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# A CASE STUDY OF STUDENT VETERAN EFFICACY IN THE COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY AT GEORGIA SOUTHERN UNIVERSITY

by

#### **KEVIN GAVIN FINLEY**

(Under the Direction of Roger Purcell)

#### ABSTRACT

This thesis addresses the issues student veterans face in their transition from military to academic life while pursuing an undergraduate degree in the STEM fields (Science, Technology, Engineering, Math) at Georgia Southern University's College of Engineering and Information Technology (CEIT). Historically this transition has been a difficult one. Through the implementation of a mentorship program comprised of military veterans on the staff and faculty of Georgia Southern University as well as assistance and participation from members of the case study researcher team and primary researcher this program assisted incoming military student veterans as they assimilated into the collegiate atmosphere. The mentorship program was designed to assist each student veteran during their transitional phase back into the academic world and throughout their time as a college student. The program was also to assist these student veterans as they manage their perceived stress levels, work through their academic and social challenges and prepare them for their future employment. The data presented in this document was gathered during the 2016-2017 school year.

INDEX WORDS: Student veteran, Perceived stress, Transition, Academic

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by

### KEVIN GAVIN FINLEY

B.S., University of Colorado, 2008

A Thesis Submitted to the Faculty of Georgia Southern University in Partial Fulfillment of the Requirements for the Degree

> MASTER OF SCIENCE STATESBORO, GEORGIA

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KEVIN GAVIN FINLEY

Major Professor: Roger Purcell Committee: Melissa Plew John Dryden Keith Landry

Electronic Version Approved: December 2017

### DEDICATION

To my family: Kevin, Nancy, Brett and Jason for their never-ending love and support.

To my wonderful fiancé Jessica, for her constant support, guidance and patience while I strove to accomplish this goal.

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## ABBREVIATIONS

STEM	Science, Technology, Engineering, Math
USG	University System of Georgia
RAND	Research AND Development
SVA	Student Veterans of America
GPA	Grade Point Average
IVMF	Institute for Veterans and Military Families
VA	Department for Veteran Affairs
NVEST	National Veteran Education Success Tracker
PSS	Perceived Stress Scale
GSU	Georgia Southern University
FYE	First Year Experience
CEIT	College of Engineering and Information
	Technology

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# CHAPTER I INTRODUCTION

#### **Problem Statement**

Adjusting to new situations and new surroundings can be a challenging task. Transitioning from a culture with strict discipline and ample guidance to a culture with little of either can be impossible for some. The transition from a military culture with strict rules to a loosely structured collegiate culture where it is mostly up to the individual to set their own rules, schedule and timelines is exactly what our current demographic of military student veterans faces as they move from their active duty roles back to civilian life and into the academic realm. These individuals have become accustomed to operating within a system where much of their life follows a set routine and that routine functions largely as part of unit. Once they have integrated into the academic world much of this structure and team oriented mentality goes away. As these veteran's transition into college many of them struggle to find their footing and have difficulty completing their degree. This can be seen through the low retention and graduation rates of our current military student veterans. "The concept of community is central to the work of student affairs administrators in part because student success is enhanced when campuses provide environments that are both inclusive and supportive. The goal is to promote student success by recognizing the importance of individualized support, based on the unique needs of a subset of the student body" (DiRamio, 2008, p. 74).

During the transitional process, many student veterans experience increased and varying levels of perceived stress. The varying degrees of perceived stress these students encounter can come from many factors in their lives. Things such as their family situations, health and disability issues, age differences with their new peer group, financial issues, ect. can all cause increases in daily stress levels. Increased stress causes very real problems for students and this mentorship program was designed to help these students cope with and overcome the issues that caused their varying stress levels. Along with mentoring these students during their time adjusting to and then throughout college, which is the first major component of this case study, the second major component of this study will be identifying each student veteran's stressors and helping them deal with these issues. These stressors cause increased levels of perceived stress in students and increase their risk of unsuccessful completion of their desired degree. To analyze these stress occurrences the researcher will be evaluating the mentorship program that was established at Georgia Southern University. This mentorship program strives to assist student veterans with their transition into college and throughout their time in school.

