lindenwood University and federal restrictions. These protocols and restrictions limited the researcher's ability to survey both veterans and active duty military personnel. Student veterans were the singular authorized respondents regarding this research. Due to this limitation, the researcher was unable to make correlations related to how service members currently serving in the military simultaneously adapted to multiple social and cultural environments amid post-secondary and military venues.

Assumptions

The following assumptions were accepted for this study and given consideration during the valuation of the raw data collected from the respondent survey. The first assumption was all respondents answered truthfully and consistently to questions posed regarding their combat experience(s), educational experience(s), and disabilities. All respondents were required to have at least one deployment to a combat zone and one semester of post-secondary experience. The second assumption was some respondents had pre-existing psychological disabilities embellished by military service. The third

assumption was respondents answered all questions with complete objectivity due to confidence in their anonymity and willingness to participate. The fourth assumption was all respondents were of a typical sample in a specific category consisting of former military personnel in a post-secondary environment. Chapters Four and Five will present the analysis and conclusions of the research, with the limitations and assumptions presented contextually and every attempt being made at prescribing the relationship of the limitations and assumptions to the inferences made by the researcher.

Summary

The introduction of Chapter One of this study identified the many challenges student veterans and student service members encountered as they transitioned and integrated into post-secondary environments. With ever increasing numbers of veterans and service members entering post-secondary venues, there existed a need for educational institutions to prepare for the influx of this diverse and unique demographic of student by implementing administrative research-based protocols designed and applied using the latest and most accurate qualitative and quantitative data. Currently, this type of data has not been available or distributed to institutions of higher learning. The conceptual framework of this study was designed for the specific purpose of correlating independent and dependent psychological and social variables as they related to student veterans' and student service members' success in higher education. The statement of the problem regarding this research was identified as post-secondary institutions inability to adequately address barriers to academic attainment through the recognition of predominant independent and dependent variables.

Discussed in Chapter One were dependent variables consisting of Schlossberg's transition theory, Maslow's hierarchy of needs, Bandura's theories on self-efficacy, social learning, social cognition, and quality of life. The independent variables consisting of PTSD, depression, mTBI, and TBI were identified. Both sets of variables were related to many student veterans and student service members' successes or failures in higher academics, with the consequential effects of these variables remaining unknown. The research questions, definition of key terms, and the limitations and assumptions of this research were the final entries in Chapter One.

Chapter Two will begin with a literature review related to the theories proposed in Chapter One, with the conceptual framework extended and refined by means of topical analysis. Topical analysis elaborated on how specific independent and dependent variables affected student veterans' and student service members' educational attainment in higher academia. Chapter Two will conclude with summation.

Chapter Two: Review of Literature

The academic success of student veterans and student service members was correlated to independent psychological and dependent social variables related to administrative protocols and the manner protocols were developed and implemented by post-secondary institutions (O'Herrin, 2011). The challenges facing student veterans and student service members in present day post-secondary academics and their transitions, integrations, and social and psychological assimilations to academic life has been studied through qualitative and quantitative research (Norman et al., 2015). A dominant inference made by the researcher suggested there were no observable or viable research-based protocols established using accurate quantitative data regarding success/fail rates of student veterans and student service members. Further inference implied there was no formal qualitative data supporting the establishment or implementation of universally accepted academic protocols for higher education institutions proven to assist this demographic of student in academic attainment.

The availability and accuracy of data regarding the post-secondary outcomes of present-day student veterans created challenges due to inconsistent methods in data collection by state and federal entities (Cate, 2014). The most reliable indicators and determinants for student veterans' educational success was exhibited through high school grade-point averages (GPA's), the display of self-efficacious characteristics, and/or the expression of intrinsic interests and values (De La Garza et al., 2016). The researcher inferred the determinants for academic success among student veterans and student service members were correlated to independent psychological and dependent social variables which became the focus of this study.

Semer and Harmening (2015) who conducted a study of 4,000 students with military backgrounds, identified the lack of support systems, administrative barriers, the inability to fit in with traditional college students, and difficulty transitioning from a structured military environment to the less structured life of a civilian as the predominant obstacles hindering successful transitions and outcomes in higher education. Student veterans and student service members experienced major changes when they entered post-secondary education (Falkey, 2016). With this demographic of student identifying a need for support systems, an inability to fit in with traditional college students, and difficulties transitioning to higher academic environments, the researcher inferred psychological and social theories were the prudent and predominant paradigms for the conceptual framework regarding this study.

Chapter Two of this research will include a topical analysis of qualitative data profiling student veterans' and student service members' difficulties transitioning to higher academic settings, analysis of present-day educational environments, and the institutional protocols used in transitioning and the attainment of educational success. This will be followed by a review of independent variables identified as post-traumatic stress disorder (PTSD), depression, mild traumatic brain injury (mTBI), and traumatic brain injury (TBI). An analysis of the dependent social variables known as transitioning, integration, social learning, social cognition, quality of life (QoL), and perceived self-efficacy will follow. The effect of independent variables on dependent variables will be done through analysis of qualitative data related to the social learning theory (Bandura, 1969); the self-efficacy model (Bandura, 1994); the social cognitive theory (Bandura,

2005); Maslow's hierarchy of needs and quality of life (Lester et al., 1983); and Schlossberg's transitioning model (Ryan et al., 2011).

Conceptual Framework

The conceptual framework of this research was constructed under two prevailing themes: (1) the challenges related to scholastic environments student veterans and student service members encountered while attempting to achieve academically; and (2) psychological independent and social dependent variables. The researcher suggested a better understanding of the correlation between academic environments and dependent and independent variables yielded a more transparent insight into the barriers of academic success for student veterans and student service members. An additional inference made by the researcher regarding independent and dependent variables theorized why some student veterans and student service members transitioned and achieved academically while others did not. DiRamio, Ackerman, and Mitchell (2008) believed it was equally important to gain an understanding of how military service shaped the disposition of veterans who were students to further advance contributions in the establishment of more substantive protocols assisting this distinct demographic toward educational attainment.

Higher education offered many support programs for students with military backgrounds but did not seem prepared for the influx of student veterans and student service members who served in Iraq and Afghanistan (Jones, 2013). Colleges and universities should have prepared for and aided with the transition and matriculation of student veterans in higher education, though many veterans pursued higher education after military service and did not earn a degree (Ryan et al., 2011). Schlossberg emphasized the preparation of academic advisors to assist students with definitive needs

as a viable protocol in the transition model (Ryan et al., 2011). Through proper advising, Schlossberg's theory advocated four key components to assist student veterans and student service members in achieving personal and academic successes. These components are: (a) helping student veterans gain a greater sense of control and hopefulness about academic transitions (situation); (b) developing academic motivation, identity, and skills (self); (c) building, identifying, maintaining, and utilizing support networks (support); and (d) helping student veterans develop and employ effective coping skills (strategies) (Ryan et al., 2011).

A major inference made by the researcher was higher education institutions could not design, implement, and refine effective protocols for student veterans and student service members without recognizing: (1) the specific independent psychological and dependent social variables organic to students who have experienced combat; (2) a well-defined understanding of what was and was not considered academic success and attainment; and (3) current and official data establishing what the true success/fail rates were for student veterans. Another inference suggested by the researcher was recognizing higher educations' generalized approaches to assisting student veterans as members of the general scholastic population, not as an independent group having specific needs. Sportsman and Thomas (2015) stated, "Service members who are transitioning into higher education with new disabilities are a special category" (p. 47). These inferences helped the researcher to establish a theoretical framework for this study.

From a social cognitive perspective, self-regulated learners directed their learning processes and attainments by setting challenging goals for themselves (Zimmerman et al., 1992). Bandura (1994) defined perceived self-efficacy as an individual belief in personal

capabilities producing designated levels of performance exercising influence over events affecting life and assisting in understanding personal feelings, thoughts, motivation, and behavior. The researcher made an additional residual inference based on the examination of qualitative data and Banduras 1994 theory regarding self-efficacy suggesting the detrimental effects of PTSD, depression, mTBI, and TBI, diminished learning processes, made goals more difficult to achieve, with goals less likely defined and/or refined by the manifestation of self-efficacious characteristics.

Maslow's hierarchy of needs accentuated people's motivational development leading to self-actualization characterized by realizing and achieving a normal or above normal degree of potential by fulfilling basic needs (Rouse, 2004). Maslow theorized self-actualization was attained through satisfying: (a) physiological needs; (b) safety needs; (c) belongingness needs; and (d) esteem needs (Rouse, 2004). Theories of human development differed in their conceptions of human nature and what was regarded as the basic determinants and mechanisms of personal adaptation and change (Bandura, 1996). From Maslow's theory the researcher inferred: (1) the needs of some student veterans and student service members should be addressed individually; (2) the definition of educational success and educational attainment should be general in nature; and (3) QoL should be determined by the comfort levels one has experienced in life and the frequency, psychological, and physical circumstances influencing fluctuations in these comfort levels.

Academic environments and challenges.

The academic environments and challenges pertaining to student veterans and student service members will begin with an overview of the history of student veterans

and student service members in higher education. This overview will give a brief synopsis of the evolution of this demographic of student in higher education from World War II to present times. This will be followed by a description of the current environment's student veterans and student service members face in higher education. The researcher will compare the two philosophies of military culture and academic culture and describe their effect on the efforts of student veterans' and student service members' abilities to transition and academically attain in post-secondary venues. By studying the concepts of transitioning and integration, the researcher will identify those barriers most common to student veterans' and student service members' abilities to effectively assimilate in higher education environments. The researcher will associate current practices with the present-day protocols used by higher education to assist student veterans and student service members in their transitioning, integration, and psychological assimilations. This will be followed by the legal, financial, and judicial realities associated to post-secondary education and their relationship to students with military backgrounds, how the legal, financial, and judicial aspects affected the educational attainment of this demographic of student in higher education, and the effect these realities had on the psychological adversities facing students with disabilities. This section will conclude with data related to current enrollment, educational success, and predatory institutions.

History of veterans and student service members in education. Seventy-five years-ago disability services in post-secondary education began in mediocrity and advanced to sophisticated levels undergoing rapid expansion and evolving into a singular profession in higher academics (Madaus, 2011). Shortly after World War II, higher education

administrators, who were unfamiliar with the accommodations required for people with disabilities, insisted such students did not belong on college campuses (Rose, 2012). Paraplegic veterans at the University of Illinois were denied admission on the grounds their presence on campus would drive away non-disabled students and create challenges the administration could not accommodate (Rose, 2012). The Servicemen's Readjustment Act of 1944, better known as the GI Bill, addressed what service members and veterans needed to recover from the lingering effects of war and help soldier's transition from military service into becoming healthy, productive citizens (McEnaney, 2011). Because of these mandates, World War II soldiers obtained more education than non-veterans in this era (Teachman, 2005). The two decades following World War II were highlighted as the "golden age" of higher education (Bresler, 2013). The development of programs to assist disabled veterans in higher academics continued extensively after the Korean conflict until 1955 (Madaus, 2011). Between 1955 and 1965, federal funds were unavailable to assist veterans and service members in transitioning, educational attainment, and vocational rehabilitation (MacLean, 2005).

The average age group of veterans drafted and voluntarily enlisting during the Vietnam War was between the ages of 18 to 24, with school enrollment ages averaging between 18 to 19, constituting 50% of Vietnam era veterans who attended school (Teachman, 2005). The age group of veterans between the ages of 22 to 24 constituted 15% of veterans who attended school during this era (Teachman, 2005). Teachman (2005) suggested older individuals entering military service were not as likely to have experienced a disruption in their efforts to academically attain. For younger veterans, military service disrupted or accelerated the natural transition to maturity, adulthood, and

the chance to attain self-actualization, but were normally consistent in completing academic endeavors, finding employment, and starting families (MacLean, 2005).

The wars in Vietnam and Iraq were characteristically different, with consensus evolving around the notion Americans in both wars were sent to countries dissimilar from their own in terms of language, culture, and history (Schuman & Corning, 2006). The all-volunteer military of today heavily embraced the benefits offered through the GI Bill and its implication of promised support for post-secondary educational attainment and assistance in helping veterans' transition to civilian life (Osborne, 2009). The Vocational Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the amendment of the Higher Education Opportunities Act of 2008, have played contributory roles by increasing access for veterans regarding vocational training and post-secondary education (Madaus, Kowitt, & Lalor, 2012).

Current environments. There has been little known data regarding the expectations and life experiences combat veterans brought with them to the auspices of higher education (DiRamio et al., 2008). Higher academic institutions recognized PTSD as the central focus of academic administrators in addressing the needs of student veterans (Lopez et al., 2015). Many of the finite idiosyncratic aspects concerning the transitioning process for veterans were not definitively understood by faculty, staff, and administrators in higher education (Rumann & Hamrick, 2010). Rumann and Hamrick (2010) found in their research related to individual-level transitioning for student veterans and student service members, that higher education administrators were more interested in issues concerning federal assistance programs for this demographic of student. An estimated two million veterans from the wars in Iraq and Afghanistan undertook post-secondary

academic endeavors, with many representing disabilities impacting their aptitudes, and other detriments effecting personal perceptions to academically attain (Madaus, Miller, & Vance, 2009). The diligence and awareness of academic institutions in recognizing the needs of student veterans and student service members gave academic administrations the opportunity to develop appropriate techniques minimizing attrition and increasing the chances for academic success (Falkey, 2016). Branker (2009) suggested combat experiences created an undeserving imbalance between social choices and academic responsibility as student veterans and student service members traded weapons for education.

Today's students attended colleges and universities with multiple intersecting identities (Wurster et al., 2012). Current data indicated military learners adapted and persisted in higher academia by utilizing conditioned traits and tendencies acquired through military service such as self-discipline, mission-first focus, and a reliance on fellow veterans (Ford & Vignare, 2015). Presently, there were limited amounts of scholarly and research-based literature advocating the best ways of addressing the educational needs of veterans who have served in Iraq and Afghanistan since these wars occurred relatively recently and the absolute effects are still yet unknown (Bichrest, 2013). Gonzalez and Elliot (2016) suggested institutions of higher learning universally design their lectures and activities to alleviate student veterans' feelings of not fitting in. Student veterans enrolled in a college or university transitioned between military and civilian communities with defined agendas, ways of learning and thinking, and personal ways in how they signified membership in their current environment while they experienced disruptions related to "learning shock" (Hara, 2017). Hitt (2015) wrote,

"Although relief from the burden of tuition and related educational expenses is important, military as well as civilian students indicated issues related to acceptance and assimilation can be just as important" (p. 537).

The feelings of under-representation exhibited by many veterans in higher education were manifested through personal adversity such as homelessness, physical and psychological disability, substance abuse, family hardship, and inadequate academic skills or the perception of academic inadequacy. (Stewart, 2014). Transitioning veterans identified relational concerns with new-found student peers, with concerns being exacerbated by existing strains in current relationships (Olsen, Badger, & McCuddy, 2014). Specific programs designed to serve veterans more effectively were implemented by means of independent veterans' offices on college and university campuses to alleviate the stress factors associated with transitioning from the military to an academic environment (Osborne, 2012). Welcoming programs developed by higher academic venues to assist in student veterans' and student service members' transitions and integrations to academic life did not cause this demographic of student to automatically self-disclose or motivate these students to utilize traditional service models currently in place on college and university campuses (Church, 2009).

Military culture vs. academic culture. The military was identified as an exclusive culture; endowed with its own history, laws, values, language, and customs (Meyer, 2015). Zinger and Cohen (2010) suggested it was problematic for student veterans and student service members to manage scholastic culture shock when undertaking the responsibilities of academics, as the transformations in new environments have revealed observable and distinct nuances. In general terms, social and environmental cultures

provided unwritten rules forming and shaping expected behaviors in people (Greenberg, Langston, & Gould, 2007). Few higher academic staff and faculty in the venues of post-secondary endeavor were veterans (Francis & Kraus, 2012). For this reason, a cultural gap became apparent in many colleges and universities attended by veterans and service members. The military/civilian cultural gap in higher academics was reduced by student veterans and student service members bringing their military experiences to the general classroom (Hawn, 2011). The greatest nuance causing a cultural gap between some civilian college students and student veterans was the resentment of these student veterans and student service members being treated as every other student (Francis & Kraus, 2012). Due to the rigid culture of military service instilling toughness, self-sufficiency, and initiative, many veterans found it difficult to ask for assistance while pursuing their academic endeavors (Lange et al., 2016). Shackelford (2009) corroborated this notion by affirming military cultural norms, carried over from military experiences, impacted the capacity of many student veterans and student service members to come forward and self-identify as those needing support.

The test facing some academic administrators who served military populations on their campuses was understanding what made student veterans and student service members unique (Bonura & Lovald, 2015). Bonar (2016) found there existed a need for a required understanding of higher academic institutions in matriculating and assimilating student veterans and student service members in post-secondary venues, while simultaneously recognizing their culture, needs, strengths, skills, and vulnerabilities to facilitate effective transitioning, integration, and academic success. Due to the prevailing culture of present times, higher academic administrations were expected to take personal

initiatives to educate themselves with knowledge supporting the view military establishments did not think with one mind, while making concerted efforts to distance themselves from militaristic stereotypes perpetuated by the media and Hollywood caricatures (Hawn, 2011). The liberal higher academic philosophy was identified as the median assertion on many college and university campuses, with this mutual philosophy circulating indiscriminately among faculty and staff, especially in the social sciences (Elliot, 2015). The researcher inferred that the stereotypical mindsets of educators and their indiscriminate liberal philosophies, as well as a preponderance of misinformation, may have influenced the establishment of unrealistic and impractical protocols that were designed to assist student veterans and student service members in educational attainment.

Francis and Kraus (2012) wrote college and university professionals delegated to assisting student veterans and student service members should do so while exhibiting humility and caution. What follows seems to support these ideas. Most veterans previously experienced the responsibility of holding high stress positions; however, these same veterans now on college and university campuses have been relegated to freshman status and /or work-study status (Francis & Kraus, 2012). Within the general military culture there existed sub-cultures designated and identified as service members, active duty service members, prior service veterans, disabled veterans, and military retirees, with each requiring an exclusive recognition and understanding by academic administrators (Bonura & Lovald, 2015). With the vast amounts of sub-groups within military culture, strained relationships between veterans, service member's and academic authorities on college and university campuses caused detrimental cultural divides, often

with neither side understanding the perspectives of the other (Francis & Kraus, 2012). Although support offices on college campuses were paramount in aiding student veterans and student service members, it was frequently impossible to have one office serving the needs of all veterans (Bonar, 2016). While post-secondary institutions combined all military students into one demographic group, there were fundamental and distinct differences between the five primary branches of the military, (Army, Navy, Air Force, Marines, and Coast Guard), requiring a separate recognition of their unique cultural history (Bonura & Lovald, 2015).

Many student veterans and student service members experiencing climates of anti-military sentiment on college and university campuses attributed these negative sentiments to a general anti-military consensus pervading among academic faculties (Bateman, 2008). The historical relationship between many professionals in higher education and those affiliated with the military have been deemed complex (Bateman, 2008). Frequently fueled by misunderstandings regarding culture, administrators of higher institutions of learning and military leaders maintained cautious scrutiny between themselves, with each side eyeing the other with curious contempt (Bateman, 2008). With this, there may always be a persistent cultural divide between the military and higher academic administrations affecting a consensus concerning the best ways to assist veterans in their academic attainments.

Transitioning and integration. The prodigious influx of veterans and service members presently transitioning to higher academic settings was compared to the incursion of veterans entering higher academic venues after World War II (Lange et al., 2016). The manner student veterans and student service members evaluated their roles as

members of the armed forces was dissimilar in the way they evaluated their roles as college or university students (Jones, 2013). For many veterans transitioning to academic settings, the management of service-connected injuries and disabilities manifested deliberate concerns (Green & Van Dusen, 2012). In some higher academic venues, faculty, staff, and administrators did not enable themselves to understand the complex variables involved regarding the transition and integration of student veterans and student service members to academic life (Rumann & Hamrick, 2010). There is little data available related to the transition and integration of student veterans and student service members and their abilities to participate in academic life to its fullest (Kim & Cole, 2013).

The persistent norms of higher academic communities were unlike those of the restricted and controlled norms of a military community (Wilson, Smith, Lee, & Stevenson, 2013). Some older student veterans and student service members expressed difficulties interacting with traditional students based on the traditional students' unlikeliness in having determinedly established vocational, social, and family roles (Borsari et al., 2017). The definitive variable complicating the transition and integration for some student veterans and student service members in higher academic environments was the divergence between military and academic culture (Tinoco, 2015).

Successful transition and integration processes relied on the adaptability and willingness of the participants to embrace new experiences (Robertson & Brott, 2014). Countless student veterans and student service members experienced a myriad of transitions and integrations within the realm of military culture, with academic administrators and faculty of higher education institutions not understanding that the

transition and integration of first-year students entering higher education from military service was markedly different from the transitions within military service (Semer & Harmening, 2015). According to Tinoco (2015), "A student veterans' transition from the regimented military lifestyle to self-directed structuring of their schedules, making their own decisions, and challenging authority, requires a significant shift in mindset" (p. 29). For this reason, Naphan and Elliot (2015) suggested the use of a technique known as "role exit" involving the simultaneous assimilation of learning a new role when military personnel transitioned to civilian settings (Naphan & Elliot, 2015).

The efforts expended in seeking educational attainment by veterans and service members was a choice (Berry & Stanley, 2014). The individuals' choice to positively and constructively interact and respond accordingly within a given learning environment genuinely affected learning, influenced academic performance, and aided in student retention (Liu & Liu, 2000). Many who advocated the theories of transition and integration into higher academic settings, affirmed student veterans and student service members' successes were optimistically affected by the awareness and sensitivity of faculty and staff who made special efforts in catering to the needs of this demographic of student (Griffin & Gilbert, 2012). Integration and transition to academic life after military service was described as the satisfaction with a chosen environment, with successful integration becoming a determinant to student satisfaction (Liu & Liu, 2000). For student veterans and student service members to view higher education environments as friendly bastions, meaningful programs were established, and well-trained professionals were placed in positions to assist with the transition and integration of student veterans and student service members (Griffin & Gilbert, 2012). This social and

psychological assimilation of student veterans and student service members required demonstrated, positive, and effective provisions, with services for these veterans going beyond what was available to non-veterans (Vance & Miller, 2009).

Current practices. Presently, institutions of higher learning recognized the concept of individual motivation as the catalyst to academic attainment. The delineation of motivation was the process where goal-directed activities were originated and maintained continuously, with the expectancy value theory advocating expectation and success as catalysts for motivation (Cook & Artino, 2016). Some initial university programs designed to specifically assist and motivate student veterans and student service members were judged as antiquated concepts in higher education, with post-secondary academia attempting to catch up with the overwhelming influx of today's diverse veteran demographic entering the domains of higher academic venues (Kurzynski, 2014). Certain colleges and universities were hindered by the lack of general data concerning retention, graduation, and job-placement rates, with no commonly designed programs or protocols identified as being genuinely effective or universal in assisting student veterans or student service members (Knapp, 2013). With the variance of methodology used concerning data collection at innumerable post-secondary institutions, there was difficulty in determining the genuine success rates of student veterans and student service members (Steele, 2015).

Initiating associations, collaborations, and opportunities to embellish the educational attainments and successes of military learners was problematic for higher education (Ford, Northrup, & Wiley, 2009). Kirchner, Coryell, and Biniecki (2014) advocated the importance of quality engagement, building support programs, establishing and

strengthening student military and veterans' organizations, and the creation of military and veteran resource centers as facilitators to student veterans and student service members transitions, integrations, and academic success. Student veterans and student service members conveyed teaching style and the manner classrooms were arranged as being contributory to readjustment, transition, and integration (Sportsman & Thomas, 2015). There seems to be little attention given to research literature by higher education concerning academic and social supports related to the military demographic of students attending post-secondary venues (Mentzer, Black, & Spohn, 2015).

Awareness of the serious and under-reported nature of the psychological detriments facing many student veterans and student service members was facilitated through professional development programs created for faculty and staff at higher education institutions (Sportsman & Thomas, 2015). Rudimentary preparation provided to faculty and staff in professional development forums afforded academic skillsets establishing veteran friendly environments and delivering student veterans and student service members calm and comfortable classroom settings (Sinski, 2012). Keen abilities to distinguish normal from abnormal body language triggered by stress was beneficial for the educators and students (Sinski, 2012). With veteran populations on college and university campuses growing nationwide, as well as the programs instituted to assist veterans, there were efforts by universities and colleges to employ more staffing to correspond with the influx of this growing veteran populace (Kurzynski, 2014). Systemized and distinct academic supports were reviewed as essential to student persistence (Mentzer et al., 2015). One of these supports was the Community College Survey of Men (CCSM) which was developed to analyze the determinants involved in

the success of veterans attending community colleges, with the original implication of the CCSM encouraging the design and improvement of programs related to transition and success (De La Garza et al., 2016).

