

IMPACT OF COMBAT EXPERIENCE ON ADULT LEARNING FOR STUDENTS  
ENROLLED AT LIBERTY UNIVERSITY IN SPRING 2019

by

Stephany Pracht

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

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## ABSTRACT

This dissertation joins an active conversation in the behavioral sciences regarding the challenges of assimilating the adult experienced trauma into the adult education setting. This quantitative study employed a nonexperimental, causal-comparative research design to explore the perceptions of current and former combat-experienced military students about their academic experiences. By exploring the needs in higher education that are concerning and prevalent among those who have experienced active combat, this paper discusses the effects of the combat experience on current and former military members as they seek to acclimate to the academic world. This study was guided by Malcolm Knowles's idea that andragogy is the art and science of adult learning and his five assumed characteristics of an adult learner: self-concept, the adult learning experience, a readiness to learn, prepared to learn, and motivation to learn. An independent samples *t*-test was utilized to determine if a difference exists between the two groups: learners who have experienced active combat and learners who have not experienced active combat. The dependent variables were defined as academic motivation, personality, and self-esteem. A one-way MANOVA was used to determine whether there are any statistically significant differences within the study variables of academic motivation, personality, self-esteem, and overall academic experience. This study provides no creditable evidence of the impact of experiencing active combat has on the adult learner. However, this study provides data and information to continue and develop the conversation of the impact of adult trauma on the adult learner.

Keywords: adult, trauma, learning, post-traumatic stress, higher education, combat

## Table of Contents

ABSTRACT .....	3
List of Tables .....	7
List of Figures .....	8
List of Abbreviations .....	9
CHAPTER ONE: INTRODUCTION.....	10
Overview.....	10
Background.....	10
Historical Context.....	11
Social Background.....	13
Theoretical Background.....	17
Problem Statement.....	18
Purpose Statement.....	19
Significance of the Study.....	20
Research Question(s).....	21
Definitions.....	21
Summary.....	23
CHAPTER TWO: LITERATURE REVIEW.....	25
Overview.....	25
Conceptual Framework.....	25
Related Literature.....	27
Crisis, Stress, Anxiety, and Trauma.....	28
Trauma and Current or Former Military Members.....	34

Social Effects of Posttraumatic Stress Symptoms .....	37
Relationships.....	37
The Brain .....	40
Perception .....	42
Treatment Options .....	43
Treatment Hindrances.....	46
Positive Growth Spiral.....	48
Teaching and Learning .....	50
Summary.....	60
CHAPTER THREE: METHODS.....	61
Overview.....	61
Design .....	62
Research Questions.....	64
Hypotheses.....	64
Participants and Setting.....	65
Instrumentation .....	68
Procedures.....	69
Data Analysis .....	72
CHAPTER FOUR: FINDINGS.....	75
Overview.....	75
Summary of Information of the Data Set of the Sample .....	75
Descriptive Statistics.....	76
Results.....	77

Hypotheses .....	79
CHAPTER FIVE: CONCLUSIONS .....	87
Overview.....	87
Discussion.....	87
Implications.....	89
Limitations .....	90
Recommendations for Future Research .....	92
REFERENCES .....	95
APPENDIX A: IRB Approval .....	122
APPENDIX B: IRB Administrative Approval Request .....	123
APPENDIX C: Recruitment Letter/Invitation .....	124
APPENDIX D: IRB Approved Consent Form .....	125
APPENDIX E: SURVEY .....	126

**List of Tables**

Table 1. Descriptive Statistics.....	77
Table 2. Descriptive Statistics for Perceived Ability to Successfully Learn .....	79
Table 3. Descriptive Statistics for Academic Motivation.....	80
Table 4. Levene’s Test of Equality of Error Variances for Academic Motivation.....	81
Table 5. Multivariate Tests Academic Motivation .....	82
Table 6. Descriptive Statistics for Personality .....	83
Table 7. Levene’s Test of Equality of Error Variances for Personality.....	84
Table 8. Multivariate Tests Personality .....	85
Table 9. Descriptive Statistics for Self-Esteem .....	86
Table 10. Levene’s Test of Equality of Error Variances for Self-Esteem .....	86

**List of Figures**

Figure 1. Delineation of Groups .....	71
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### **List of Abbreviations**

Academic Motivation Scale (AMS-C 28)

Cognitive Behavioral Therapy (CBT)

Cognitive Processing Therapy (CPT)

Eye Movement Desensitization and Reprocessing (EMDR)

Posttraumatic Stress Disorder (PTSD)

Rosenberg Self-Esteem Scale (RSE)

Self-Directed Learning (SDL)

Ten-Item Personality Inventory (TIPI)

U.S. Department of Defense (DoD)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

The purpose of the following chapter is to provide background information for this quantitative study by laying a foundation for researching the effects of adult trauma on adult education through exploring the perceived higher educational experience of current and former military members who have experienced active combat. The background section explores the presenting problem of the learning cycle being disrupted by trauma. The purpose and significance of the study are identified. The chapter touches on the way this subject is important to the researcher and addresses the needs of current and former military members who have experienced active combat. The research questions and hypotheses are framed and presented. And, lastly, important definitions regarding this research study are discussed and defined.

### **Background**

The learning cycle is continually in motion and is an active, productive, circumstantial process (O'Brien, Millis, & Cohen, 2008). The learning process or journey involves change, growth, and becoming something or somebody different (in knowledge, attitude, or skill). The setting or framework of the learning journey may include the formal institution, non-formal settings, and informal contexts (Merriam, Caffarella, & Baumgartner, 2007). No matter the framework of the learning journey, there are responsibilities inherent in the process. The learner must be an active participant in the learning journey. The learner is responsible for recognizing, understanding, receiving, and applying the information that is presented (Wilson & Peterson, 2006).

In a journey, especially a learning journey, there can be obstacles or roadblocks along the way. These obstacles can be external or internal. Internal obstacles on the learning journey can

be lack of motivation, academic preparedness, or self-awareness, whereas external obstacles are based on people and circumstances that are out of the learner's control (Collins, 2009). Another potential external roadblock is trauma.

### **Historical Context**

In everyday usage, the terms *stress*, *crisis*, *trauma*, and *traumatic stress* often have overlapping definitions and implications. Individuals do not respond to stress in identical ways. Responses are unique and often determined by each person's personality and character, temperament, daily frustrations, personal coping skills, adaptability to change or unexpected events, and support system, as well as the intensity and duration of the stressor (Yeager & Roberts, 2015). Therefore, what is simple stress for one individual may result in the start of a crisis event or traumatic reaction for another (Cocoran & Roberts, 2000).

According to the American Psychiatric Association (APA, 2013), combat is categorized as a traumatic experience that can produce posttraumatic stress symptoms. Research has shown that military members who have been in combat are at especially high risk of developing posttraumatic stress disorder (PTSD; Church, 2009). In a 2007 population survey of 103,788 military members that were active duty from 2001–2005, 13% of the study participants were diagnosed with PTSD. Interestingly, the survey highlighted that active combat exposure was a more significant variable contributing to PTSD symptoms than just deployment to a warzone (Seal, Bertenthal, Miner, Sen, & Marmar, 2007). The system of care within the Department of Defense (DoD) for psychological health, which has evolved since posttraumatic stress was first recognized after the Civil War, has not been sufficient to meet the needs of those suffering from the symptoms and will not be sufficient to meet needs in the future (Arthur, MacDermid, & Kiley, 2007).

Originally, PTSD was referred to as combat fatigue by the U.S. DoD (Gould, Greenberg, & Hetherington, 2007). Although first recognized in military members, numerous examples of posttraumatic stress symptoms have also been found in the general population. Posttraumatic stress symptoms have been identified in abused women and children with past traumatic experiences or sudden, unexpected catastrophic experiences such as sexual abuse, war, or natural disasters such as a tsunami (Cantani et al., 2009). The prevalence of posttraumatic stress symptoms varies across traumatic events with sexual assault causing symptoms at the highest rate (Foa & Rothbaum, 1998).

Posttraumatic stress is a relatively new diagnosis in the history of psychology in the Trauma and Stress-Related Disorder category in the *Diagnostic and Statistical Manual*. Throughout history, in a military context, PTSD has been called by a number of different names, such as *soldier's heart* after the Civil War, *combat fatigue* or *shell shock* after World War I, and *battle fatigue* or *gross stress reaction* after World War II (Pols, 2008). Whatever the name, PTSD can cause a host of issues in affected individuals. According to Church (2009), PTSD can interfere with cognitive skills, judgment, memory, concentration, organization skills, and motivation. Posttraumatic stress symptoms can also cause difficulty retaining verbal directions, managing assignments, performing multiple tasks with time pressures, and prioritizing tasks. Posttraumatic stress sufferers can also have difficulties interacting with others and problems with authority figures, negative feedback, and interpreting criticism (Church, 2009).

Traumatic experiences can result in interference with cognitive skills, judgment, memory, and concentration (Hayes, Vanelzakker, & Shin, 2012). Traumatic events can lead to ambivalence: the conflicting and competing incentives for and against making change (Miller & Rollnick, 2013). When ambivalence is present, the process of evoking moves the person from

ambivalence to discover personal reasons and motivation for making changes (Resnicow & McMaster, 2012).

### **Social Background**

Inside the United States lives one of the most culturally diverse people in the world. Culture is the ideational makeup by which people arrange their lives, explain their experiences, and interpret the behavior of others (Lingerfelter & Mayers, 2016). Culture essentially defines a way of life for a person; culturally identified ways of living reflect human diversity. Culture can be multigenerational and is a heritage that often is passed down through family lineage (Anderson, 2007). The military is a culture, and the military as a way of life is a philosophy instilled in all military members from the start of their service. The military's warrior culture instills strength, resilience, courage, and personal sacrifice. These characteristics are evident in the various military branches' slogans: "Army Strong"; "The Few, The Proud"; "Aim High"; "A Global Force for Good." This culture, or way of life, is ingrained in military members through immersion in information about the history of their service, customs and courtesies, values and ethics, justice, proper wear of the uniform, military bearing, and training (Stowers, 2014). This nation's veterans represent a group of diverse individuals who bring different experiences and perspectives to the classroom than traditional college-aged students.

During deployments, many military members are under constant threats of being attacked or ambushed, receiving incoming artillery, rocket, or mortar fire, and being shot at or receiving small-arms fire (Powell & Rademacher, 2009). Deployed military members typically maintain a heightened level of awareness of their surroundings. These military members are trained to identify threats, sometimes of a hidden enemy, before the enemy has a chance to identify them. This constant state of hypervigilance is necessary to maintain the safety and security of all

personnel in a hostile environment (Kimble, Fleming, & Bennion, 2013). Operational missions may require service members enter situations that are extremely dangerous. According to Powell and Rademacher (2009), these missions may require members to take long trips in convoys or to patrol neighborhoods, and it is during these missions that service members are most susceptible to enemy attack. These military members are armed and ready for action with their adrenaline pumping and their eyes constantly scanning doors, windows, rooftops and cars for any movement or anything out of place that may conceal enemies' positions or improvised explosive devices (Moon, 2012). They often become suspicious of people, including women and children, the same people they were sent to protect.

When military members have the length of tours extended or are called on to serve multiple tours, the chance of injury increases (MacGregor, Han, Dougherty, & Galarneau, 2012). Military members are more likely to sustain injuries than to die from those injuries, as they did in past wars (Wieland, Hursey, & Delgado, 2010). Medical advancements and improved equipment, especially protective body armor, contribute to better survival rates. There is "higher ratio of 16/1" (Goldberg, 2010, p. 204) of injuries to deaths in Operation Iraqi Freedom and Operation Enduring Freedom have in previous wars due to the use of Kevlar and the capacity for swift transport from the war zone. The prevalence of multiple deployments during these most recent wars has increased the probability of exposure to combat trauma significantly, and the best predictor of depression and posttraumatic stress is the exposure to combat. For example, Colonel Elspeth C. Ritchie, MD, MPH, consultant to the U.S. Army Surgeon General, stated during an American Psychiatric Association lecture that "the rates of anxiety and depression are rising with multiple deployments, ranging from 12% with first deployment to 27% with third

deployment” (as cited in Kaplan, 2008, p. 12–13). The rate of suicide has also gone up and may eventually exceed the number of military members killed in combat (Tanielian & Jaycox, 2008).

Physical wounds that would certainly have killed a member of the Armed Services as recently as in the Vietnam or Korean War are now survivable due to advances in medical technology (Corso et al., 2009). These injuries are tangible (Tanielian & Jaycox, 2008) rather than unseen. Indeed, several different types or forms of casualty are now recognized as those that are not seen. These include such injuries as mental health conditions or cognitive impairments resulting from physical battlefield wounds. Now that they have been recognized as genuine, these unseen or invisible wounds are more recognized as impacting the overall health of the military member (Tanielian & Jaycox, 2008).

The basic challenges of readjusting to civilian life include coping with posttraumatic stress symptoms, depression, physical injury, lack of structure in civilian life, and difficulties with personal relationships and social functioning. The adjustment contains a shift in a personal sense of self and goals, as well as understanding of the world the military member now lives in. In their new world, military members have a navigate how to deal with negative public opinion against the war and their service or being uncomfortable with overt appreciation by others. Some military members have resorted to using ineffective coping instruments due to lack of assistance (Zinger & Cohen, 2010).

Coping refers to the thoughts and actions people use to deal with stressful circumstances. The measures used to reduce the stress or anxiety in those circumstances are coping strategies. Additionally, Folkman and Lazarus (1980) described coping strategies as psychological and behavioral techniques that people use to try to overcome, minimize, or handle stressful life circumstances. Frequently used coping strategies can include cognitive and behavioral

approaches, avoidance, and religious or spiritual methods, as well as drug and alcohol use (Barnett, Smith-Osborne, & Barnette-Braddock, 2016). Military members learn multiple coping tactics and practices for overcoming or adjusting to the rigors of their time in service. However, some coping techniques are linked to health risks.

Earlier studies found evidence that people drink excessive alcohol when they are trying to escape or avoid unpleasant memories or emotions, and this can lead to alcohol-related problems (Abbey, Smith, & Scott, 1993; Grunberg, Moore, Anderson-Connolly, & Greenberg, 1999). The U.S. Department of Veterans Affairs (2007a) defined substance abuse as consuming too much alcohol or drugs to alleviate pain. According to Fuehrlein et al. (2016), more than 40% of U.S. military members have abused alcohol. Utilizing alcohol as a coping mechanism often leads to comorbid problems including mental health issues, suicidal thoughts, and sometimes actual suicide attempts (Fuehrlein et al., 2016). An additional study stated that exposure to trauma and PTSD-related symptoms are linked to cannabis use (Bonn-Miller, Vujanovic, & Drescher, 2011). Further data showed an increase in cannabis abuse and dependence among susceptible peoples that included military members (Bonn-Miller, Harris, & Trafton, 2012). It was reported that young U.S. Army members that experienced active combat are more likely to binge drink (Lande, Marin, Chang, & Lande, 2008). These factors can ultimately result in detrimental health effects.

The impact of post deployment mental health problems may be construed as part of the overall cost of war. But combat-induced posttraumatic stress symptoms do not stay on the battlefield. The military members bring those symptoms home with them. Since today, many wounded warriors are returning to civilian life by way of the college campus, the impact can be seen and felt in families, communities, and society as a whole. The literature generally shows



that there is, at times, a problem with trauma-impacted individuals' ability to concentrate (Ormrod, 2008). Concentration forms the basis of self-directed learning. A lack of concentration may hinder any type of self-directed learning that is needed by students in college for scholastic success.

As a result of counseling and an increase in posttraumatic stress awareness, an understanding of the need for treatment for suicidal thoughts and suicide prevention has become more established in the general population (Hasegawa et al., 2009). Posttraumatic stress has become a factor in countless lives. Now that it has been recognized by the mental health community as a valid concern, more research needs to be conducted in venues less studied (Barracough & Hughes, 1987). Various studies have been done on suicide and depression due to the posttraumatic event (Barracough & Hughes, 1987). In addition, incidents of suicide and attempted suicide have been studied more closely to gain insights into the military members' increased association with the battlefield trauma (Bullman & Kang, 1995). This has placed added importance on studying the problems experienced by returning military members of Vietnam, the Gulf War in Iraq, and the ongoing conflict in Afghanistan (U.S. Department of Veterans Affairs, 2007b).