#### **Background Information**

Since 1944 there have been six different versions of the GI Bill enacted by Congress to help servicemembers pay for their education. The most recent version came about through the Post 9/11 Veterans Education Assistance Act of 2008. This GI Bill represents the largest expansion of military education benefits since WW II. For today's students, just as it has been for decades, the collegiate experience is an individual journey and the guidance offered can feel very minimal to a person who is accustomed to living in the structured world that the military provides. Historically the transition process military veterans experience as they move from their role as an active duty service member to a civilian has proven difficult. "Research revealed a consistent theme that transition is a process involving step-by-step change, working through events across a timeframe, and requiring adjustment across several of life's dimensions" (DiRamio, 2008, p.76). Looking at student veterans, the difficulties they encounter as they begin their pursuit of a college education pose a very real threat to the successful completion of their desired degree. When looking at the University System of Georgia graduation and retention rate averages for military student veterans, it is obvious these rates are low and the student veteran demographic requires attention. "Specific to the University of Georgia system, for student veterans who started school in fall 2010, the four-year graduation rate was 56% and in fall 2011 the retention rate for student veterans was 78%" (Poe, 2016, pp. 4-5).

#### **Objective of Research**

This thesis focuses on a mentorship program for student veterans and its attempt to address the previously stated issue of poor graduation and retention rates resulting from increased perceived stress levels for student veterans pursuing college degrees and what can be done to improve these averages. The targeted demographic for this study focused on student veterans pursuing a degree in any of the four STEM fields of study (science, technology, engineering, and math) in the College of Engineering and Information Technology (CEIT) at Georgia Southern University. The objective was to develop a mentorship program consisting of military veterans on the staff and faculty of Georgia Southern to then assist these student veterans as they navigated the collegiate atmosphere. Also identified were the primary factors affecting their stress levels and how to help mitigate those factors.

As stated by Packard (2016), "When students have positive mentoring experiences, they are more apt to achieve better grades and persist in college. Furthermore, mentoring is a high impact educational practice, which means that your institution can expect to see increased engagement and retention as a result of your investment" (p. 5). Table 1 data which was received from the university website (georgiasouthern.edu), shows enrollment at Georgia

Southern in the two colleges working in the STEM fields (The College of Science and Math – COSM - and The College of Engineering and Information Technology – CEIT) has been steadily rising since 2011. This steady increase in student population will bring with it more student veterans and enhances the needed focus on providing all incoming students with resources for success.

Table 1 GSU STEM Colleges Enrollment Data College Fall 2011 Fall 2012 Fall 2013 Fall 2014 Fall 2015 CEIT 718 2269 2749 2939 3174 COSM 3636 1984 2047 1938 1797 Totals 4354 4253 4796 4877 4971

Given the varying characteristics of age, experience, family situations, financial situations and potential disabilities as seen in a study conducted by the RAND corporation which focuses on the motivating factors, barriers and problems student veterans face when pursuing further education, which this group of student veterans possess in comparison to the typical incoming college freshman, assimilation into the university culture can be difficult. The faculty and staff members who agreed to join this program and act as mentors played a vital role for this group of student veterans.

The main issue student veterans face upon entering college is moving from a very demanding environment where their support structure was much more defined in terms of training and motivation to a culture where they must define their own structural parameters. Additionally, they must assimilate into an environment that may seem foreign. Some of the differences these student veterans experience are that they may be older than their peers, they may have already started a family, they may have experienced combat, ect. These factors, combined with the overall difficulty of college, make this transition process very hard and very stressful for many student veterans. The major transitions they are encountering along with the increase in their levels of perceived stress lower their chances of successful completion of their degree. This thesis asks that, if a mentorship program providing support and guidance for student veterans in CEIT seeking a STEM degree transitioning from military to academic life is implemented, then how can it help student veterans better handle their transition from military service into the academic world?