Other factors attributed to the positive learning experiences of student veterans and student service members were the physical design and arrangement of the classroom, seating assignments, and the autonomy of the student veterans and student service members to leave the classroom under their own discretion (Sinski, 2012). Little data existed concerning whether the labors applied by post-secondary institutions to introduce targeted programs were helpful to student veterans and student service members (Kim & Cole, 2013). Vance and Miller (2009) found outdated methods establishing the criteria for the accommodation of disabilities by means of self-disclosure by veterans with physical and psychological detriments, combined with the obligatory practices of proving their disabilities, were not effective. Experiential learning opportunities were avoided by some student service members and student veterans, namely internships and practicums, study abroad, community service, and learning communities (Kim & Cole, 2013).

The responsibility of post-secondary institutions to meet the needs of student veterans and student service members was burdened with complications (Ford et al., 2009). Several post-secondary institutions did not have the means to initiate the required protocols to assist student veterans and student service members in transitioning and integration, putting faculty, staff, and administrators at a distinct disadvantage by their lack of subjective knowledge and exposure to military culture (McCaslin et al., 2014). Martin (2009) advocated the training of social workers to specifically address the needs of student veterans and student service members suffering from the effects of wartime

trauma. Callahan and Jarrat (2014) suggested colleges and universities aggressively identify current and former service members who needed assistance, as well as administrators, faculty, staff, and alumni who could provide a holistic evaluation regarding the effectiveness of institutional protocols aimed at the transition and integration of veterans on their campuses. The transition and integration of most student veterans and student service members were aided by instituting peer groups and peer mentors, training campus providers in recognizing the characteristic nuances of mental and physical trauma, providing training to increase the sensitivity of faculty, staff, and administrators, and developing partnerships with veterans' organizations (Ahern, Foster, & Head, 2015). The continuation of military operations abroad has demonstrated a need for specific services and curricula geared to the successful educational attainment of student veterans and student service members (De La Garza et al., 2016). Limited quantitative research on the success of military affiliated students, as well as the negligible availability of qualitative data concerning veteran achievement and programs related to success in post-secondary education, obstructed the development of universal protocols used in assisting these students (De La Garza et al., 2016).

Legal, financial, and judicial realities.

Legal realities. Section 504 of the Rehabilitation Act of 1973 and/or Title II of the Americans with Disabilities Act of 1990 (ADA), required all post-secondary institutions to provide equitable accommodations and academic modification for students with disabilities (Shackelford, 2009). Shackelford (2009) verified these mandates did include accommodations for student veterans and student service members. The disheartening and psychological indemnities of war were well documented and nurtured the adjustment

and improvement of licit efforts to amend academic modifications and reasonable accommodations for student veterans and student service members entering post-secondary institutions (Tramontin, 2010). These efforts have extended to all services, assistances, opportunities, and actions helping to eliminate disability discrimination derived from the self-effacing pre-conceptions of those not requiring services (Simon, 2011). Compliance and non-compliance of disability mandates for student veterans and student service members was the central and decades-long focus of post-secondary institutions, motivating unnecessary tensions precipitating perceptions disabled students were getting something others were not (Simon, 2011). Contemporary lawmaking and amended federal regulations guided new requirements and helped to balance the efforts of disability service providers (Simon, 2011). Colleges and universities had several processes in place to accompany the current mandates instituted by law, including processes for determining if accommodations were genuinely afforded and policies governing grievances and due process were extant (Simon, 2011).

Financial realities. Research related to disability compensation Law 38 CFR 4 yielded data concerning disability, employment, and income models focused on the reparations for disabled veterans (Fulton, Belote, Brooks, Mathews, & Coppola, 2009). Often, disabled veterans returning from deployment, leaving the military and re-training for civilian occupations, found it more difficult to find employment, were at risk for having lower income opportunities, and fostered more difficulty paying bills (Elbogen, Johnson, Wagner, Newton, & Beckham, 2012). Most veterans with the ability to pay for basic needs were less likely to exhibit criminal behavior, resort to substance abuse, commit suicide, foster aggression, and encounter the possibilities of becoming homeless

(Elbogen et al., 2012). In 2011, veterans constituted 41% of the United States' homeless population (Elbogen et al., 2012). Post-deployment complications were linked to financial distress, with PTSD, depression, mTBI, and TBI amplified by unemployment and debt (Elbogen et al., 2012). In 2012, the unemployment rate for veterans 24 and older was 8.6%, as compared with a 6.8% unemployment rate for non-veterans (Steele, 2018).

Judicial realities. The Department of Defense (DoD), Veterans Administration (VA), and legislatures accountable for the transition and re-integration of military personnel to civilian life, were limited in their capacity to give legal support to veterans (Cassidy, 2015). The manifestation of criminal misconduct among Iraq and Afghanistan war veterans was cited as a growing problem, with little known data concerning why these veterans were at a greater risk for arrest (Elbogen et al., 2012). Criminal behavior theorists hypothesized exposure to traumatic events or stressful environments manifested negative effects such as anger and irritability prompting anti-social comportment (Elbogen et al., 2012). Elliot (2015) suggested some illicit behaviors exhibited by student veterans and student service members on college and university campuses were compounded by feelings of being unfairly judged by faculty and staff or sensing they did not fit in to their scholastic environment. According to Hardcastle (2015), TBI was linked to criminal behavior.

Current data regarding enrollment, educational success, and predatory Institutions.

Enrollment. As of 2014, the percentage of veterans registering in post-secondary public institutions was 79.2, with 10.7% registering in private non-profit schools and

10.1% registering in proprietary schools (Cate, 2014). According to the SVA and the Million Records Project whose efforts embodied the most inclusive scrutiny of student veterans' post-secondary academic success in decades, 51.7% of students within these institutional parameters earned certifications or degrees (Cate, 2014). Private non-profit venues had the highest graduation rates at 63.8% based on the student veterans' or student service members' sector of enrollment, though 21.6% of students completed their degrees or certifications at public institutions (Cate, 2014). Forty-three percent of student veterans and student service members enrolling in higher academics began their educational journeys at community colleges, with 84% electing to begin their academic vocations by enrolling in two-year academic programs (De La Garza et al., 2016).

Educational success. Nationwide data retrieved by state and federal entities ascribing to student veterans' outcomes in higher education was problematic to amass, examine, and construe due, in part, to the poor protocols related to data collection and the establishment of narrow inclusion criteria aimed at classifying veterans (Cate, 2017). Obsolete national data bases omitted relevant portions of the student veteran demographic, while including other elements of military populations causing an obstruction of a precise analysis of post-secondary outcomes for many student veterans (Cate, 2017). Without the ability to acquire specific, accurate, and detailed data regarding the demographic variables attributed to student veterans, including when student veterans were separated from military service and began post-secondary vocations, the significance and usefulness of any data related to the effectiveness of protocols concerning academic progress and outcomes could not be determined (Cate, 2017). This is pertinent information since the initial symptoms of mental health disorders

in veterans and service members were commonly manifested several months after returning from deployments or leaving the military (Barry et al., 2012).

Predatory institutions. A 2015 article in the New York Times investigating the deceptive and illusory administrative practices of for-profit post-secondary institutions revealed impropriety, including fraud, illegal activity, bankruptcy, inducement payments to recruiters, and misleading enrollment etiquettes (Naylor, 2016). For-profit post-secondary organizations had the highest default rates and lowest graduation rates when compared to private, non-profit, and public institutions of higher learning (Naylor, 2016). In 2012 and 2013, for-profit post-secondary institutions enrolled four million students (12%) of the United States' college population (Naylor, 2016). For-profit post-secondary institutions charged twice as much for tuition than public post-secondary institutions with an average cost of $15,000 for full-time students, culminating in an increased debt-load for veterans attending for-profit post-secondary institutions and potentially compounding the effects of PTSD, depression, mTBI, and TBI (Elbogen et al., 2012; Naylor, 2016). The national average costs for students attending four-year public institutions was $8,655, with community colleges charging a national average of $3,131 (Naylor, 2016).

Although for-profit post-secondary institutions accounted for 50% of student loan defaults, federal law allowed these educational venues, under Title IV of the Higher Education Act of 1965, to receive 90% of their revenue from federally subsidized funding, enabling for-profit post-secondary institutions to maliciously and aggressively target veterans (Naylor, 2016). Steele (2018) attributed the attraction of for-profit post-secondary institutions to deceptive marketing practices. The major appeal of for-profit institutions among veterans was vocational focus, convenience for working adults, and

high levels of academic counseling (Steele, 2018). The number of for-profit post-secondary institutions increased radically in recent years due partially to the implication of subsidization from federal student aid programs resulting in sizeable profits for monetary stakeholders (Cellini & Goldin, 2014).

Psychological detriments.

The following are the psychological detriments suspected of most commonly affecting student veterans' and student service members' abilities to academically attain in higher education. The first detriment is depression and its prevalent symptomology. The second detriment is post-traumatic stress disorder (PTSD), it's symptomology, and how PTSD correlated to educational attainment among student veterans and student service members in higher education. Quality of life (QoL), post-traumatic growth (PTG), and moral disengagement were residual topics related to PTSD. This section will include a synopsis of mild-traumatic brain injury (mTBI) and traumatic brain injury (TBI), a description of how they may affect the educational attainment of student veterans and student service members in higher education, and their related effects on academic work.

Depression. Social outcomes for students were directly related to mental health, with education and depression linked to these outcomes (World Health Organization, 2018). The symptomology most prevalently associated with depression in most individuals were low energy levels, appetite changes, excessive or little sleep, persistent worry, diminished concentration, an inability to make decisions, agitation, feelings of worthlessness, chronic guilt or hopelessness, and thoughts of self-harm and suicide (World Health Organization, 2018). According to the World Health Organization (2018),

individuals who attained a higher level of academic accomplishment were less likely to exhibit symptoms synonymous with depression.

Post-traumatic stress disorder (PTSD). Post-traumatic stress disorder was referred to as an anxiety condition occurring from the experiencing or witnessing of a traumatic event (National Center for PTSD, 2010). Although official and formal data has not existed highlighting the number of student veterans and student service members who completed their degree programs in higher education, some qualitative and quantitative research has emphasized the psychological challenges facing this demographic of student, with PTSD being the predominant detriment to academic attainment among veterans (Norman et al., 2015). Ness, Middleton, and Hildebrandt (2015), found those who have endured the debilitating effects of mental disorders were at higher risk for negative academic outcomes. Some of the predominant characteristics attributed to PTSD were diminished cognitive skills, difficulty in the discernment between right and wrong, difficulty functioning under stressful conditions, trouble interrelating with others, negatively responding to others without using conforming social etiquette and norms, and struggles interrelating with authority figures, with anti-social behavior being triggered by the perception of negative constructive feedback and the belief authority figures outside the military hierarchy did not exhibit suitable and applicable training or were unprincipled in the execution of their duties (Glover-Graf et al., 2010). Veterans with psychological trauma continually eluded to what they believed to be potential triggering events, with delayed responses to current stimuli unrelated to previous experiences (Medley et al., 2017). The occurrence of PTSD was predominant among the female

demographic of student veterans who had served in combat, with little research iterating the reason why this was so (Schnurr & Friedman, 2008).

Though PTSD was attributed to lower academic performance and the suppression of motivation among student veterans and student service members, the choice to attend a supported educational environment was deemed an effective psychiatric and clinical protocol benefitting those students suffering from PTSD (Barry et al., 2012; Osborne, 2012). Osborne (2012) indicated research identifying the lack of supported educational interventions enabled those suffering from mental health disorders, specifically veterans, to be least likely to self-identify and obtain assistive technology and other accommodations at post-secondary institutions. Higher education administrators were aware many student veterans and student service members suffering from PTSD, general anxiety disorders, and depression elected not to seek professional help (Medley et al., 2017).

Intelligence levels were recognized as a fundamental variable in helping to determine the path of development and severity of PTSD (Barry et al., 2012). Higher intelligence levels among student veterans and student service members were deemed protective mechanisms offering some immunity from the debilitating effects of PTSD, with higher IQ's used as determinants to PTSD resiliency (Barry et al., 2012). The appreciation of life among student veterans and student service members equated to lower PTSD severity, with guilt and depression magnifying the acuteness of many mental disorders (Owens, Steger, Whitesell, & Herrara, 2009). There was little research regarding the function of trauma concerning PTSD and its possible relational parallels to the concept of the unconscious mind, as well as the comorbid effects of attention deficit (ADD) and

hyperactivity disorders (HAD) related to the mental health of student veterans and student service members (Kilborne, 2014; Shura, Denning, Miskey, & Rowland, 2017).

The dissimilar methods used in research concerning the effects of PTSD on individuals having relational experiences in the military made findings inconclusive (Fokkens et al., 2015). The diagnosis of PTSD as a singular disorder without comorbidity was exceptionally uncommon, with 80% of those diagnosed with PTSD exhibiting depression, anxiety, and substance abuse (Fokkens et al., 2015). One in three military personnel experiencing combat was diagnosed with PTSD, depression, and mild traumatic or traumatic brain injury (Barry et al., 2012). With only a small amount of information available concerning the health status of student veterans and student service members, higher education institutions were stagnated in their efforts to develop programs and strategies enabling the successful transition and integration of this demographic of student (Barry et al., 2012).

Quality of life (QoL). Quality of life was defined as the general level of contentment individuals had in relating to the general aspects of their lives (Martindale et al., 2016). Numerous influences on a veterans' quality of life were profoundly impacted by the invasive nature of PTSD, a leading disability noted to be diagnosed in service members and veterans, and often associated with service in Iraq and Afghanistan (Silverberg et al., 2017). Paraskevi (2013) argued the defining concept of QoL and its association to an individual's state of mind was problematic because of its multi-dimensional nature and the involvement of self-perceptions related to inner consciousness. Little was known about the effect PTSD had on the QoL of service members who served in combat (Vogt et al., 2016). Though the transitions of many veterans to civilian life proved successful,

these veterans found it difficult in acquiring monetarily gratifying employment, with QoL reduction similarly associated to substandard academic performance (Vogt et al., 2016).

Schnurr and Lunney (2008) emphasized a more profound understanding of PTSD and its relationship to QoL was necessary when facilitating the needs of the VA patient population. Reduced QoL attributed to the exacerbation of emotional distress and a student veterans' motivation to restrict their social and occupational roles (Silverberg et al., 2017). Symptom severity related to PTSD, depression, mTBI, and TBI were regarded as determinants related to the extent QoL was diminished, with additional comorbid variables influencing the reduction of QoL (Martindale et al., 2016). Substantial differences in QoL existed between male and female veterans, with evidence suggesting the QoL of female veterans was more greatly reduced, with little empirical evidence existing indicating why this was so (Schnurr & Lunney, 2008).

Post-traumatic growth (PTG). Post-traumatic growth referred to a positive psychological change resulting from a traumatic event (Benetato, 2011). Post-traumatic growth was characterized by increases of personal strength, renewed meaning of life, and improved personal relationships, with few studies examining the relationship between PTSD and PTG outcomes (Schuettler & Boals, 2011). It was unclear whether PTG was manifested as a mechanism for the purposes of avoiding and denying traumatic events (Schuettler et al., 2011). The researcher inferred that the manifestation and existence of PTG among student veterans and student service members may yield indications that these students can academically attain under the debilitating detriments of PTSD and similar psychological disabilities.

Moral disengagement. Moral disengagement described the constructs of personally manifested philosophies under which individuals convinced themselves ethical standards did not apply to them within specific situations or contexts (Bandura, 1999). Impulsive and acute shifts related to destructive behavior and their relationship to moral justification were pervasive in military conduct, with moral disengagement taking place gradually (Bandura, 1999). Bandura (1999) wrote the following:

> People may not recognize the changes they are undergoing. Initially, they perform milder aggressive acts they can tolerate with some discomfort. After their self-reproof has been diminished through repeated enactments, the level of ruthlessness increases, until eventually acts originally regarded as abhorrent can be performed with little personal anguish or self-censure. Inhumane actions become thoughtlessly routinized. (p. 12)

The engagement of harmful and destructive conduct was first justified morally by the individual engaging in such behavior, with most individuals, on the norm, not put in situational contexts requiring such justification (Bandura, 1999). The researcher inferred that moral disengagement may affect normal cognitive reasoning and carry over to a student veterans' or student service members' attempts at social transitioning and reintegration to civilian life and affect their abilities to academically attain.

Mild traumatic brain injury (mTBI). Mild traumatic brain injury referred to a traumatically induced physiological disruption of brain function and was labeled the predominant physical injury of military deployments in Iraq and Afghanistan (Combs et al., 2015; Kay et al., 1993). Data indicated 12% to 16% of military personnel deployed to combat zones sustained an mTBI (Combs et al., 2015). Mild traumatic brain injuries

resulted in cognitive deficiencies effecting the transition and integration of veterans in higher education (Daggett, Bakas, Buelow, Habermann, & Murray, 2013). The prevailing characteristic of mTBI and TBI was they were rarely non-comorbid, with severity being exacerbated by PTSD and depression (Brenner, O'Brien, Harwood, Filley, & James, 2009). The identification of military personnel requiring post-concussive blast treatment was convoluted by the clarification of specific symptomology (Larson, Kondiles, Starr, & Zollman, 2013). Strong disagreement persisted regarding the etiology, course, and treatment associated with the symptoms of mTBI following exposure to the concussive forces of high-pressure blasts (Peskind, Petrie, Cross, Pagulayan & McCraw, 2011). The lowest risk for cognitive impairment came from those military personnel who were confirmed with having mTBI, with no comorbidity related to PTSD or depression (Seal et al., 2016). Difficulties in cognitive retention and concentration were substantially connected to combat related mTBI (Seal et al., 2016). The symptomology related to mTBI following exposure to concussive blasts have, in most cases, resolved in weeks or months following injury (Seal et al., 2016). Helms and Libertz (2014) suggested some cases related to mTBI led to significant life-long impairment effecting individuals' ability to function physically, cognitively, and psychologically.

Traumatic brain injury (TBI). Traumatic brain injury referred to an injury causing the disruption of normal brain function induced by a bump, blow, jolt to the head, or penetrating head injury (Center for Disease Control, 2017). Blast overpressure has not been attributed to TBI (Hardcastle, 2015). Not all soldiers exposed to a concussive blast sustained a TBI (Helms & Libertz, 2014). Data related to the total number of military personnel suffering from the effects of TBI may be three times higher than officially

reported, with TBI being difficult to identify because of the coinciding effects of other detriments (Hardcastle, 2015). The distinct symptomology of TBI unconnected to other detriments were headaches, complications associated with balance and coordination, and irregularities in eye-tracking (Hardcastle, 2015).

Smee, Buenrostro, Garrick, Sreenivasan, and Weinberger (2013) insisted the rigorous and demanding cognitive requirements associated with academic work resulted in cognitive fatigue and academic failure among those suffering from TBI. Many veterans suffering from TBI reported mental and physical exhaustion and long recovery times following extreme periods of concentration associated to academic work (Smee et al., 2013). The predominant psychological issues concerning TBI were the degradation of cognitive and behavioral functions (Bush et al., 2010). Misguided acuity to individual strengths and challenges was not uncommon among those affected by TBI, causing student veterans to pursue unrealistic goals without the ability to distinguish between desired ambitions and their present inabilities to successfully attain them (Bush et al., 2010). Mental processing speeds, mental flexibility, and loss of memory were identified as common characteristics of TBI (Smee et al., 2013). Bandura (1996) stated difficulties related to attention threatened one's ability to self-regulate.

Psychological and social theories.

The researcher inferred psychological and social theories were the prudent and predominant paradigms for the conceptual framework regarding this study. This section will begin with a description of perceived self-efficacy and its importance to individual academic attainment. This will be followed by a synopsis of the social learning theory describing how individuals are producers of their own experiences and creators of their

own events. The social learning theory will delineate how others learn and develop characteristics of those they observed. Maslow's hierarchy of needs will define the basic human necessities required to reach self-actualization and psychological health. The motivation systems theory (MST) and intrinsic motivation will be residual topics related to Maslow's theory. This section will conclude with Schlossberg's transition theory and its importance to the integration and social/psychological assimilation of student veterans and student service members in academic settings.

Perceived self-efficacy. Self-efficacy was deemed a determinant regarding motivation and academic achievement while being viewed as an important and fundamental component in the learning process (Alt, 2013). Important elements associated to self-efficacy were an individual's personal belief in themselves to reach designated levels of performance, their ability to motivate themselves, and the ability to regulate emotions and thought through the expression of their own self-concept, with influences coming from the surrounding environment and the dominance of existing intrinsic values (Bandura, 1994; Cherian & Jacob, 2013; McEacheron & Gustavsson, 2012). Traditionally, self-efficacy was related to academics and correlated to performance in the classroom, depth of involvement with academic content, academic outcomes, and stress (Brannick, Miles, & Kisamore, 2005).

Personality traits governed by self-perception were used to describe individual differences in behavioral patterns in people (Fosse et al., 2015). There was a strong relationship between the existence of individual self-efficacy and personal perceptions regarding the meaning of life and QoL (Blackburn & Owens, 2015). Levels of individualistic pre-existing knowledge related to the preponderance of self-efficacy and

self-concept was a determinant in the abilities of people to effectively interpret conditional relationships between events, enabling individuals to control events of intrinsic importance (Bandura, 1989). Persons exhibiting low self-efficacy recoiled from demanding and arduous tasks, with difficulty levels being a determining variable hindering success and viewed as a perceptive threat (Bandura, 1994).

The singular motivation of an individual through self-efficacy was established through cognitive activity, with forethought concentrating on expectancy values, intrinsic interests, and the anticipation of future events not effecting current motivation or action (Bandura, 1989). Bandura (1977) found expectation derived from efficacy deviated by magnitude (difficulty) of a task, generality (mastery expectations), and strength (the intensity of the expectation). Expectation was not considered the universal force driving motivation and performance (Bandura, 1977). The two significant approaches to measuring perceived self-efficacy were through the appraisal of personal aptitudes to complete tasks within a group and evaluation concerning the efficacy of the group itself (Bandura, 2000).

A normal high level of perceived self-efficacy was a crucial determinant regarding individual resiliency to trauma (MacEacheron & Gustavsson, 2012). Individuals with high self-efficacy saw the confrontation of misfortune as a mastery task, focused on individual attributes, and were more resilient to setbacks (MacEacheron & Gustavsson, 2012). Peer support among veterans helped to bolster self-efficacy in others through examples set by fellow veterans who demonstrated self-efficacious coping skills, giving credence to the social learning theory derived from the premise individuals learned from observing others (MacEacheron & Gustavsson, 2012). Shared life experiences were

paramount concerning peer support perpetuating empathy, dependability, and safety in helping relationships among veterans and service members (MacEacheron & Gustavsson, 2012).

The social cognitive theory. The social cognitive theory referred to an agentic perspective recognizing individuals as their own producers of personal experiences and creators of their own events, with environmental, behavioral, and personal agentic variables mutually affecting one another through causation (Bandura, 1999). Bandura (1999) believed the direction and meaning of life were embellished through accomplishment and the attainment of goals by means of cerebral, sensory, and motor systems. According to Bandura (1999), the human environment was structured under three predominant domains: (1) the imposed environment: (2) the selected environment; and (3) the created environment (Bandura, 1999).

Social systems were identified as predominant catalysts to human adaptation and change (Bandura, 1999). Human behavior was not singularly influenced by socio-structural or psychological factors, but through social structures affecting psychological mechanisms producing behavioral outcomes (Bandura, 1999). Bandura (1999) stated, "Economic conditions, socio-economic status, and family structure affect behavior through their impact on people's aspirations, sense of efficacy, and other self-regulatory factors rather than directly" (p. 24).

The social cognitive theory was a theoretical model describing individuals as agents of their own functioning and life's circumstances (Bandura, 2003). Resiliency to adversity and hardship was contingent on personalized enablement rather than a need to seek out socio-structural sanctuary (Bandura, 2003). The agentic perspective in the social

cognitive theory stressed enablement that, in turn, furnished the psychological and environmental assets needed to nurture aptitudes and create environments supporting progressive adaptation (Bandura, 2003). The researcher inferred that through the development of aptitudes, the self-efficacious behaviors of student veterans and student service members in higher education, who suffer from service-connected disabilities, could be embellished.