### **Theoretical Background**

Recent studies in the area of military members returning to the college classroom have explored various aspects that can hinder the learning experience. Harvery (2015) sought to understand how PTSD interferes with cognitive processes by exploring executive function, behavior regulation, and problem solving in military college students with PTSD. The theoretical concept utilized in this study centered on Ormrod's (2008) description of how the arena of educational psychology is focused on "the nature of learning" (p. 3) and the cognitive

processes linked in learning. Another study looked at how most higher education settings use a traditional lecture style that does not encourage personal engagement in the material being presented (Roehl, Reddy, & Shannon, 2013). Researchers who explore the teaching and learning process may need to move away from the traditional styles and employ new and more current ways of instructing learners (Christensen, Horn, & Johnson, 2011). This study engages the ongoing conversation by presenting how the active combat experience impacts the adult learning experience by exploring the motivation, personality, and self-esteem of the learner.

### **Problem Statement**

There is a gap in the literature regarding how active combat experienced military perceive their educational experience (Martin, Ghahramanlou-Holloway, Lou, & Tucciarone, 2009). Over the years, studies have been produced regarding the negative effects linked with traumatic events in the general population such as job loss, chemical dependency, marital problems, suicide, or socioeconomic issues (Amir, Kaplan, Efroni, & Kotler, 1999; De Fabrique, Van Hasselt, Vecchi, & Romano, 2007; Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997; Santa Mina, & Gallop 1998). Indeed, the frequency of posttraumatic stress in the general population is estimated to be 7–8% (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), although estimates tend to vary contingent on the type of trauma exposure and demographic characteristics. It is acknowledged that there is an inadequate amount of research specifically targeting current and former combat-experienced military member college students and their experience of adapting to college (Fontana, 2010). The symptoms associated with the traumatic event experience can exacerbate difficulties for current and former combat-experienced military members pursuing higher education. These symptoms can consist of anxiety, stress, hypervigilance, or a total lack of motivation (APA, 2013). It is assumed that concentration,

motivation, or other positive or foundational behaviors are needed for college-level learning, but these skills and attitudes may be missing in current or former military member students who have symptoms of their traumatic experiences (Fontana, 2010). The problem is that more research is needed on how adult trauma impacts the adult learner, specifically in the area of the academic motivation, personality, self-esteem, and overall academic experience, for those who have returned from active combat. A deeper awareness is needed on this community of higher education learners to provide better understanding and assistance (Barakat & Wodka, 2007).

Surveys conducted by the U.S. Department of Veterans Affairs (2016) have documented increased levels of residual trauma related to combat among returning veterans. Indeed, some studies that have evaluated military members more than once after redeployment have shown that PTSD prevalence increases over the 12 months following the member's return from deployment (Hines, Sundin, Rona, Wessely, & Fear, 2014). Time since trauma may be an important factor. There is evidence that, under acute stress conditions, people show a predisposition to stay away from threat-related stimuli, which has been linked to later PTSD symptoms (Wald et al., 2011). These quantitative surveys did not address the practical life concerns that combat-related trauma creates in the military members' learning process. The problem this quantitative project sought to address is that current and former military members affected by combat-related trauma are returning to academic environments and that trauma is having an impact on their learning experience, both inside and outside of the classroom.

### **Purpose Statement**

The purpose of this study was to understand and describe the perceived educational experience of current and former military members who have experienced active combat and to establish any influence of combat-related trauma on these military members in the civilian

learning environment. The learning experience of the current or former military member with symptoms of posttraumatic stress was generally defined as learning experience. The framework guiding this study was the understanding that adults learn differently than children and that adults that have symptoms of PTSD learn differently than the traditional collegiate-age student. In addition, this study was conducted with the understanding that trauma is processed differently at different stages of development. The main catalyst for this study was that the perceived learning experience of current and former military member students who have active combat experience has not been fully explored.

### **Significance of the Study**

It is possible that postsecondary institutions will continue to see an increase in enrollment of current and former military member students as they transition to civilian life and pursue their educational and career goals. Former military members may need to acquire skills that equip them to become competitive in the civilian workforce, and a completed postsecondary education is one of the best paths to a successful transition back into civilian life. Utilizing a quantitative research approach provided an opportunity to gain a depth of knowledge and understanding about former or current military college students' perceptions of their trauma experience and concerns in regard to personality, motivation, and self-esteem and how they could affect their college experience.

A goal of a study is to be both reliable and valid (Creswell, 2007). This study provides further evidence for the need for more adequately in-depth understanding of the needs of current or former military members with symptoms of posttraumatic stress to support their pursuit of higher education. A more comprehensive understanding of these experiences could assist in further and more efficient accommodation of posttraumatic stress symptoms for additional

students who have symptoms of posttraumatic stress at other postsecondary institutions. The findings from this quantitative project have the potential to reduce learning or educational barriers faced by this valiant community of students and contribute to the quality of accommodations for learning in the adult education arena for current and former military members who have experienced active combat.

### **Research Question(s)**

The fundamental question that birthed this study is: How does adult trauma impact the adult learner pursuing higher education? The central research question for this study was: What impact does the active combat experience have on the undergraduate's or postgraduate's perceived ability to successfully learn? It was hypothesized that the active combat experience is detrimental to the undergraduate's or postgraduate's perceived ability to successfully learn.

**RQ1:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived ability to successfully learn?

**RQ2:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived academic motivation?

**RQ3:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived personality?

**RQ4:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived self-esteem?

### **Definitions**

1. *Adult Learner* – An adult who is currently taking classes to pursue higher education.
2. *Anxiety* - A state of apprehension and tension occurring in some forms of mental disorder; distress or uneasiness of mind caused by fear of danger or misfortune brought

about by a traumatic event such as combat, sexual assault, natural disasters, and other extreme stressors (Kessler, Chiu, Demler, & Walters, 2005).

3. *Avoidance* – A mechanism by which the individual makes concrete plans to avoid the situation that would cause or bring about the problem causing the PTSD to manifest (APA, 2013).
4. *Cognitive resilience* – An individual's ability to adapt to severe stress and to keep control of thoughts and emotions (Robinson, Kolts, & Watkins, 2006).
5. *Dissociative disorder* – A mental disorder characterized by sudden temporary alteration in consciousness, identity, or motor behavior (Bryant, Sackville, Dang, Moulds, & Guthrie, 1999).
6. *Exaggerated startle response* – A disorder in which those affected have an exaggerated startle reflex reaction to a perceived threat (APA, 2013).
7. *Hyperarousal* – A mental state of being which results in those with PTSD being startled very easily and being vigilant to the point of paranoia (APA, 2013).
8. *Memory* – The cognitive ability to retain information about stimuli, events, images, ideas, etc., after the original stimuli are no longer present (Reber, Allen, & Reber, 2009).
9. *Stressors* – Agents, conditions, or other stimuli that cause stress to an organism or individual. Stressors are anything that causes anxiety or negative reactions in people (APA, 2013).
10. *Trauma* – A physical or an emotional wound or shock that creates substantial, lasting damage to the psychological development of a person, often leading to neurosis, anxiety, or some other impairment (Bryant et al., 1999).

11. *Traumatic event* – An experience that causes physical, emotional, or psychological stress or harm. A traumatic event is an event that is perceived and experienced as a threat to one’s safety or to the stability of one’s world (Bryant et al., 1999).
12. *Posttraumatic stress* – A disorder that can develop after a person is exposed to a traumatic event such as sexual assault, warfare, traffic collisions, or other threats on a person’s life. Symptoms may include troubling or alarming thoughts, feelings, or dreams linked to the events, mental or physical anxiety to trauma-related triggers, attempts to avoid trauma-related trigger, changes in how a person thinks and feels, and an increase in the fight-or-flight response. The symptoms last for more than a month after the traumatic event (APA, 2013).

### **Summary**

In adult learners, intrinsic motivation is assumed to be a necessary characteristic for success in higher academic learning. However, it has been noted that former and current military members with PTSD often seemed ambivalent or reluctant to gain or use new skills or give up old ways of coping (Murphy & Rosen, 2006). Adult learners typically have a task-centered, problem-focused personality that provokes them to desire to immediately apply what they have learned (McCauley, Hammer, & Hinojosa, 2017). A 10-year study found that of “patients who were still in treatment 10 years later, 81.6% were still diagnosed with PTSD and/or personality change due to a catastrophic experience” (Arbanas, 2010, p. 212). Adult learners tend to have an independent self-esteem that aids them in directing their learning experience (Knowles, Holton, & Swanson, 2015). It has been shown that former military members that have symptoms of PTSD display more unbalanced self-esteem, which is a noteworthy predictor of lower overall well-being (Kashdan, Uswatte, Steger, & Julian, 2006). The emotional experience of trauma can

have long-term cognitive and psychological effects. The trademark symptoms of posttraumatic stress include modifications to cognitive processes such as memory, concentration, planning, and problem solving, highlighting the negative impact on cognitive functioning. The learning process can be hindered by the effects of the active combat experience for the current or former military member. These questions need to be answered: How does adult trauma effect the adult learning process? Regardless of how a person learns, how does trauma change the teaching and learning process? And what adjustments need to be made? This paper sought to explore the answers to those questions through investigating how adult trauma impacts the adult learner who is a current or former military member and has active combat experience.



## **CHAPTER TWO: LITERATURE REVIEW**

“The expectation that we can be immersed in suffering and loss daily and not be touched by it is as unrealistic as expecting to be able to walk through water without getting wet.”

(Remen, 2006, p. 52)

### **Overview**

The topic of this research project was the impact that adult trauma has on the adult learner’s educational experience. The adult trauma in this project is the experience of active combat, while the adult learner is the person who has active combat experience and is pursuing an undergraduate or graduate degree. This chapter provides a review of research literature relevant to the topic of the study. In the first section of the chapter, the theories that provide the framework for the study are reviewed, to include education motivation, personality, and self-esteem theories. The second section provides a detailed review of previous research and literature addressing the topics of current and former military members, posttraumatic stress, posttraumatic stress treatment options, hindrances to treatment, the teaching and learning process, cognition, information processing function, behavior regulation, and problem solving.

### **Conceptual Framework**

The theoretical framework for this study was the adult learning theory of andragogy. This concept was introduced by Malcolm Knowles (1980), who termed andragogy as “the art and science of helping adults learn” (p. 43). Andragogy distinguishes the field of adult education from other areas of education. Davenport and Davenport (1985) wrote that andragogy has been categorized “as a theory of adult education, theory of adult learning, theory of technology of adult learning, method of adult education, technique of adult education, and a set of

assumptions” (p. 157). Merriam (2001) laid out five assumptions that frame the andragogy learning theory. The assumptions describe the adult learner as someone who

(1) has an independent self-concept and who can direct his or her own learning, (2) has gained a measure of life experiences that is a rich resource for learning, (3) has learning needs closely related to their changing social roles, (4) is problem-centered and interested in immediate application of knowledge, and (5) is motivated to learn by internal rather than external factors. (Merriam, 2001, p 11).

Recent views of andragogy stress that there is a sixth assumption about adult learners: the need to know. Adult learners need to know what they will be learning, why this learning is important, and how they will learn (Knowles et al., 2015). According to educator Cyril Houle (1996),

Education is fundamentally the same wherever and whenever it occurs. It deals with such basic concerns as the nature of the learner, the goals sought, the social and physical milieu in which instruction occurs, and the techniques of learning or teaching used. Andragogy remains as the most learner-centered of all patterns of adult educational programming. (p. 29–30)

Andragogy maintains that adults have more experiences than children or teenagers to pull from and apply new material to; therefore, effective learning will utilize these experiences (Knowles et al., 2015). Houle (1996) conceded that andragogy has brought to the attention of educators that they “should involve learners in as many aspects of their education as possible and in the creation of a climate in which they can most fruitfully learn” (p. 30). Students vary in the ways in which they integrate course material and experiences according to their stage of development. The framework of the andragogy learning theory can to help converge the learner’s knowledge and experience in the teaching and learning environment (McCauley et al., 2017).

The learner needs to be an active participant in the teaching and learning process. The learner is responsible for recognizing, receiving, understanding, and applying the information that is presented. While ultimately it is the responsibility of the learner to choose to learn, the teacher is responsible for motivating, communicating, inspiring, and activating the information to the learner. C. S. Lewis (1974) wrote that “the task of the modern educator is not to cut down jungles, but to irrigate deserts” (p. 27). For teachers to irrigate those deserts, the teacher needs to study their students by recognizing and considering their students’ varied learning styles, wants, interests, and motivations (O’Brien et al., 2008).

### **Related Literature**

The impact of both the physical and emotional wounding of trauma can be widely seen in military personnel as they return from deployment. The trauma evidenced in post deployment mental health may be viewed as part of the overall cost of war, and PTSD has been called one of the signature traumas of the recent wars. PTSD is the third most common military service-related disability following hearing loss and tinnitus, or ringing in the ears. Combat-induced posttraumatic stress can bring the front line home. There is a distinct gap in the amount of research that has been conducted on current and former military members who are college students and have experience active combat regarding the issues they may encounter while in a college program (Martin et al., 2009). The following literature review illustrates historical perspective, theoretical findings, and related studies on the effects of combat-related trauma. The literature review briefly investigates combat-related trauma as it has evolved from the days of the Civil War, when it was referred to as *soldier’s heart*, to the misunderstood consequence of combat in the U.S. military today (Gould et al., 2007).

To increase former military members' opportunities in the workplace and allow them to adapt to civilian life, it is necessary for them to be successful in the learning arena (Bennett, 2014). These warriors, who are returning to the classroom, may carry with them the psychological or physical effects of war, including PTSD. Although the difficulties associated with PTSD are present in the learning environment, little research has been done concerning this group of learners (Fontana, 2010).

### **Crisis, Stress, Anxiety, and Trauma**

A crisis is an acute disruption of psychological homeostasis in which typical coping mechanisms fail and there is evidence of distress and functional impairment (Sapolsky, 2004). The main cause of a crisis is an intensely stressful, traumatic, or perilous event, but two other conditions are also necessary: (1) the individual's perception of the event as the cause of considerable anxiety and/or stress, and (2) the individual's inability to resolve the disruption by previously used coping mechanisms. Crises often have five components: a hazardous or traumatic event, a vulnerable state, a precipitating factor, an active crisis state, and the resolution of the crisis (Roberts, 2000).

Stress is a hormone-driven internal response to a situation or event that demands a change from the typical (Levers, 2012). Stress usually demands positively or negatively adapting to a new or different situation in one's environment. Stressors vary from minor annoyances to major catastrophes and can be perceived as positive or negative events. Commonly, stressors are life events such as daily irritations, pressures at home or on the job, marriage or relational problems, or an unexpected illness and injury. Positive stressful life events can include the birth of a child, graduating, a family vacation, or a job promotion (Kaplan & Sadock, 1998). Stress begins in the

brain. A reaction to perceived stressful or emergency events trigger what is described as the “fight or flight” response (Levers, 2012).

Stress and anxiety do serve as an important catalyst for preparing a person to meet the demands of everyday life and furthering the person’s chance of surviving and thriving. Therefore, it is not surprising that an arousing and emotional stimulant quickly overtakes a person’s attention and produces a powerful influence over how information is processed, programed, stored, and accessed. When extreme levels of stress or anxiety are experienced, it can have a devastating impact on functional processing. This devastating impact on functional processing is demonstrated clearly as trauma (APA, 2013).

The word *trauma* comes from the Greek word for wound and is defined as a physical injury or emotional hurt with long-term psychological impact (Reyes, Elhai & Ford, 2008). Trauma is an emotional response to an awful circumstance like an accident, rape, or natural disaster. Traumatic events happen every day and can happen to anyone. Traumatic events include the perception of threatened death, violent personal assault, natural or unnatural disasters, and the witnessing of those events (Sanderson, 2013).