### **CHAPTER II**

#### LITERATURE REVIEW

#### **Increased Military Veteran Presence on Campus**

With the drawdown of overseas deployments in some of the major conflicts in the Middle East there is an expectation that there will be an increase in the amount of returning soldiers that will be looking to further their education and use their earned GI Bill benefits. "Given the large number of returning service members and the more generous education benefits offered by the Post-9/11 GI Bill, veteran enrollments are expected to rise markedly relative to Montgomery GI Bill levels, with usage rates potentially increasing by 20 percentage points, from 50 to 70 percent" (Simon, Negrusa & Warner, 2009, p.1012). "This means college campuses will increasingly face the challenge of helping returning veterans integrate into the civilian workforce, to fulfill that mission effectively, they must first understand the unique needs of this population" (Steel, Salcedo & Coley, 2010, p.2). If the current college systems do not focus on and modify the way student veterans are assimilated into their campuses, those institutions will make it harder for the men and women who have served our country to successfully use their GI Bill money to further their education.

As stated in a study conducted by the Center for American Progress (2012), "According to recent reports, news articles and statements from government officials, returning veterans often face a myriad of challenges when it comes to higher education, including reacquainting themselves with academic work, navigating complex campuses administrative systems, finding support services to meet their needs, encountering negative reactions from the campus community based on their participation in military conflicts and having difficulty connecting with classmates and faculty" (Griffin & Gilbert, 2012, p.2). Therefore, the question proposed is what can be done in CEIT that can help this demographic of student veterans succeed? "Developing strategies that increase the likelihood of veterans completing the studies and earning their degrees will certainly contribute positively to this goal and simultaneously promote national competitiveness as well as appropriately compensating veterans for their service" (Griffin & Gilbert, 2012, p.2).

A major issue facing student veterans is the fact that "the way in which veterans created meaning for their life in the military is often different than the way they create meaning as a student on campus" (Jones, 2013, p.1). "Much of military training forces service members into preassigned identities that, while valued in the military may have little correlation to their new roles as students in higher education. Understanding how this group makes meaning during this transition will help educators offer appropriate curricular and co-curricular support that promotes openness and adaptability for veterans moving from a regimented, external-authority-based environment toward developing self-authorship and establishing a post-military identity" (DiRamio & Jarvis, 2011, pp.66-67). "The challenge to researchers and educational policy makers is this: to provide the best learning environment for student veterans they can, to assist them in any way possible and do our best to understand what they have already accomplished in the past and encourage them to do more in the future" (Jones 2013, p.13).

#### **Transitioning from Military to Academic Life**

RAND (2010), as well as documents by DiRamio, Ackerman and Mitchell (2008) show that military veterans who are transitioning from an active duty role into civilian life and then back into school will experience considerable hardship during this phase of their life. This transition can be difficult and for many make the likelihood of completing the degree they are seeking low. The fact is that most veterans who are returning to school possess the skills they need to be successful but have a challenging time transitioning those skills to be beneficial in school. A breakdown of the University System of Georgia's (USG) graduation rates for student veterans can be seen in Table 2 and retention rates can be seen in Table 3.

Table 2

First- time Undergraduate Graduation Rates (USG)

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	Group	Years	Student Veteran Average	USG Student Average
_	Student Veteran	2011-2013	45%	37%
	USG Student	2007-2009	60%	57%
	Six Year	2006-2008	68%	64%

Table 3 First-time Undergraduate Retention Rates (USG)

Groups	Years	Fall	Summer	Spring	Average
Student Veterans	2011-2013	72%	100%	88%	78%
USG Student Averages	2011-2013	91%	67%	90%	90%

As stated by Cass (2014), "According to Student Veterans of America (SVA), approximately half of student veterans will not graduate in six years. Eighty-five percent of student veterans are over the age of twenty-four and almost half have a family which they support. Most veterans have endured multiple extended wartime deployments, and reservists are often mobilized to active duty during the course of their education. Furthermore, student veterans haven't been in the academic environment for years" (p. IX). Taking these reasons into consideration one can see the difficulty the transition into academic life can be for veterans. Cass (2014) goes on to say, "while student veterans bring great strengths to college campuses, the transition to college can be very difficult and often leads to attrition. Graduation rates are

widely debated, but here is one thing we can all agree on: the graduation rates among our nations veterans is *unsatisfactory* and needs to improve, and can improve" (Cass, 2014, p. IX).