The social learning theory. The social learning theory was based on the concept human beings learned from their interactions with others in a societal context and developed the similar behaviors of those observed (Nabavi, 2012). The attributes most often associated with the social learning theory was through identification and modelling and the transformation of thought patterns, feelings, or actions of another person who served as a model (Bandura, 1969). Identification and modelling were most commonly derived from a specific attribute of the model, with a distinguishable and unique behavioral antecedent acting as the defining motivation of identification (Bandura, 1969). Imitation was not descriptive or indicative of the social learning theory in that imitation was done discreetly, with identification done amenably (Bandura, 1969). The researcher inferred that student veterans and student service members could learn positive behaviors through the examples set by others which may result in the manifestation of constructive attributes positively effecting educational outcomes.

Maslow's hierarchy of needs and self-actualization. Self-actualization referred to the process involved in fulfilling one's potential, with self-actualization being determined through an all-inclusive psychological analysis of an individual (Francis & Kritsonis, 2006; Rouse, 2004). There was an essential supposition in American psychology

emphasizing the concept of individuality as an unquestionable norm, with individuality defining one's uniqueness and place in the social and ecological structure (Francis & Kritsonis, 2006). Maslow believed self-comprehension of characteristics correlated to personality and enabled specific value adaptations, with self-actualization leading to a comprehension of the basic yet fundamental knowledge of human nature (Francis & Kritsonis, 2006). The theory of self-actualization was considered a stimulus in adult education and deemed as a progressive focus on personal interests or needs while advocating personal autonomy and social progress (Francis & Kritsonis, 2006). Rouse (2004) suggested Maslow himself believed few individuals rarely attained self-actualization.

Lester et al. (1983) recognized Maslow's work as a proposed classification of human needs consisting of psychological, safety and security, belongingness, esteem, and love resulting in psychological health being attained through self-actualization. Complex needs could not be fulfilled until the least complex needs were satisfied, with psychological health being attained only when these needs were met (Lester et al., 1983). The less psychological needs were met, the more psychologically disturbed an individual was (Lester et al., 1983). The researcher inferred the educational outcomes of student veterans and student service members could be related to the fulfillment of the basic psychological and material needs advocated by Maslow.

Motivational systems theory (MST). Maslow's hierarchy of needs was attributed to the fulfillment of basic needs, giving rise to the motivational systems theory (MST) and serving as a supplement to Maslow's theory (Rouse, 2004). This alternative hierarchy included: (1) affective goals such as entertainment, tranquility, happiness, bodily

sensations, and physical well-being; (2) cognitive goals pertaining to explorations, understanding, intellectual creativity, and positive self-evaluation; (3) subjective organizational goals correlating to unity and transcendence; (4) self-assertive social relationship goals relating to individuality, self-determination, superiority, and acquisition; (5) integrative social relationship goals specifying association to belongingness, social responsibility, equity, resource provision; and (6) task goals influencing mastery, task creativity, management, material gain, and safety (Rouse, 2004). The motivational systems theory provided a multitude of motivational means to enhance inspiration, creating more avenues to achieve goals, allowing for the conception of one goal, and stimulating a more intense motivational experience (Rouse, 2004). Through a use of MST, goals were more readily identified and aligned with goals associated to alliances (Rouse, 2004). The researcher posited the inference MST identified directly or residually the dependent variables related to this study; transitioning, integration, social learning, social cognition, perceived self-efficacy, and QoL. MST is a supplement to Maslow's hierarchy of needs. According to Rouse (2004) psychological health is dependent on fulfilling basic needs before other variables affecting learning can be addressed.

Intrinsic motivation. Post-secondary students were typified as learners who thrived on the accomplishment of discovery, with andragogical doctrine advocating adult learners were motivated by understanding the why, what, and how of learning (Leggette, Black, McKim, Prince, & Lawrence, 2013). The period between 2001 and 2016, saw increased interest and research related to the emotions of learners in academic settings, with inferences made by psychologists and academia suggesting emotions were

steadfastly correlated to essential learning variables, including self-regulated learning and perceived control and value (Hall, Sampasivam, Muis, & Ranellucci, 2016). Froiland et al. (2012) implied the overall theme of motivation consisted of many varieties, with non-motivation being defined as the lack of intent to act, extrinsic motivation expressed through the avoidance of punishment to gain external reward, interjected regulation manifesting internal pressures influencing success, identified regulation enabling individuals to recognize the significance of worth in the development of behavior or competencies, and intrinsic motivation stimulated by inherent benefits.

Achievement goals in education were predominantly guided and influenced by mastery goals helping one to determine a desire to learn, comprehend and solve problems, attain additional comprehension skills, and increase mastery of tasks (Cohen, Darnon, & Mollaret, 2017). Performance goals were primarily associated with the internal need to out-perform peers (Cohen et al., 2017). Cohen et al. (2017) stipulated mastery and performance goals were essential for success in post-secondary education, with mastery goals being the only socially desirable trait. Mastery goals were representative of persistence, a positive presentation of work, greater contribution to activities, and meaningful and positive relationships with peers (Cohen et al., 2017). Performance goals alone ascribed a negative depiction of work, surface learning, cheating, and competitive peer relationships (Cohen et al., 2017). Stimuli other than the ability to academically attain and achieve inspired educational practices advocating an emphasis on a high sustainable motivation to learn (Depasque & Tricomi, 2015; Spinath & Steinmayr, 2008). Intrinsic motivation and goals were hypothesized to stimulate psychological security, enabling individuals to satisfy basic psychological needs during

their quest for goal attainment (Vansteenkiste et al., 2004). According to Leggette et al. (2013) the fulfillment of basic psychological needs advocated by Maslow and the manifestation of meaningful and constructive intrinsic values have been correlated to positive outcomes regarding the successful educational attainment of student veterans and student service members in higher education.

Schlossberg's transition theory. Schlossberg's transition theory was based on individual perceptions related to events or non-events, with events bringing about changes in relationships, routines, assumptions, and roles (Evans, Forney, & Guido-DeBrito, 1998). There were certain considerations observed when applying Schlossberg's model concerning the type of events or non-events individuals encountered, the context of such events, and their impact on the individual (Evans et al., 1998). Context referred to the individual's relationship to the transition and the environment where situations took place (Evans et al., 1998). Impact was related to the extent an event or non-event transformed one's daily living (Evans et al., 1998). Schlossberg identified three types of transitional scenarios: (1) anticipated transitions occurring predictably such as the birth of a child; (2) unanticipated transitions not predicted or scheduled such as death or divorce; and (3) non-events; the expected occurrences of events not happening such as failure to be admitted to a graduate school (Evans et al., 1998).

Evans et al. (1998) identified four discernible features manipulating an individual's ability to manage transitional diversity. These features are: (1) situation, referring to the trigger, the timing, the ability to control certain aspects of the situation, role-changes perpetuating the perception of gain or loss, duration, experiences with similar past

transitions, concurrent stress, and assessment of who or what was responsible for the transition; (2) self, referring to socio-economic status, gender, age, stage of life, and stage of health; (3) social supports such as intimate relationships, family, friends, institutions, and communities; and (4) strategies modifying the situation, controlling the meaning of the problem, and managing stress levels (Evans et al., 1998). Schlossberg's model identified wide-ranging aspects of life-transitions that could be applied as a viable agenda by some academic counselors to assist veterans' transitions and integrations to higher education (Ryan et al., 2011). Schlossberg's model complimented the enablement of student veterans and student service members, allowing for a greater sense of control and hopefulness related to their transitions (situation); helping in the emergence of academic motivation, inspiration, individual uniqueness, and aptitudes (self); aiding in identifying, maintaining, and utilizing support networks (support); and assisting in the development and employment of effective coping strategies (strategies) (Ryan et al., 2011).

According to Schiavone and Gentry (2014) some academic counselors in higher academic settings encouraged all student veterans and student service members to integrate fully by embracing the entire academic community, as veterans had tendencies to associate exclusively with other veterans. Schiavone and Gentry (2014) found an inability to connect with the total academic environment encompassing those experiential differences and backgrounds increased attrition rates of some veterans on college and university campuses. Griffin and Gilbert (2015) emphasized counseling services provided by higher education be staffed by those who were specifically trained in dealing with veterans.

The individual efforts made by student veterans and student service members to willingly transition, integrate, and assimilate in higher academic environments might only be possible if academic institutions develop sustainable protocols related to the independent and dependent variables most suspected of affecting success rates in higher education. Through the recognition of a hierarchical taxonomy emphasizing the most dominant detriments affecting student veterans and student service members in post-secondary education, the survivability and viability of these students may become more predictable. With this, there is an emphasis placed on the accountability of all stakeholders in effectively aiding in the successful educational attainment of student veterans and student service members in higher academia.

Summary

Topical analysis of the literature iterating the independent and dependent variables related to this study, the inconsistencies in data correlated to the success rates of student veterans and student service members, and the need for research-based protocols assisting veterans in post-secondary education were the central premises of this study. The manifestation of the conceptual framework evolved from three central themes: (1) the academic environments and challenges student veterans and student service members encountered while trying to achieve transitionally and academically; (2) the physical and psychological independent variables affecting academic achievement identified as PTSD, depression, mTBI, and TBI; and (3) the dependent variables of transition, integration, social learning, social cognition, quality of life, and perceived self-efficacy. Many of the psychological and social theories discussed in this chapter may have a profound effect on the educational attainment of student veterans and student service members and their

abilities to academically attain in higher education. Chapter Three will describe a mixed methods correlational study, and how the methodology will be used to address the research questions.

Chapter Three: Methodology

Chapter Three categorized and described the protocols developed in this research to answer the research questions and support or refute the hypotheses. The chapter will begin with an overview of the problem and its correlation to the purpose of the study. Reiteration of the research questions and their related hypotheses will follow. The research design portion of this chapter will provide support for why a mixed methods correlational study was chosen to investigate this topic. Justification for population and sampling size will precede an explanation of how the instrumentation was conceived, with reasoning ascribing to its rationale and validity. A detailed description of the data collection process, data analysis, procedural protocols related to ethical considerations, and summary will conclude Chapter Three.

Problem and Purpose Overview

The significant problem influencing the conceptualization of this research was the inconsistency, unreliability, and unavailability of data used to assess the success rates of student veterans and student service members in higher academics. The lack of consistent, reliable, and available data may have suppressed higher academics' ability to establish research-based protocols associated to addressing the needs of student veterans and student service members in post-secondary education. The purpose of this research was to identify dependent and independent variables and their correlation to the academic attainment of student veterans, with the identification of these variable sets leading to a hierarchical taxonomy.

The researcher identified four dominant independent variables and six dominant dependent variables suspected of affecting student service members' and student

veterans' academic performance. The four dominant independent variables realized by the researcher were: a) post-traumatic stress disorder (PTSD); b) depression; c) mild traumatic brain injury(mTBI); and d) traumatic brain injury (TBI). The six dominant dependent variables suspected of most frequently being affected by the independent variables were: a) transitioning; b) integration; c) social learning; d) social cognition; e) QoL; and f) perceived self-efficacy. A hierarchical taxonomy of independent and dependent variables may enable the creation of more effective protocols addressing the effectual empowerment of student veterans and student service members in their journeys toward educational achievement and academic attainment.

Research Questions and Hypotheses

Research Question 1: What were the predominant variables related to student veterans' success in higher education?

Null Hypothesis 1: Depression was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 1: Depression was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 2: Post-traumatic stress disorder was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 2: Post-traumatic stress disorder was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 3: Mild traumatic brain injury was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 3: Mild traumatic brain injury was an independent

variable not affecting student veterans' success in higher education.

Null Hypothesis 4: Traumatic brain injury was an independent variable affecting student veterans' success in higher education.

Alternate Hypothesis 4: Traumatic brain injury was an independent variable not affecting student veterans' success in higher education.

Null Hypothesis 5: The ability of student veterans to transition into higher academic settings, was a dependent variable affected by PTSD, depression, PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 5: The ability of student veterans to transition into higher academic settings, was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 6: The ability of student veterans to integrate into higher academic settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 6: The ability of student veterans to integrate into higher academic settings, was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 7: The social cognitive ability of student veterans in higher academic settings, was a dependent variable affected by PTSD, depression, TBI, and/or mTBI.

Alternate Hypothesis 7: The social cognitive ability of student veterans in higher academic settings, was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 8: The social learning ability of student veterans in higher

academic settings, was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 8: The social learning ability of student veterans in higher academic settings, was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 9: The perceived self-efficacy of student veterans in higher academic settings, was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 9: The perceived self-efficacy of student veterans in higher academic settings, was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Null Hypothesis 10: The quality of life of student veterans in higher academic settings, was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

Alternate Hypothesis 10: The quality of life of student veterans in higher academic settings, was a dependent variable no affected by PTSD, depression, mTBI, and/or TBI.

Research Question 2: What was the hierarchical order of independent variables related to student veterans' success in higher education.?

Null Hypothesis 11: A hierarchical order of independent variables related to student veterans' success in higher education does exist.

Alternate Hypothesis 11: A hierarchical order of independent variables related to student veterans' success in higher education does not exist.

Research Question 3: What was the hierarchical order of dependent variables related to student veterans' success in higher education?

Null Hypothesis 12: A hierarchical order of dependent variables related to student veterans' success in higher education does exist.

Alternate Hypothesis 12: A hierarchical order of dependent variables related to student veterans' success in higher education does not exist.

Research Design

This was a mixed methods correlative study. The mixed methodology of the research relied on data of a quantitative and qualitative nature. Qualitative data was based on inferences made from the literature review as they related to the independent variables of PTSD, depression, mTBI, and TBI, and the dependent variables of transitioning, integration, social learning, social cognition, QoL, and perceived self-efficacy. Quantitative correlations were made to determine how the independent and dependent variables related to one another and helped in determining a hierarchical taxonomy of both variable sets. The qualitative and quantitative data was used to determine if a hierarchical order of both variable sets existed.

According to Fraenkel, Wallen, and Hyun (2015) correlational research has been used to determine the degree quantitative variables may be related. This correlational study was comparing two variable sets-independent and dependent. The validity of the research itself was measured by the inferences made from the literature concerning inconsistent data linked to the success rates of student veterans in higher academics, the inability of higher education to develop valid research-based protocols, and the consistent inferences made in the literature regarding predominant dependent and independent

variables and their relationship to one another. Fraenkel, Wallen, and Hyun (2015) stated, "Validity has been defined as referring to the appropriateness, correctness, meaningfulness, and usefulness of the specific inferences researchers make on the data they collect" (p. 149). With respect to this research, precursory inferences were made using qualitative data identified through the literature review. Reliability of the research instrument was dependent upon its brevity and comprehensiveness allied to the subject. According to Fraenkel, Wallen, and Hyun (2015) content-related evidence of validity referred to the appropriateness of the content, its comprehensiveness, the ability of the instrument to adequately address the intended variables, and the content and format of the instrument. The research instrument was content-specific, brief, and addressed all dependent and independent variables related to the study.

Population and Sample

The population represented in this research was a non-random typical sample in a specific category. This sample was typical because it represented the population of interest (military veterans), and specific because student veterans were selected to be surveyed due to having a minimum of one college semester and deployment to combat zones. The sampling size for this study was contingent on the research methodology chosen. According to Fraenkel, Wallen, and Hyun (2015) a sample size of 50 was required for a correlational study to establish a relationship between variables. Non-random samples were defined as members of a population who did not have an equal chance at being chosen (Fraenkel, Wallen, & Hyun, 2015). The unit of analysis were former United States military personnel in a post-secondary environment.

Student veterans from Drury University who have completed a minimum of one semester of post-secondary work, and who have had previous combat experience, was the representative sample. This sample was identified by a designated representative of Drury University. The specific unit of analysis was a higher education environment. Both male and female respondents meeting the sample requirements were eligible to participate in the research. Respondents were recruited by a recruitment letter composed by the researcher (see Appendix D). IRB approval was given by Drury University (see Appendix F).

Instrumentation

The research instrumentation conceived for this study was based on qualitative data identified through the literature review and the general and universal symptomology related to the independent variables of PTSD, depression, mTBI, and TBI, and the dependent variables of integration, transitioning, social learning, social cognition, QoL, and perceived self-efficacy (see Appendix A). The collective purpose of the instrument was to correlate independent and dependent variables using qualitative and quantitative methodology. The precursory concept of the instrument was developed through known qualitative data and inferences proposed by the researcher which were related to the dependent and independent variables correlated to the ability of student veterans' abilities to succeed in post-secondary education. The instrumentation was designed in three parts: 1) Through direct questions correlated to inferences related to the dependent variables using qualitative data; 2) Questions addressing the independent variables of PTSD and depression derived from the Diagnostic and Statistical Manual of Mental Disorders: DSM-5 (American Psychiatric Association, 2013); and 3) Questions addressing the

independent variables of mTBI and TBI derived from universal symptomology, with the intent of showing possible relationships between both variable sets. Reliability of the survey was dependent on its specificity, meaningfulness, and brevity. Additionally, by showing qualitative inferences and a correlative relationship between both variable sets, the researcher attempted to show a quantitative relationship using percentages, with percentages identifying comorbidity within independent variables.

The instrumentation will address three research questions. The first research question pertained to what the predominant variables were affecting student veterans' abilities to academically achieve and attain in higher education. The variables associated to question one was the independent variables of PTSD, depression, TBI, and mTBI, and the dependent variables of transitioning, integration, social cognition, social learning, perceived self-efficacy, and quality of life. Question two addressed what the hierarchical order was for the independent variables affecting student veterans' abilities to academically achieve and attain in higher academia. Question three addressed what the hierarchical order was for the dependent variables affecting this demographics ability to academically achieve and attain in a post-secondary environment. The instrumentation consisted of 23 quantitative questions and one qualitative question.

Data Collection

The following protocols were followed for collecting data for this research. The first protocol was to make initial contact with Drury University in St. Robert, Missouri (see Appendix C). Drury University required the submission of an IRB to conduct research on their site. A Lindenwood University prospectus with research survey (see Appendix A) and Drury University IRB form were submitted to Drury for final approval. Drury

University required a disclaimer with submission and distribution of the research instrumentation (see Appendix B). The disclaimer emphasized to respondents that participation in the research was strictly voluntary, that respondents did not have to answer all survey questions, and that respondents could terminate the research under their own discretion at any time.

Following the presentation of the research proposal to the dissertation chair and committee members at Lindenwood University, the Lindenwood IRB was submitted for approval. Upon approval of the Lindenwood IRB, the research instrumentation was delivered to the designated representative of Drury University for distribution to respondents. Respondents for this research represented a typical sample in a specific category. Respondents were student veterans who were required to have completed one semester of post-secondary education and one tour of duty in a combat zone. Before the survey was administered to the respondents, the designated representative of Drury University distributed the qualifying requirements to take the survey. Potential respondents identifying themselves as those who did not meet the mandatory requirements were not allowed to take the survey.

Upon individual completion of each survey, the respondent delivered the survey to the designated representative of Drury University. The designated representative placed each completed survey in an individual envelope. Once surveys were completed, all envelopes were placed in a large envelope which was sealed and taped. After completion of all surveys, the designated representative of Drury University contacted the researcher to take possession of the surveys. After data analysis, the researcher kept all completed

survey instrumentation in a locked filing cabinet for three years per Lindenwood University policy.

The following assumptions were accepted and given consideration during the valuation of the raw data collected from the respondent surveys. The first assumption was all respondents answered truthfully and consistently to questions posed regarding their combat experience(s), educational experience(s), and disabilities. All respondents were required to have at least one deployment to a combat zone and one semester of post-secondary experience. The second assumption was some respondents had psychological disabilities not related to military service or combat, with pre-existing psychological disabilities embellished by military service. The third assumption was respondents answered all questions with complete objectivity due to confidence in their anonymity and willingness to constructively participate. The fourth assumption was all respondents were of a typical sample in a specific category consisting of former military personnel in a post-secondary environment. Chapters Four and Five will present the analysis and conclusions of the research, with the assumptions presented contextually, and all attempts being made at prescribing the relationship of the assumptions to the inferences made by the researcher.

Data Analysis

Analysis of qualitative data was made through inferences proposed by the researcher via the literature review of this research. Through the literature review, the researcher discovered dominant independent and dependent variables correlating to student veterans' and student service members' abilities to academically attain (Bandura, 1969; Bandura, 1977; Bandura, 1996; Lester et al. 1983; Rouse, 2004; Ryan et al. 2011). The

rationale for this discovery will be discussed further in Chapter Four, with conclusions relating to this rationale made in Chapter Five.

The quantitative data collected from this study was analyzed using percentages, with the sample size denoted as n=50. Quantitative data based on percentages signified by the responses of the research instrumentation allowed for the correlation between independent and dependent variable sets, the possible existence of a hierarchical order of both variable sets, and the possible presence of comorbidity between the independent variables. For the purposes of anonymity, respondents were designated by numbers in the order their surveys were received by the researcher.

The following limitations were identified in this study and given consideration during the valuation of raw data collected from the respondent survey. The first limitation was the unavailability of official data. Post-secondary institutions were not mandated by federal or state governing entities to compile data reflecting success and fail rates of student veterans and student service members. The researcher made inferences based on qualitative data previously identified in the literature review. The availability of qualitative and quantitative data regarding the successes and failures of this demographic of student had no effect on the independent and dependent variables proposed in this research. The lack of official data may have had bearing on whether post-secondary venues instituted sound protocols based on success and fail rates which may have hindered this student population's ability to academically attain.

The second limitation of this research was the availability of sites willing to sponsor research of a controversial nature and subject their student populations in remembering difficult and traumatic events. Though many extension campuses existed throughout the

state of Missouri, few were in proximity of military installations where the availability of student veterans subsisted. Drury University in St. Robert, Missouri maintained a reputation of hosting many veterans in the area.

The third limitation of this research was the instrumentation. The instrumentation was designed by the researcher through inferences discovered in the literature review, with validity based on these inferences and their applicable nature to each survey question. Although every attempt was made to design a thorough questionnaire encompassing every possible, imagined, and inferred variable, anomalies and thoroughness in design may have existed due to causal variations regarding additional independent and dependent variables. Causal variations may have affected the correlative relationships between both variable sets. Additional causal variations may have derived from the possible existence, yet unavailability, of formal or specific data unknown to the researcher. The specificity and brevity of the instrumentation did not allow respondents to contradict themselves through redundant questioning due to the identification of specific dependent and independent variables and their use in an exclusive contextual manner regarding the educational attainment of student veterans in higher education.

The fourth limitation of this research was the possibility of excessive non-responses by participants which limited the accumulation of raw data and altered the researcher's ability to make qualitative and quantitative conclusions. In the event of excessive non-responses, the researcher may have made considerations for redistributing the survey instrumentation until viable and conclusive data was amassed. Chapter Four and Five will present the analysis and conclusions of the research, with the limitations presented

contextually, and all attempts being made at prescribing the relationship of the limitations to the inferences made by the researcher.

The fifth limitation of this research was influenced by institutional protocols at Lindenwood University. These protocols limited the researcher's ability to survey both veterans and active duty military personnel. Student veterans were the singular focus regarding the accumulation of qualitative and quantitative data via the research instrument. Because of this, the researcher was unable to make correlations related to how service members simultaneously adapted to multiple social and cultural environments.

Ethical Considerations

Representatives of Drury University will be conducting the survey protocol. The researcher will have no demographic information related to respondents or see the surveys being completed. A disclaimer and informed consent document will be read before respondents begin the survey. Surveys will be sealed in a manila envelope after completion. All data collected was for the express purpose of determining the hierarchical order of the independent and dependent variables related to the research. Once surveys were in the possession of the researcher, they remained secured in a locked filing cabinet in the researcher's home. After three years, the surveys will be destroyed per Lindenwood policy. The researcher has taken the National Institute of Health certification training and was aware of the procedures for anonymity and conduct of professional ethics (see Appendix E). Any information conveyed regarding the data contained within this dissertation will be done during its defense via the dissertation committee and through its publication in EBSCO.

Summary

Discussed in Chapter Three was a brief statement regarding the premise of the research and the protocols used in proving or disproving the hypotheses related to the independent and dependent variables affecting student veterans' success rates in higher education. Research design describing a mixed methods correlative study, non-random sampling, instrumentation describing the design and rationale for the research instrumentation, and the protocols for data collection were all thoroughly discussed. Chapter Three concluded with a description of protocols used in data analysis, ethical considerations for maintaining anonymity, and summation.

Chapter Four will begin with a brief synopsis of the study and a description of the research instrument used. A description of how the data was presented will follow. An overview of the independent and dependent variables related to the study, the results of quantitative and qualitative analysis, and summary will conclude Chapter Four.