When comparing and contrasting trauma and complex trauma, it is important to note that not all experiences of trauma lead to a trauma response or trauma-related disorder or diagnosis. There is a normal period of time following a traumatic event or experience that a person might expect to see trauma-related responses or symptoms that do not necessarily develop into a traumatic stress disorder. However, when signs and symptoms of traumatic stress endure over time, at least a month or longer, disrupt the person’s daily life, impact the person’s social and emotional health, and meet specific diagnostic criteria, the two types of trauma must be explored. Trauma can occur after someone experiences, sees, or learns about a traumatic event in which a

person was exposed to a threat of death, sexual violence, and/or serious injury (Sanderson, 2013). Common examples of traumatic events are accidents, typically vehicle accidents; natural disasters; sexual and/or physical abuse; robbery; and public humiliation. Complex trauma can develop after prolonged exposure to social and/or interpersonal trauma. Complex trauma occurs in the context of entrapment, captivity, or dependence (Sanderson, 2013). Common examples of traumatic events that can lead to complex trauma are prolonged exposure to sexual, physical, and/or emotional abuse; bullying; being held captive; war; and extreme poverty. These experiences cause the person to feel helpless, without any control, and can even change the person's sense of identity or sense of self.

Traumatic stress reactions are normal reactions to abnormal experiences (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, 2014). How an experience affects a person depends on many factors, including characteristics of the person; the type, characteristics, and intensity of the experience; developmental processes; the meaning of the experience; and sociocultural factors. Immediate reactions in the aftermath of trauma can be quite complicated and are affected by the person's experiences, the availability of natural support and healing systems, the person's own coping and life skills as well as those of their immediate family, and the responses of the larger community in which the person lives. Although reactions range in severity, even the most acute responses are natural responses intended to allow the individual to survive the trauma.

Initial reactions to trauma can include exhaustion, confusion, sadness, anxiety, agitation, numbness, dissociation, confusion, and physical arousal. Most reactions to a traumatic event are normal. Common indications of more severe reactions include constant distress without times of

some peace or rest, severe dissociation symptoms, and intense intrusive memories that remain even though the person has returned to safety. Delayed responses to trauma can include persistent fatigue, sleep disorders, nightmares, fear that the event will happen again, anxiety, flashbacks, depression, and avoidance of emotions, feelings, or activities that are even slightly linked with the trauma (Elsesser, Sartory, & Tackenberg, 2005).

The *Diagnostic Statistical Manual of Mental Disorders* (5th ed.) defined trauma events as experiencing, witnessing, or challenging an event that involves actual or threatened death or serious bodily injury. Posttraumatic stress exacerbates the threat of the physical safety to one's self or others, who could be strangers or family and friends. All this occurs with the individual's response involving intense fear and feelings of helplessness and horror (APA, 2013). Two types of response to these trauma events can occur: acute stress, which is usually observed near the end of the trauma event, or chronic stress, which is more serious and central to the study of posttraumatic stress (Curran, 2006). This second variation will have an adverse effect on the individual for years (APA, 2013). Kessler et al. (1995) estimated that nearly 60% of all Americans will suffer from a life-threatening trauma event some time in their lives. Since the 9/11 tragedy, this number is higher (Kimerling, Clum, McQuery, & Schnurr, 2002).

The amount of emotional, psychological, or spiritual wounds that results from a trauma may depend on the person's developmental age at the time of the trauma. The developmental ages of childhood, adolescence, young adulthood, midlife, and older adulthood are associated with different cognitive, emotional, and social understandings, which may affect the probability of adverse consequences following traumatic experience. In research focused on adults that are 60 years old or older and living independently, there is evidence that traumatic experiences during young adulthood and middle age are more strongly related to late-life depression (Dulin

& Passmore, 2010), poor physical health (Krause, Shaw, & Cairney, 2004), and a reduced sense of meaning in life (Krause, 2005) compared to a trauma experience occurring in earlier or later ages of development.

Furthermore, college student populations represent a collection of individuals who have been exposed to potentially traumatic events at a significant rate (Vrana & Lauterbach, 1994). Despite the frequency of occurrence of such traumatic events, most are able to return to a state of normalcy after such experiences (Williams & Hall, 2009). The act of returning to normalcy does not imply that the issue or event has been forgotten or that individuals who experience the trauma event have not had their lives changed. This simply implies that the reminders and cues do not impair that individual's ability to function in everyday life. Nonetheless, with some individuals, extreme responses to traumatic events can cause distress and impairment to the individual's life (Williams & Hall, 2009). When this occurs, the issue can lead to posttraumatic stress.

Because PTSD is a type of anxiety stress disorder and involves medical stress symptoms, it is characterized by various behaviors, physical and mental, as symptoms of anxiety (Beach, 2003). However, the interrelationship between stress, anxiety, and physical or mental issues illustrates that posttraumatic stress is far more complicated than simply the fact that stress and anxiety are posttraumatic stress symptoms (Beach, 2003). Both stress and anxiety are also primary causes of posttraumatic stress (Bryant et al., 1999). The relationship between stress, anxiety, and posttraumatic stress is one of the reasons that some people have such difficulty learning to live with or get over their posttraumatic stress.

Almost 4% of adults in the United States over the age of 18 have experienced posttraumatic stress (APA, 2013). That works out to nearly 8 million people. Although anyone



can develop posttraumatic stress, the average age at which people begin to experience posttraumatic stress symptoms is 23 years old. Nearly 20% of Vietnam War military members have suffered from or currently suffer from posttraumatic stress (Frueh, Grubaugh, Elhai, & Buckley, 2007)

There are a few studies that suggest there are differences in the effects of trauma on neurobiology depending on the stage of development at which the trauma occurs (Van Der Kolk, 2003; Van Der Kolk, 2009; Sherin & Nemeroff, 2011). Traumatic stress can be understood as the response to a threatening stimulus or experience, whether acute or long term, that overwhelms the normative fight or flight response and causes the person's capacity to return to balance to become impaired. When a person is profoundly frightened, the trauma creates a biological alteration of the brain. Traumatic experiences can affect the mind, body, and emotions (Pally, 1998). During the threatening experience, the brain signals physical reaction. The body is flooded with hormones that cause the heart rate and blood pressure to increase. The pupils of the eyes dilate to take in as much light as possible, and the veins in the skin constrict so that more blood flow is available to the major muscle groups. Blood glucose levels increase, causing muscles to tense up. Nonessential body systems like the digestion and immune systems shut down to allow more energy for emergency functions.

These body reactions are intended to prepare the body for survival. Some trauma is so devastating that future generations will adapt in ways that still reflect the original trauma. Behavioral patterns and attitudes may progress beyond the initial experience and be woven into the fabric of future generations. Such trauma was experienced in the Holocaust, Vietnam, and 9/11. Each individual has a different capacity to cope with such catastrophic stresses. While most people who experience traumatic events do not develop PTSD, others do progress on to

develop the criteria that meet the PTSD diagnosis. This understanding demonstrates that trauma, like pain, is not merely an external occurrence that is completely objective. Traumatic experiences, like pain, are filtered through emotional and cognitive processes before they are interpreted as a threat or not. Personal differences in processing may cause people to appear to have different trauma thresholds. Although there may be some subjective aspects of traumatic exposure, it must be emphasized that events such as rape, torture, genocide, and severe war zone stress are traumatic experience events (APA, 2013).

### **Trauma and Current or Former Military Members**

There are three major types of injuries or trauma experienced by military members: physical injuries from blasts such as burns, amputations, and orthopedic injuries; operational stress and mental health injuries; and traumatic brain injuries. Blasts are considered the signature cause of injuries from improvised explosive devices. Military members are exposed to a variety of stressful events. Military members are trained to cope with the trauma of modern-day conflicts. Basic combat training is designed to instill resilience and an understanding of common purpose and teamwork in military members to forge completion of successful missions. The individual military member's sense of purpose is attached to the unit and military tradition and character. The unit's success and unity act as a shield that protects the individual members who trust each other and the team for safety (Ritchie, 2008). Even with that intense training, many factors will impact military members' response to their experiences of war. Witnessing violence and death has been demonstrated to increase the risk of anger and aggressive behavior, anxiety, somatic complaints, and posttraumatic stress. Some military members react with high levels of posttraumatic stress and functional impairment, while others grow and mature from the experiences. Past experience has demonstrated that most returning military members become

productive citizens, while for others, mental health issues remain a significant problem (Kessler et al., 1995). Many military members experience traumatic loss while deployed; roughly 80% of service members deployed to Iraq reported knowing someone who was seriously injured or killed (Hoge, Castro, Messer, & McGurk, 2004). The death of a unit member may lead to significant sadness and grief in addition to posttraumatic stress (Resick et al., 2017). This particular presentation of posttraumatic stress may be more treatment resistant and may partially account for the residual symptoms of depression. For example, military members with posttraumatic stress often wrestle with financial issues and unemployment, relationship issues, and aggressive behavior (Stiglitz & Bilmes, 2008).

Another factor that may influence treatment response is military training and ethos. The U.S. Army (n.d.) Warrior Ethos includes a set of principles that military members are expected to adhere to in their personal and professional lives: “I will always place the mission first. I will never accept defeat. I will never quit. I will never leave a fallen comrade” (para. 1). Military members are also surrounded by implicit or explicit messages like “Stay alert, stay alive” or “If everyone does their job, everyone will come home.” These principles serve to foster bravery and perseverance and inspire military members to perform their duties to the best of their abilities. However, when confronted with an uncontrollable traumatic event, those who have strongly internalized the Warrior Ethos may have difficulty accepting the outcome of a traumatic event, justifying their actions or those of their fellow military members, and recovering from their experience (Resick et al., 2017). Though admirable principles to live by, inflexible adherence to military values may be problematic when recovering from posttraumatic stress and living in a noncombat environment.

Some aspects of military training also focus on limiting the experience of vulnerable emotions such as fear, emphasizing more approach-focused responses like anger and aggression (Forbes et al., 2010). While this prioritization of emotions may be functional in combat, it may be a barrier to trauma-focused treatments that require patients to experience a range of emotions, including sadness or regret. Accordingly, among military members, high levels of anger are predictive of less posttraumatic stress symptom reduction over the course of treatment (Schoenleber, Berghoff, Gratz, & Tull, 2018).

The mental and physical challenges of participating in war are many and vary in intensity, duration, rules of engagement, leadership, effective communication, unit morale, unit cohesion, and perceived importance of the mission (Bartone, 2006). Some challenges related to combat are powerful enough to overwhelm most people almost immediately. Traumatic stress injuries involve literal damage to the brain and mind due to experiences of real or threatened death or serious injury or its aftermath (Patel, Spreng, Shin, & Girard, 2012). The human body and mind are conditioned to deal with and handle stress, but not everyone who is exposed to real or threatened death or its aftermath is damaged by that experience. In fact, many military members return home with normal perceptions (Hoge et al., 2008). But everyone is susceptible to experiencing intense terror, horror, or helplessness when confronted with their own or their peers' mortality, and susceptibility varies over time due to the accumulation of stress from other causes (Helmus & Glenn, 2005).

When stressful events occur during the course of the lifespan, individuals often create various tactics to manage and cope with negative reactions or emotions. In doing so, they can change their emotional experience connected with the traumatic trigger and also change how the emotional trigger affects their cognitive performance. People can use personal restraint and

control of emotion for a desired effect; they can engage in thought reassessment to improve an affect or intensify negative affect. Furthermore, cognitive control strategies can be used to improve memory performance or suppress unwanted memories. Such intentional manipulation of emotion can momentarily provide distraction in the face of devastating circumstances and help people remain focused on goal-directed behaviors. In treating stress and anxiety, cognitive-behavioral interventions commonly allow patients to exercise greater control over emotions through thought-challenging exercises. These interventions suggest alternative ways of thinking about a negative situation. Preliminary evidence suggests that these types of interventions not only reduce symptoms but also improve cognitive performance (Sutherland & Bryant, 2007).

### **Social Effects of Posttraumatic Stress Symptoms**

Posttraumatic stress symptoms can be manifested in all aspects of the everyday lives of those affected (Williams & Sommer, 1994). The rate of comorbidity is high among anxiety disorders such as PTSD. Depressive and anxiety disorders commonly present together. More than 50% of presenting patients suffer from a comorbid second depressive or anxiety disorder (Hirschfeld, 2001). There is also a high rate of comorbidity between PTSD and substance abuse. Longitudinal studies have revealed that these individuals are more likely to experience employment problems (Ouimette & Read, 2008).

### **Relationships**

PTSD causes a wide variety of effects on relationships. In regard to posttraumatic stress, experimental work investigating the cognitive control of emotion has examined whether patients can purposely forget negative information. Some research has suggested that patients with posttraumatic stress have an enhanced ability to forget information, which may explain the amnesia sometimes experienced for important details of a traumatic event (Hayes et al., 2012).

This idea suggests that repeat trauma survivors with posttraumatic stress cope during their trauma by dissociating from their surroundings and disengaging attention from the event, sometimes leading to amnesia for large stretches of time (Mechanic, Resick, & Griffin, 1998).

This avoidant coping style may manifest in adulthood through an increased ability to forget new information. Those who suffer with PTSD often adopt an avoidant coping style in an attempt to forget negative information. This attempt to forget negative information can also block non-threat-related information from the suffers' memory.

Additionally, an avoidant coping style can build avoidant attachment within the person. Avoidant attachment, as opposed to secure attachment, causes the focus of attachment to be seen as consistently cold, distant, and unreliable (Bradshaw, Ellison, & Marcum, 2010). The abused person often uses avoidant coping strategies, such as substance abuse, dissociation, and emotional suppression, which are factors likely associated with their collective mental health (Staples, Rellini, & Roberts, 2012).

The avoidant coping style can affect relationships and in particular the marriage relationship. In one study of quality of the marital relationship in military couples, it was found that over 70% of couples in which the husband was diagnosed with posttraumatic stress reported significant relationship distress, including difficulties with intimacy and consideration of separation or divorce. Only 30% of the non-posttraumatic stress couples reported significant marital distress (Riggs, Byrne, Weathers, & Litz, 1998). Ongoing studies with former military members from previous eras highlight continued relationship problems, poor marital satisfaction, and high levels of posttraumatic stress almost 30 years after returning home from their military service (Koenen, Stellman, Sommer, & Stellman, 2008). Such evidence underscores the importance of addressing and treating posttraumatic stress in returning military members and

providing mental health services for the current and former military members as well as their spouses and families (Milliken, Auchterlonie, & Hoge, 2007). Veterans with posttraumatic stress and their wives both experienced higher levels of violence in the home (as self-reported by each) than those in the homes of military members without posttraumatic stress (Brockman et al., 2016). Additional studies with children of military members indicate that those who have a father with posttraumatic stress view their families as more dysfunctional and report higher levels of conflict (Davidson & Mellor, 2001; Westerink & Giarratano, 1999). These findings demonstrate that posttraumatic stress affects the behaviors and well-being not only of the military member, but also of members of their family.

Spouses of military members have reported higher levels of secondary traumatic stress. Secondary traumatic stress refers to the presence of posttraumatic stress symptoms caused by at least one indirect exposure to traumatic event. Figley and Kleber (1995) originally coined the phrase *secondary traumatic stress disorder* to refer to the distress and behaviors that can result from knowing and caring for an individual who has been exposed to a traumatic stressor. This distress can manifest itself in numerous ways from depression and anxiety to nightmares and intrusive thoughts about the significant other's trauma.

Trauma and symptoms of posttraumatic stress can impact relationships, especially the marriage relationship. Mutually satisfying and affirming marriage relationships do not just happen; they require work. Solid marriage relationships are shown to be emotionally supportive, open, involved, and focused on the needs of each partner (Johnson, 2008). Mutual understanding in a relationship involves each individual's behaviors and attitudes that are believed either effective or ineffective based on their partner's reaction (Shafer, Jensen, & Larson, 2014). Communication is essential in cultivating and building strong relationships, and body language

plays an integral part in communication. Before words were created, people used facial expressions, gestures, and body language to communicate. Body language, as nonverbal communication, can have several meanings. For example, the crossing of arms can communicate being uncomfortable or feeling defensiveness (Kar & Kar, 2017).

Higher self-esteem is positively linked with relationship satisfaction (Erol & Orth, 2016). It is important to foster the components of trust, empathy, selflessness, and unity (Chongruksa & Prinyapol, 2011). Posttraumatic stress's underlying root of anxiety can result in poor performance and unpredictable absences (Church, 2009). Shame can be associated with suicidal thoughts and behavior (Kleindienst et al., 2008). Self-esteem has strong positive correlations with the hope that aids in having the resolve to achieve goals that enhance an individual's self-worth and understanding (Lyubomirsky, Tkach, & Dimatteo, 2006).