#### The Role of Project Management in the Mentorship Program

In order to manage a program of this size the researcher took cues in the planning and scheduling of the program from those used in many large industries. In a project of this size, one with so many moving parts, the project management, planning and scheduling practices come to play a significant role. "Project management can be seen as the application of tools and techniques utilized to guide the use of resources toward achieving an intricate task within the constraints of time, cost and quality. From conception to completion, a mixture of these tools and techniques is necessary to fit the task environment and project life cycle" (Oisen, 1970, p. 8). Further defined by the UK association of Project Management (APM), "the planning, organization, monitoring and control of all aspects of a project and the motivation of all involved to achieve the project objectives safely and within agreed time, cost and performance criteria. The project manager is the single point of responsibility for achieving this" (AMP, 2017, p. 14).

Without strict adherence to the above stated principles this program would be unmanageable and unable to complete its set upon goal. Relating this program to that of a project in many large industries allows the researcher to use these views coupled with vast experience with large projects which rely on many different facets to be successful. These programs utilize multiple individuals and teams to accomplish a collective goal. Given the modern technology of today the communication methods at the disposal of the researcher and large industry teams are very similar and easily transitioned. In this case study the researcher's role was that of a project manager. The researcher was tasked with managing a large group of people, each with varying schedules, goals and methods of approach. Using varying managerial approaches (meeting on neutral ground, beginning each meeting with friendly conversation and making sure each meeting was a two-way conversation) and varying managerial tools (google drive to share documents, google calendar for meeting invitations and social media to inform the entire group of changes in schedules) allowed this project to run smoothly and efficiently. Approaching this case study in the same way one would a large project allowed the researched to utilize many tested and proven effective managerial aspects from varying professional fields.

#### Theory Behind the Conception of the Veteran Mentorship Program

A major focus in the development of this study was how to go about teaching these student veterans about the college experience and prepare them for the challenges they will face as they move forward in the academic world. Mentoring is a way to help lessen the stressful aspects of change and help these student veterans with their transition. The framework for the development and implementation of this study is largely taken from the book *How Learning Works: 7 Research-Based Principles for Smart Teaching* which defines learning "as a process that leads to change, which occurs because of experience and increases the potential for improved performance and future learning" (Ambrose, Bridges, Lovett, Dipietro & Norman, 2010, p. 3). They further state that "Learning is a process not a product. Learning involves change in knowledge, beliefs, behaviors or attitudes. Learnings is not something that is done to students, but rather something students themselves do" (Ambrose et al.,2010, p. 3).

A fact that is both a major asset and a major hurdle for the student veterans in this program is the prior knowledge that this group brings with them. "Students do not come into our courses as blank slates, but rather with knowledge gained in other courses and through daily life. This knowledge consists of an amalgam of facts, concepts, models, perceptions, beliefs, values and attitudes, some of which are accurate, complete and appropriate for the context, some of which are inaccurate, insufficient for the learning requirements of the course, or simply inappropriate for the context" (Ambrose, et al., 2010, p. 13). This fact has proven to be one of the major hurdles these student veterans must deal with. "As students bring this knowledge to bear in our classrooms, it influences how they filter and interpret incoming information" (Ambrose, et al., 2010, p. 13). A main objective of this program is to teach these student veterans how to incorporate what they learned in the military, adapt those skill sets to the academic world and apply them in school.

Another vital concept this study addressed was the learned concept of knowledge. In the military soldiers are taught to "learn" concepts in a practical and efficient way. Much of what they will be asked to "learn" in the college atmosphere is conceptual and will not be used in a practical way until they move on to their desired career. So how do they use the learned skill set they already possess and transition that into a skill set they can use in school? Ideally, this mentorship program will teach these student veterans how to adapt the vast skill sets they possess into assets they can draw upon in school.