Chapter Four: Analysis

A mixed-methods research instrument consisting of 23 quantitative questions and one qualitative question was distributed to 50 respondents at Drury University. The first three questions were related to general demographics, with three questions related to high school grade-point averages (GPA's), pre-deployment post-secondary GPA's, and post-deployment post-secondary GPA's. Eleven questions were related to transitioning, integration, social cognition, social learning, quality of life (QoL), and perceived self-efficacy, with one quantitative question related to post-traumatic stress disorder (PTSD), depression, mild traumatic brain injury (mTBI), and traumatic brain injury (TBI). Five questions were related to the symptomology of PTSD, depression, mTBI, and TBI. There was one qualitative question asking respondents how military service affected students' post-secondary educations. All participants in the research served in Iraq and/or Afghanistan were veterans of the United States armed forces and presently pursuing post-secondary educations.

The purpose of this study was to identify those variables associated with the educational attainment of student veterans in post-secondary education. The researcher discovered four independent and six dependent variables influencing the success rates of this demographic of student. The four independent variables were PTSD, depression, mTBI, and TBI. The six dependent variables were transitioning, integration, social cognition, social learning, quality of life, and perceived self-efficacy. The literature review in Chapter Two showed inconsistent data regarding the success rates of student veterans and student service members in higher education. Inconsistent data may have erroneously influenced the establishment and implementation of assistive protocols

designed to help students in educational attainment and success. The correlating purpose of this study was to define the independent and dependent variables as they related to the success rates of student veterans to assist higher education institutions in establishing refined parameters for protocols designed to support these students. The residual correlative purpose of this research was to establish a taxonomy of the independent and dependent variables influencing the parameters used in establishing assistive protocols. The following were the research questions which guided this study:

Research Question 1: What were the predominant variables related to student veterans' success in higher education?

Research Question 2: What was the hierarchical order of independent variables related to student veterans' success in higher education?

Research Question 3: What was the hierarchical order of dependent variables related to student veterans' success in higher education?

The quantitative data in this research was represented using percentages and bar graphs. Percentages were used to establish a hierarchical order of the independent variables. Quantitative responses were correlated to information already established in the literature review. Qualitative data was represented using excerpts from the respondents in quote form.

General Demographics

The sample for this study included 50 participants. The respondents consisted of 30 males and 20 females. The median age of all respondents was 33. The median time in service was 4.5 years of active military service. The variables of hyper-activity and

attention deficit disorders were taken into consideration when analyzing the data for this research.

Hyper-activity/attention deficit disorder.

The pre-disposition of hyper-activity and attention deficit in student veterans were regarded as non-service and non-combat related impairments that influenced the educational attainment of many veteran and non-veteran post-secondary students. The existence of hyper-activity and attention deficit in veterans could have corrupted the responses to questions that were specifically linked to combat related detriments. Hyper-activity and attention deficit disorders were variables unrelated to the independent variables of PTSD, depression, mTBI, and TBI. ADHD was considered in this research due to their possible residual effect on post-deployment post-secondary grade-point averages. ADHD was discounted as determining variables influencing the conclusions of the research questions.

The pre-existence of hyper-activity and attention deficit disorders may have accentuated the presence of depression, PTSD, mTBI, and TBI. In this study, the presence of ADHD was considered when evaluating the validity of data related to service-connected independent variables and their relationship to the dependent variables associated to student veterans' academic attainment. The researcher found it necessary to consider and incorporate any variables not service-connected or combat related which may have influenced data concerning the independent and dependent variables associated to the success rates of this demographic of student. Hyper-activity and attention deficit disorders were fundamental variables affecting students at all education levels. This was the rationale for their consideration in this research. The following self-reported data was

based on a sample size of *n*=50, with 100% of the respondents associated with this study given an opportunity to answer (see Figure 1). Two percent of the respondents in this study had experienced both hyper-activity and attention deficit. Twenty-six percent of these respondents indicated a pre-disposition to ADD, with 66% of respondents identified as having no pre-disposition to either ADHD.

Figure 1. Veterans Indicating a Pre-Disposition to Hyper-Activity/Attention Deficit Disorders

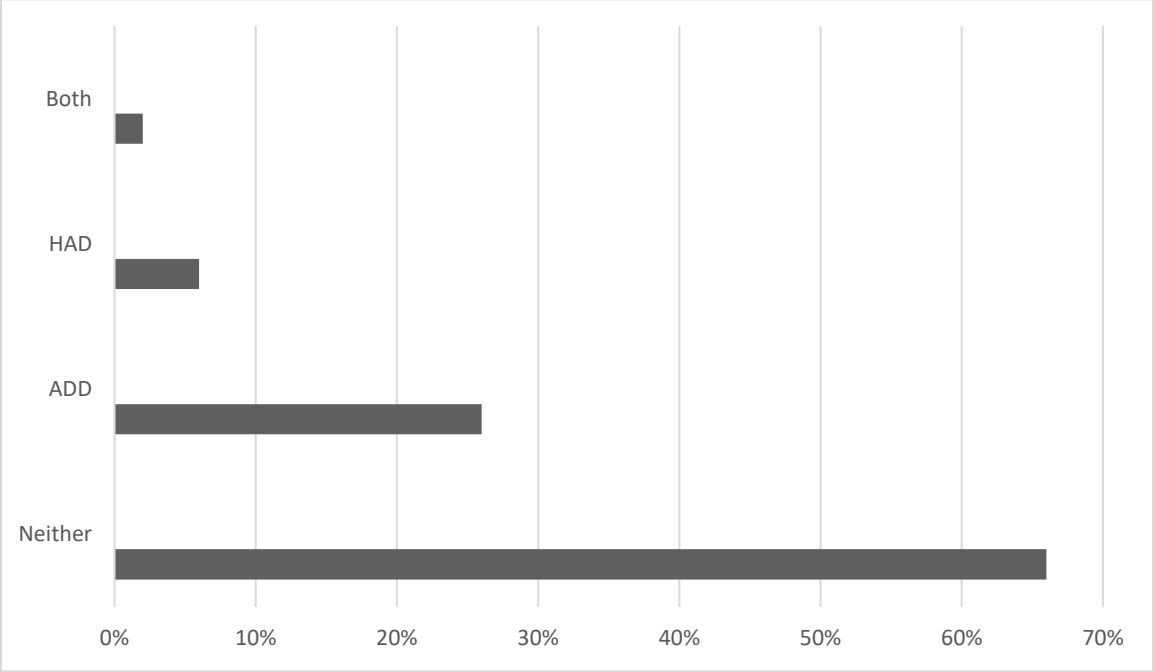

Figure 1. This graph showed data related to the pre-disposition of hyper-activity and attention deficit disorders. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Grade-point averages.

High school grade-point averages.

In this study, the researcher included correlations between high school grade-point averages, pre-deployment, and post-deployment post-secondary grade-point averages (see Figures 2 through 4). PTSD resiliency indicated by high school grade-point

averages could not be determined in post-secondary academic environments unless those individuals with PTSD undertook post-secondary endeavors.

Self-reported grade-point averages from high school and the grade-point averages from pre-deployment, and post-deployment post-secondary work were the deciding factors influencing the conclusions regarding the research questions. Although the researcher posited the failure or success of attaining a post-secondary degree was not an adequate indicator of student veterans' success, grade-point averages did serve as an indicator to determine whether student veterans transitioned and adapted to their post-secondary environments, learned, and gained exclusive and applicable knowledge being of some intrinsic value to the learner. The following self-reported data was based on a sample size of n=50, with 100% of the respondents associated with this study given the opportunity to answer. Thirty-two percent of respondents indicated they maintained a high school grade-point average between 4.0 and 3.4, with 54% of respondents indicating a high school grade-point average between 3.3 and 2.4. Fourteen percent of respondents indicated high school grade-point averages between 2.3 and 1.4 (see Figure 2).

Figure 2. High School Grade-Point Averages of Veterans

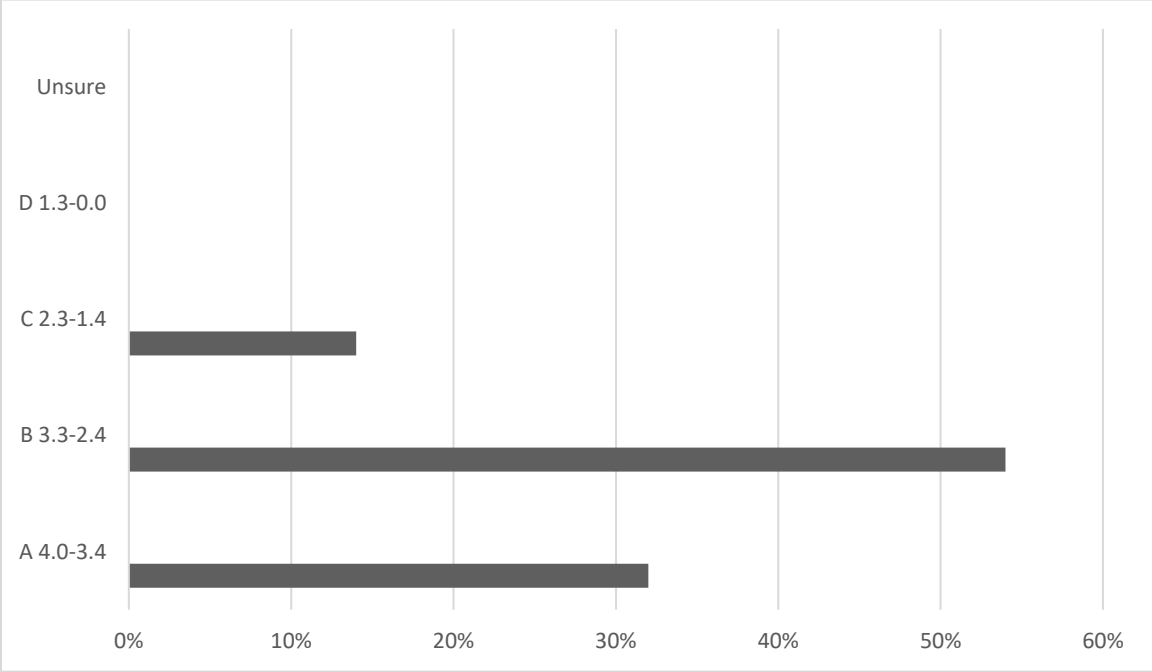

Figure 2. This graph denoted the high school grade-point averages of student veterans before entering military service. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Pre-deployment post-secondary grade-point averages.

The results from the survey indicated the self-reported grade-point averages of veterans in post-secondary pre-deployment environments improved, compared to their reported high school grade-point averages. With 100% of the sample size given the opportunity to respond to this survey question, 42% of student veterans from a sample size of *n*=50 indicated a post-secondary pre-deployment grade-point average between 4.0 and 3.4, with 42% of respondents indicating a grade-point average between 3.3 and 2.4. Fourteen percent of respondents indicated they maintained a pre-deployment post-secondary grade-point average between 2.3 and 1.4. No respondents had post-secondary pre-deployment grade-point averages between 1.3 and 0.0. Two percent of respondents indicated they were unsure of what their grade-point averages in post-secondary

education were before deployment. Grade-point averages in a post-secondary pre-deployment environment between 4.0 and 3.4 increased 10% from high school. Pre-deployment post-secondary grade-point averages between 3.3 and 2.4 decreased 12% from high school, with pre-deployment grade-point averages between 2.3 and 1.4 remaining the same (see Figure 3).

Figure 3. Pre-Deployment Post-Secondary Grade-Point Averages of Veterans

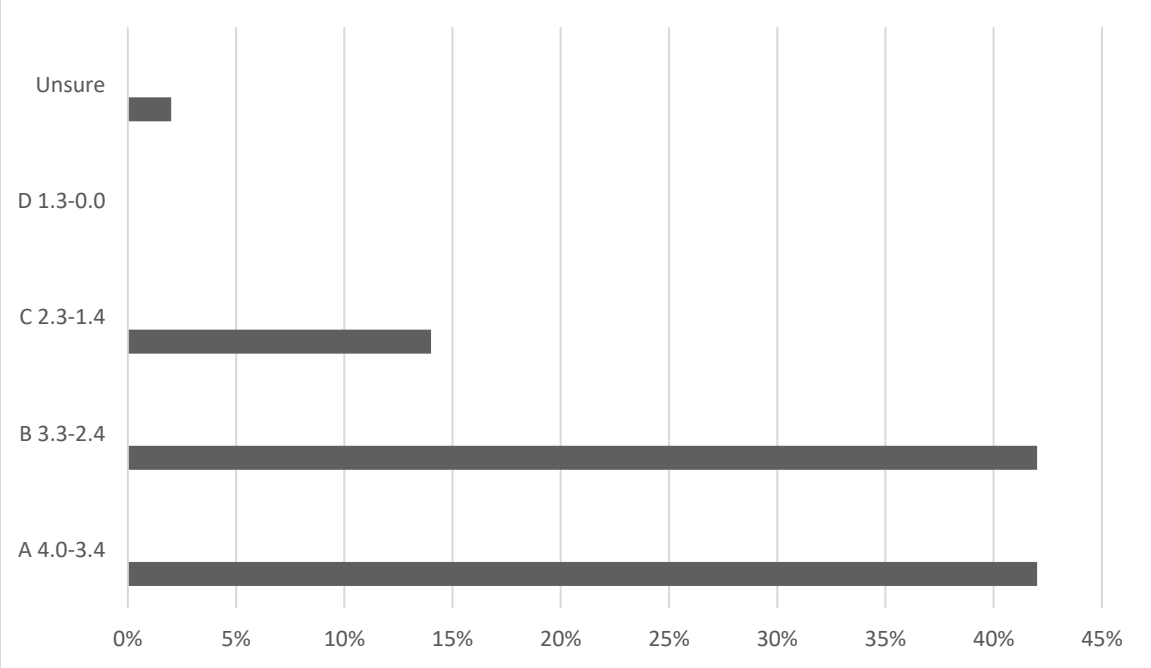

Figure 3. This graph denoted the post-secondary grade-point averages of student veterans before being deployed to a combat zone(s). Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Post-deployment post-secondary grade-point averages.

Based on the self-reported responses of 100% of the participants associated with this study within a sample size of *n*=50, grade-point averages between 4.0 and 3.4 decreased 6% after deployment. Grade-point averages between 3.3 and 2.4 decreased 6% after deployment. There was an 8% increase of post-deployment post-secondary grade-point averages between 2.3 and 1.4, with a 2% increase of post-secondary post-deployment grade-point averages between 1.3 and 0.0. Four percent of the respondents indicated they

were unsure of what their post-deployment post-secondary grade-point averages were (see Figure 4).

Figure 4. Post-Deployment Post-Secondary Grade-Point Averages of Veterans

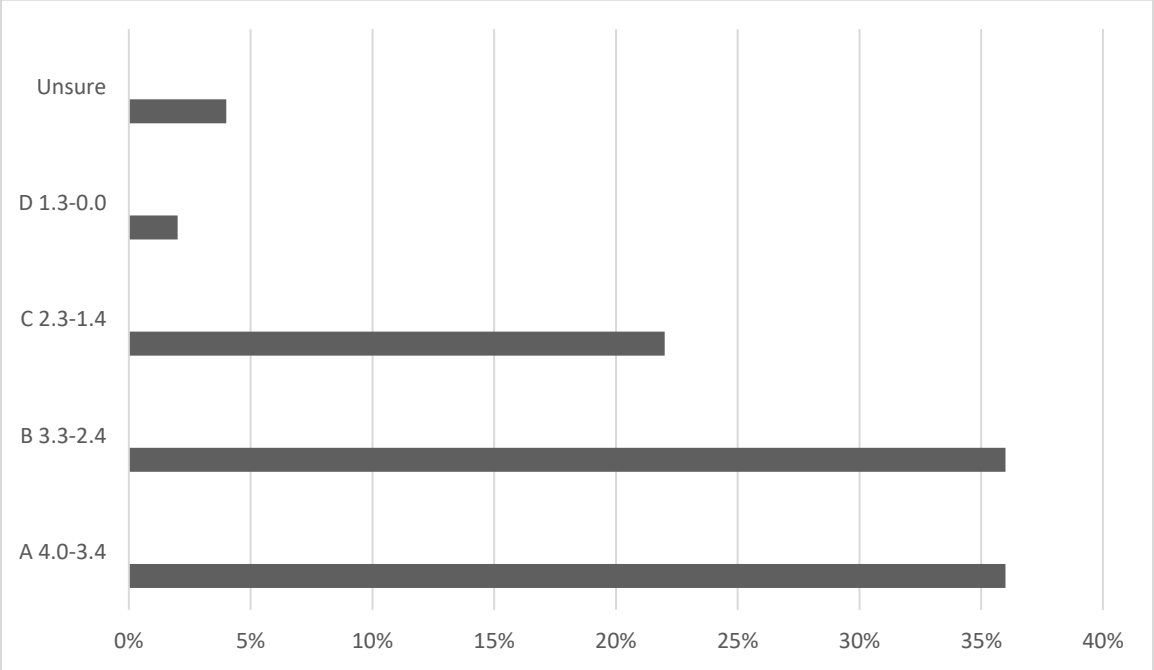

Figure 4. This graph denoted the post-secondary grade-point averages of student veterans after being deployed to a combat zone(s). Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Independent Variables

To address Research Question 2, the researcher identified and arranged the independent variables in graph form to show their hierarchical dominance for the purpose of establishing an order of priority as they related to post-secondary protocols. The following self-reported data was derived from a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Twenty-six percent of student veterans involved in this research were diagnosed with PTSD and depression, with 22% of respondents indicating a singular diagnosis of depression without comorbidity. Fourteen percent of veterans were singularly diagnosed with

PTSD. Two percent of respondents indicated a comorbid diagnosis of mTBI and depression. Four percent of respondents declined to answer if they had been diagnosed with any detriment. Four percent of the respondents were uncertain whether they exhibited the symptomologies of any detriment (see Figure 5).

Figure 5. Responses to the Research Instrument Denoting the Pre-Disposition of Combat Related Detriments Among Veterans

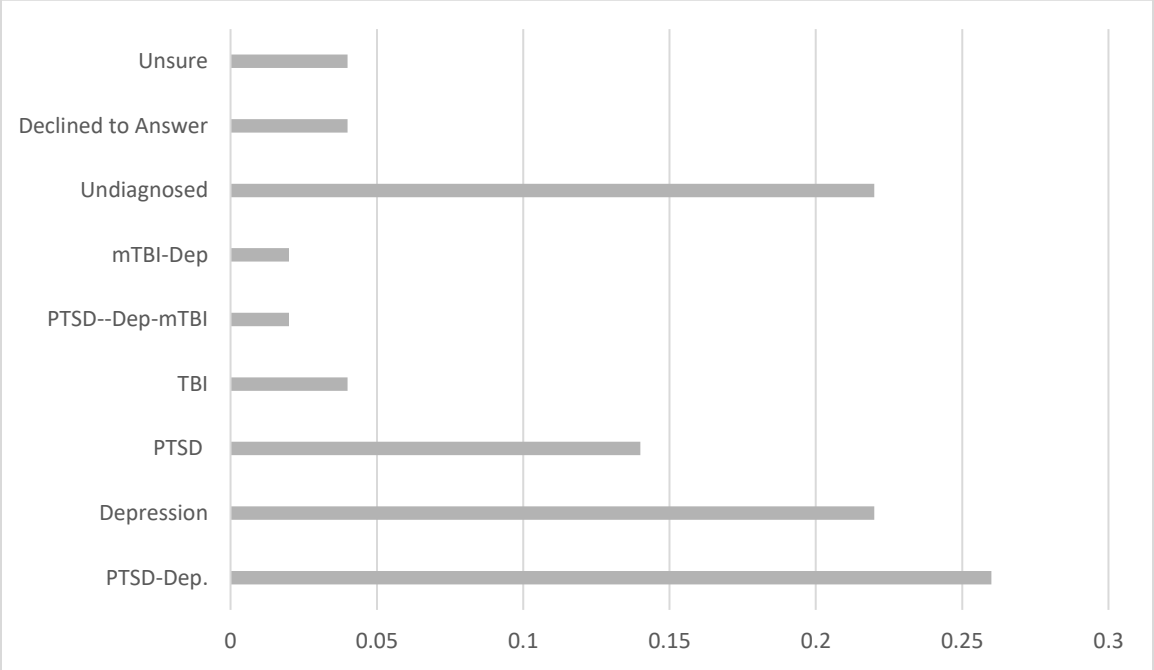

Figure 5. This graph showed the predominance of the independent variables related to combat and service-connected disabilities among student veterans in post-secondary environments. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Dependent Variables

Perceived self-efficacy.

To address Research Question 3, the researcher identified and arranged each dependent variable in graph form. Due to the proximity of grade-point averages correlated to each dependent variable set, a hierarchical order of dependent variables

could not be determined. However, the dependent variables identified in this research were determined to be necessary facilitators to effective learning.

The data related to the responses regarding perceived self-efficacy were displayed in graph form (see Figures 6, 7 and 8). In Figure 6, respondents had the choices of Low, Average, or High. This figure denoted 57% of respondents believed they exhibited a high pre-disposition to self-efficacious behavior, with 37% reporting an average pre-disposition to self-efficacious behavior. Six percent of respondents reported a low predisposition to self-efficacious behavior. Additional data pertaining to perceived self-efficacy was guided by Item A and Item B, where respondents had the choices of Yes or No (see Figures 7 and 8). Figure 7 indicated 94% of respondents believed they performed best under challenging circumstances, while 6% of the respondents indicated they did not. Figure 8 indicated 40% of the respondents believed they exhibited persistent and exaggerated beliefs and expectations, with 60% of the respondents indicating they did not. Data in Figures 6, 7 and 8 were self-reported, based on a sample size of n=50, with 100% of the respondents associated with this study given the opportunity to answer. This data denoted the pervasive outlook of student veterans in post-secondary settings regarding their ability to perform in pressure situations. In Figures 7 and 8, respondents were given the choices of Yes or No for the responses to each question.

Figure 6. Responses to the Research Instrument Denoting the Pre-Disposition of Perceived-Self Efficacy

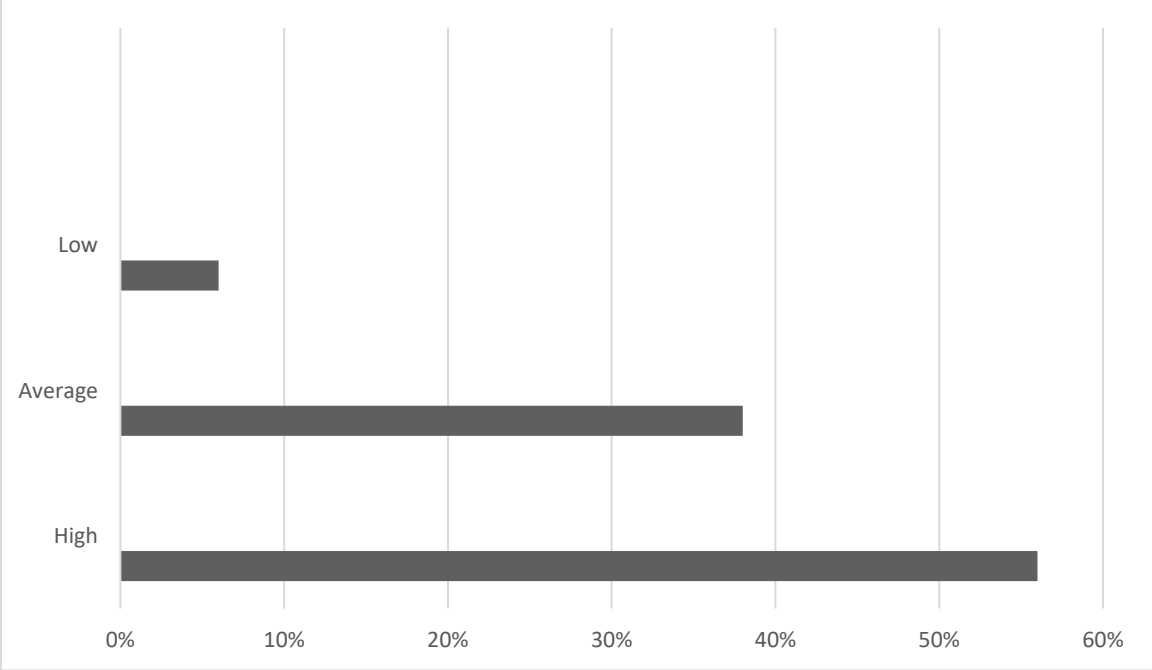

Figure 6. This graph denoted the confidence levels of veterans in post-secondary environments. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Figure 7. Responses to Item A

Item A. I perform best under challenging circumstances.