### **The Brain**

In individuals with PTSD, trauma-related memories intrude into their consciousness and are difficult to disregard. Each day, people ponder over events, experiences, and ideas in the present with their short-term memory; at the same time, they are storing past events, experiences, and learned ideas in long-term memory. The ability to remember is not infallible. Memory is malleable and tends to deteriorate over time. This deterioration can cause memory to be very unreliable at times (Chu, 2011). A traumatic memory is the recalling of an event or events that involved actual or threatened death or serious injury or a threat to the physical well-being of self or others (APA, 2013). In addition, reminders or memories of traumatic events can capture attention and evoke distress and anxiety. Some researchers have hypothesized that in PTSD, memory is involuntarily predisposed toward stimuli that are threatening, and this proclivity can lead to a disruption of ongoing cognitive activities.



In short, trauma effects the brain. The brain is a marvelously complex organ. Contained within this complex organ are four layers: the cerebellum, cerebrum, brain stem, and limbic system. The biggest part of the brain is the cerebrum, which is further divided into the frontal, parietal, temporal, and occipital lobes. While these different layers of the brain do have their own functions, they must also work together to ensure ideal effects in human health. The cerebrum is responsible for thought processes such as reasoning, planning, feeling emotions, problem-solving, and perceptions. The cerebellum works to maintain balance, muscle tone, and the ability to walk. The brain stem is especially important since it is essential for blood pressure, respiration, and heart rate. Finally, the limbic system is in control of hunger, thirst, memory, fear, and emotion.

Partly due to intrusive memories, many people with PTSD additionally suffer from sleep problems. Concerns have been raised about possible harmful effects of sleep problems on the effectiveness of the treatments for posttraumatic stress. Sleep problems have shown to reduce the speed of recovery in those with posttraumatic stress coupled with depression (Lommen et al., 2016). Sleep is important to a person's health and mental well-being. Without sleep, the immune system is compromised. People are wired to require sleep; sleep helps fight illness and infectious diseases and lowers the risk of cardiovascular disease, obesity, and diabetes. There is evidence that links increased sleep duration and quality of sleep with a longer lifespan (Cappuccio, Miller, & Lockley, 2010).

Adequate sleep improves motor skills and enhances creativity, memory, and learning (Rasch & Born, 2013). Some sleep theorists suggest that learning new things requires more sleep (Cirelli, 2012). Sleep heightens academic and work performance (Epstein & Mardon, 2007). Additionally, recent research suggests there may be a correlation between REM sleep and

the networks in the brain, like the amygdala and brain stem, involved with emotions and fear. Therefore, REM sleep may affect emotions and memory-related fear (Genzel, Spoormaker, Konrad, & Dresler, 2015). Another study supports a correlation between lack of sleep or insomnia and depression and other mental and emotional issues (Fernandez-Mendoza et al., 2015). Although discoveries have been made in science and medicine that can extend and improve the quality of a person's life, no medication has been found that enables the body to optimally perform with fewer than the normal number of hours of sleep.

### **Perception**

Posttraumatic stress alters a person's perception of God. It would be logical that an individual that sees God as distant would have more doubt regarding God's existence. There is also a correlation between psychopathology for those individuals who do not view God as loving and those who perceive God as distant (Bradshaw, Ellison, & Flannelly, 2008). Individuals who experience anxious or inconsistent relationships with God appear to have higher levels of distress than other individuals (Bradshaw et al., 2010).

An individual's perception is an active process. It is constantly being modified according to ongoing experience with the point of focus (Drubach & Claassen, 2008). In the wake of tragic circumstances, an individual will project more anger. The same projection can be true for their perceptions of God, or God image. Following negative circumstances, individuals express more anger toward God if they believed that God deliberately caused the negative circumstances because of a cruel motivation (Exline, Park, Smyth, & Carey, 2011). Before a stressful situation, an individual may have a loving God image. After the stressful situation, combined with other variables, such as more stresses or crises and the passage of time, the individual may change the loving God image to a cruel or distant God image (Newton & McIntosh, 2009). Many people

see God as all-powerful and have the perception that God does intervene in the events in the world (Wood et al., 2010).

Society values and teaches the importance of self-reliance, inner strength, and the ability to overcome adversity (Blum, 1998). It is common for people to feel that no matter what they have faced or lived with, no matter how extreme the ordeal, they should be able to carry on (Cook, Pilver, Dinnen, Schnurr, & Hoff, 2013). After traumatic experiences, people may have problems they did not have before the event. At first, some people experience a high level of distress and find that they are unable to think or concentrate on things other than the trauma. These reactions can last for days or even weeks and are common, normal reactions. But regardless of how competent people may believe they are personally or professionally, sometimes they face trauma of such magnitude that they become unable to cope and function in their daily lives. Some people become so distressed by memories of trauma that will not go away that they begin to live their lives trying to avoid any reminders of what happened to them (APA, 2013). Over time, if the reactions remain frequent and intense, last for months, and cause problems in living, individuals may develop a more debilitating anxiety disorder.

### **Treatment Options**

Recovery from trauma is not out of the question. The main treatments for people with posttraumatic stress are counseling (known as “talk” therapy or psychotherapy), medications, or a combination of the two. Although there are a number of treatment options for PTSD, and patient response to treatment varies, some treatments have been shown to provide more benefit in general. A primary type of treatment is counseling using cognitive behavioral therapy (CBT). Through utilizing CBT, a counselor can help a military member dealing with posttraumatic stress

understand and change how thoughts and beliefs about the trauma and the world cause stress and maintain current symptoms.

CBT has been shown to be successful in treating PTSD symptoms. However, some military members' comorbid conditions may also need to be addressed. Eye movement desensitization and reprocessing (EMDR) can also be effective therapy for posttraumatic stress. EMDR uses a combination of talk therapy and specific eye movement techniques. Like the CBT, EMDR has been shown to be effective in treating posttraumatic stress (Van Den Berg & Van Der Gaag, 2012). Like other kinds of therapy, the talk therapy component of EMDR can help change the reactions to memories military members experience as a result of their trauma. However, in general, it appears that the talk therapy component is helpful, but most evidence suggests that the eye movement component does not add much, if any, benefit (Hase et al., 2015).

In addition to the treatments described above, other types of counseling may be helpful in treating posttraumatic stress. Group therapy can be effective and is popular among people who have had similar traumatic experiences. Through group therapy, military members have the opportunity to talk and share about their experiences and, depending on the focus of the group, can learn skills to manage symptoms of posttraumatic stress. Group therapy can help those with posttraumatic stress symptoms by giving them a chance to share their stories with others, feel more comfortable talking about their own trauma, and connect with others who have experienced similar problems or feelings (Kracen, Mastnak, Loaiza, & Matthieu, 2013).

Family and couples therapy are methods of counseling that include the military member's family. A counselor or therapist can assist all persons involved to communicate, rebuild or preserve good relationships, and cope with challenging emotions (Karam, Blow, Sprenkle, &

Davis, 2015). Posttraumatic stress can sometimes have a significant negative impact on relationships, making this mode of therapy particularly helpful in some cases.

While there are decades of research on posttraumatic stress treatment with civilians and military members, research with active duty military samples has more recently developed (Arnsten, Raskind, Taylor, & Connor, 2015; Bryant et al., 1999; Johnson & Thompson, 2008). Based on research using civilian and military member samples, treatment guidelines by the U.S. Department of Veterans Affairs (2016) and DoD (2010) list cognitive processing therapy (CPT) or prolonged exposure as first-line treatments for service members with posttraumatic stress. Recent studies indicate that these treatments are also effective in active duty samples (Reger et al., 2016). Despite these promising findings, active duty military may not respond as favorably to existing posttraumatic stress treatments as other populations. For example, in randomized-controlled trials of CPT (Resick et al., 2017), the effect sizes, though in the medium and large ranges, were lower than those typically found in other samples (Watts et al., 2013). Additionally, CPT led to more modest reductions in depression than in previous trials (Resick et al., 2017).

Additionally, there are pharmacologically enhanced approaches for the treatment of PTSD (Baldwin et al., 2014). Selective serotonin reuptake inhibitors are a category of antidepressant medication that includes include fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), citalopram (Celexa), and fluvoxamine (Luvox). Many, if not most, patients with posttraumatic stress will achieve some symptom relief with a selective serotonin reuptake inhibitors, although the evidence of effectiveness is less convincing in combat posttraumatic stress compared to posttraumatic stress due to other traumas. Other prescribed medications have been used for specific symptoms with some success. Prazosin may be promising for trauma-

related nightmares. In addition, short-term use of a medication for sleep can be helpful for those who have substantial trouble sleeping immediately after a traumatic event. Longer-term use of sedative/hypnotic medications, such as benzodiazepines, however, has not been shown to be of benefit, and there is some evidence that long-term use of benzodiazepines for posttraumatic stress may interfere with psychotherapy (Schwartz, 2016).

### **Treatment Hindrances**

Although many Veteran Administrations have recently attempted to provide their patients with a variety of treatment modalities to best serve their needs, there continue to be barriers to treatment caused by both the military members themselves and the mental health care system. A study of 6,201 military members returning from Iraq and Afghanistan showed that roughly 15% of those military members who screened positive for a mental disorder, yet only 23–40% of those individuals reported receiving psychological treatment (Hoge et al., 2004). Health and psychological issues associated with PTSD continue to plague military members as they attempt to readjust their lives to assimilate back into society. During the height of Operation Desert Storm, the Army regularly dismissed large numbers of military members for having a personality disorder when they were probably suffering from the traumatic stresses of war (DoD, 1998). The Army later recognized the problem and cut the number of military members given the designation significantly due to pressure from Congress and the American public. Veterans believe that an unknown number of troops still have to unfairly bear the stigma of a personality disorder, making them ineligible for military healthcare and other benefits (Frueh, Grubaugh, Elhai, & Buckley, 2007).

The DoD is conscious of the fact that in order to support the troops, there must be measures put in place to ensure these military members are not misdiagnosed with a personality

disorder and not PTSD due to stress and trauma during the war on a battlefield. Unlike PTSD, which the Army regards as a treatable mental disability caused by the acute stresses of war, the military designation of a personality disorder can have devastating consequences for military members (Frueh, Grubaugh, Elhai, & Buckley, 2007). A personality disorder is defined as a deeply ingrained maladaptive pattern of behavior and is considered a pre-existing condition that relieves the military of its duty to pay for the person's healthcare or provide combat-related disability pay (Frueh, Grubaugh, Elhai, & Buckley, 2007). According to additional figures provided by the DoD, the service discharged approximately 2,000 members were discharged in 2005 and 2006 for having a personality disorder ("Personality Disorder Discharges," 2010).

Additional barriers to receiving help include the perceived stigma of having a mental illness and concerns about how one would be viewed by peers and leaders within the military. Due to the stigma surrounding having a mental illness, many military members experience the fear that seeking treatment could impact their careers.

The military culture may also introduce practical issues into treatment. There are transportation and available appointment time issues, the overall cost, socioeconomic status, and geographic location hindrances. Service members often see their providers on base and during their workday. Therefore, there may be more session interruptions or cancellations than typically occur due to service demands. Military members may also be called away for mandatory trainings or even separated from the military before completing treatment (Bush, Sheppard, Fantelli, Bell, & Reger, 2013). In light of recent research emphasizing the impact of more frequent CPT sessions on treatment outcomes (Gutner, Suvak, Sloan, & Resick, 2016), it is evident that these competing obligations may interfere with military members' opportunities to fully benefit from treatment.

Another common challenge to recovery is the low rate of active duty military members that seek mental health treatment. One large study of recently deployed military personnel found that only half of those with posttraumatic stress symptoms and depression sought treatment (Tanielian & Jaycox, 2008). Researchers conducting clinical trials with active duty service members report difficulties recruiting and retaining participants in their studies (Bush et al., 2013). These difficulties are likely related to logistical issues but may also reflect the stigma associated with seeking mental health care. While logistical barriers and stigma are not unique to active duty military members, aspects of the military structure may make these particularly prominent concerns. For example, service members are aware that their commanding officers can access their mental health records and may be hesitant to attend treatment due to confidentiality concerns and fear of being treated differently or even discharged. Importantly, military members who rate their leaders more positively and report higher levels of unit cohesion report lower stigma and fewer logistical barriers to seeking treatment (Hernandez, Morgan, & Parshall, 2016). This suggests that leadership's attitudes regarding mental health treatment could be an important facilitator to treatment engagement. When leaders foster a supportive environment for those seeking help for posttraumatic stress and help to minimize scheduling difficulties due to work conflicts, stigma and logistical barriers to care may be reduced.

### **Positive Growth Spiral**

Despite the hindrances, there is potential for positive adjustment following traumatic life experiences. Past research has provided evidence that positive psychology has supported shifting the focus from negative states, such as anxiety and depression, to more strength-based ideas, such as well-being (Pavot & Diener, 2008). Some evidence suggests that perceptions of life satisfaction appear to be influenced by significant life events, but there are victims of trauma



who have recognized that they have become a better person as a result of coping with their experience (Wright, Crawford, & Sebastian, 2007). When people seek to have a positive life focus, exercise has produced similar results to antidepressant medication, and in the long term, exercise has been linked to lower occurrence of relapse of substance abuse (Blumenthal & Doraiswamy, 2014).

Since students vary in the ways in which they integrate course material and experiences according to their stage of development people were created to live in community, social support has a strong, positive influence on posttraumatic stress symptoms. Social support can create a safe setting where the trauma can be acknowledged and shared. The group counseling dynamic can assist in providing the safe community. Being able to identify with a group provides a sense of belonging (Chao, Wei, Good, & Flores, 2011). Additionally, it has been found that people who journal long term develop optimism and a general sense of well-being (Radley, 2017). People who journal and write regularly made 43% fewer doctor visits and exhibited better health than those who did not (Radley, 2017). Also, benefit-finding can be thought of as “seeing the silver lining” in a traumatic experience and meaning-making can be viewed as finding purpose in, or a reason for, the traumatic experience. There is much emphasis on the importance of making something good out of something bad as a way for survivors of trauma to know that their suffering was or is not in vain (Wright et al., 2007).

Each person attending counseling comes with many different values and moral judgments that have been deeply ingrained by people who have come before them (Stark-Rose, Livingston-Sacin, Merchant, & Finley, 2012). Counselors need to ask more questions regarding faith and prayer as part of the client’s sessions and should be open to introducing prayer and faith when their client is willing and accepting of it (Weld & Eriksen, 2007). Only 51% of Christian

counselors use prayer during their preparation for their counseling sessions (Weld & Eriksen, 2007).

People from all walks of life count on extended family members throughout the course of life, but some groups can be especially vulnerable when the unexpected happens (Kim, Spangler, & Gutter, 2016). Returning military members will have a wide range of medical diagnoses and related health problems that will have a temporary or chronic impact on their living, working, learning, and relationship functioning. The availability of a military member's personal, family, and/or community resources will mitigate their experience with a health problem. These conditions may have a significant impact on the individual's strength, endurance, and energy levels, and if they are taking medication, then there may also be significant side effects.

### **Teaching and Learning**

Disabilities or noneducation burdens are not new to the college campus. One particular study found that from 2005 until 2006, 9.2% of incoming college freshmen reported some type of general disability (Barakat & Wodka, 2007). These noneducational burdens included such issues as orthopedic disability with immobility concerns or chronic or severe illness such as cancer. These problems were mostly medical in nature. Posttraumatic stress is a newly recognized disability or burden as college campuses are becoming the new frontline for many of the country's returning military members since the passage of the Americans with Disabilities Act Amendment Act of 2008 and the Post-9/11 Veterans Assistance Act of 2008 have afforded military members the opportunity to pursue postsecondary education.

To build a secure future for themselves and their families by pursuing vocational and educational goals, thousands of returning combat military members take advantage of recent legislation that helps pay for their education. They face new challenges in their newest pursuit:

the classroom. According to Arthur, MacDermid, and Kiley (2007), since October 2001, over two million American men and women in uniform have deployed in support of Operation Iraqi Freedom and Operation Enduring Freedom. Although the GI Bill provides a certain level of financial benefits to those in college, there has been inadequate effort on the part of the government to give emotional or psychological support to those same service men and women in need (Arthur et al., 2007).