This topic is discussed in Lowman (1995) states that there are "three independent sources of influence are postulated: the student, the instructor, and the course. Two interrelated influences are identified for each general source, producing six variables, each of which make a significant, direct contribution to differences in learning. Specifically, the student's and instructor variables refer to differences in ability and motivation and the course variables deal with the objectives sought and motivation, method of organization chosen to reach them". Taking this concept and applying it to this mentorship program one can see how important it is to match each mentee with a mentor or peer group that will be able to draw the best traits out of each student veterans while at the same time working with them to navigate around specific personal characteristics that may prove to be detrimental to their collegiate success.

This mentorship program is designed to treat incoming student veterans more as colleagues than the traditional teacher to student relationship. The aim was to build a sense of rapport that will help the students "open up" so that they feel comfortable asking for assistance or guidance when they are faced with an issue. Lowman (1995) states, "Anything you can do to show interest in students as individuals will help promote rapport". Ideally, the mentors and mentees participating in this study will, to a degree, become friends and share experiences outside of the academic world. Once a bond of friendship is established the chances of a student veterans reaching out and receiving helpful guidance when guidance is needed will increase. One such piece of literature, written by Clifford and Lakoski, titled "Top 10 Tips for Mentors" proved to be particularly helpful. They state "As a mentor, you will provide psychosocial support to your mentee by encouraging him or her and listening, and you will contribute to your mentee's career progression through guidance and by introducing him or her to your network" (Clifford & Lakoski 2008, p. 3).

#### Student Veteran Assimilation into the Colligate Atmosphere

Given the many differences the common student veterans have in comparison with their academic peers it can be exceedingly difficult for student veterans to assimilate into the social

atmosphere on a college campus. This program was crafted to provide each student veteran assistance in their transitional time and then throughout their time in school. A study conducted by The RAND elaborates on this point, "Unlike traditional undergraduates, who typically enroll in college immediately after high school, attend school full time, depend on their parents financially, and have no spouse or dependents" (Choy, 2002, p.1), "Student veterans tend to look more like "nontraditional" students because of the years they spent serving in the military before enrolling in their current higher education programs" (Steel, Salcedo & Coley, 2010, p.1). When looking at research question one which asks, what motivated the student veterans to join the mentorship program, you need to have an idea of what the students are facing in this unfamiliar environment.

In the collegiate atmosphere, fitting in is an important aspect of social life. Feelings of being an outsider and not a part of the group can be very detrimental to the success of a student veteran. These feelings can also cause an increase in that amount of perceived stress these transitioning student veterans experience. Further justified by Junger (2016) "Todays veterans often come home to find that, although they're willing to die for their country, they're not sure how to live for it" (Junger, 2016, p.124). When you then factor in the additional pressure and change of culture that comes with their adjustment to the academic world, one can get a sense of how drastic a cultural transformation this can be for our returning student veterans.

DiRamio et al. (2008) explain the changes student veterans go through, "beyond the pressures of enrollment as nontraditional students, student veterans may face challenges in transitioning from military service to civilian life, as service members end their military careers, they must quickly adjust to a less-regimented existence that requires them to manage their time and balance their responsibilities efficiently". The adjustment from a culture with rigid and

planned structure to one where planning the day's schedule is solely up to the individual is a major adjustment and can at times be very intimidating.

#### **Transition to the Academic Mindset**

Before the researcher could develop this mentorship program and refine its implementation and application another important theory must be explored. As Willingham (2001) describes, "A telling experiment reveals a big problem among college students: They don't know how to study". When looking at these student veterans it may not be that they do not know how to study but more that they have forgotten how to study or are accustomed to learning in a military centric environment. One must remember that most of these new incoming student veterans joined the military directly from high school and even back then many were not prepared for the academic challenges they would find in college. The researcher focused on identifying the positive skills these students brought with them from their time in the military and maximizing their use in this environment.