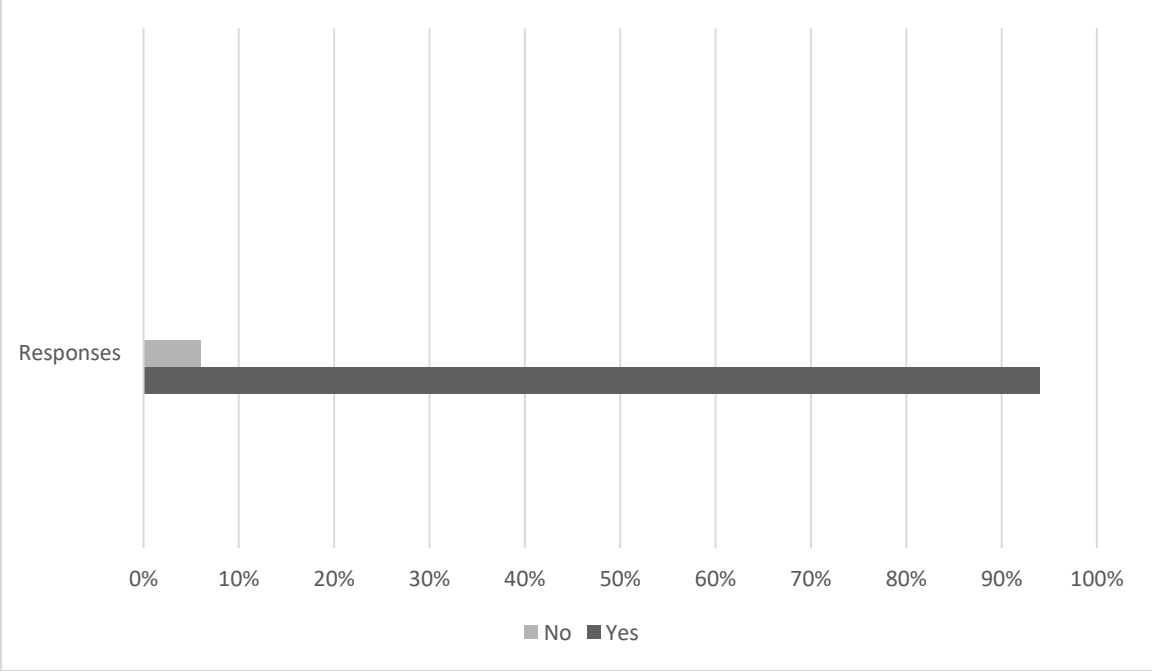

Figure 7. This graph represented the responses to Item A regarding respondents who performed best under challenging circumstances. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Figure 8. Responses to Item B

Item B. I have had persistent and exaggerated negative beliefs and expectations of myself, others, and the world.

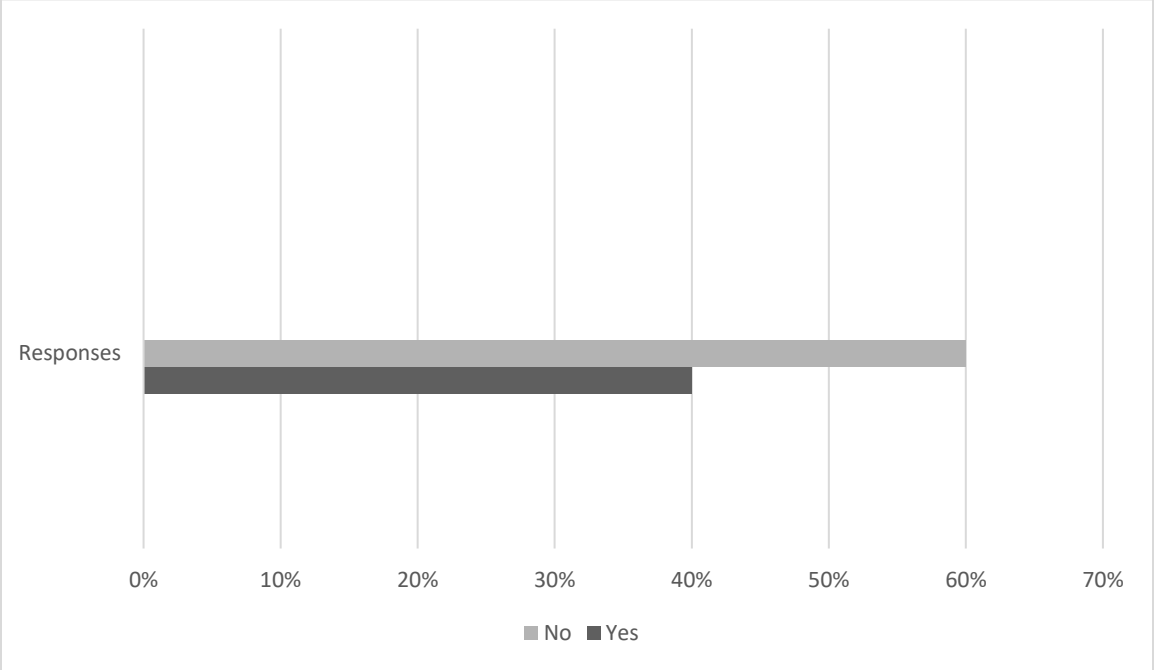

Figure 8. This graph denoted the responses to Item B regarding those respondents who have had persistent and exaggerated negative beliefs or expections of themselves, others, and the world. Responses were based on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychiatric Association.

PTSD, integration, transitioning, and social learning.

The following are graphs showing quantitative data collected from the research survey as they related to seven specific items regarding integration, transitioning, PTSD, and social learning. Items C, D, H, and I were developed by the researcher. Items E, F, and G were related to the symptomogy of PTSD as per the DSM-5, and correlated to cognitive alteration and its association to integration. The seven items were:

Item C: I have always interacted well with others.

Item D: I am a social person.

Item E: I sometimes feel estranged or detached from others.

Item F: I feel uncomfortable in large crowds.

Item G: I have little interest in participating in significant events.

Item H: While attending college, it was easier associating with fellow service members and veterans rather than civilian peers.

Item I: While attending college, fellow peers and the university made it easier to transition from a military environment to a classroom setting.

Item C was related to social learning. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 9). Particpants had only the choices of Yes or No for responses to Item C. The self-reported data indicated 76% of respondents interacted well with others, with 24% of respondents reporting they did not interact well with others.

Figure 9. Responses to Item C

Item C. I have always interacted well with others.

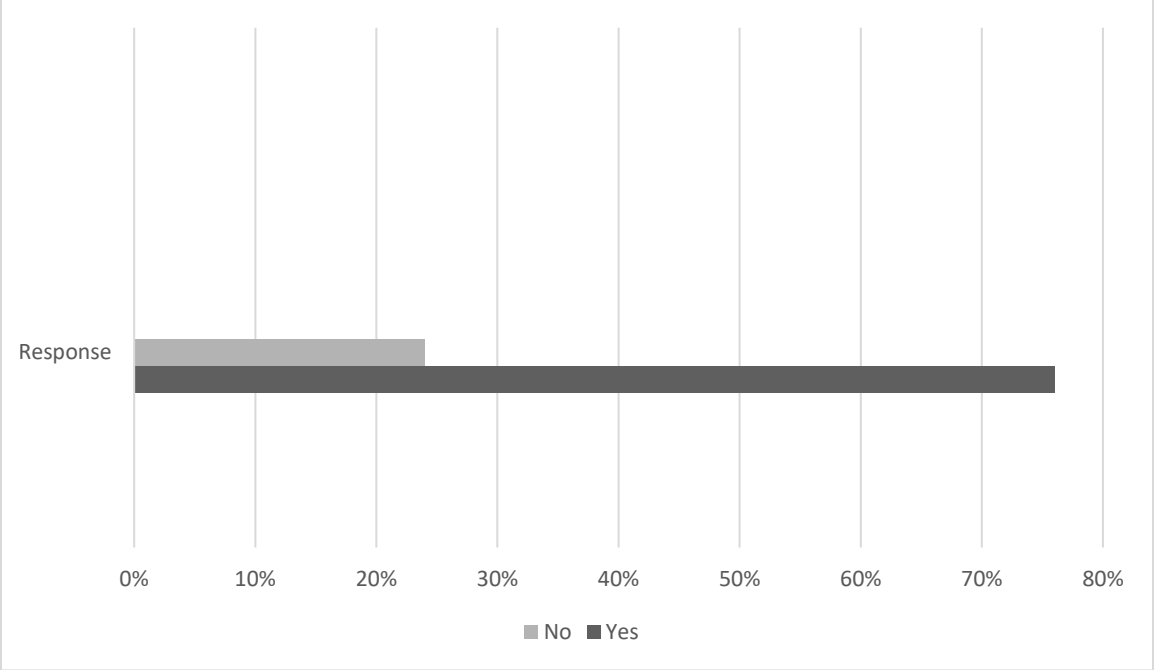

Figure 9. This graph summarized the responses to Item C and were related to social learning. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Item D was associated to the social tendencies of respondents and were related to social learning. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were in graph form (see Figure 10). Participants had only the choices of Yes or No for responses to Item D. The self-reported data indicated 60% of respondents believed they were socially adaptable, with 40% of the respondents believing they were not socially adaptable.

Figure 10. Responses to Item D

Item D. I am a social person.

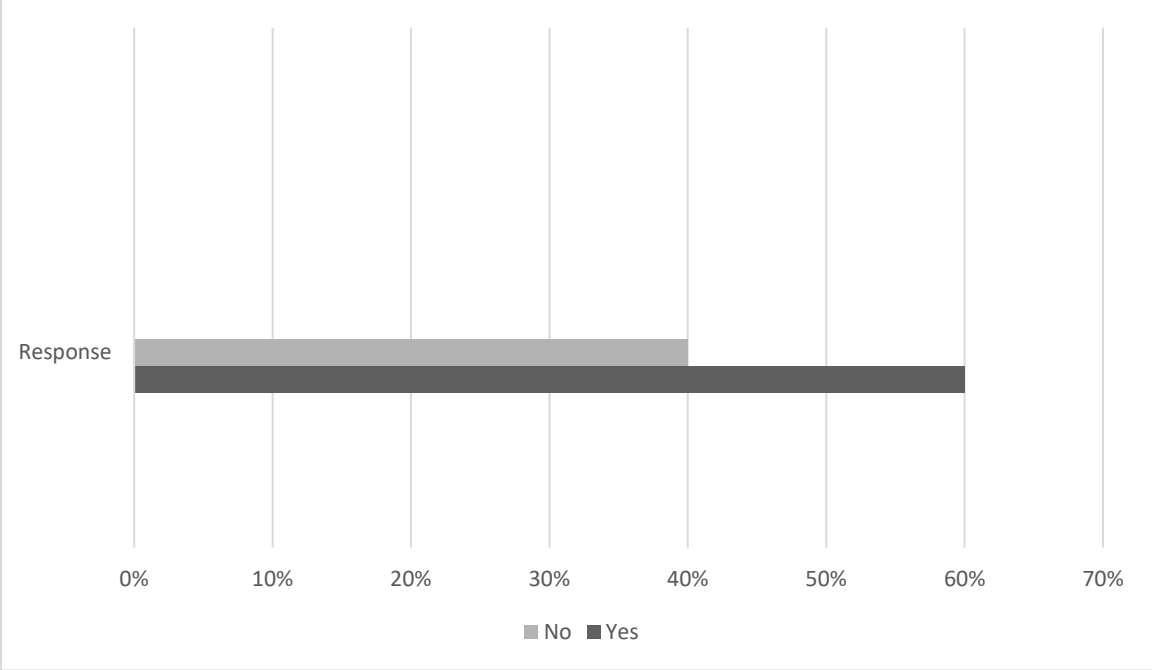

Figure 10. This graph showed the responses to Item D regarding the social tendencies of respondents and were related to social learning. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Item E was related to PTSD, social learning, transitioning, and integration. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 11). Participants had only the choices of Yes or No for responses to Item E. The self-reported data indicated 64% of respondents sometimes felt estranged and detached from others, with 36% reporting they did not feel estranged and detached from others.

Figure 11. Responses to Item E

Item E. I sometimes feel estranged and detached from others.

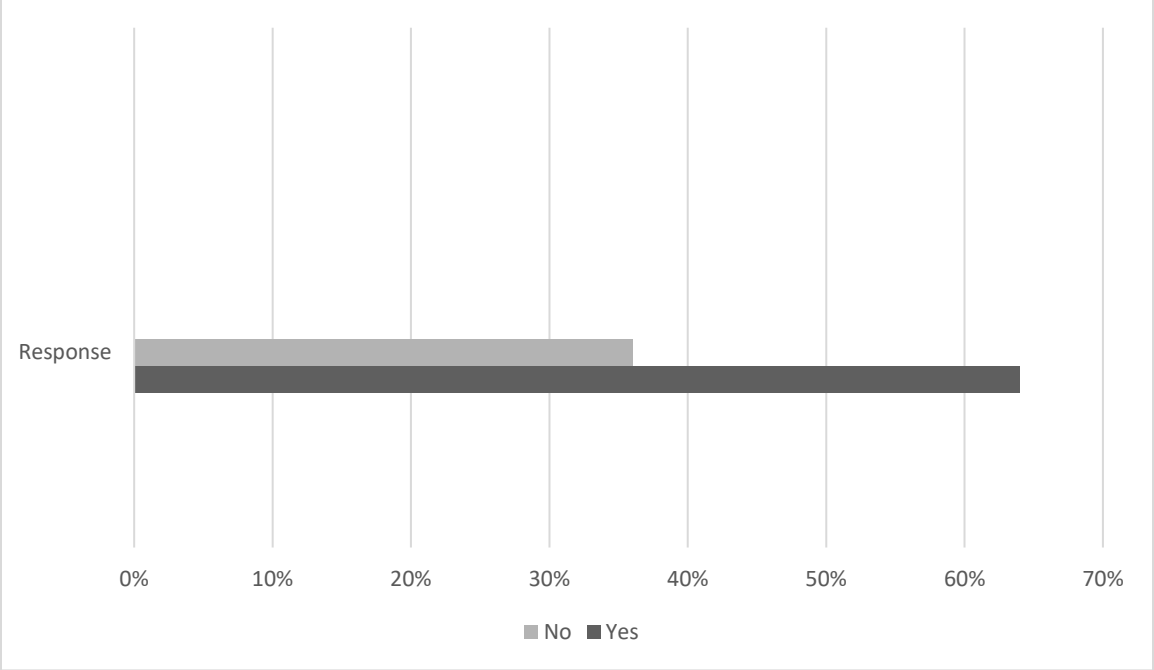

Figure 11. This graph summarized the responses to Item E that were related to PTSD, social learning, integration and transitioning. Responses were based on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychiatric Association.

Item F was related to PTSD, transitioning, and integration. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 12). Particpants had the choices of Yes or No for responses to Item F. The self-reported data indicated 60% of respondents felt uncomfortable in large crowds, with 40% of the respondents indicating they did not feel uncomfortable in large crowds.

Figure 12. Responses to Item F

Item F. I feel uncomfortable in large crowds.

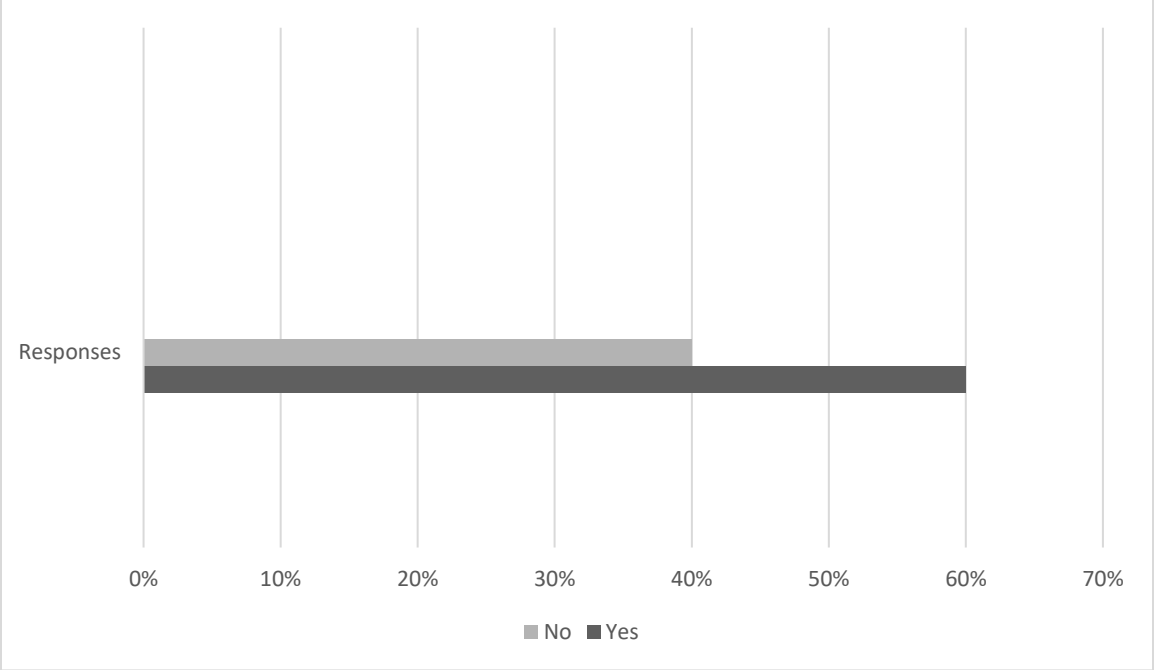

Figure 12. This graph denoted the responses to Item F and were related to PTSD, transitioning, and integration. Responses were based on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychiatric Association.

Item G was related to PTSD. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 13). Participants had only the choices of Yes or No for responses to Item G. The self-reported data indicated 52% of respondents had little interest in participating in significant events, with 48% reporting no disposition toward this behavior.

Figure 13. Responses to Item G

Item G. I have little interest in participating in significant events.

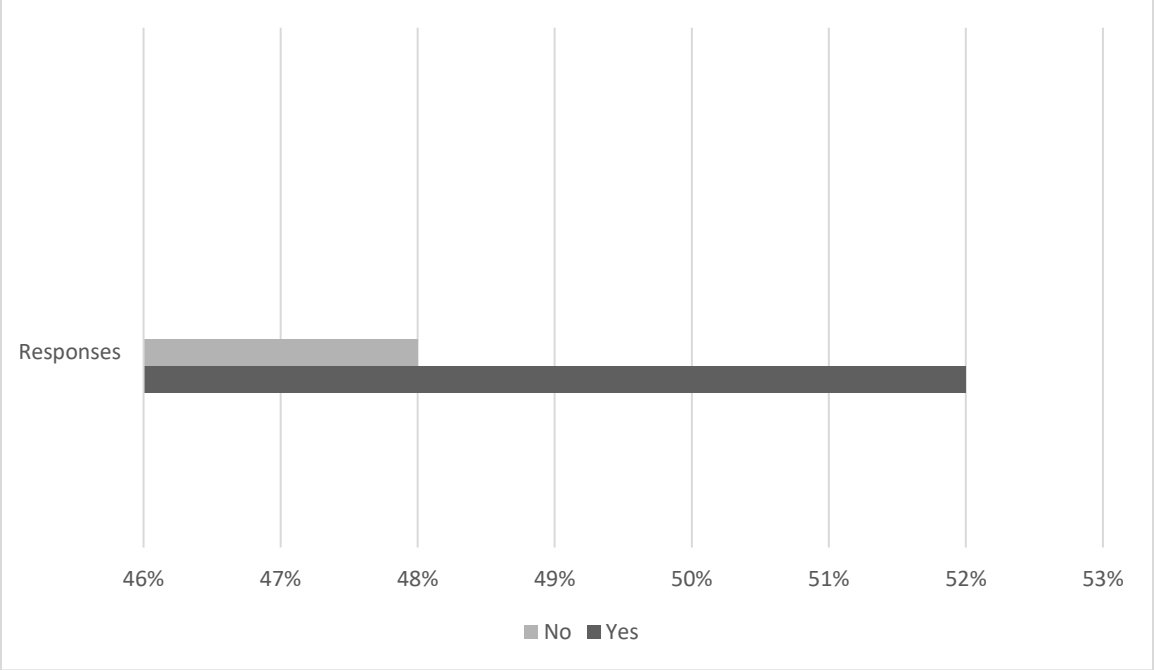

Figure 13. This graph denoted the responses to Item G and were related to PTSD. Responses were based on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorder: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychiatric Association.

Item H was related to transitioning and integration. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure H). Participants had the choice of Yes, No, or Neither for responses to Item H. The self-reported data indicated 68% of respondents felt more comfortable associating with fellow service members and veterans in post-secondary settings, with 8% indicating they did not feel more comfortable associating with fellow service members and veterans. Twenty four percent of the respondents indicated neither Yes or No to this item.

Figure 14. Responses to Item H

Item H. While attending college, it was easier associating with fellow service members and veterans rather than civilian peers.

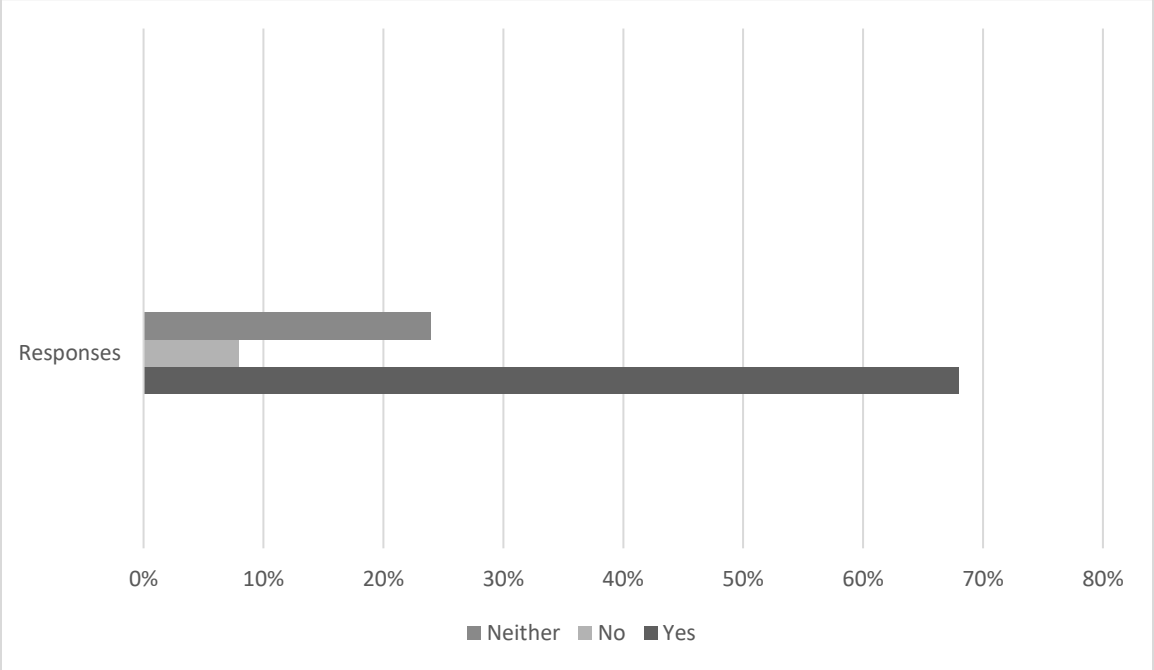

Figure 14. This graph denoted the responses to Item H and were related to transitioning and integration. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Item I was related to transitioning and integration. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 15). Particpants had only the choice of Yes, No, or Neither for responses to Item I. The self-reported data indicated 46% of respondents found peers and the university made it easier to transition from the military into classrroom settings, with 14% of the respondents reporting peers and the university did not make transitioning easier. Forty percent of the respondents reported neither Yes or No to this item.

Figure 15. Responses to Item I

Item I. While attending college, fellow peers and the university made it easier to transition from a military environment to a classroom setting.