College campuses prepare for the returning military member by developing programs to meet the unique challenges of returning military members with both visible and invisible injuries. These institutions have had to take into consideration that many military members have not or will not self-disclose any traumatic symptoms and will not attempt to utilize the traditional student services existing on campuses for students with disabilities. Postsecondary institutions are aware of the unique and wide-ranging needs of the current or former military members who are returning to the classroom (Bennett, 2014).

The problems associated with PTSD may contribute to issues that may concern combat-experienced current or former military college students or any other college student that may have been diagnosed with PTSD. There has been a very limited amount of research conducted on issues concerning posttraumatic stress in college students utilizing the direct experiences of participants therein. Only an insignificant percentage of information has been gathered that illustrates references between posttraumatic stress in general and posttraumatic stress in college settings (Jaycox, Kataoka, Stein, Langley, & Wong, 2012). Most investigational work on posttraumatic stress has been conducted on the general public through crime prevention networks among police departments, the clinical research of psychologists and mental hospitals, and the related research accomplished by colleges and universities. As a result, the research conducted

thus far on the topic has obtained far less information for the study of college students with the disorder than the overall population in general (Howgego et al., 2005).

Investigations on posttraumatic stress primarily conducted on military members previously produced viable answers about the influence of psychological trauma on cognition. For instance, findings in the military have suggested that posttraumatic stress can impair attention to detail, learning ability, memory retention, and executive function (Arthur et al., 2007). The literature review reveals several topics that involve the disorder in general. There is also an acknowledged understanding that not as much time or devoted research has been invested in the dilemma facing the nation's returning combat-experienced military members as they pursue a college education (Martin et al., 2009). College students faced with posttraumatic stress symptoms may not adjust or have difficulty adjusting to the academic classroom by not maintaining adequate grade point averages, becoming less interested in school, turning to drugs or alcohol while under stress, or dropping out entirely in the face of trauma (Barakat & Wodka, 2007).

Neuroimaging studies in healthy individuals have supported the notion of a recognized incentive trail that includes the ventral striatum, ventral pallidum, orbital frontal cortex, and anterior cingulate (Smith, Tindell, Aldridge, & Berridge, 2009). Two studies have examined the neural correlates of decision-making and reward in posttraumatic stress; both provided evidence for reduced capacity for positive reward in posttraumatic stress. Sailer et al. (2008) showed that the nucleus accumbens (part of the ventral striatum) was less active in patients with posttraumatic stress than controls during processing of positive gains. Behaviorally, patients with posttraumatic stress were slower in learning how to maximize their gains in a monetary gain/loss paradigm. Although speculative, the possibility exists that reduced reward processing

in posttraumatic stress may have negatively influenced patients' motivation in learning the task. Similarly, posttraumatic stress patients showed reduced activity in the striatum during a financial task in another study (Elman et al., 2009). Interestingly, when evaluating gains vs. losses there is a negative correlation with a loss of interest in favorite activities and having feelings of detachment (Elman et al., 2009)

The idea of academic motivation is based on self-determination theory or a human motivation theory. The theory centers on an individual's motivation-related characteristics and motives that stimulate behavior or action. This idea focuses on how the individual internalizes ideas, values, goals, and intentions under the influence of numerous entrenched social environments (Deci & Ryan, 2008). Unlike children, adults are motivated to learn for countless reasons beyond a requirement for an acceptable grade while in school. People train for job skills to become more marketable for promotions, higher-level job placement, and higher levels of learning for more advanced job skills (Piskurich, 2002). Additionally, adults may want to continue or complete a formal education as with a college degree. Others may be motivated to finish high school or obtaining high school equivalency in order to obtain a job. Each individual has different motivational needs for learning. Motivational intervention usually causes an increase in interest and enthusiasm or involvement in a particular subject area (Piskurich, 2002).

Examples of motivational intervention can be viewed as the overall job performance of a company as perceived by its employees or when someone in a particular college course receives an A on a final exam. Motivation can also be financial, which includes raises or higher rates of pay for a higher job level. Nonfinancial motivation could include things like employee empowerment or job promotions. Incentive or motivation is meant to stimulate someone into learning (Piskurich, 2002). People make decisions based in part on motivational influences; they

weigh the costs and rewards that may result from each option. On one end of the spectrum, seeking immediate positive rewards is associated with the psychopathology of addiction disorders (Bechara, Dolan, & Hindes, 2002), while on the other end, absence of reward seeking is linked with depressive disorders (Pizzagalli et al., 2008). In posttraumatic stress, numbing symptoms including loss of pleasure in activities and loss of the ability to experience positive emotions may suggest altered processing of positive rewards. Consistent with this notion, patients with posttraumatic stress are less satisfied with rewards than controls (Hopper et al., 2008) and expend less effort to obtain positive rewards (Elman et al., 2005). Thus, it follows that patients with posttraumatic stress may have altered decision-making capacity if the drive to achieve positive rewards is reduced.

Motivation is essential for self-directed learning (Piskurich, 2002). Adults do not necessarily learn because they have to; they learn because they want to. To learn something means to come to know or have knowledge of any given phenomenon or paradigm, which can be clarified as knowing how and knowing what (Moon, 2004). Knowledge, skills, and abilities, such as the ability to analyze literature, can be viewed as cognitive learning; physical or practical learning would give one the ability to hold a saw and cut a straight line; learning study skills would include the ability to write an essay. The central concept here is that the effects of posttraumatic stress would have a direct influence on all these aspects of learning.

Typical problematic symptoms of posttraumatic stress may involve a lack of these essential cognitive abilities (Fontana, 2010). Past research has found that fundamentals needed for college such as motivation or other positive behaviors may not be evident in the posttraumatic stress-affected college student so much as they may be in a college student without

the condition (Fontana, 2010). These positive attributes, which are mandatory educational qualities for college students, may be lacking in the posttraumatic stress-affected individual.

As previously stated, learning is the ability to acquire knowledge. Memory and recall are necessary to the ability to acquire and retain knowledge as part of the learning process. Working memory is often interchanged with short-term memory, where information is stored temporarily (Diamond, 2013). Importantly, working memory has a limited ability, suggesting that people can only remember and work with a small amount of information at a given time. A consequence of this limited ability is that intrusion from distracting trigger can reduce an individual's ability to maintain goal-oriented information. The interference of distracting trigger, such as intrusive thoughts and trauma memories, seems to be a particular difficulty in PTSD and may underlie the hallmark symptom of difficulty with concentration. Working memory deficits in patients with PTSD have been demonstrated using both verbal and visual stimuli. Schweizer and Dalgleish (2011) reported inferior working memory presentation in trauma-exposed patients on a verbal sentence task in which the patients were told to remember words presented following trauma-related or neutral sentences. Supporting the idea that trauma-related material is particularly disruptive to working memory performance, memory was weaker for words presented after trauma-related sentences than after neutral sentences. Difficulty with working memory was observed in both participants with a current diagnosis of PTSD and individuals with a lifetime history of posttraumatic stress (Schweizer & Dalgleish, 2011).

Neuroimaging studies exploring the impact of emotional triggers on working memory have suggested that hyperactivity in an emotional processing regions, such as the amygdala, ventrolateral prefrontal cortex, and medial prefrontal cortex, or hypoactivity in a dorsal executive function processing regions, such as the dorsolateral prefrontal cortex and parietal cortex, can

cause impaired retention of information in working memory as a result of emotional distraction (Dolcos & McCarthy, 2006). This model was supported in a functional MRI study examining working memory in posttraumatic stress. Morey et al. (2009) showed that patients with PTSD had poorer memory performance when both neutral and trauma-specific distracters were presented during the working memory delay in comparison to a trauma-exposed control group. Furthermore, the study showed disrupted activity in the dorsal executive function network during the working memory delay in posttraumatic stress that could explain the diminished performance. An interesting outcome of this study is that performance was interrupted for both trauma-specific triggers and neutral triggers, perhaps providing evidence for generalized hypervigilance.

Emotional memory research in nonsymptomatic persons suggests that emotional information tends to be remembered better than neutral information (Kensinger, 2007). However, the extent to which emotion provides a facilitating effect on memory encoding and retrieval in posttraumatic stress is unclear. Cognitive models of posttraumatic stress predict that patients remember emotional information better due to a bias toward (Chemtob et al., 1988) or difficulty disengaging from (Chemtob, Roitblat, Hamada, Muraoka, Carlson, & Bauer, 1999) threat-related information, which may lead to greater resources engaged to process and encode emotional information. This suggests that recall of negative information may be enhanced in posttraumatic stress, whereas information about specific details and contextual information appears to be diminished. This is consistent with the notion that cognitive resources may be differently assigned to process threat information at the expense of neutral or non-threat-related information.



When the ability to acquire new information is distorted or interrupted by exposure to traumatic events such as combat, there could be an adverse effect on a college student's performance or perceptions of the college experience. Students in college who have symptoms of posttraumatic stress from a traumatic event such as combat may have vastly different academic experiences than students who have had no such event or symptoms. If the student who has posttraumatic stress is placed in a situation where concentration, cognitive abilities, and studying are needed, then another hypothesis could be that the current or former military member may not experience the same success as a student with no posttraumatic stress issues. This paradigm may have a beneficial relationship to the proposed study. This could aid in the validation of the theory that experiential input in an online survey of current or former military members could assist those in administrative positions in furthering their understanding of the condition.

One of the two foundational theories of adult learning, self-directed learning (SDL) is usually inherent in adults (Merriam, 1998). This sets adults apart from children in that adults learn for numerous reasons due primarily to maturity. SDL occurs in everyday life and is not usually found in a formal classroom. Examples of SDL are learning a trade, learning to gain a promotion at work, learning to obtain another job, learning as part of a rehabilitation program, or simply learning for the sake of learning. However, countless combat-experienced military members and others with posttraumatic stress symptoms lack the needed initiative and drive associated with goal setting and academic ambition, which are a prerequisites of SDL. Symptoms of posttraumatic stress may cause an interruption in the initiative, drive, and ambition processes (Vrana & Lauterbach, 1994).

Many Americans' knowledge about the military may be limited to what is presented in the media. Few outside the military truly understand the culture, values, or people who make up the most powerful military force on earth. For civilians with little or no personal exposure to military culture, the Armed Forces may seem overwhelming, incomprehensible, mysterious, or even outdated. Understanding student military members means understanding military culture, battlefield skills, and deployment-related stressors. There is a lack of specially trained counselors and advisors in postsecondary institutions that can assist with the needs of returning military members (Association of the Study of Higher Education, 2001). For many military members entering postsecondary education, the faculty and staff may be the first link to early recognition, intervention, referrals, and treatment despite barriers. There is anxiety among postsecondary education professional staff over the need for professional development about military members on campus. There is a sense that forcing faculty to be prepared for another special group will create more work and resentment among the faculty, as they may question the need for more training once again (Hart & Thompson, 2016).

Prior to this study, this researcher anticipated that finding that the symptoms of posttraumatic stress are being addressed but the root cause of those symptoms is not. For example, the symptom of depression is treated, but the root cause of the trauma of assessing a bombed house and having to walk over and count dead bodies is left completely alone. Often the treatment, especially with medication, is just an attempt to lessen or mask the symptom. This research expected to find a correlation between the unresolved source of trauma and its effect on the person's motivation, personality, and self-esteem. These cognitive effects of the trauma can be seen in the person's perceived inability to cultivate and learn new information or to put that information into action.

The perceived inability to learn can cause a ripple effect in other areas of life. It was expected that a correlation would be seen between the perceived inability to process and implement the new information and trauma resiliency in the person's relationships. For example, the perceived inability to implement new learned coping skills in a marriage would be detrimental to the relationship. This would support a recent study that shows that military members who screen positive for PTSD after deployment are more likely to divorce than deployed military members that do not display PTSD symptoms (Negrusa & Negrusa, 2014). This would also show that merely treating the symptoms and not the root trauma will only assist the person in surviving from day to day but will not empower them or equip them with the ability and confidence to learn and thrive and grow every day. To learn and thrive and grow happens when the initiating trauma is addressed and the person is allowed to heal.

The posttraumatic stress of war has resulted in a high percentage of current and former military members experiencing a wide range of health issues as a result of their exposure to trauma, as well as other injuries. Many of these injuries are not visible and include physical wounds, posttraumatic stress, depression, and traumatic brain injuries requiring accessible environments and accommodations. However, many current and former military members are not utilizing the traditional service providers for students with disabilities in higher education. Therefore, colleges and universities need to engage military members and utilize their strengths in designing welcoming campuses that facilitate success for adult learners. Merely adjusting to accommodate the symptoms of posttraumatic stress may facilitate the completion of a degree, but it does not identify and acknowledge the multifaceted relationship between the root traumatic stress and the military member. It is necessary to address how the root trauma is affecting the individual's learning process.

## Summary

There is a sizable amount of literature on the impact of posttraumatic stress on current and former military members, and the issues linked to posttraumatic stress are continually being explored. Current literature provides evidence that people with PTSD experience memory and attention deficits (Cardenas et al., 2011; Francati, Vermetten, & Bremner, 2007; Suvak & Barrett, 2011). Additionally, combat veterans commonly carry the burden of guilt, self-blame, and even survivor's guilt (Ross, 2013). Multiple studies suggest that among veterans, events such as killing others (Maguen et al., 2010), participating in atrocities (Breslau & Davis, 1987), failing to prevent the death of a fellow soldier, and disposing of dead bodies (Ursano & McCarroll, 1990) were associated with PTSD. The feelings of guilt or shame can be heightened because the service member may believe they have crossed a moral line. Morally distressing experiences can occur when individuals view themselves as being part of inciting the experience or failing to prevent it, or even just being an eyewitness to experiences that go against deeply held moral beliefs or expectations (Paul et al., 2014).

Therefore, how trauma is affecting the learning process and learning experience of the person with posttraumatic stress or whether any negative impact can be changed or alleviated had not been thoroughly investigated. It was highly beneficial to explore the difference in perceptions of the learning experience of those pursuing higher education who acknowledge the active combat experience.

## CHAPTER THREE: METHODS

“Leave people better than you found them.”

(Ashton, 1992)

### Overview

This project was constructed with the idea that all people have a basic need to understand. This basic need comes from an inborn tendency to organize lived, personal experiences (Wolf, 1988). A person’s narrative of their lived experience offers a chance for not just understanding, but for reorganization the sense of self (Kohut, 1977). A person that was wounded, broken, frightened, or lost can find healing through telling their personal story. Each person’s story is their personal truth and theirs alone. Giving testimony to their personal experience can bring awareness and closure (Schutze, 1983). It is the belief that the researcher cannot be completely detached from his/her own biases and should not pretend otherwise. But the objective of this study was to describe as accurately as possible without any preconceived framework while remaining true to the presented data (Stones, 1988).

Quantitative methods emphasize unbiased data by using statistical or mathematical examination of data collected through different sample or survey methods to compare and contrast the data to gain evidence for a certain outcome. On the other hand, qualitative data consist of participants’ experiences, opinions, feelings, and knowledge, all of which are obtained through interviews, surveys or observation (Creswell, 2007). Quantitative research focuses on gathering statistical data and applying that data across similar groups of people to explain a particular phenomenon. Although qualitative studies provide a source of well-grounded descriptive information that allows researchers to present factual results from personal narratives (Creswell, 2007), they gather data from fewer people than quantitative studies. The goal of

conducting quantitative research study is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) within a population (Babbie, 2010). Quantitative research designs are either descriptive (subjects usually measured once) or experimental (subjects measured before and after a treatment; McNabb, 2008). A descriptive study establishes only associations between variables; an experimental study establishes causality (Babbie, 2010).

The purpose of this quantitative study was to explore the perceived academic experiences of current and former combat-experienced military students. Data were obtained to provide an understanding of the issues and obstacles that active combat-experienced military students face when they pursue an undergraduate or graduate degree. This study utilized multiple survey questions to search for correlations in the data regarding trauma, motivation, and personality disposition in the perceived experience of learning. Chapter Three describes the methodology of the research and the reasoning for selecting the quantitative method, lays out the framework for the survey instrument, and acknowledges how the data were assessed.

### **Design**

The study utilized a quantitative, nonexperimental, causal-comparative research design (Lohmeier, 2010). Based on the research design as well as the research questions, an online survey was used for this study, as it offered anonymity to participants. The trustworthiness of the project was predicated on the assumption that all the participants will truthfully and accurately answer the online survey questions based on their personal experience (Leedy & Ormrod, 2010). It has been assumed that the perceived lived experiences of the participants in this project can contribute to decisions made regarding the challenging issues surrounding how adult trauma impacts the adult learner. This project did not focus on any one individual's or

participant's perceived experience. Instead, the focus of the project was gathering data regarding the participants' collective experiences as they individually processed the factors they personally deemed important about their higher education experience. Another assumption was made that the surveys would reveal a common area of interest or concern and that the participants perceive the nature and significance of this study in a positive manner.