This is not a small hurdle to overcome and one that must be addressed if these student veterans are to have any chance at academic success. "Forty percent of students who will begin work on a four-year college degree this September will finish in four years" (Willingham, 2016, p. 1). This statement demonstrates that low graduation rates are not specific to military student veterans but rather the entire university system. It furthers the point that most students are not prepared for the challenges of college when they graduate high school. Adding in the cultural changes, the living situation differences, the age gap and the time spent away from an educational learning environment these student veterans are at an even higher risk of failing to overcome the obstacles in their path and in turn not complete their desired college degree. The

task in front of these student veterans is not a small one but it is one that can be conquered if they are given the proper guidance and support they will need to navigate this process.

#### **Key Issues Faced by Student Veterans**

Further elaborating on research question one (why the students joined the program) the key issues many student veteran students encounter must be addressed. The most significant challenges faced by many student veterans in their transition from military to civilian life as well as the challenges experienced in the transition to an academic environment are described in three relatively recent and comprehensive surveys conducted between 2010 and 2015. The most recent study (2015), conducted by the Institute for Veterans & Military Families (IVMF) and the RAND corporation, analyzed survey answers provided by over 4900 active duty, reservists, National Guard, veterans and dependents. The IVMF survey states that "military service tends to motivate service members to believe furthering their education after transitioning to civilian life is key to their future success" (Zoli, Maury & Fay 2015, p. 6).

The motivating factors student veterans may experience are things in life that drive them to pursue further education. Going back to school can be a very large leap outside of a person's comfort zone and the motivating factors they experience are the reason why each individual decided to embark on the difficult journey of furthering their education. An example of one of the identified motivating factors veterans experience when going back to school is that of selfimprovement. Self-improvement can mean many things but most commonly to the student veterans population it refers to bettering their employment opportunities now that they are no longer active military personnel. Table 4 is a list of the top motivating factors provided along with the corresponding percentage of survey responses.

Motivating Factors for Student Veterans to Return to	School
Motivating Factors	RAND Study Results
Career Improvement	86%
Self-Improvement	71%
Increased Salary	69%
Professional Advancement	56%
To Use Earned Benefits	51%

Table 4Motivating Factors for Student Veterans to Return to School

The IVMF Survey also listed the top challenges veterans face when getting started in their academic pursuit. These challenges are defined as barriers to their pursuit of higher education. These barriers represent aspects in a person's life that can deter them from making the decision to go back to school. An example of one of the barriers these students may face is represented as health/disability issues they may bring with them stemming from their service. The researcher conducting this study decided to steer clear of the common PTSD issues and focus more on physical health and disability issues these student veterans may have. Things such as head trauma, back issues, knee problems and anything else that may make their time on campus more difficult. Table 5 is a list of the top barriers along with the corresponding percentage of survey responses.

Table 5

Barriers for Student Veterans to Return to School

Barriers	RAND Study Results	
Financial Resources	56%	
Personal/family Obligations	28%	
GI Bill Benefits Expired	25%	
Health/disability Issues	23%	
School/job Conflict	21%	

Once the former service members have started their higher educational pursuits, the student veterans described the major problems they encounter impeding their academic progress. One major problem identified in this mentorship program case study is the drastic

age difference they now have with many of their peers. This age difference and often lack of maturity they see in their new peers can often be a major source of frustration for military student veterans coming back into college. Table 6 lists of the top problems encountered along with the corresponding percentage of survey responses.