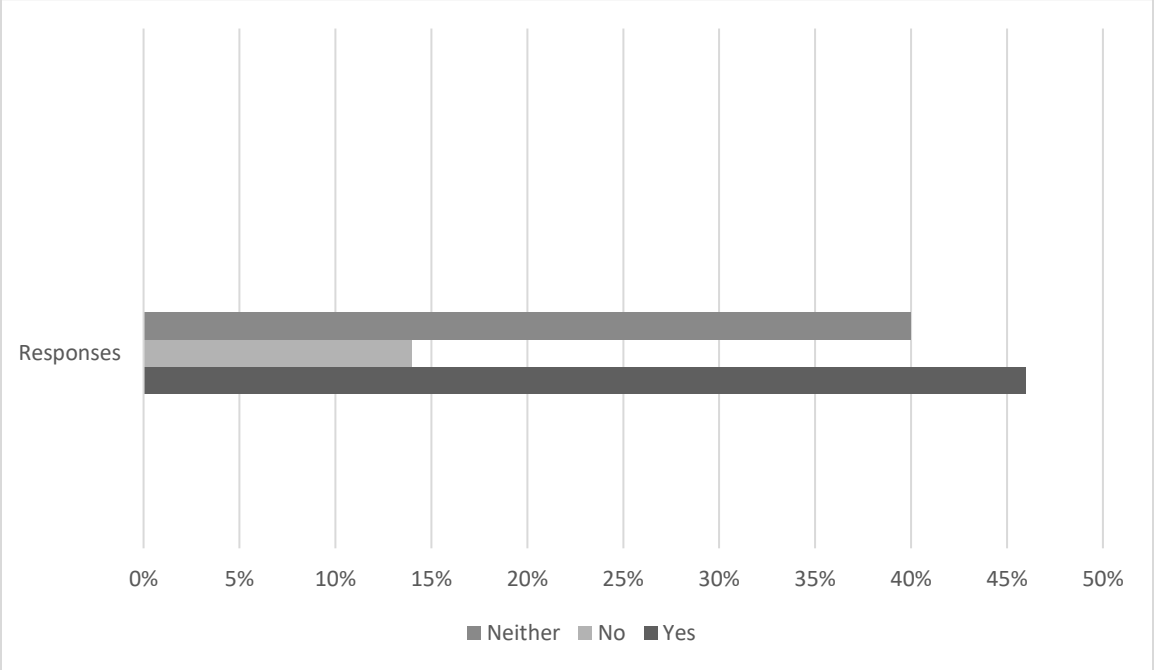

Figure 15. This graph denoted the responses to Item I and were related to transitioning and integration. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Social cognition.

Item J was related to social cognitive functioning. This data was based on a sample size of *n*=50, with 100% of the respondents asociated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 16). Participants had only the choices of Yes or No for responses to Item J. The self-reported data indicated 80% of respondents exhibited a high level of social cognitive functioning, with 20% of the respondents exhibiting low levels of social cognitive functioning.

Figure 16. Responses to Item J

Item J. I have control over the events in my life.

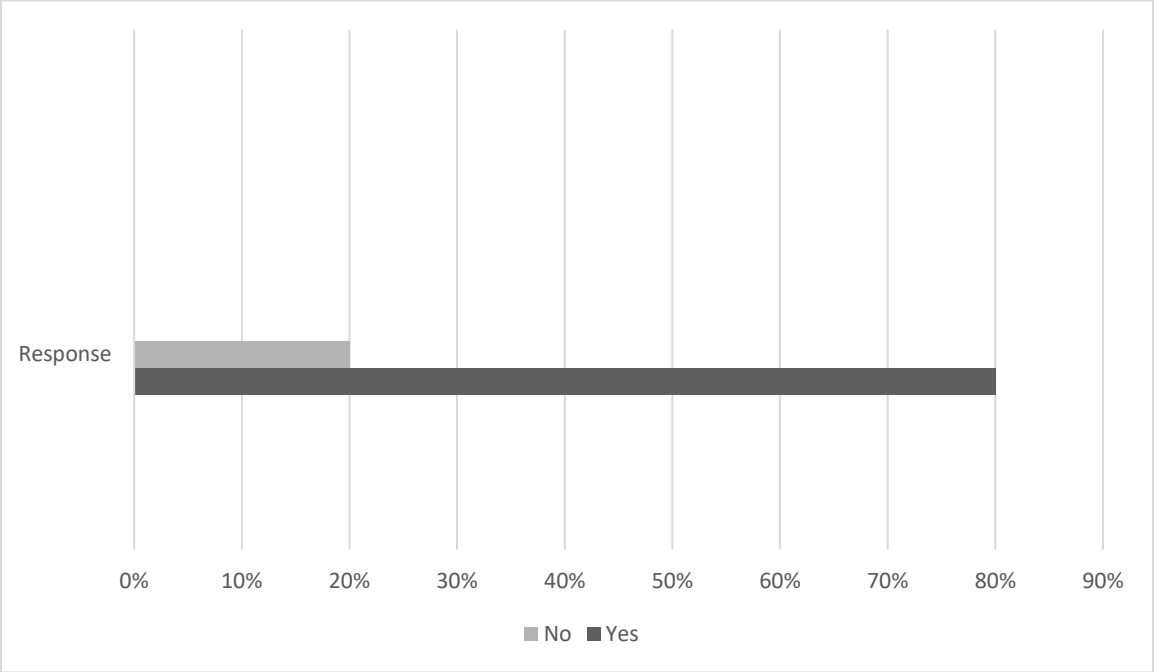

Figure 16. This data reflected the responses to Item J and were related to social cognitive functioning. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Social cognition and perceived self-efficacy.

Item K was related to social cognition and perceived self-efficacy. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 17). Participants had only the choices of Yes or No for responses to Item K. The self-reported data indicated 87% of respondents set expectation levels for themselves too high, with 13% of the respondents exhibiting low levels of expectations.

Figure 17. Responses to Item K

Item K. I sometimes set expectations for myself too high.

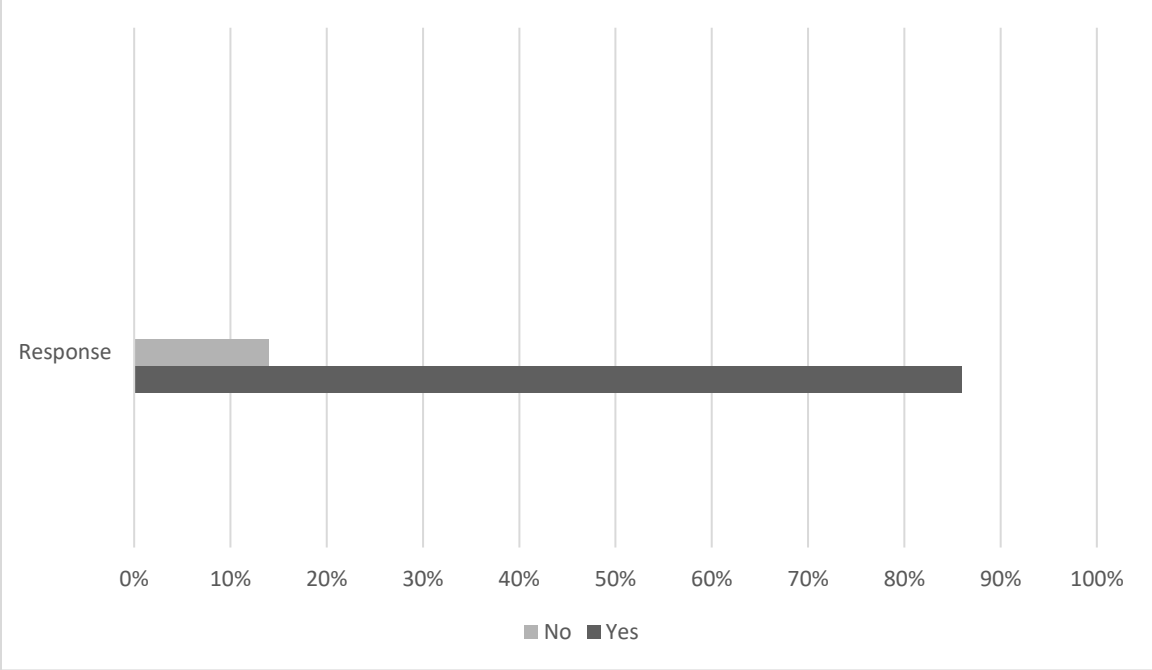

Figure 17. This graph denoted the responses to Item K and were related to the expectation levels of student veterans in a post-secondary environment. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Quality of life.

Item L was related to QoL. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 18). Participants had only the choices of Yes or No for responses to Item L. The self-reported data indicated 80% of respondents had the basic necessities to maintain a suitable standard of living while attending school, with 20% of the respondents indicating they did not have the basic necessities while attending school.

Figure 18. Responses to Item L

Item L. While attending college, I had the basic needs to live such as shelter, food, transportation, and money.

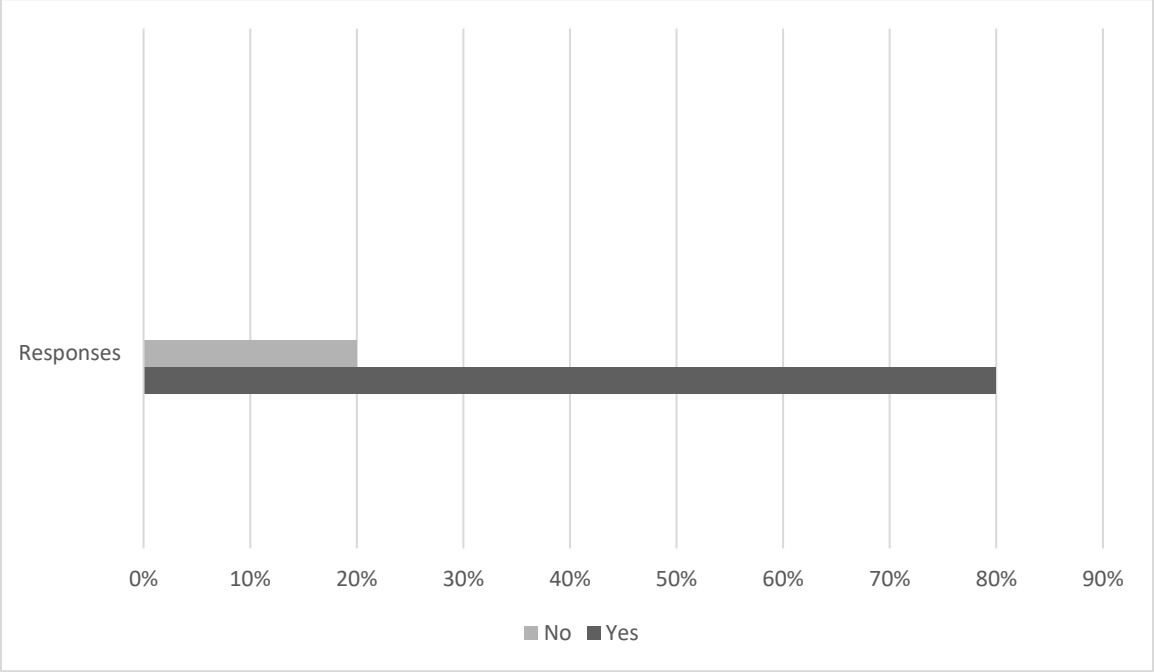

Figure 18. This graph denoted the responses to Item L of those respondents who had the basic necessities while attending school. Responses were based on a sample size of *n*=50. *Source:* Data collected from research survey.

Depression.

Item M was related to depression. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 19). Participants had only the choices of Yes or No for responses to Item M. The self-reported data indicated 73% of respondents had difficulty concentrating, thinking, and/or making daily decisions, with 27% of the respondents indicating no difficulty.

Figure 19. Responses to Item M

Item M. I have trouble concentrating, thinking, and/or making decisions every day.

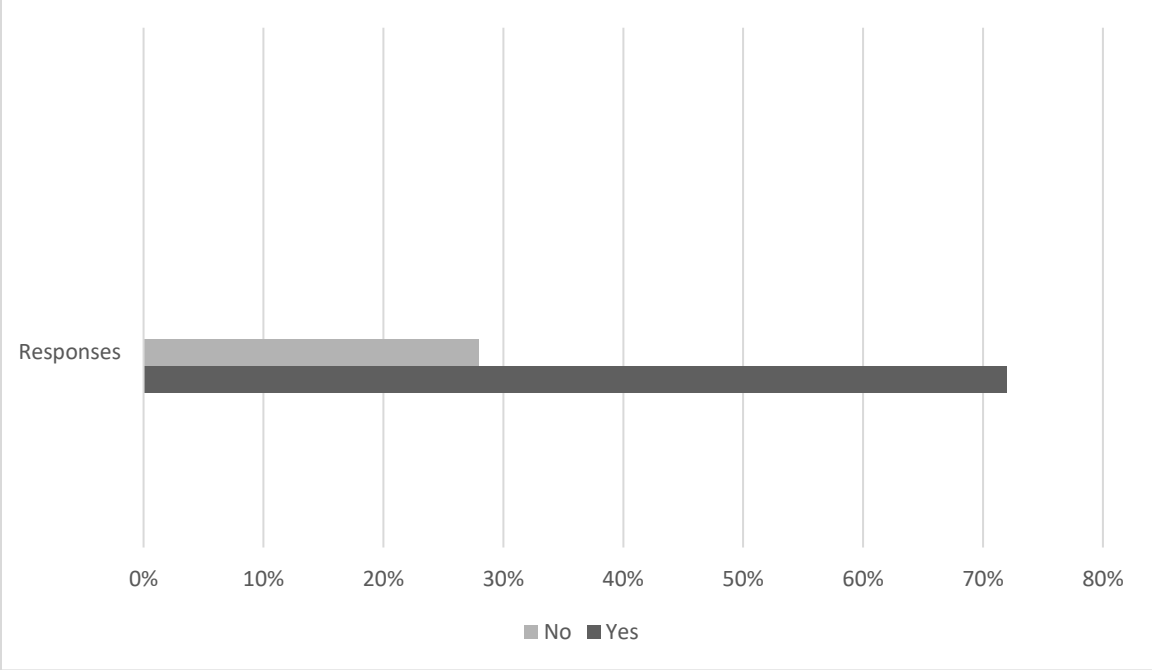

Figure 19. This graph denoted the responses to Item M regarding those respondents who had trouble concentrating, thinking, and/or making decisions every day. Responses were based on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychiatric Association.

Item N was related to depression. The data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 20). Participants had only the choices of Yes or No for responses to Item N. The self-reported data indicated 60% of respondents had little interest in all, or almost all, activities they usually enjoyed, with 40% of the respondents exhibiting no disposition toward this behavior.

Figure 20. Responses to Item N

Item N. I have had little interest or pleasure in all, or almost all, activities I usually enjoy.

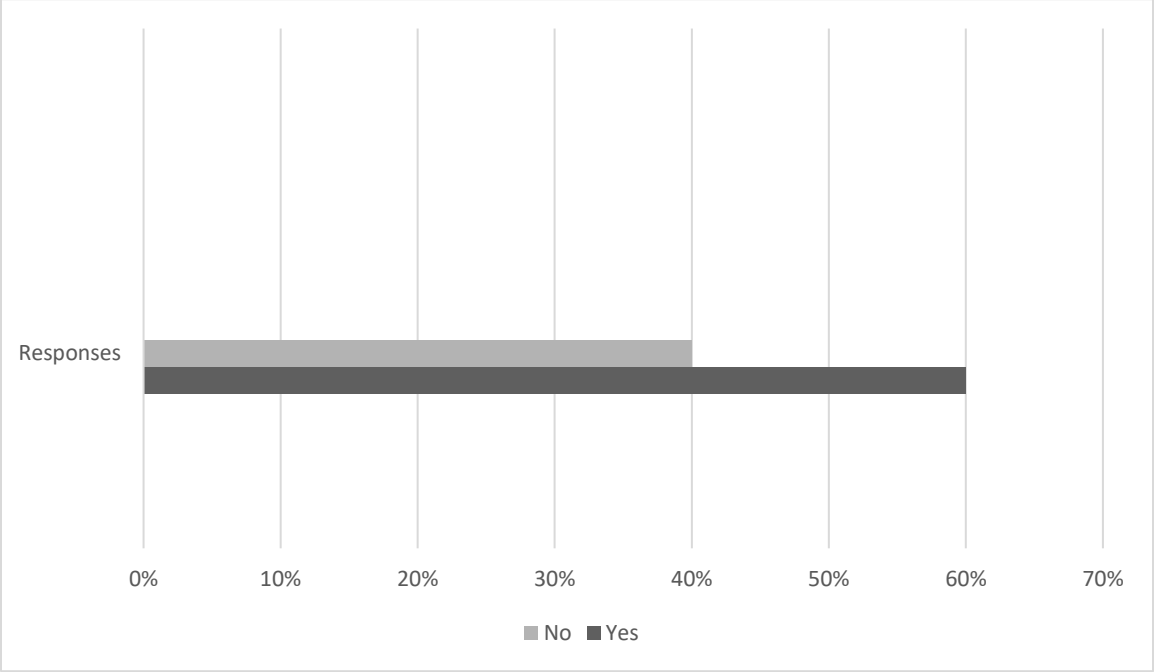

Figure 20. This graph denoted the responses to Item N regarding those respondents who had little interest or pleasure in all, or almost all, activities they usually enjoyed. Responses were based on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychiatric Association.

Item O was related to depression. This data was based on a sample size of *n*=50, with 100% of the respondents associated with this study given the opportunity to answer. Responses to this item were displayed in graph form (see Figure 21). Participants had only the choices of Yes or No for responses to Item O. The self-reported data indicated 50% of respondents exhibited depressive symptomology on a daily basis, with 50% of the respondents indicating no disposition toward this behavior.

Figure 21. Responses to Item O

Item O. I feel depressed most of the day.

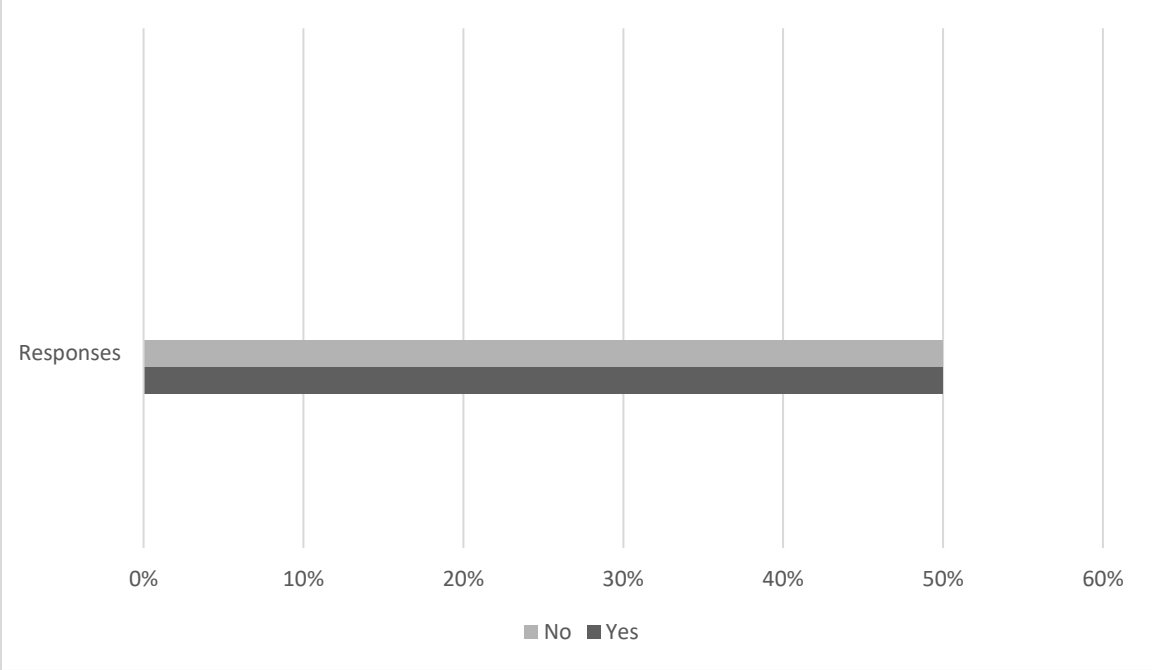

Figure 21. This graph denoted the responses to Item O regarding those respondents who have exhibited depressive tendencies on a daily basis. Responses were beased on a sample size of *n*=50. *Sources:* Data collected from research survey; *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.) (2013). Arlington, VA: American Psychological Association.

Qualitative Data

Fifty respondents were asked, "How has your education been affected by serving in the military?" There were 32 responses to this question. Eighteen responses were discarded because they were unrelated to the qualitative question. From these responses,

the researcher identified five emerging themes. The first emerging theme was related to data where veterans recognized military service as an asset to post-secondary work. Respondent 12 believed their military experiences made it easier to give presentations and talk to strangers. Respondent 13 indicated, "My military service had a positive influence on school because it instilled discipline." Respondent 24 simply stated, "My military experience has been an asset;" while Respondent 26 said, "It's going well. I feel like I have to put in more effort than others. However, the army has helped me with disciplining myself to do schoolwork." Respondent 29 believed organizational skills learned in the military applied to schoolwork. Respondent 43 stated, "I learned excellent time management skills in the military which has helped in school." Respondent 43 said, "The military gave me the discipline to maintain my social skills and confidence to succeed. School has given me a new purpose." Respondent 49 stated, "Military service has helped me feel more directed. I like to keep a strict time schedule so I don't feel anxious about the unknown."

The second emerging theme included qualitative data of respondents whose post-secondary educations were unaffected by military service. Respondents 4, 15, 39, 42, 44, and 46, stated their educations had not been affected by serving in the military. They simply stated, "My education has not been affected," and offered no further elaboration.

The third emerging theme related to this research was qualitative data indicating student veterans' specific difficulties in pursuing post-secondary educations. Respondent 1 stated, "I've had a hard time interacting with others in a group-like setting. I've also had a hard time asking for help from professors due to being afraid of looking stupid." Respondent 3 said, "It is sometimes hard to complete tasks at hand. It is also difficult to

complete group projects as I have to complete them with people." Respondent 11 simply stated, "My military experience has made it harder to complete schoolwork." Respondent 17 said, "When I was going to school in the military it was hard to focus on the work. Now that I'm out of the military, it's hard to find the motivation and will-power to do well." Respondent 18 stated:

> It has been hard being in a large classroom environment. I have difficulty with public speaking and completing assignments because of difficulty understanding content. School was very difficult for me to get started, but it has become my mission. I work very hard to do my absolute best.

Respondent 27 remarked, "College is much harder and complicated because of my military experience." Respondent 34 stated, "My college experience has been negative because it adds on to the other things I worry about."

In the third emerging theme, respondents indicated specific difficulties encountered in their post-secondary experiences. These specific difficulties were in regard to motivation and an inability to work with others or in group settings. These difficulties were synonymous with the symptomologies of PTSD and depression, and may be correlated to integration, transitioning, social learning, and perceived self-efficacy.

The fourth emerging theme related to this research was qualitative data associated to respondents who have sought medical assistance and the affect medical assistance had on their post-secondary pursuits. Respondent 7 said, "My college education has not been affected so much as I have sought medical help." Respondent 22 stated:

> I feel that due to the effectiveness of my therapy and the delay between being medically retired and starting post-secondary education, I was left with well-

> established discipline, time management skills, and an ability to adjust to civilian life.

As noted by the respondents' comments, few felt medical assistance was a factor in their continued education. However, it must be noted that medical intervention could play a vital role in student veterans' academic attainment. Students must either take the initiative to seek medical assistance on their own accord, or they must be identified and given the opportunity to seek medical intervention.

The fifth emerging theme related to this study were qualitative responses regarding concentration and memory. Respondent 8 said, "Military service made it harder to concentrate in school." Respondent 10 stated:

> Starting school at first was affected because my mind was on the many friends and colleagues I lost which was very sad and it took me time to cope because I was depressed most of the time. But after a few months I picked myself up and remembered I had to be strong.

Respondent 21 remarked, "My military experience has given me an inability to concentrate which has led to lower grades because I have difficulty completing assignments." Respondent 23 simply stated, "My short-term memory is horrible." Respondent 33 said, "My grades have gone down because it's hard to concentrate." Respondent 40 stated, "I've had trouble concentrating, with feelings of depression and anxiety." This theme was related to concentration and memory and was synonymous with the symptomologies annotated in the DSM-5 which correlated to the dependent variables of PTSD, depression, mTBI, and TBI.

Summary

Discussed in Chapter Four was a description of the research instrument and the purpose of the study which reiterated the research questions and a brief description of how quantitative data would be analyzed. A narrative of the general demographics of the respondents followed. Chapter Four identified how graphical data was correlated to the research questions. Graphical data pertaining to ADHD, grade point averages, self-confidence levels which were directly related to perceived self-efficacy, a hierarchical order of the independent variables related to this study, and data correlated to integration, transitioning, PTSD, and social learning followed. Each data set was correlated to information found in the literature review. The researcher presented additional graphical data related to the symptomology of PTSD and integration, with correlating data related to social cognition, TBI and social cognition, perceived self-efficacy, additional data relating to transitioning and integration, quality of life, depression and qualitative data concluding Chapter Four. Chapter Five will begin with the findings, conclusions, and the implications for practice. Chapter Five will close with recommendations for future research and summation.