A simple survey format allows for credibility in the study; the participants were able to express their perceived college experience in regard to academic motivation, personality, and self-esteem. The findings of this survey were directly reported by the researcher using no intermediary. The study has transferability in that the results should be the same for any other university given the same research parameters. It is understood that participants could have felt they were being placed into an embarrassing situation if their identity were to become public knowledge. If not treated properly, this would complicate situations for the participant at school, work, or home. Confidentiality of answers/data will be maintained indefinitely, and identification of participants were not made available during the study or after the study's completion. These conditions were communicated to all participants during the invitation process and prior to the start of the online surveys.

The active combat experience is the independent variable. There are two levels associated with the independent variable: active combat experience acknowledged and no active combat experience acknowledged. The four main dependent variables were academic motivation, personality, self-esteem, and perceived ability to successfully learn. The subvariables associated with academic motivation are recorded as pleasure in learning, capability of learning, self-improvement, and personal gratification. The dependent variable of academic motivation was measured using the Academic Motivation Scale College Version (AMS-C 28;

Vallerand et al., 1992). The subvariables associated with personality are self-discipline, calmness, organization, and openness to new experiences. The personality dependent has been measured with the Ten-Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003). The subvariables associated with self-esteem are self-satisfaction, self-worth, and attitude toward self. The dependent variable of self-esteem was measured using the Rosenberg Self-Esteem Scale (RSE; Snyder et al., 1991).

### **Research Questions**

The fundamental question that birthed this study is: How does adult trauma impact the adult learner? The central research question for this study was: What impact does the active combat experience have on the undergraduate or postgraduate's perceived ability to successfully learn? It is hypothesized that the active combat experience is detrimental to the undergraduate or postgraduate's perceived ability to successfully learn.

**RQ1:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived ability to successfully learn?

**RQ2:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived academic motivation?

**RQ3:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived personality?

**RQ4:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived self-esteem?

### **Hypotheses**

**H<sub>0</sub>1:** Students who have experienced active combat and students who have not experienced active combat do not differ by perceived ability to successfully learn.



**H<sub>a1</sub>:** Students who have experienced active combat and students who have not experienced active combat do differ by perceived ability to successfully learn.

**H<sub>02</sub>:** Students who have experienced active combat and students who have not experienced active combat do not differ by academic motivation.

**H<sub>a2</sub>:** Students who have experienced active combat and students who have not experienced active combat do differ by academic motivation.

**H<sub>03</sub>:** Students who have experienced active combat and students who have not experienced active combat do not differ by personality.

**H<sub>a3</sub>:** Students who have experienced active combat and students who have not experienced active combat do differ by personality

**H<sub>04</sub>:** Students who have experienced active combat and students who have not experienced active combat do not differ by self-esteem.

**H<sub>a4</sub>:** Students who have experienced active combat and students who have not experienced active combat do differ by self-esteem.

### **Participants and Setting**

The target population for this study was active combat-experienced military college students. For this study, the sample consisted of male and female college students who have experienced active combat and are between the ages of 18 and 65. Participants were either part-time or full-time students enrolled in an undergraduate or graduate degree program. If a participant was enrolled in a degree program but was on a holiday break, he or she was still included in the study. Participants were divided into two groups based on the independent variable of having experienced active combat or not having experienced active combat. Participants who reported experiencing active combat were assigned to the experienced active

combat group, while participants who reported not having experienced active combat were assigned to the not experienced active combat group. Participants were not questioned about whether or not they had been diagnosed with PTSD. The group assignment of the participants was determined through a series of demographic questions.

The participants for this study were comprised of a convenience, or nonprobability, sample. Participants were recruited through contact with the Office of Military Affairs and an academic department at Liberty University. The sample size was based on a one-way MANOVA with one independent variable (experienced active combat), two levels (experience of active combat acknowledged or not acknowledged), two groups, and four dependent variables: scoring on academic motivation scale, scoring on personality scale, scoring on self-esteem scale, and over-all scoring of the three scales. The minimum sample size number was calculated using G\*Power 3.1. To calculate the sample size, the industry standard for alpha level and power level were chosen and set at 0.05 ( $p = .05$ ) for the alpha level of, and 0.80 for the power level (Cunningham & McCrum-Gardner, 2007). To determine the appropriate effect size, post-hoc effect sizes in analogous research were reviewed. Similar post-hoc effect sizes showed medium to medium/large ( $d = .65$  to  $.74$  [medium is  $d = .50$  & large is  $d = .90$ ]) and one clinical trial showed an effect size on the small side of medium ( $f = .23$  [small is  $f = .10$  & medium is  $f = .25$ ]) effect size (Harvery, 2015; Kashdan, Uswatte, Steger, & Julian, 2006; Meiser et al., 2017). It was concluded that a medium effect size of  $f = 0.30$  would be appropriate. Therefore, the sample size was calculated with an effect size of  $f = 0.30$ , an alpha level of 0.05 ( $p = 0.05$ ), and a 0.80 power level. The G\*Power 3.1 calculated that the sample size for the study will need to be a minimum of 45 participants with 22 to 23 in each group.

Anonymity and confidentiality of research participants was paramount in each stage of the research process. Every effort has been taken to protect the anonymity and privacy of the research participants. The Office of Military Affairs and the academic department were contacted and asked to send the recruitment emails, containing the link to the survey by blind-copy email; only providing the researcher the total number of emails sent. Neither department were asked to collect the surveys or have access to any of the data; they simply emailed the recruitment email/letter. If either department had wanted to know, they could have seen how many students opened the recruitment email but they would not know which students, if any, clicked on the survey link. The researcher's lack of access to the names or contact information of any perspective participant and the departments' lack of access to the survey responses or the data helped secure the anonymity, confidentiality, and privacy of the participants. Once a participant submitted a survey, their responses were housed in the SurveyMonkey application. The SurveyMonkey application's privacy policy states:

In general survey responses to SurveyMonkey surveys are controlled and managed by the Creator (the person who sent or deployed that survey). In those instances SurveyMonkey is only processing those responses on behalf of the Creator. Creator and Respondent trust is paramount to everything we do and so when we do use data about Respondents, we put Creators and Respondents first. When we do analysis of response data we only do so once we have ensured the anonymity of individual respondents (by aggregating and anonymizing the data). Our goal is to improve the user experience across SurveyMonkey survey services while maintaining the confidentiality and privacy of responses (Privacy Policy, 2019).

### **Instrumentation**

The AMS-C 28 measures the intrinsic and extrinsic drive for academic pursuit. The valuable instrument provides differentiation between motivation stemming from an actual interest and motivation due to any external factors. The AMS-C 28 is broken down into seven subscales, which include three types of intrinsic motivation (knowledge, accomplishment, and stimulation), three types of extrinsic motivation (identified, internalized beliefs, and external), and amotivation (Paul, Sriram, Subalukshmi, & Mala, 2015). The scale divides intrinsic motivation into three unordered subscales: intrinsic motivation for knowledge, which assesses the desire to perform an activity for the pleasure and satisfaction experienced while learning; intrinsic motivation toward accomplishments, which assesses the desire to perform an activity for the pleasure and satisfaction experienced from the accomplishment; and intrinsic motivation for stimulation, which is experiencing pleasure, fun, or excitement from the activity. Additionally, there are three subscales of extrinsic motivation: identified regulation, which assesses the desire to perform activities in order to gain approval for others; internalized belief regulation, which assesses the presence of pressure and guilt to attain the goal; and extrinsic regulation, which measures whether participation is to avoid negative consequences or achieve rewards. Lastly, amotivation assesses the presence of lack of motivation (Cokley, 2015). The scale contains 28 items rated on a 7-point Likert scale that ranges from (1) does not correspond at all to (7) corresponds exactly. A high score indicates high motivation in the corresponding subscale. This instrument has been replicated in several different studies (Alivernini & Lucidi, 2008; Can, 2015; Fairchild, Horst, Finney, & Barron, 2005; Guay, Morin, Litalien, Valiois, & Vallerand, 2015; Vallerand et al., 1992).

The TIPI measures the Big Five personality traits, also known as the five-factor model. The TIPI is a very brief measure, and, although somewhat inferior to standard multi-item instruments, the inventory reached adequate levels in terms of: (a) convergence with widely used Big Five measures in self, observer, and peer reports, (b) test-retest reliability, (c) patterns of predicted external correlates, and (d) convergence between self and observer ratings (Gosling et al., 2003). The five personality factors measured are openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The inventory contains 10 items rated on a seven-point scale that ranges from (1) disagree strongly to (7) agree strongly.

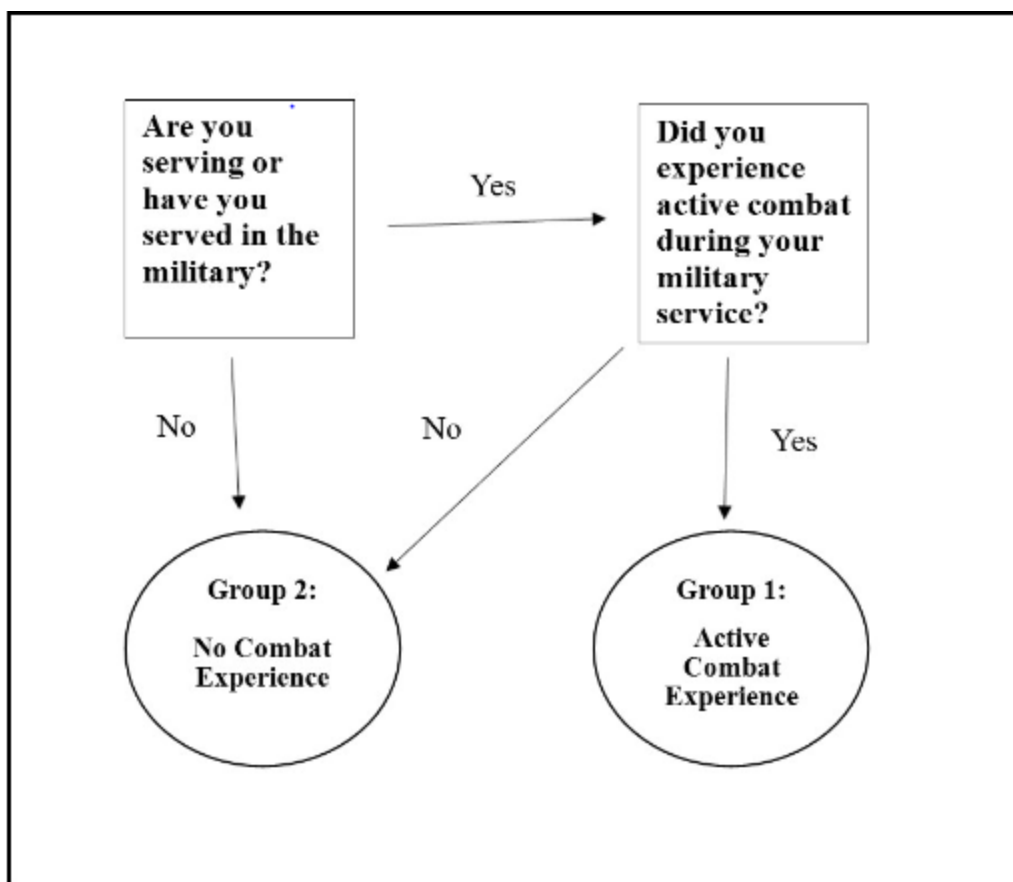
Lastly, the RSE is a self-report instrument that measures respondents' self-esteem capacity. The RSE showed strong convergent validity for men and women, for different ethnic groups, and for both college students and community members (Robins, Hendin, & Trzesniewski, 2001). This multiple-item scale helps to safeguard content validity. The RSE establishes a Guttman scale coefficient of reproducibility of .92, demonstrating excellent internal consistency. Test-retest reliability over a period of two weeks reveals correlations of .85 and .88, demonstrating reliable stability. In addition, the scale shows concurrent, predictive, and construct validity using known groups. The RSE compares with other measures of self-esteem, including the Coopersmith Self-Esteem Inventory. In addition, the RSE correlates in the predicted direction with measures of depression and anxiety (Rosenberg, 1979). The scale contains 10 items rated on a four-point Likert scale that ranges from (1) strongly agree to (4) strongly disagree.

### **Procedures**

The proposal for research was submitted to and approved by Liberty University's Institutional Review Board. Upon receiving approval from the Institutional Review Board (see

Appendix A), the Office of Military Affairs at the faith-based university was contacted with a request to send a study recruitment email (see Appendix B) to all students who were identified in the system as a military student currently enrolled in undergraduate or graduate classes. The recruitment request was declined by the Office of Military Affairs. Additionally, the academic department was contacted to secure approval to send a study recruitment email to a randomly generated selection of students that have not acknowledged any connection with the military or military service. The recruitment email was sent to students through the academic department to meet the nonmilitary criteria. The academic department agreed to disseminate the recruitment email.

The recruitment email informed potential survey participants of the broad purpose of the study and provided a link to the survey (see Appendix C), which was housed in the online SurveyMonkey application. The online survey contained seven initial demographic questions. The demographic questions did not ask any personal or identifying questions. The demographic questions were used to divide the participants into the two study groups. Group 1 is comprised of participants who have experienced active combat, and Group 2 is comprised of participants who have not experienced combat. The following figure visually describes how the participants were divided into groups through the demographic questions:



*Figure 1. Delineation of Groups.*

After the demographic questions, the participants responded to the 28 questions on the AMS-C 28; then the 10 questions of the TIPI, which measures the Big Five personality traits; and finally, the 10 questions of the RSE.

The initial recruitment email yielded a more than an adequate number of responses; therefore, a reminder email was not sent. It had already been determined that the sample size for the study required a minimum of 45 participants with 23 and 22 in the groups. The number of participants was calculated using G\*Power 3.1 to find a sample size appropriate for an a priori research design with an effect size of  $f = 0.30$ , an alpha level of 0.05 ( $p = .05$ ), and a 0.80 power level. When the survey response days were completed and an adequate number of surveys were collected through the online SurveyMonkey application, data analysis began.

### **Data Analysis**

The collected, raw data were imported electronically from the online survey site, SurveyMonkey, directly to a Microsoft Excel spreadsheet and verified. Verification of the data included, but was not limited to, scoring each participant's scales and looking for and following criteria for eliminating surveys that have missing information. First and perhaps most naturally, a "clean" data set is understandably necessary and data screening to delete cases with inappropriate responses is commonly recommended practice as part of the data analysis process (Meade & Craig, 2012). Tabachnick and Fidell (2007) assert that if 5% or less information is missing from a large data set then the issue is less serious and most approaches for dealing with missing information will work. However, if more than 5% of the data is missing, deleting that survey has been identified as an alternative to handling missing data (Tabachnick & Fidell, 2007).

Deleting a survey because of missing data occurred when a participant did not answer the military questions and/or the combat experience question. If a participant answered the military service question as no but did not answer the combat question or did not answer the military service question but answered the combat question no, that participant was be put into the no active combat experience group. Although, if a participant did not answer the military service question but answered the combat questions with yes, the survey was deleted due to careless response and not being able to place the participant accurately in either group. Additionally, if a participant answered all the scales with neutral answers, the survey was deleted due to careless response (Meade & Craig, 2012).

Once the data were verified and the three scales scored, the raw data were manually entered into the IBM SPSS software program. The raw data were organized so that each row



represents one participant. While, the columns corresponded with the demographic questions, the AMS-C 28, the TIPI, and the RSE.

The data were first analyzed to determine if the assumptions of the MANOVA were violated. The assumptions for the MANOVA was: “Independence: Observations should be statistically independent” (Field, 2009, p. 603). Independence of observations can be met by testing participants individually, as was the case for this study. The participants were independent from the others in the study. Additionally, the participants were specific to their assigned group with no connection or intersection with the other group. The first assumption was not violated.