Table 6

Problems for Student Veterans to Return to School

Problems	RAND Study Results
Age Difference with Student Peers	37%
Financial Resources	32%
Working Full Time	30%
Family Responsibilities	29%
Few Veteran Resources on Campus	51%

The "Veteran Economic Opportunity Report" contains data collected by the Department of Veterans Affairs (VA) from 2002 to 2013 and offers additional findings related to issues affecting the academic performance and integration of military veterans into academic environments. Of note, "veteran graduation rates ranged from 40 - 50% with the exception of the Air Force which had a graduation rate of 65%" (Department of Veteran Affairs, 2015, p. 20). The findings from the IMVF survey and the VA report appear to indicate student veterans begin their transition from military service into academic pursuits well-motivated to succeed but with varying degrees of resilience to the most shared challenges faced by students. Educational models of student learning in a STEM environment offer a vehicle for developing a program to mitigate these issues and improve graduation and retention rates by increasing the efficacy of student veterans. The practice of using questionnaires to help with memory recall has been thoroughly studied and elaborated on, "research also suggests that asking students questions specifically designed to trigger recall can help them use prior knowledge to aid the integration and retention of new information" (Woloshyn, Paivio & Pressley 1994, p. 202).

#### **Student Veteran Transition Into and Through College**

The tools developed for this program are designed to help ease the students transitional process. A pertinent concept used in the research of this mentorship program case study when describing the process military veterans go through when they transition from active duty to civilian life and then into the academic world is the theme of "Moving In, Moving Through, Moving Out" (DiRamio, Ackerman & Mitchell 2008, p. 80). This transitional theme focuses on the above stated three-major adjustment phases your typical incoming student veterans will go through and provides suggestion as to the best way to prepare for and execute their transition. "This particular approach is useful for studying student-veterans because it focuses on how individuals experience a change in assumptions about self-corresponding change in both behavior and relationships" (DiRamio et al., 2008, p. 80). Having a path to follow for both parties, the student and the researcher, allows each to focus on their specific task and follow certain guidelines that can be laid out for them by the mentors in this program. The process of getting student veterans into school then helping them be successful is the goals and focus of research question two which states, how did the student veterans use the mentorship program?

A common theme that was observed during this study is that "the transition to college was among the most difficult adjustment to be made when returning home from wartime service" (DiRamio, et al., 2008, p. 97). The availability of a mentorship program in CEIT that caters to the issues military veteran face when entering college was aimed at helping decrease the level of perceived stress these student veterans encounter and increasing the chances of each student veterans succeeding at their individual goal. Involvement in this mentorship program is intended to lower perceived stress and increase the overall retention and graduation rates of military veterans in the program. A description of the themes of transitioning student veterans from "moving out" of the military through "moving in" to college can be seen in Table 7.

Table 7

neme of "Moving In" and "Moving Out"	
Moving Out	Moving In
Transitional Process	Connecting with peers
Returning Home	Blending In
Academic Preparation	Faculty
	Campus Veterans Office
	Finances

#### **Applying Beneficial Personal Characteristics to Academic Pursuit**

Further looking at the application of research question two, the personal characteristics of each student and how the program can help the students maximize their usefulness is another important aspect. A concept used in this thesis to help define and identify the qualities and traits military veterans learned in the service that could be used as tools for success in school is explored thoroughly by Duckworth (2016) in her book *Grit*. She explains her research as she was "interviewing leaders in business, art, athletics, journalism, academia, medicine and law: Who are the people at the very top of your field? What are they like? What do you think makes them special" (Duckworth, 2016, p. 7)? She found that these successful people had more major characteristics in common. "It was critically important – and not easy at all – to keep going after failure: Some people are great when things are going well, but they fall apart when things aren't" (Duckworth, 2016, p. 7). Her studies on grit directly translate to what these student veterans are going through. Student veterans have proven they have all the tools needed to preserver though difficult challenges, some of them just need help figuring out how to adapt what they already learned to this unfamiliar environment.

"The highly accomplished were paragons of perseverance" (Duckworth, 2016, p. 8). Student veterans know how to persevere; many of them have dealt with situation far beyond what civilians will ever see. What they need is some guidance channeling their perseverance skill set into a useful tool in the collegiate environment. "In sum, no matter the domain, the highly successful had a kind of ferocious determination that played out in two ways. First, these exemplars were unusually resilient and hardworking. Second, they knew in a very, very deep way what it was they wanted. They not only had determination, they had direction" (Duckworth, 2016, p. 8). Throughout the course of this literature review the researcher identified one of the largest hurdles faced by military veterans returning to school is not lack of determination, rather lack of knowledge both the correct direction to focus and the correct application of their skill set.