Chapter Five: Discussion

This study was related to the independent and dependent variables affecting the success rates of student veterans in higher education. The independent variables most suspected of affecting the success rates of student veterans in higher education were post-traumatic stress disorder (PTSD), depression, mild traumatic brain injury (mTBI), and traumatic brain injury (TBI). The dependent variables most suspected of affecting the success rates of student veterans in a post-secondary environment were transitioning, integration, social learning, social cognition, perceived self-efficacy, and quality of life (QoL). Inconsistent data regarding the success rates of student veterans and student service members has existed, with no formal data compiled by governmental or post-secondary entities affirming what the true success rates were for this demographic of student. Without the use of accurate success rates, formal protocols established by post-secondary institutions could be deemed ineffective. In order to facilitate the establishment and implementation of higher education protocols designed to assist student veterans and student service members in educational attainment, definitive variables affecting success rates should be recognized. Success rates could be used as an indicator of the effectiveness of post-secondary protocols, with the use of independent and dependent variables employed as benchmarks to enable establishment of these educational precepts.

Chapter Five will begin with the findings of the research. This will be followed by the conclusions, research limitations, implications for practice, and the recommendations for future research. Chapter Five will conclude with summation.

Findings

In order to evaluate the variables influencing the educational attainment of student veterans in higher education, the researcher identified those independent and dependent variables from the literature review that were most likely to affect this demographics' academic abilities. The researcher analyzed quantitative and qualitative data pertaining to the independent and dependent variables to prove or refute the null or alternate hypotheses and definitively answer the research questions. This was done through the comparison of correlative coefficients related to each variable, with the relationships to correlative coefficients represented as post-deployment grade-point averages.

Analysis of data used to prove or refute the null or alternate hypotheses revolved around two key data sets. These key data sets were those regarding grade-point averages in high school (see Figure 2) and in post-secondary education (see Figures 3 and 4), and the hierarchical order of combat and service-connected independent variables established using quantitative data that were most suspected of influencing the abilities of veterans to academically attain (see Figure 5). Before analysis of data pertaining to the independent and dependent variables could take place, the researcher identified hyper-activity and attention deficit disorders as possible influences which may have tainted quantitative and qualitative data related to the independent and dependent variables found in this study. According to Kilborne, (2014) and Shura et al. (2017), there was little research regarding the function of trauma concerning PTSD and the possible relational parallels to the concept of the unconscious mind, as well as the comorbid effects of attention deficit and hyper-activity disorders related to the mental health of student veterans. The researcher disqualified ADHD as an influence on the independent and dependent variables related to

combat and service-connected detriments (see Figure 1). High school, pre-deployment, and post-deployment post-secondary grade-point averages of 2.3 and above affirmed this notion.

Grade-point averages.

According to De La Garza et al. (2016) the most reliable indicators and determinants for student service members' and student veterans' success in higher education were exhibited through high school scores, the display of self-efficacious characteristics, and/or the expression of intrinsic interests and values. Respondents self-reported grade-point averages from high school showed no grades dropping below a 2.3 to 1.4 average. In pre-deployment post-secondary work, the grade-point averages of 4.0 to 3.4 increased. Grade-point averages of 2.3 to 1.4 in post-secondary work before deployment remained comparatively the same as high school. Grade-point averages of 3.3 to 2.4 in post-secondary work before deployment dropped slightly from high school grade-point averages. Post-secondary grade-point averages after deployment dropped noticeably from pre-deployment averages, with grade-point averages of 1.3 to 0.0 manifesting for the first time after deployments. These grade-point averages indicated student veterans' abilities to academically attain were altered in some manner. More students after deployments admitted to being unsure of their grade-point averages, indicating a possible lack of concern due to alterations of perceived self-efficacy and the ability to self-motivate. According to Rouse (2004), the motivation systems theory included the ability to self-evaluate in order to achieve established goals. The researcher posited grade-point averages were a reasonable means to self-evaluate.

Independent Variables

Individuals who attained a higher level of academic accomplishment were less likely to exhibit symptoms synonymous with depression (World Health Organization, 2018). PTSD was attributed to lower levels of academic performance and the suppression of motivation (Osborne, 2012; Barry et al., 2012). Intelligence levels were recognized as a fundamental variable in helping to determine the path of development and severity of PTSD (Barry et al., 2012). Higher intelligence levels among student veterans and student service members were deemed protective mechanisms offering immunity from the debilitating effects of PTSD, with higher IQ's being used as determinants to PTSD resiliency (Barry et al., 2012). The diagnosis of PTSD as a singular disorder without comorbidity was exceptionally uncommon, with 80% of those diagnosed with PTSD exhibiting depression, anxiety, and substance abuse (Fokkens et al., 2015). Mild traumatic brain injury resulted in cognitive deficiencies effecting the transition and integration of veterans in higher education (Daggett et al., 2013). The lowest risk for cognitive impairment came from those student veterans who were confirmed with having mTBI with no comorbidity related to PTSD or depression (Seal et al., 2016). Rigorous and demanding cognitive requirements associated with academic work resulted in cognitive fatigue and academic failure among those suffering from TBI (Smee et al., 2013). One in three military personnel experiencing combat was diagnosed with PTSD, depression, and mild traumatic brain injury (Barry et al., 2012). According to Fokkens et al. (2015) the number of veterans suffering from PTSD who have not been diagnosed may be 17% higher than current estimates. Thirty percent of the student veterans

responding to the research survey exhibited comorbidity related to their service-connected detriments.

PTSD with comorbidity involving depression was the dominant combat related detriment affecting student veterans. Depression without comorbidity was the second most dominant detriment. However, many students exhibiting depressive symptomologies reported never having been diagnosed with any combat detriment involving depression or PTSD. The researcher's interpretation of this was that some student veterans may have been mis-diagnosed, did not have the opportunity to seek a diagnosis, or believed symptoms related to depression were regarded as normal or "phases" individuals experienced. The third most prominent detriment was PTSD without comorbidity. PTSD without comorbidity was exceptionally rare, with 80% of those having PTSD also exhibiting depression (Fokkens et al., 2015). The researcher posited the quantitative data reflecting PTSD with comorbidity involving depression may have been significantly higher among the respondents associated with this study.

Dependent Variables

Perceived self-efficacy.

Norman et al. (2015) identified PTSD as the predominant detriment to academic attainment. Some of the major characteristics associated to PTSD were difficulty in discerning right from wrong and trouble interrelating with others (Glover-Graf et al., 2010). The social learning theory was based on the concept human beings learned from their interactions with others in a societal context and developed similar behaviors from those observed (Nabavi, 2012). Responses to Item E showed 64% of student veterans had propensities toward estrangement and detachment from fellow peers.

Perceived self-efficacy was deemed a determinant regarding motivation and academic achievement and was identified as an important component in the learning process (Alt, 2013). Important elements associated with self-efficacy were an individual's belief in themselves to reach designated levels of performance, their ability to motivate themselves, and the ability to regulate emotions through expressions of their own self-concept which was dictated by the surrounding environment and the dominance of existing intrinsic values (Bandura, 1994; Cherian & Jacob, 2013; MacEacheron & Gustavsson, 2012). Fifty-six percent of the respondents involved in this study who were undertaking pre-deployment post-secondary endeavors indicated high self-confidence levels in their abilities to achieve. Thirty-eight percent of respondents exhibited average self-confidence levels, while 6% of veterans exhibited low levels of self-confidence.

Bandura (1999) found those exhibiting low self-efficacy recoiled from demanding and arduous tasks, with the difficulty level being a determining variable hindering success and being viewed as a perceptive threat. Levels of individualistic, pre-existing knowledge related to the preponderance of self-efficacy and self-concept was a determinant in the abilities of people to effectively interpret conditional relationships between events, enabling people to control events of intrinsic importance (Bandura, 1989). The singular motivation of an individual through self-efficacy was established through cognitive activity, with forethought concentrating on expectancy values, intrinsic interests, and the anticipation of future events not effecting current motivation or action (Bandura, 1989).

In order to analyze the self-efficacy of student veterans, the researcher posited confidence levels for this demographic of student would reflect the extent self-efficacy

had manifested within each student. Most of the students surveyed exhibited high levels of self-confidence which could be attributed to traits acquired through military service. Average confidence levels may have exhibited an imbalance between normal levels of self-efficacy and a rational understanding of being able to distinguish attainable goals from those goals that were unattainable. Low levels of self-confidence could be an indication that combat-related and service-connected detriments were chronically hindering the self-efficacious propensities of these students. An overwhelming majority of veterans believed they performed best under challenging circumstances. Military experiences manifested traits where veterans were expected to perform in life and death situations. Academic attainment may not always be influenced by traits manifested through military experiences. In this research, respondents did not consistently exhibit persistent and exaggerated negative beliefs or expectations of themselves, others, or the world. However, enough veterans associated with this study did exhibit these tendencies, leading to the conclusion expectation levels regarding fellow peers and academic instructors may have manifested unrealistic concepts of the academic environment which hindered academic abilities.

Misguided acuity to individual strengths and weaknesses was not uncommon among those affected by TBI, causing student veterans to pursue unrealistic goals without the ability to distinguish between desired ambitions and their present abilities to successfully attain them (Bush et al., 2010). From a social cognitive perspective, self-regulated learners directed their learning processes and attainments by setting challenging goals for themselves (Zimmerman et al., 1992). There was no elaboration concerning what the expectations of student veterans consisted. It can be assumed those veterans pursuing

post-secondary credentials were doing so under the expectation of earning a degree or the premise of expanding knowledge in areas students deemed intrinsically important.

PTSD, integration, transitioning, and social learning.

The social learning theory was based on the concept human beings learned from their interactions with others in a societal context and developed similar behaviors of those they observed (Nabavi, 2012). The individual choice to positively interact within a given learning environment constructively effected learning, influenced academic performance, and aided in student retention (Liu & Liu, 2000). According to Bandura (1969), the attributes most associated with the social learning theory were through identification, modelling, and the transformation of thought patterns, feelings, or actions of another person who served as a model.

The propensity of students to interact well with others was exceptionally high, with social adaptability also high. However, a high percentage of students felt estranged and detached from fellow peers, with acknowledgement by veterans that they felt uncomfortable in large crowds and exhibited slightly less interest in participating in significant events. These variances in social adaptability may be contingent on the context in which student veterans integrated and transitioned in post-secondary environments, with influences dependent on whether student veterans were interacting socially with veterans or civilian peers. PTSD may be a significant catalyst influencing veterans' tendencies to associate with fellow veterans rather than civilian counterparts. Most student veterans found it easier associating with fellow veterans in an academic environment. Peer support among veterans helped to bolster perceived self-efficacy in others through examples set by fellow veterans who demonstrated self-efficacious coping

skills, giving credence to the social learning theory derived from the premise individuals learned by observing others (MacEacheron & Gustavsson, 2012). Fellow peers and the awareness of universities regarding military affiliation were important to integration and transitioning for student veterans. A significant number of student veterans did not think fellow peers and the university made a difference in transitioning and integration. The researcher posited social learning for veterans was contingent on a veterans' ability to associate with the entire academic population to capitalize on opportunities to fully integrate, transition, and benefit from the prospects to learn socially. An ability to fit in to current environments was significant to veterans in order to ease apprehensions of those who were first-generation college students.

Estrangement and detachment from others was directly related to PTSD, transitioning, integration, and social learning. The non-physical obstacles encountered by student veterans pursuing education at post-secondary institutions were identified as lack of support systems, administrative barriers, an inability to fit in with traditional college students, and difficulty transitioning from a structured military environment to the less structured life of a civilian (Semer & Harmening, 2015). Falkey (2016) found many student veterans affected by PTSD and TBI had diminished interactions with others and a decrease in positive outlooks on life not usually apparent to those interacting with this classification of student. Successful transition and integration processes relied on the adaptability and willingness of the participants to embrace new experiences (Robertson & Brott, 2014). New experiences could include the interaction with civilian peers.

Olsen et al. (2014) discovered many transitioning veterans identified rational concerns with new found peers, with concerns exacerbated by existing strains in current

relationships. Furthermore, some older student veterans and student service members expressed difficulties interacting with traditional students based on the traditional students' unlikeliness in having determinedly established vocational, social, and family roles (Borsari et al., 2017). Academic counselors in higher academic settings have encouraged student veterans and student service members to integrate fully by embracing the entire academic community, as veterans had tendencies to associate with other veterans (Schiavone & Gentry, 2014). According to Schiavone and Gentry (2014), an inability to connect with the total academic environment encompassing those experential differences in backgrounds increased the attrition rates of veterans on college and university campuses.

Most student veterans reported that their instructors knew they were veterans. The acknowledgement of military affiliation by faculty and staff was an important element regarding student veterans' abilities to fully integrate in academic environments. The awareness of instructors who knew their students were veterans enabled instructors to accommodate this demographic of student more readily. This also enabled faculties to design classroom lectures in a manner that took into consideration the exclusive needs of veterans suffering from combat related detriments.

TBI and social cognition.

The social cognitive theory referred to an agentic perspective recognizing individuals as their own producers of personal experiences and creators of their own events, with environmental, behavioral, and personal agentic variables mutually affecting one another through causation (Bandura, 1999). Resiliency to adversity and hardship was contingent on personalized enablement rather than a need to seek out socio-structural sanctuary

(Bandura, 2003). The agentic perspective in the social cognitive theory stressed enablement that, in turn, furnished the psychological and environmental assets needed to nurture aptitudes and create environments supporting progressive adaptation (Bandura, 2003).

Social systems were identified as a predominant catalyst to human adaptation and change (Bandura, 1999). Human behavior has not been singularly influenced by socio-structural or psychological factors, but through social structures affecting psychological mechanisms which produce behavioral outcomes (Bandura, 1999). Socialization was a fundamental catalyst to integration and transitioning, with Schlossberg's transition theory complimenting the enablement of student veterans, allowing for a greater sense of control and hopefulness related to their transitions (situation); helping in the emergence of academic motivation, inspiration, individual uniqueness, and aptitudes (self); aiding in identifying, maintaining, and utilizing support networks (support); and assisting in the development and employment of effective coping strategies (strategies) (Ryan et al., 2011).

Student veterans exhibited high levels of social cognition, with most veterans believing they possessed the ability to control events that influenced their lives. This data is in correlation to the data related to high confidence levels exhibited by most veterans. It is important to note that the ability to distinguish attainable from unattainable goals may have manifested irrational beliefs in distinguishing those events affecting veterans' lives that were controllable and those that were not. This is especially true if some student veterans suffered from the debilitating effects of traumatic brain injury or other

service-connected or combat related detriment. Bandura (1999) recognized social systems as the predominant catalysts to human adaptation and change.

Quality of life.

Quality of life was defined as the general level of contentment individuals had relating to the everyday aspects of their lives (Martindale et al., 2017). Numerous influences on a veterans' quality of life were profoundly impacted by the invasive nature of PTSD (Silverberg et al., 2017). Little was known about the effect PTSD had on the QoL of service members who served in combat (Vogt et al., 2016). Eighty percent of the respondents associated with this research indicated they had the basic needs to subsist while attending college. However, the majority of the respondents indicating they did not have the basic needs to subsist while attending school, maintained grade-point averages of 'C' or better.

Maslow theorized a proposed classification of human needs which consisted of psychological safety, security, belongingness, esteem, and love, which resulted in psychological health being attained through self-actualization. Maslow emphsized that complex needs could not be fulfilled until the least complex needs were met, with psychological health being attained only when these needs were satisfied (Lester et al., 1983). Although the transitions of most veterans to civilian life have proved successful, many veterans found it difficult in attaining jobs that were monetarily satisfying and personally gratifying, with the reduction of QoL also being associated to substandard academic performance (Vogt et al., 2017). Symptom severity related to PTSD, mTBI, TBI, and depression was a determinant related to the extent QoL was diminished, with additional comorbid variables influencing the reduction of QoL (Martindale et al., 2016).

There is little existing data regarding the relationship between PTSD and QoL and their effect on student veterans' abilities to academically attain. Most respondents associated with this research had the basic needs to maintain normal standards of living. Those student veterans utilizing the GI Bill to attend post-secondary institutions were given a basic allowance for housing (BAH) that was supplementary to tuitions costs. The purpose of BAH was to ensure student veterans had the basic needs to attend school and maintain a suitable standard of living. Most importantly, educators have advocated that poverty levels cannot alter the intelligence levels of students or their capacity to learn. However, poverty levels can hinder one's capacity to academically attain. Shnurr and Lunney (2008) emphasized a more profound understanding of PTSD and its relationship to QoL was necessary when facilitating the needs of the VA population.

Depression.

The symptomology most associated with depression in most individuals were low energy levels, appetite changes, excessive or little sleep, persistent worry, diminished concentration, an inability to make decisions, agitation, feelings of worthlessness, chronic guilt or hopelessness, and thoughts of self-harm and suicide (World Health Organization, 2018). Many of these symptoms were evident in the responses given by the respondents regarding the qualitative question asked at the conclusion of the research survey. According to the World Health Organization (2018), individuals who attained a higher level of academic accomplishment were less likely to exhibit symptoms synonymous with depression. Depression was commonly manifested through non-military related circumstances and was quite prevalent among civilian college students in post-secondary environments. The comorbidity of PTSD and depression was the central focus of this

study where many students exhibited depressive dispositions through their service in the military which was most often manifested through combat.

Conclusions

This research has concluded that a hierarchical order of combat related independent variables existed (see Figure 5). In order to establish a hierarchical order of dependent variables and whether these dependent variables affected post-secondary attainment, each null and alternate hypothesis related to dependent variables will be addressed, with grade-point averages from high school, post-secondary pre-deployments, and post-secondary post-deployments serving as the decisive data. It was important to note that although the ability of student veterans to academically attain in a post-secondary environment may have been affected due to the existence of combat and service-connected independent variables related to this study, it must be made clear that direct effects and hindrances on academics that were influenced by specific variables were much different than variables absolutely suppressing the abilities of students to academically attain. The following data will make clear those dependent variables that affected academic attainment. No independent and dependent variables associated with this study suppressed the efforts of student veterans in their abilities to academically attain. A grade-point average of 2.3 and above was regarded as academic success. In order to give a clear understanding regarding the basis for the following conclusions, tables were used to show the correlation of grade-point averages and their relationship to each independent and dependent variable. All percentages were rounded to the nearest number, with post-secondary post-deployment grade-point averages used as determinants regarding success.

Research Question 1: What were the predominant independent and dependent variables related to student veterans' success in higher education?

Alternate hypothesis 1. Depression was an independent variable not affecting student veterans' success in higher education.

Depression was an independent variable related to the educational attainment of student veterans in higher education. Though combat and service-connected depression did hinder the abilities of student veterans to academically attain in higher education, the pre-disposition of depression in veterans did not suppress these students' abilities to academically attain. This conclusion was based on the following self-reported quantitative data (see Table 2).

Table 2

Percentages of Respondents Reporting a Diagnosis of Depression and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=8		
	41%	4.0 to 3.4
	18%	3.3 to 2.4
	41%	2.3 to 1.4

Note. Percentages are based on the respondents reporting a diagnosis of depression within a sample size of *n*=50.

Alternate hypothesis 2. Post-traumatic stress disorder was an independent variable not affecting student veterans' success in higher education.

PTSD was an independent variable related to the educational attainment of student veterans in higher education. Though combat and service-connected PTSD did hinder

the abilities of student veterans to academically attain in higher education, the pre-disposition of PTSD in veterans did not suppress these student's abilities to academically attain. These conclusions were based on the following self-reported data (see Tables 3 and 4).

Table 3

Percentages of Respondents Reporting a Diagnosis of PTSD and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=11		
	45%	4.0 to 3.4
	27%	3.3 to 2.4
	18%	2.3 to 1.4
	4%	1.3 to 0.0
	6%	Unsure

Note. Percentages are based on the respondents reporting a diagnosis of PTSD within a sample size of *n*=50.

Table 4

Percentages of Respondents Reporting a Diagnosis of PTSD/Depression and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=14		
	29%	4.0 to 3.4
	38%	3.3 to 2.4
	22%	2.3 to 1.4
	6%	1.3 to 0.0

	5%	Unsure

Note. Percentages are based on the respondents reporting a diagnosis of PTSD/depression within a sample size of *n*=50.

Alternate hypothesis 3. Mild traumatic brain injury was an independent variable not affecting student veterans' success in higher education.

Mild traumatic brain injury was an independent variable related to the educational attainment of student veterans in higher education. Though combat and service connected mTBI did hinder the abilities of student veterans to academically attain in higher education, mTBI did not suppress students' abilities to academically attain. This conclusion was based on the following self-reported data (see Table 5).

Table 5

Percentages of Respondents Reporting a Diagnosis of Mild Traumatic Brain Injury and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=2		
	100%	4.0 to 3.4

Note. Percentages are based on the respondents reporting a diagnosis of mild traumatic brain injury within a sample size of *n*=50.

Alternate hypothesis 4. Traumatic brain injury was an independent variable not affecting student veterans' success in higher education.

Traumatic brain injury was an independent variable related to the educational attainment of student veterans in higher education. Though service-connected and combat related TBI did hinder the abilities of student veterans to academically attain in

higher education, TBI did not suppress students' abilities to academically attain. This conclusion was based on the following self-reported data (see Table 6).

Table 6

Percentages of Respondents Reporting a Diagnosis of Traumatic Brain Injury and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=1	100%	4.0 to 3.4

Note. Percentages are based on the respondents reporting a diagnosis of traumatic brain injury within a sample size of *n*=50.

Alternate hypothesis 5. The ability of student veterans to transition into higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

The ability to transition was a dependent variable related to the educational attainment of student veterans in higher education. Quantitative data related to this research has indicated that a significant number of student veterans reported being diagnosed with PTSD, depression, mTBI, and/or TBI. Though combat and service-connected detriments did hinder the abilities of student veterans to transition in higher education, they did not suppress students' abilities to academically attain. In order to establish a correlation between transitioning and student veterans' abilities to academically attain, participants were asked to respond to two statements. These conclusions were based on the following self-reported data (see Tables 7 and 8).

Item A: While attending college, fellow peers and the university made it easier to transition from a military environment to a classroom setting.

Item B: While attending college, it was easier associating with fellow service members and veterans rather than civilian peers.

Table 7

Percentages of Participants Responding to Item A and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=28 (Yes)		
	22%	4.0 to 3.4
	44%	3.3 to 2.4
	26%	2.3 to 1.4
	8%	1.3 to 0.0
n=8 (No)		
	25%	4.0 to 3.4
	25%	3.3 to 2.4
	50%	2.3 to 1.4

Note. Percentages are based on the number of participants who responded Yes or No to Item A within a sample size of *n*=50.

Table 8

Percentages of Participants Responding to Item B and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=39 (Yes)		

	32%	4.0 to 3.4
	28%	3.3 to 2.4
	16%	2.3 to 1.4
	2%	1.3 to 0.0
n=11 (No)		
	15%	4.0 to 3.4
	35%	3.3 to 2.4
	35%	2.3 to 1.4
	5%	1.3 to 0.0
	10%	Unsure

Note. Percentages are based on the number of participants who responded Yes or No to Item B within a sample size of *n*=50.

Alternate hypothesis 6. The ability of student veterans to integrate into higher academic settings was a dependent variable affected by PTSD, depression, mTBI, and/or TBI.

The ability to integrate was a dependent variable related to the educational attainment of student veterans in higher education. Quantitative data related to this research has indicated a significant number of student veterans reported being diagnosed with PTSD, depression, mTBI, and/or TBI. Though combat related and service-connected detriments did hinder the abilities of student veterans to integrate in higher academic settings, they did not suppress students' abilities to academically attain. In order to establish a correlation between integration and the ability of student veterans to academically attain, respondents were asked to respond to one statement. This conclusion was based on the following self-reported data (see Table 9).

Item C: I feel uncomfortable in large crowds of people.

Table 9

Percentages of Participants Responding to Item C and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=29 (Yes)		
	30%	4.0 to 3.4
	22%	3.3 to 2.4
	26%	2.3 to 1.4
	11%	1.3 to 0.0
	11%	Unsure
n=21 (No)		
	17%	4.0 to 3.4
	29%	3.3 to 2.4
	9%	2.3 to 1.4
	7%	1.3 to 0.0

Note. Percentages are based on the number of participants who responded Yes or No to Item C within a sample size of *n*=50.

Alternate hypothesis 7. The social cognitive ability of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Social cognition was a dependent variable related to the educational attainment of student veterans in higher education. Quantitative data related to this research has indicated a significant number of student veterans reported being diagnosed with PTSD, depression, mTBI, and TBI. Though combat related and service-connected detriments

did hinder the social cognition of student veterans in higher academic settings, they did not suppress students' abilities to academically attain. In order to establish a correlation between social cognition and student veterans' abilities to academically attain, participants were asked to respond to three statements. These conclusions were based on the following self-reported data (see Tables 10, 11 and 12).

Item D: I have control over the events in my life.

Item E: I sometimes set expectations for myself too high.

Item F: I perform best under challenging circumstances.