The second assumption is random sampling. “Random sampling: Data should be randomly sampled from the population of interest and measured at an interval level” (Field, 2009, p. 603). Interval level denotes equal differences in the variable being measured. Interval data are commonly evaluated using a Likert or Likert-type scale (e.g., five-point scale), as was the case for this study, with a Likert type scale used. This assumption was not violated.

The third assumption is multivariate normality. “Multivariate normality: In the case of MANOVA, we assume that the dependent variables (collectively) have multivariate normality within groups” (Field, 2009, p. 603). The distribution of raw scores were examined visually using SPSS. Outliers are observations that are different from all others and can bias the statistical outcomes (Field, 2009). Outliers also make it difficult to evaluate the relationship between the independent variable(s) and dependent variables (Warner, 2008). Outliers were removed from the data prior to analysis to ensure a robust outcome. This assumption was not violated.

The last assumption is homogeneity of covariance conditions. “Homogeneity of covariance conditions: In MANOVA, it is assumed the variances for each dependent variable are roughly equal. In addition, it is assumed the correlation between two dependent variables is the same in all groups” (Field, 2009, p. 603). In terms of the violations of the homogeneity of covariance, MANOVA is fairly robust in terms of the error rate when sample sizes are equal or relatively equal. This assumption is easily checked using the Levene’s test (Field, 2009; Warner, 2008). If the Levene’s test is significant ( $p \leq .05$ ), then it is assumed the null hypothesis is incorrect and the assumption of homogeneity has been violated (Field, 2009). However, if the Levene’s test is non-significant ( $p > .05$ ), the variances are equal, and the assumption has not been violated (Field, 2009).

After the preliminary analyses were performed, descriptive statistics were analyzed. The descriptive statistics include mean, median, standard deviation, range, skew, and kurtosis for age, years of education, gender, highest level of education completed, and experiencing active combat. Following the descriptive statistics, a one-way MANOVA, or multivariate analysis of variance, were conducted to test the hypotheses. The one-way MANOVA was used to determine whether or not there was a statistically significant difference with the four study variables between the college students who reported experiencing active combat and the college students who did not acknowledge experiencing active combat. A one-way MANOVA is appropriate when there are several dependent variables (Field, 2009), as was the case for this study. The one-way MANOVA will be conducted using SPSS. The alpha level used for the MANOVA, as well as all the statistical analyses, was 0.05. The absence of a significant difference ( $p > .05$ ) would result in a failure to reject the null hypotheses.

## **CHAPTER FOUR: FINDINGS**

### **Overview**

This chapter addresses each of the research questions. First, a summary of the whole data set of the two groups of survey participants, descriptive statistics of demographic variables, and descriptive statistics of the study variables will be presented. Then, the results of the one-way MANOVA statistical test will be given to determine the difference in academic motivation, personality, self-esteem, and overall academic experience between students at Liberty University who acknowledge experiencing active combat and those who cannot acknowledge having experienced active combat.

### **Summary of Information of the Data Set of the Sample**

Initially, there were 386 surveys; of those surveys, 41 indicated the potential participant had experienced active combat. Of the 41 individuals who submitted surveys who had experienced active combat, four did not answer complete sections of the surveys, and the surveys were deleted. Additionally, one survey was deleted because all the questions were answered with the same response. Since it had been determined that a maximum of 50 surveys would be needed in each group, the first 50 completed surveys were analyzed for Group 2 participants, as not experiencing active combat. Of the first 50 surveys, three acknowledged experiencing active combat and were in Group 1. Six respondents did not answer complete sections of the survey and their responses were deleted.

After processing the surveys and cleaning the data field, 36 surveys remained for individuals who had active combat experience and 41 for individuals who had not experienced active combat. Both groups had well above the needed 23 surveys. The final sample consisted of 77 total participants, 36 of which self-reported they had experienced active combat, while 41

self-reported they had not experienced active combat. The data set of 77 participants contains the statistical data of their demographic answers and their test scores corresponding to academic motivation, personality, self-esteem, and overall scoring of the three scales. These statistics are summarized in Table 1.

### **Descriptive Statistics**

The following table provides descriptive statistics on gender, age, highest level of education, how class was attended, and military service among sample participants. The descriptive statistics show that 57.1% of the sample participants were female and 41.6% were male. Since gender was split between participants similarly to the experienced active combat and not experienced active combat, gender was made a covariance so it would not confound the results.

Table 1

*Descriptive Statistics*

	Frequency	Percentage	Valid Percentage
<b>Gender</b>			
Male	32	41.6	42.1
Female	44	57.1	57.9
Missing	1	1.3	
<b>Military experience</b>			
Yes	36	46.8	46.8
No	41	53.2	53.2
<b>Combat experience</b>			
Yes	36	46.8	46.8
No	41	53.2	53.2
<b>Age</b>			
18–20	6	7.8	7.8
21–29	15	19.5	19.5
30–39	35	45.5	45.5
40–49	15	19.5	19.5
50–59	6	7.8	7.8
<b>Education level</b>			
Associate degree	18	23.4	23.4
Bachelor's degree	14	18.2	18.2
High school	5	6.5	6.5
Some college	40	51.9	51.9
<b>Class type attended</b>			
On campus	6	7.8	7.8
Online	6	7.8	7.8
Both	6	7.8	7.8
<b>Total</b>	<b>77</b>	<b>100.0</b>	

**Results**

The results of the one-way MANOVA statistical test is presented to determine the difference in academic motivation, personality, self-esteem, and overall academic experience between students at Liberty University who acknowledged experiencing active combat and those who could not acknowledge having experienced active combat. The results will be discussed according to each of the hypotheses. Each hypothesis and the corresponding alternate hypothesis

will be reviewed, and then the corresponding statistical results for that hypothesis will be detailed.

The MANOVA result determined whether there were statistically significant differences with the study variables of academic motivation, personality, self-esteem, and overall academic experience, between participants that self-reported experiencing active combat and those that did not self-report experiencing active combat. The level of significance of 0.05 was used in the MANOVA analysis. It is reasoned that there would be a statistically significant difference in dependent variables among the two groups if the  $p$  values were equal or less than the level of significance value of 0.05 ( $p \leq .05$ ).

Overall, the results did not indicate any statistically significant differences between participants that self-reported experiencing active combat and those participants that did not self-report experiencing active combat. Those results will be presented below. However, since this was not the anticipated outcome, Cronbach's alpha was run during data analysis. Cronbach's alpha is a measure used to determine the reliability, or internal consistency, of the scale instruments used in the survey. Reliability or internal consistency is the extent to which an instrument consistently measures a specific concept, and Cronbach's alpha is one way of measuring the strength of that consistency. There are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95 (Bland & Altman, 1997; DeVellis, 2003; Nunnally & Bernstein, 1994; Tavakol & Dennick, 2011). A low value of alpha could suggest too low a number of questions, lack of relationship between questions or unrelated concepts. Whereas, if the alpha is too high it may be that some questions are redundant, by rewording the same idea in several different ways. A maximum alpha value of 0.90 has been recommended (Streiner, 2003).

The scores for the instruments were between .735 and .815, providing acceptable reliability and consistency.

### Hypotheses

**RQ1:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived ability to successfully learn?

**H<sub>0</sub>1:** Students who have experienced active combat and students who have not experienced active combat do not differ by perceived ability to successfully learn.

**H<sub>a</sub>1:** Students who have experienced active combat and students who have not experienced active combat do differ by perceived ability to successfully learn.

The mean score of perceived ability to successfully learn is somewhat higher ( $M = 3.40$ ) for the participants that self-reported experiencing active combat than for participants that did not self-report experiencing active combat ( $M = 3.29$ ). There are no statistically significant difference findings in the area of overall perceived ability to successfully learn. And, therefore, fails to reject the null hypotheses.

Table 2

#### *Descriptive Statistics for Perceived Ability to Successfully Learn*

Active combat	<i>M</i>	<i>SD</i>	<i>n</i>
No	3.29	0.642	41
Yes	3.40	0.604	36
Total	3.34	0.623	77

**RQ2:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived academic motivation?

**H<sub>02</sub>:** Students who have experienced active combat and students who have not experienced active combat do not differ by academic motivation.

**H<sub>a2</sub>:** Students who have experienced active combat and students who have not experienced active combat do differ by academic motivation.

The mean scores for academic motivation were all lower for participants who self-reported experiencing active combat in all categories except the amotivation category ( $M = 6.2857$ ,  $SD = 5.84391$  compared to  $M = 4.7317$ ,  $SD = 1.50041$ ). The amotivation category measures the presence of a lack of motivation (Cokley, 2015).

Table 3

*Descriptive Statistics for Academic Motivation*

	Active combat	<i>M</i>	<i>SD</i>	<i>n</i>
Internal motivation: To Know	No	25.7561	6.69993	41
	Yes	21.6286	7.36880	36
	Total	23.8553	7.26949	77
Internal motivation: To Accomplish	No	23.4634	8.01591	41
	Yes	17.6571	6.39367	36
	Total	20.7895	7.82869	77
Internal motivation: To Experience Stimulation	No	17.0976	8.11420	41
	Yes	13.1429	5.77593	36
	Total	15.2763	7.36043	77
External motivation: Identified	No	27.0244	5.76840	41
	Yes	20.3143	6.83319	36
	Total	23.9342	7.08865	77
External motivation: External Regulate	No	20.9756	9.55115	41
	Yes	16.7429	8.52451	36
	Total	19.0263	9.27933	77
Amotivation	No	4.7317	1.50041	41
	Yes	6.2857	5.84391	36
	Total	5.4474	4.15819	77
External motivation: Introjected	No	22.6341	8.23637	41
	Yes	17.4286	8.19356	36





experienced active combat and not experienced active combat, gender was made a covariance so it would not confound the results. There was no statistically significant difference in the overall variable of academic motivation based on active combat experience,  $F(7, 67) = 1.477$ ,  $p > .05$ ; Wilk's  $\Lambda = 0.866$ , partial  $\eta^2 = .134$ . And, therefore, failed to reject the null hypotheses.

Table 5

*Multivariate Tests Academic Motivation*

Effect	Value	$F^b$	Hypothesis $df$	Error $df$	Sig.	Partial Eta Squared
Intercept						
Pillai's Trace	0.921	112.244	7.000	67.000	.000	.921
Wilks' Lambda	0.079	112.244	7.000	67.000	.000	.921
Hotelling's Trace	11.727	112.244	7.000	67.000	.000	.921
Roy's Largest Root	11.727	112.244	7.000	67.000	.000	.921
Sex						
Pillai's Trace	0.091	0.955	7.000	67.000	.471	.091
Wilks' Lambda	0.909	0.955	7.000	67.000	.471	.091
Hotelling's Trace	0.100	0.955	7.000	67.000	.471	.091
Roy's Largest Root	0.100	0.955	7.000	67.000	.471	.091
Exper_active_combat						
Pillai's Trace	0.134	1.477	7.000	67.000	.191	.134
Wilks' Lambda	0.866	1.477	7.000	67.000	.191	.134
Hotelling's Trace	0.154	1.477	7.000	67.000	.191	.134
Roy's Largest Root	0.154	1.477	7.000	67.000	.191	.134

**RQ3:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived personality?

**H<sub>0</sub>3:** Students who have experienced active combat and students who have not experienced active combat do not differ by personality.

**H<sub>a</sub>3:** Students who have experienced active combat and students who have not experienced active combat do differ by personality.

With regard to the personality variable, participants who self-reported experiencing active combat had slightly lower mean scores in agreeableness, emotional stability, and openness to experiences than participants who had not experienced active combat. In the extraversion and conscientiousness categories, participants who self-reported experiencing active combat had slightly higher mean scores than participants who had not experienced active combat.

Table 6

*Descriptive Statistics for Personality*

Variable	Active combat	<i>M</i>	<i>SD</i>	<i>n</i>
Extraversion	No	7.7317	3.66077	41
	Yes	7.8571	4.07390	36
	Total	7.7895	3.83081	77
Conscientiousness	No	11.9268	2.17244	41
	Yes	12.2857	2.17704	36
	Total	12.0921	2.16750	77
Agreeableness	No	10.9024	2.70929	41
	Yes	9.3429	3.66977	36
	Total	10.1842	3.26072	77
Emotional stability	No	8.9512	3.51391	41
	Yes	8.1714	3.99622	36
	Total	8.5921	3.73873	77
Openness to experiences	No	11.7805	2.37184	41
	Yes	9.9429	3.18030	36
	Total	10.9342	2.90441	77

Table 7 shows that the Levene's test for homogeneity of variance was performed. Levene's test was used once again since there were multiple subvariables included in the independent variable of personality, to assure homogeneity within the independent variable. The test showed the subvariables had not violated the assumption of homogeneity of variance, with

the exception of openness to experiences ( $p = .046$ ). Again, MANOVA is not sensitive to this violation as long as the sample sizes are equal (Field, 2009; Warner, 2008).

Table 7

*Levene's Test of Equality of Error Variances for Personality*

	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
Extraversion	3.099	1	74	.082
Conscientiousness	0.075	1	74	.784
Agreeableness	2.971	1	74	.089
Emotional stability	0.895	1	74	.347
Openness to experiences	4.122	1	74	.046

Table 8 demonstrates the results of the Multivariate test for the independent variable of personality. Even though the Levene's test showed a minor violation of homogeneity in the area of openness to experiences, it did not impact the overall difference of personality in the multivariate test. Again, the Intercept section of the table is the estimate of the dependent variable when all independent variables are set to 0 and does not impact the results of the independent variable of personality. As earlier stated, since gender was split between participants similarly to the experienced active combat and not experienced active combat, gender was made a covariance so it would not confound the results. Once again, there was no statistically significant difference in the overall variable of personality based on active combat experience,  $F(5,69) = 1.110$ ,  $p > .05$ ; Wilk's  $\Lambda = 0.926$ , partial  $\eta^2 = .074$ . And, therefore, fails to reject the null hypotheses.

Table 8

*Multivariate Tests Personality*

Effect	Value	$F^b$	Hypothesis $df$	Error $df$	Sig.	Partial Eta Squared
Intercept						
Pillai's trace	0.955	290.766	5.000	69.000	.000	.955
Wilks' lambda	0.045	290.766	5.000	69.000	.000	.955
Hotelling's trace	21.070	290.766	5.000	69.000	.000	.955
Roy's largest root	21.070	290.766	5.000	69.000	.000	.955
Sex						
Pillai's trace	0.090	1.372	5.000	69.000	.246	.090
Wilks' lambda	0.910	1.372	5.000	69.000	.246	.090
Hotelling's trace	0.099	1.372	5.000	69.000	.246	.090
Roy's largest root	0.099	1.372	5.000	69.000	.246	.090
Active combat						
Pillai's trace	0.074	1.110	5.000	69.000	.363	.074
Wilks' lambda	0.926	1.110	5.000	69.000	.363	.074
Hotelling's trace	0.080	1.110	5.000	69.000	.363	.074
Roy's largest root	0.080	1.110	5.000	69.000	.363	.074

<sup>a</sup>Design: Intercept + sex + Experienced active combat

<sup>b</sup>Exact statistic

**RQ4:** Do students who have experienced active combat and students who have not experienced active combat differ by their perceived self-esteem?

**H<sub>0</sub>4:** Students who have experienced active combat and students who have not experienced active combat do not differ by self-esteem.

**H<sub>a</sub>4:** Students who have experienced active combat and students who have not experienced active combat do differ by self-esteem.

In the category of self-esteem, participants who self-reported experiencing active combat had a higher mean score ( $M = 31.1429$ ) than participants who had not experienced active combat.

Table 9

*Descriptive Statistics for Self-Esteem*

Active Combat	<i>M</i>	<i>SD</i>	<i>n</i>
No	29.8049	6.53919	41
Yes	31.1429	5.63676	36
Total	30.4211	6.13680	77

Table 10

*Levene's Test of Equality of Error Variances for Self-Esteem*

<i>F</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
.096	1	74	.758

Lastly, there were no statistically significant differences to report in the overall area of self-esteem. And, again, fails to reject the null hypotheses. The findings of the one-way MANOVA failed to reject the null hypothesis for each research question. These results strongly suggest that there are no differences between those who have experienced active combat and those who have not experienced active combat in the areas of perceived ability to successfully learn, academic motivation, personality, and self-esteem.