Table 10

Percentages of Participants Responding to Item D and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=40 (Yes)		
	36%	4.0 to 3.4
	36%	3.3 to 2.4
	16%	2.3 to 1.4
	6%	1.3 to 0.0
	6%	Unsure
n=10 (No)		
	24%	4.0 to 3.4
	24%	3.3 to 2.4
	31%	2.3 to 1.4
	21%	Unsure

Note. Percentages are based on the number of participants who responded Yes or No to Item D within a sample size of *n*=50.

Table 11

Percentages of Participants Responding to Item E and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=46 (Yes)		
	29%	4.0 to 3.4
	44%	3.3 to 2.4
	19%	2.3 to 1.4
	3%	1.3 to 0.0
	5%	Unsure
n=4 (No)		
	50%	4.0 to 3.4
	50%	3.3 to 2.4

Note. Percentages are based on the number of participants who responded Yes or No to Item E within a sample size of *n*=50.

Table 12

Percentages of Participants Responding to Item F and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=47 (Yes)		
	33%	4.0 to 3.4
	37%	3.3 to 2.4
	22%	2.3 to 1.4
	4%	1.3 to 0.0
	4%	Unsure

n=3 (No)		
	60%	4.0 to 3.4
	40%	Unsure

Note. Percentages are based on the number of participants who responded Yes or No to Item F within a sample size of *n*=50.

Alternate hypothesis 8. The social learning ability of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Social learning was a dependent variable related to the educational attainment of student veterans in higher education. Quantitative data related to this research has indicated a significant number of student veterans reported being diagnosed with PTSD, depression, mTBI, and/or TBI. Though combat related and service-connected detriments did hinder the social learning abilities of student veterans in higher academic settings, they did not suppress student's abilities to academically attain. In order to establish a correlation between social learning and student veterans' abilities to academically attain, participants were asked to respond to one statement. This conclusion was based on the following self-reported data (see Table 13).

Item G: I have always interacted well with others.

Table 13

Percentages of Participants Responding to Item G and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=39 (Yes)		

	37%	4.0 to 3.4
	42%	3.3 to 2.4
	21%	2.3 to 1.4
n=11 (No)		
	24%	4.0 to 3.4
	18%	3.3 to 2.4
	22%	2.3 to 1.4
	17%	1.3 to 0.0
	19%	Unsure

Note. Percentages are based on the number of participants who responded Yes or No to Item G within a sample size of *n*=50.

Alternate hypothesis 9. The perceived self-efficacy of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Perceived self-efficacy was a dependent variable related to the educational attainment of student veterans in higher education. Quantitative data related to this research has indicated a significant number of student veterans reported being diagnosed with PTSD, depression, mTBI, and/or TBI. Though combat and service-connected detriments did hinder the perceived self-efficacy of student veterans in higher academic settings, combat and service-connected detriments did not suppress perceived self-efficacy and the students' abilities to academically attain. In order to establish a correlation between perceived self-efficacy and a student veterans' abilities to academically attain, participants were asked to respond to one statement. This conclusion was based on the following self-reported data (see Table 14).

Item H: My self-confidence level is high, average, or low.

Table 14

Percentages of Participants Responding to Item H and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=27 (High)		
	36%	4.0 to 3.4
	36%	3.3 to 2.4
	28%	2.3 to 1.4
n=21 (Average)		
	27%	4.0 to 3.4
	24%	3.3 to 2.4
	21%	2.3 to 1.4
	14%	1.3 to 0.0
	14%	Unsure
n=2 (Low)		
	50%	4.0 to 3.4
	50%	3.3 to 2.4

Note. Percentages are based on the number of participants who responded High, Average, or Low to Item H within a sample size of *n*=50.

Alternate hypothesis 10. The quality of life of student veterans in higher academic settings was a dependent variable not affected by PTSD, depression, mTBI, and/or TBI.

Quality of life was a dependent variable related to the educational attainment of student veterans in higher education. Quantitative data related to this research indicated a

significant number of student veterans reported being diagnosed with PTSD, depression, mTBI, and/or TBI. This research concluded that quality of life was not a dependent variable influencing the success rates of student veterans in higher academics. In order to establish a correlation between quality of life and student veterans' abilities to academically attain, participants were asked to respond to one statement. This conclusion was based on the following self-reported data (see Table 15).

Item I: While attending college, I had the basic needs to live such as shelter, food, transportation, and money.

Table 15

Percentages of Participants Responding to Item I and Post-Deployment Grade-Point Averages

Number of Respondents	Percentages	GPA
n=40 (Yes)		
	31%	4.0 to 3.4
	33%	3.3 to 2.4
	14%	2.3 to 1.4
	11%	1.3 to 0.0
	11%	Unsure
n=10 (No)		
	20%	4.0 to 3.4
	22%	3.3 to 2.4
	22%	2.3 to 1.4
	18%	1.3 to 0.0
	18%	Unsure

Note. Percentages are based on the number of participants who responded Yes or No to Item I within a sample size of *n*=50.

Research Question 2: What was the hierarchical order of independent variables related to student veterans' success in higher education?

Null hypothesis 11. A hierarchical order of independent variables related to student veterans' success does exist (see Figure 5).

Twenty-two percent of respondents reported a diagnosis of PTSD and depression. Twenty percent of respondents reported being diagnosed with depression without comorbidity. Fourteen percent of respondents were diagnosed with PTSD without comorbidity. Two percent of respondents were diagnosed with PTSD, depression, and mTBI, with 2% of respondents reporting they were diagnosed with mTBI and depression.

Research Question 3: What was the hierarchical order of dependent variables related to student veterans' success in higher education?

Alternate hypothesis 12. A hierarchical order of dependent variables related to student veterans' success in higher education does not exist.

A hierarchical order of dependent variables could not be established due to the close-proximity of post-deployment grade-point averages associated to each variable. Although the dependent variables were commonly essential in the abilities of all students to academically attain at any scholastic level, most student veterans suffering from the debilitating detriments of PTSD, depression, mTBI, and/or TBI, did academically attain. Although combat and service- connected disabilities hampered the dependent variables associated to each student, the presence of perceived self-efficacy, social learning, social cognition, transitioning, integration, and quality of life were kept relatively intact and remained useful attributes to learning.

Limitations

The following limitations were identified in this study and given consideration during the valuation of raw data collected from the respondent survey. The first limitation was the unavailability of official data. Post-secondary institutions were not mandated by federal or state governing entities to compile data reflecting success and fail rates of student veterans and student service members. The researcher made inferences based on qualitative data previously identified in the literature review. The availability of qualitative and quantitative data regarding the successes and failures of this demographic of student had no effect on the independent and dependent variables proposed in this research. The lack of official data may have had bearing on whether post-secondary venues instituted sound protocols based on success and fail rates which may have hindered this student population's ability to academically attain.

The second limitation of this research was the availability of sites willing to sponsor research of a controversial nature and subject their student populations in remembering difficult and traumatic events. Though many extension campuses existed throughout the state of Missouri, few were in proximity of military installations where the availability of student veterans subsisted. Drury University in St. Robert, Missouri maintained a reputation of hosting many veterans in the area.

The third limitation of this research was the instrumentation. The instrumentation was designed by the researcher through inferences discovered in the literature review, with validity based on these inferences and their applicable nature to each survey question. Although every attempt was made to design a thorough questionnaire encompassing every possible, imagined, and inferred variable, anomalies in design may

have existed due to causal variations regarding additional independent and dependent variables. Causal variations may have affected the correlative relationships between both variable sets. Additional causal variations may have derived from the possible existence, yet unavailability, of formal or specific data unknown to the researcher. The specificity and brevity of the instrumentation did not allow respondents to contradict themselves through redundant questioning due to the identification of specific dependent and independent variables and their use in an exclusive contextual manner regarding the educational attainment of student veterans in higher education.

The fourth limitation of this research was the possibility of excessive non-responses by participants which limited the accumulation of raw data and altered the researcher's ability to make qualitative and quantitative conclusions. In the event of excessive non-responses, the researcher may have made considerations for redistributing the survey instrumentation until viable and conclusive data was amassed. Chapters Four and Five presented the analysis and conclusions of the research, with the limitations rendered contextually, and all attempts being made at prescribing the relationship of the limitations to the inferences made by the researcher.

The fifth limitation of this research was influenced by institutional protocols at Lindenwood University. These protocols limited the researcher's ability to survey both veterans and active duty military personnel. Student veterans were the singular focus regarding the accumulation of qualitative and quantitative data via the research instrument. Because of this, the researcher was unable to make correlations related to how service members simultaneously adapted to multiple social and cultural environments.

Implications for Practice

All accredited higher education institutions, public or private, should be mandated by federal statutes requiring schools to collect data regarding the success rates of veterans attending post-secondary venues. This data could be used to establish and implement assistive protocols designed to help veterans academically attain and be used as determinants regarding the success or failure of protocols. Post-secondary institutions are required by the veteran's administration to reveal grade-point averages of those students using the GI Bill. Veterans using the GI Bill were required to maintain a 'C' grade-point average in order to continue using benefits. However, this data was collected only for the purpose of reporting a veterans academic standing. This data was not used to establish assistive protocols. Higher academic institutions who establish and implement assistive protocols should ask for recommendations from the Veterans Administration regarding content and implementation. Student veterans registering for school should be afforded the opportunity to voluntarily reveal combat and service-connected disabilities in order to facilitate and accommodate their specific needs, provided post-secondary institutions follow the prescribed state and federal protocols regarding privacy such as HIPAA (Health Insurance Portability and Accountability Act) and FERPA (Family Educational Rights and Privacy Act). This can be done by asking specific questions on the application forms when students attempt to gain admission into colleges and universities.

Higher education institutions must hire faculty and staff who are trained for the explicit purpose of assisting veterans. More specifically, academia should hire veterans who understand the complications involved in transitioning and integrating from a military environment to an academic environment. At the very least, non-veteran faculty

and staff should be given training allied to the specific combat related detriments that prevail among student veteran populations within academic settings. Faculty and staff at colleges and universities should be informed of veterans' statuses to nurture awareness so accommodations could be made available. More importantly, faculty and staff should let student veterans know they are aware of their veterans' status which may give these student veterans the capacity to more readily self-identify the detriments that could hinder their academic propensities to attain. Training for faculty and staff could be implemented through professional learning communities.

One aspect of student veterans was that most were first-generation college students who did not know how to disseminate academic information related to schoolwork. Identification of first-generation college students should be made by higher education institutions through admissions applications. Taking notes from lectures and identifying significances in subject matter was much different in higher education settings than in K-12 settings. A pre-cursory credited orientation course to give these veterans the skills to succeed should be implemented. The differentiation between higher academic failure due to combat related detriments and failure due to inadequate academic skillsets should be made, with higher academia taking initiatives to ensure student veterans are prepared to enter higher academic environments. Those students who were identified as first-generation college students should be required to take a pre-cursory academic orientation course in order to gain full admission into colleges and universities. Simply put, there are some student veterans who must learn how to learn at post-secondary levels.

Recommendations for Future Research

One interesting concept identified in the literature review was how there was no research indicating how personality manifested acceptable performance outcomes in students. Further research must be conducted to evaluate what personality traits are more suitable for learning and how unacceptable personality traits can be modified to incorporate productive learning. A profound concept would be to discover how unacceptable personality traits could be modified by stimulating specific and appropriate intrinsic values through identifying and capitalizing on individual intrinsic interests.

Another avenue for possible research was in the area of assistive protocols used by academia to help student veterans in academic attainments. Nationwide research should evaluate existing protocols at colleges and universities to ascertain what protocols were most effective in helping student veterans in becoming academically successful. It would be interesting to ascertain how many colleges and universities promise assistance to veterans and the extent to which post-secondary budgets reflect those efforts.

Future research should be conducted regarding how monthly stipends offered through the Post/911 GI Bill motivated students to undertake post-secondary endeavors. Many student veterans admitted that monthly stipends and cost of living allowances offered by the Veteran's Administration while using the GI Bill was the single most important stimulus for their decision to seek post-secondary credentials. Research could identify those predatory institutions allowing student veterans to deplete their GI Bill benefits by allowing them to take fulltime classes of any kind and in different degree fields for the sole purpose of receiving monthly stipends. In order to maintain GI Bill benefits, veterans need to only maintain 'C' averages in order to continue using benefits,

with little attention given to whether a student was taking the appropriate succession of classes to earn a degree.

Lastly, research should be conducted regarding the social assimilation processes between student veterans and active duty military personnel. Active duty military personnel must assimilate in two social settings; the military social setting and the academic social setting. Research could indicate whether active duty military personnel were academically more successful attending classes on posts where post-secondary facilities were available, or whether military personnel perform more successfully in academic settings off military installations. Some veterans prefer attending classes on military installations, when feasible, due to being accustomed to the military cultural environment.

Summary

Chapter Five began with an overview reiterating the conceptual framework of this study. This was followed by the findings related to ADHD, grade-point averages, and independent variables. Independent variables were followed by the findings related to the dependent variables associated to the study, with correlations being made between the independent and dependent variables showing veterans were academically attaining in post-secondary education. This was followed by the conclusions that reiterated the research questions and proved or refuted each hypothesis, with all alternate hypotheses being accepted except one. The null hypothesis accepted in this research indicated a hierarchical order of independent variables existed. This was followed by the limitations of the research, implications for practice, and recommendations for future research.

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Appendix A

Questionnaire

1) **I am:** (Please Circle One)

   A) Male B) Female

2) **My age is between:** (Please Check One)

   ___ 18-21

   ___ 22-25

   ___ 26-29

   ___ 30-33

   ___ 34-37

   ___ 38-41

   ___ 42-45

   ___ 46-49

   ___ 50+

3) **My time in the military is/was:** (Please Check One)

   ___ 1-4 years

   ___ 5-8 years

   ___ 9-12 years

   ___ 13-16 years

   ___ 17-20 years

   ___ 20 + years

4) **Before joining the military, I was diagnosed with:** (Please Check One)

___ Hyper-Activity Disorder (HAD)

___ Attention Deficit Disorder (ADD)

___ Both HAD and ADD

___ Neither HAD/ADD

5) **My GPA (Grade Point Average) in <u>HIGH SCHOOL</u> was:** (Please Check One)

___ A (4.0-3.4)

___ B (3.3-2.4)

___ C (2.3-1.4)

___ D (1.3-0.0)

___ Unsure

6) **My self-confidence level is:** (Please Check One)

___ High

___ Average

___ Low

7) **I have been diagnosed with:** (Please Indicate All That Apply)

___ Post-traumatic Stress Disorder (PTSD)

___ Mild Traumatic Brain Injury (mTBI)

___ Depression

___ Traumatic Brain Injury (TBI)

___ Unsure

___ None of the Above

___ Decline to Answer

8) **I have always interacted well with other:** (Please Circle One)

A) Yes B) No

9) **I am a social person:** (Please Circle One)
A) Yes B) No

10) **I have control over the events in my life**: (Please Circle One)

A) Yes B) No

11) **I sometimes set expectations for myself too high:** (Please Circle One)

A) Yes B) No

12) **I perform best under challenging circumstance:** (Please Circle One)

A) Yes B) No

13) **My GPA (Grade Point Average) in <u>COLLEGE</u> was/is**: (Please Check One)

___ A (4.0-3.4)

___ B (3.3-2.4)

___ C (2.3-1.4)

___ D (1.3-0.0)

___ Unsure

14) **While attending college, instructors are/were aware that I am/was a service member/veteran:** (Please Circle One)

A) Yes B) No C) Unsure

15) **I feel uncomfortable in large crowds of people:** (Please Circle One)

A) Yes B) No

16) **While attending college, it was/is easier associating with fellow service members and veterans than civilian peers:** (Please Circle One)

A) Yes B) No C) Neither Yes or No

17) **While attending college, fellow peers and the university made it easy to transition from a military environment to a classroom setting:** (Please Circle One)

A) Yes B) No C) Neither Yes or No

18) **While attending college, I have/had the basic needs to live such as shelter, food, transportation, and money:** (Please Circle One)

19) **My GPA (Grade Point Average) in <u>COLLEGE AFTER</u> being deployed to a war zone was/is:** (Please Check One)

___ A (4.0-3.4)

___ B (3.3-2.4)

___ C (2.3-1.4)

___ D (1.3-0.0

___ Unsure

20) **I have experienced the following:** (Please Check All That Apply)

Section A

___ Feeling depressed most of the day.

___ Had little interest or pleasure in all or almost all activities I usually enjoy.

___ Significant weight loss without dieting or an increase or decrease in appetite.

___ Sleeping too little or too much.

Section B

___ Felt hyper or slowed down every day.

___ Felt worthlessness and guilt every day.

___ Had trouble concentrating, thinking, and/or making decisions every day.

Section A

21) I have experienced the following: (Please Check All That Apply

___ A traumatic event(s).

___ Witnessed traumatic event(s) as they happened to others.

___ Heard about a traumatic event(s) that happened to a close friend or close relative.

___ I have experienced extreme or repeated exposure to aversive details of a traumatic event(s). (EXAMPLE: *first responders repeatedly picking up human remains; police officers repeatedly exposed to details of child abuse*).

Section B

___ Had recurrent, involuntary, and distressing memories of a traumatic event(s).

___ Had recurrent or distressing dreams about a traumatic event(s).

___ Sometimes relived a traumatic event(s) as though they are happening again.

___ Sometimes relived a traumatic event(s) because objects, smells, sounds, or sights remind me of the event.

___ Made efforts to avoid memories, thoughts, or feelings about a traumatic event(s).

___ Made efforts to avoid reminders of a traumatic event(s). (EXAMPLE: *people, places, conversations, activities, objects, and situations*).

Section C

___ Had trouble remembering an important aspect of a traumatic event(s).

___ Had persistent and exaggerated negative beliefs or expectations of myself, others, and the world. (EXAMPLE: *"I am a bad person, ""No one can be trusted," "The world is completely dangerous," "My whole nervous system is completely ruined"*).

___ Blamed myself for the traumatic event(s) that happened to me.

___ Had little interest in participating in significant events.

___ Sometimes felt detached or estranged from others.

___ Had trouble feeling positive emotions. (EXAMPLE: *happiness, satisfaction, or feelings of love*).

Section D

___ Sometimes felt irritable and had outbursts of anger with little or no provocation which I express verbally or physically toward people and objects.

___ Have shown reckless or self-destructive behavior.

___ Have been hyper-vigilant (EXAMPLE: *on high alert, overly cautious, highly protective of yourself and your surrounding*).

___ I can startle easily.

___ I have trouble concentrating.

___ I have trouble falling asleep, staying asleep, or have restless sleeps.

22) I have experienced the following: (Please Check All That Apply)

___ Lost consciousness for less than 30 minutes after an injury to the head.

___ Had memory loss for less than 24 hours after an injury to the head.

___ Felt dazed, disoriented, or confused for less than 24 hours after an injury to the head.

___ Had blurred vision for less than 24 hours after an injury to the head.

---

23) I have experienced the following: (Please Check All That Apply)

Section A

___ Felt dizziness after an injury to the head.

___ Felt confusion after an injury to the head.

___ Felt as though I "saw stars" after an injury to the head.

___ Had no memory of the event after an injury to the head.

___ Lost consciousness after an injury to the head

Section B

___ After a head injury, I had persistent headaches or neck pain lasting 3 or more days.

___ After a head injury, I was sensitive to light and/or noise lasting 3 or more days.

___ After a head injury, I had a loss of balance lasting 3 or more days.

___ After a head injury, I felt tired and had a lack of energy lasting 3 or more days.

___ After a head injury, I had ringing in the ears lasting 3 or more days.

___ After a head injury, I experienced depression and/or anxiety (worry) lasting 3 or more days.

___ After a head injury, my thinking, speech, and reading ability was slowed lasting 3 or more days.

___ After a head injury, I had problems concentrating and organizing daily task for more than 3 days.

24) How has your education been affected serving in the military?

Appendix B

Disclaimer

Thank you for participating in this research. Before you begin, please take a moment to find the informed consent document attached to the front of this survey (the survey representative will read aloud the informed consent document to all respondents). As a participant in this research, your identity will remain anonymous. There are 24 survey questions. The time to take this survey should be no more than 10 minutes. If at any time you wish to discontinue the survey process, you may do so with no questions asked. Discontinuing the survey process will not have any bearing on academic work. If there are questions you do not wish to answer, you may elect not to answer them, though answering fully and to the best of your ability will greatly enhance the comprehensiveness of the research being conducted. To participate in this research, you must be a veteran of the armed forces, have a minimum of one post-secondary semester, and must have deployed to a war zone while serving in the military. If you do not meet these criteria, you may discontinue the survey process at this time. Are there any questions?

Appendix C

Tammie Black
Site Coordinator
Drury University
194 Eastlawn Avenue
St. Robert, Missouri 65583 February 1, 2019

Tammie,

I appreciate that you were able to take the time out of your busy schedule to meet with me this afternoon at the Drury campus in St. Robert. As you know, I am a doctoral student searching for a site to complete the requirements of my dissertation. This research will be conducted in the form of a questionnaire, with student veterans as respondents. The respondent requirements are as follows:

1) Respondents must be student veterans who have served in the United States military.
2) Respondents must have completed one semester of post-secondary education.
3) Respondents must have a minimum of one deployment to a combat zone.

A respondent's choice to answer this questionnaire will be strictly voluntary, with complete anonymity adhered to at all times. There will be no questions asked linking any respondent to a questionnaire. This questionnaire will solely be used to acquire data to enable the researcher to put in hierarchical order those variables affecting student veterans' educational attainment in post-secondary education.

The central premise of this research is to enable higher education institutions to identify those variables directly affecting a student veterans' and student service members' ability to academically attain, and to allow higher education institutions access to data enabling more effective protocols assisting veterans toward their educational attainment and achievement. The research requirement is 50 respondents. Formal permission to conduct this research must be given by Drury University by official letter or IRB approval.

This is exceptionally important research. It may help veterans and student service members in their quest's toward academic success.

Sincerely,

W. Ray Spadoni
rayspadoni@hotmail.com
wrs215@lindenwood.edu
573-292-7476

Appendix D

Recruitment Letter

My name is Ray Spadoni. I am currently a doctoral candidate at Lindenwood University doing research related to the circumstances regarding student veteran success and educational attainment in higher academics. As a combat veteran, I have found myself in a position to help other veterans by conducting this research and would like to take this occasion to invite you, a fellow veteran, to participate.

In order to assist our veterans who are currently enrolled in colleges and universities across the country, it's necessary for higher academic institutions to see our veterans and service members attending their schools as a unique group of people. This requires efforts be made by these institutions to address the needs associated with our experiences and corresponding detriments so we may find our place in the academic environment. Our military experiences, such as those acquired through combat, and the psychological and physical detriments associated with these combat experiences, has made it difficult for some veterans to transition and integrate within academic environments and garner the educational attainment they deserve. Research has shown that post-secondary institutions are not doing enough to ensure academic success for veterans. I hope to change that with this research.

In order to participate, you must be a veteran, have completed one semester of post-secondary work, and must have at least one deployment in a combat zone. The survey should take no longer than 10 minutes to complete. Your name will not be used. There will be complete anonymity. If you elect to stop the survey, you may do so at any time. For further information regarding this research, you may email the researcher at

WRS215@lindenwood.edu. This research is voluntary and will have no compensatory value. Thank you.

Appendix E

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Warren Spadoni** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 02/06/2018.

Certification Number: 2641378.

Appendix F

Hi Ray,

You project has received approval from Drury's IRB. Good luck with your project. By the way-say hello to the folks at Lindenwood. I used to teach there from 1990-2000.

Regards,

Mary

Mary E. Utley, PhD.

Department of Behavioral Sciences

Professor of Psychology; Chair IRB

Drury University

(417) 873-7306

mutley@drury.edu

Appendix G

Drury University Informed Consent

This project, "Variables Affecting Veteran Success in Higher Education," has been reviewed and approved by the Drury University Institutional Review Board (IRB). The IRB has determined that the research procedures adequately safeguard the participant's privacy, welfare, civil liberties, and rights. The chair of the IRB may be reached at Drury University, 900 North Benton Avenue, Springfield, MO 65802. The telephone number is 417-873-7306.

I have read the material above, and any questions asked, have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without penalty or prejudice at any time.

_____

_____

Signature of Participant or Authorized Representative Date (mm/dd/yyyy)

_____

Printed Name of Participant or Authorized Representative

Vitae

Warren Ray Spadoni

U. S. Army (Retired)

Military Occupational Specialty: Medic (68W)

Bachelors: Fine Arts, Central Missouri State University, 1987

Masters: Education and Human Services, Drury University, 2015

Member: Phi Kappa Phi and Kappa Delta Pi honor societies