## **CHAPTER FIVE: CONCLUSIONS**

### **Overview**

The purpose of this chapter is to provide a summation and discussion of the results from the data analysis presented in Chapter Four. The information presented in this chapter will include a review of the research project, implications of the results, limitations, and recommendations for future research.

### **Discussion**

The purpose of this study was to contribute to the research being conducted regarding the challenges of assimilating the adult who has experienced trauma into the adult education setting by building upon and adding to earlier research. As a result, the purpose of this project was to evaluate the participants' perceived ability to successfully learn, academic motivation, personality, and self-esteem and compare the results of those that self-reported experiencing active combat and those who had not experienced active combat. The subvariables associated with academic motivation are pleasure in learning, capability of learning, self-improvement, and personal gratification. The subvariables associated with personality are self-discipline, calmness, organization, and openness to new experiences. The subvariables associated with self-esteem are self-satisfaction, self-worth, and attitude toward self.

Research question one asked: Do students who have experienced active combat and students who have not experienced active combat differ by their perceived ability to successfully? Although the study did not provide any evidence of a significant difference in the perceived ability to successfully learn between those that self-reported experiencing active combat and those that had not experienced active combat, previous literature suggests that

trauma could hinder an adult learner's ability to grasp, understand, and apply new information from academic studies to real-life situations (Fontana, 2010).

Research question two asked: Do students who have experienced active combat and students who have not experienced active combat differ by their perceived academic motivation? Once again, the data did not show any significant difference between those who self-reported experiencing active combat and those that had not experienced active combat in the area of academic motivation. The research participants reported equal academic motivation. Past research theorized that a fundamental need for adult learners is motivation or other positive outlook that may not be apparent in adult learners who have been impacted by the effects of trauma (Fontana, 2010). Motivation and concentration are needed in self-directed learning, and literature has shown this as an area of concern for those affected by trauma (Ormrod, 2008).

Research question three asked: Do students who have experienced active combat and students who have not experienced active combat differ by their perceived personality? The perceived personality variable also displayed no significant difference between those who self-reported experiencing active combat and those who had not experienced active combat. This is interesting due to previous findings that trauma responses are unique and often determined by each person's personality and character, temperament, other daily frustrations, personal coping skills, adaptability to change or unexpected events, and support system, as well as the intensity and duration of the stressor (Yeager & Roberts, 2015).

Research question four asked: Do students who have experienced active combat and students who have not experienced active combat differ by their perceived self-esteem? The data showed no significant difference in self-esteem between those that self-reported experiencing active combat and those that had not experienced active combat. It has been reported that higher



self-esteem is positively linked with relationship satisfaction (Erol & Orth, 2016). Additionally, self-esteem has strong positive correlations with hope, which helps provide the resolve needed to reach goals that enhance an individual's self-worth and understanding (Lyubomirsky et al., 2006).

### **Implications**

The implications of studying the impact of adult trauma on the adult learner through investigating any perceived differences between those who self-report experiencing active combat and those who have not experienced active combat via the lens of academic motivation, personality, self-esteem, and perceived ability to successfully learn are twofold. First, it is a growing concern for institutions of higher learning to be equipped to support all current and former military members, especially those who have active combat exposure, in their academic goals (Ford & Vignare, 2015; Sinski, 2012; Steele, Salcedo, & Coley, 2010; Wisner et al., 2015). The research and data could be valuable to institutions of higher education, including faculty, school administration, and educational counselors (Ellison et al., 2012; Hermann, Raybeck, Wilson, Allen, & Hopkins, 2008), since college students with military experience, whether current or past, have unique challenges during their pursuit of higher education, as they carry with them memories of extreme life situations and experiences that seem unusual for the traditional college student (Ellison et al., 2012).

Secondly, this study has implications for the adult learner who has experienced trauma as an adult, especially the trauma of experiencing active combat, and who is considering starting or continuing their pursuit of higher education. Not only does this study provide data and information regarding academic motivation, personality, and self-esteem, this study continues and deepens the conversation of the impact of adult trauma on the adult learner, specifically in

the trauma framework of experiencing active combat by providing further understanding and fleshing out new questions regarding the impact of adult trauma on the adult learner.

### **Limitations**

The limitations of this study are predominantly connected to the setting and sample. The study participants were limited to being enrolled in a degree program from a private, Christian faith-based university. The participants' individual faith is a limitation of this study. Studies have shown that faith plays a positive role in restoring resilience (Davydov, Stewart, Ritchie, & Chaudieu, 2010; Jonker & Greeff, 2009). Faith can provide a framework for finding meaning in the traumatic circumstance and in current life (Faigin & Pargament, 2010; Manning, 2014; Rounding, Hart, Hibbard, & Carroll, 2011). The faith-based purpose statement of the university is another limitation that may have influenced the findings of this study. Liberty University's purpose is to develop "Christ-centered men and women with the values, knowledge, and skills essential to impact the world. Through its residential and online programs, services, facilities, and collaborations, the University educates men and women who will make important contributions to their workplaces and communities, follow their chosen vocations as callings to glorify God, and fulfill the Great Commission" (Statement of Mission and Purpose, 2014). These faith-based limitations may reduce the applicability of the research to those who have experienced active combat at other universities and colleges.

Another limitation of this study is the gender representation. Of the 36 participants that self-reported experiencing active combat, only eight were female, whereas of the 41 participants that had not experienced active combat, only five were male. This is not surprising given that 88% of post-9/11 veterans are male (Institute of Medicine, 2014; National Center for Veterans Analysis and Statistics, 2017). This limitation was recognized prior to data analysis, and gender

was made a covariable so as not confound the data. But, this limitation could hinder the transferability of the research findings to the female population.

A known limitation is the possibility of the multiple active combat experiences for participants. As reported previously, the addition of multiple deployments during these most recent wars has increased the probability of exposure to combat trauma significantly, and the best predictor of depression and posttraumatic stress is exposure to combat.

An additional limitation is the presence of significant adult trauma outside of experiencing active combat. Several student participants contacted this researcher via email asking if being a first responder or 911 dispatcher or a survivor of near-death traffic accident would be considered the same as experiencing active combat. With a moved heart, this researcher clarified that for this study, experiencing active combat would only be defined through the military theater. This researcher understands that adult trauma and posttraumatic stress symptoms have also been found in the general population. Posttraumatic stress symptoms have been identified in abused women and children with past traumatic experiences, or sudden, unexpected catastrophic experiences such as sexual abuse, war, or natural disasters such as a tsunami (Cantani et al., 2009). Adult trauma outside of active combat could be present in any of the study's participants and can be a mitigating circumstance in the data results. Additionally, the researcher's own lack of personal experience in active combat can be considered a limitation. This lack of personal experience could have influenced the questions that were asked or not asked.

Lastly, there is the limitation that participants that self-report having experienced active combat may already be attending counseling, therapy, or another form of healing for their trauma. Four participants that self-reported experiencing active combat contacted this researcher

via email unsolicited. Two of those participants mentioned that they had finally been to counseling and that their educational experience was now vastly different than before counseling. Since recovery from trauma is not out of the question, this limitation could be a factor in the data analysis.

### **Recommendations for Future Research**

Recommendations for future research should start with the individual variables of amotivation and openness to experience. Even though the overall variables of academic motivation and personality were not impacted by the results of these subvariable, these individual variables produced a statistically significant result. Amotivation and openness to experience should be explored more in-depth as they pertain to those who have experienced active combat and are pursuing higher education.

Based on the limitations of this study, it is recommended that future research utilize a non-faith-based sample group with the same research method and instruments. Research through a non-faith-based college or university would provide further understanding regarding how faith aids in resiliency and how that impacts the perceived educational experience of the adult learner.

Further research is needed for each of the three variables tested for in this study and the impact adult trauma outside of active combat has on the adult learner. Research is needed on how the perceptions, attitudes, and experiences of adult trauma in the adult learner are understood by educators.

It would also be advisable to use the same research method and instruments with groups of participants that have experienced active combat with the independent variable being those who have not received any form of counseling and those who have received counseling. It

would also be beneficial to compare and contrast the perceived educational experience of individuals before and after experiencing active combat.

It would be advantageous to explore the effects of experiencing active combat on the adult learner through a phenomenological methodology. A phenomenological method seeks to investigate a comprehensive portrayal and account of the phenomena of an everyday experience (Hepner, Wampold, Owen, Wang, & Thompson, 2015). Through the phenomenological method it is reasoned that people can be certain about how things appear in, or present themselves to, their consciousness. The person's reality is the person's truth. Phenomenology asserts that to be able to arrive at certainty, anything outside the immediate experience must be ignored, and in this way the external world is reduced to the contents of the perceived personal consciousness. Perceived realities are therefore treated as pure phenomena and the only reliable data from where to begin. The open-ended questions of a phenomenological method can identify themes in the data to extract the lived experience or phenomena of experiencing active combat and how that experience impacts the pursuit of higher education.

Possible questions to ask in a qualitative, phenomenological method could be:

1. How do these students feel about their academic ability?
2. How do these students perceive the posttraumatic stress impacts their college experience?
3. Do these students perceive any hindrances to their academic ability?
4. Is these students' higher education experience different from their secondary school experience? How?
5. Do these students perceive a difference between online and in-person classes?
6. How do these students currently deal with the problems they face, both in and outside of college?

7. What types of assistance inside or outside of college have helped them?
8. What can schools do to better academically assist them?

Lastly, with the limitation of this researcher's lack of personal experience with active combat, it would be advantageous for some future research to be directed by researchers with active combat experience; this would bring needed insight and perspective to the data production, implementation, collection and analysis.

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**APPENDIX A: IRB Approval****LIBERTY UNIVERSITY.**  
INSTITUTIONAL REVIEW BOARD

March 26, 2019

Stephany Pracht  
IRB Approval 3727.032619: Impact of the Combat Experience on Adult Learning for Students  
Enrolled at Liberty University in Spring 2019

Dear Stephany Pracht,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,



**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**Research Ethics Office**

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## APPENDIX B: IRB Administrative Approval Request

# LIBERTY UNIVERSITY

## INSTITUTIONAL REVIEW BOARD

### IRB ADMINISTRATIVE APPROVAL REQUEST

**Study Title:** IMPACT OF THE COMBAT EXPERIENCE ON ADULT LEARNING FOR STUDENTS ENROLLED AT LIBERTY UNIVERSITY IN SPRING 2019

**Principal Investigator:** Stephany Pracht      **Chair (if applicable):** Dr. Steven Brooks

**Protocol #:** 3727

**Purpose:** The purpose of this research project is to investigate how adult trauma impacts the adult learner. The central research question for this study is: What impact does the active combat experience have on the undergraduate or graduate student's perceived ability to successfully learn?

**Type of Participants:** LU students ages 18-65. (Some identified through Military Affairs Office; some from Behavioral Sciences). Will be split into 'active combat' and 'no active combat.'

**Number of Participants:** 45

**Procedures:** Anonymous survey (56 questions), 6 demographic questions and 3 proprietary instruments.

**Study Duration/Timeline:** Spring 2019

**IRB Notes:** Community Care & Counseling Dept.

### ADMINISTRATIVE DECISION

- Approved
- Approved, *with conditions:*
- Denied

**SIGNED:** *Terrence Conner*

**DATE:** Mar 20, 2019

### **APPENDIX C: Recruitment Letter/Invitation**

Dear Fellow Liberty University Students:

As a graduate student in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for a Doctor of Education in Community Care and Counseling. The purpose of my research is to investigate the impact that adult trauma has on the adult learner by describing how, if any, the experience of active combat effects the educational journey compared to students who have not experienced active combat. Whether or not you have combat experience, your educational experience is important to this research and I am writing to invite you to participate in my study.

If you are between the ages of 18 and 65 years old, are currently taking classes at Liberty University and are willing to participate, you will be asked to take a survey

The survey contains 6 demographic questions and 50 research study questions. It should take approximately 15-20 minutes for you to complete the survey. Your participation will be completely anonymous, and no personal, identifying information will be collected.

To participate click on the link or copy and paste onto your browser:

<https://www.surveymonkey.com/r/HLFX3Z3>

An informed consent document is provided as the first question you will see after you click on the survey link. The informed consent statement contains additional information about my research. Please, select AGREE for the informed consent question to indicate that you have read the informed consent information and would like to take part in the survey.

It would be an honor if you would consider participating in this study.

Please, complete the survey by May 6, 2019.

Thank you for your time and consideration.

Sincerely,

Stephany Pracht

Doctoral Student at Liberty University

School of Behavioral Sciences

## APPENDIX D: IRB Approved Consent Form

The Liberty University Institutional  
Review Board has approved  
this document for use from  
3/26/2019 to 3/25/2020  
Protocol # 3727.032619

### CONSENT FORM

IMPACT OF THE COMBAT EXPERIENCE ON ADULT LEARNING FOR STUDENTS  
ENROLLED AT LIBERTY UNIVERSITY IN SPRING 2019

Stephany Pracht  
Liberty University

Community Care and Counseling Department in the School of Behavioral Sciences

You are invited to be in a research study on the impact that adult trauma has on adult education, by investigating how the experience of active combat affects the educational journey. You were selected as a possible participant because you are between the ages of 18 and 65 and are currently taking classes at Liberty University. Please read this form and ask any questions you may have before agreeing to be in the study.

Stephany Pracht, a doctoral candidate of Community Care and Counseling in the School of Behavioral Sciences at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to understand and describe the perceived educational experience of current and former military members who have experienced active combat and to establish any influence of combat-related trauma as opposed to current students who have not experienced active combat.

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. Complete the following survey. The survey contains 6 demographic questions and 3 groups of research study questions. The survey should take approximately 15-20 minutes to complete.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Participants should not expect to receive any direct benefit from taking part in this study.

Benefits to society include generating data that could provide a depth of understanding and knowledge of how adult trauma impacts the adult learner.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Anonymity of research participants is paramount in each stage of the research process. Every effort will be taken to protect the anonymity and privacy of the research participants. Once the mandatory three-year retention period required by federal law expires, all digital data will be deleted from all computer applications and any hard copies of data information will be shredded.

## APPENDIX E: SURVEY

### CONSENT FORM

#### IMPACT OF THE COMBAT EXPERIENCE ON ADULT LEARNING FOR STUDENTS ENROLLED AT LIBERTY UNIVERISTY IN SPRING 2019

Stephany Pracht

Liberty University

Community Care and Counseling Department in the School of Behavioral Sciences

You are invited to be in a research study on the impact that adult trauma has on adult education, by investigating how, if any, the experience of active combat effects the educational journey. You were selected as a possible participant because you are between the ages of 18 and 65 and are currently taking classes at Liberty University. Please read this form and ask any questions you may have before agreeing to be in the study.

Stephany Pracht, a doctoral candidate of Community Care and Counseling in the School of Behavioral Sciences at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to understand and describe the perceived educational experience of current and former military members who have experienced active combat and to establish any influence of combat-related trauma as opposed to current students who have not experienced active combat.

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. Complete the following survey. The survey contains 6 demographic questions and 3 groups of research study questions. The survey should take approximately 15-20 minutes to complete.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Participants should not expect to receive any direct benefit from taking part in this study.

Benefits to society include generating data that could provide a depth of understanding and knowledge of how adult trauma impacts the adult learner.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report, I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Anonymity of research participants is paramount in each stage of the research process. Every effort will be taken to protect the anonymity and privacy of the research participants. Once the mandatory three-year retention period required by federal law expires all the digital data will be deleted from all computer applications and any hard copies of data information will be shredded.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

**Contacts and Questions:** The researcher conducting this study is Stephany Pracht. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at [REDACTED]. You may also contact the researcher's faculty chair, Dr. Steven Brooks, at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

**Please notify the researcher if you would like a copy of this information for your records.**

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

**AGREE**

**DISAGREE**

### **Demographic Information Questions**

Please answer each of the questions with one of the responses provided

2. What is your gender?

Female

Male

3. Which range below includes your age?

18–20

21–29

30–39

40–49

50–59

60 or older

4. How do you attend classes?

On campus

Online

both

5. Have you served or are you currently serving in the military? If, YES, which branch of the military did you/do you serve in?

NO

YES – US Army

YES – US Navy

YES – US Air Force

YES – US Marine Corps

YES – Reserves

YES – National Guard

6. During your time in military service, did you experience active combat engagement?

Yes

No

Does not apply

7. Highest level of education completed

High school

Some college

Associate degree

Bachelor's degree

Master's degree

Doctorate degree