Most student veterans have ample passion and determination but may struggle adjusting to an environment with such little structure. Through the implementation of this mentorship program, the goal was to help direct the passion these student veterans have for school and use the ability to persevere they learned in the military to overcome whatever hurdles they may be facing. What many of these student veterans needed is to be shown what tools they need to refine, what tools they need to develop and when they need to simply ask for some guidance along the way. They have proven through their service that have the "grit" needed to succeed in college, many just need some assistance navigating their new landscape.

#### **Theoretical Methods Used in Organizing Mentorship Program**

The following methods were used to evaluate the program's effectiveness. Much of the social theory used to examine where military student veterans fit in as they enter college, the

personal reactions they express and receive from their peers in school and the effectiveness the mentorship program comes from the book *Social Support Measurement and Intervention* authored by Cohen, Underwood and Gottlieb (000). These perspectives are the stress and coping perspective, the social constructionist perspective and the relationship perspective. When looking at research question three which asks, was the program helpful these perspectives were used to define and explain the array of emotions this demographic of student's experience. "The stress and coping perspective proposes that support contributes to health by protecting people from the adverse effects of stress. The social constructionist perspective proposes that support directly influences health by promoting self-esteem and self-regulation, regardless of the presence of stress. The relationship perspective predicts that the health effects of social support cannot be separate from relationship processes that often co-occur with support, such as companionship, intimacy, and low social conflicts" (Cohen et al., 2000, p. 76).

Focusing first on the stress and coping perspective as a guide to what these student veterans may be feeling and how they are dealing with these emotions as they enter the collegiate world. Having a support network in place and available to serve as a guide acted as a transitional benefit. Using supportive actions, appropriate measures of social support, hypothesized mediators and analytic issues the researchers determined the root causes of stress for each student veteran and formulated methods for each student veteran to overcome their respective hurdles.

Delving into the social constructionist perspective "social construction refers to the assumption that people assumptions that people's perceptions about the world do not reflect ultimate reality. Instead, people construct theories and concepts about the world that reflect their social context" (Dewey, 1997, p. 68). How these military student veterans perceive the

culture of the academic world they are entering had a considerable influence on their initial success once they were immersed in the university culture. "However, because there is frequently no clear social consequence, there are important individual and group differences in how people interpret their worlds" (Kelly, 1969, p. 124). The mentorship program was designed to act as a guide that the targeted demographic of military veterans can understand and will be drawn to when they need support.

In dealing with the relationship perspective the focus turned to more of a social interaction concept. By associating with groups of likeminded and driven people one increases their chance of succeeding at a desired goal. "Several of these concepts involve descriptions of positive ties between people. For example, companionship involves "shared leisure and other activities that are undertaken primarily for the intrinsic goal of enjoyment: (Rook, 1987, p. 1133). "Relationship satisfaction is defined as global, subjective evaluations of relationships" (Hendrick & Hendrick, 1997, p. 425). As well as intimacy as the "bonded, connected and close feelings people have toward each other" (Barnes & Sternberg, 1997, p. 127). By combining positive, strong relationships among student veteran peers along with a defined mentorship program the student veterans participating in this study have worked to ease their transitional process and lowered their levels of perceived stress. These measures greatly increased each of their chances for success.

The study also used the concept of "perceived support" to connect with the student veterans. "Perceived support is influenced more strongly by support recipients' impressionistic understanding of supporters' personality characteristics than by the actual support that is provided" (Lakey, Ross, Butler & Bently, 1996, p. 290-292). The thought process here was that by simply making the student veterans in the program aware of the availability of support

their stress levels will be lower. "Social-cognitive views of social support are concerned primarily with the perception of support. A major premise is that once a person develops stable beliefs about the supportiveness of others, day to day thoughts about social thoughts are shaded to fit these preexisting beliefs" (Cohen & Lakey, 2000, p. 37). This concept can he used as a guide in the development of the perceived support and the role it may play as each student transitions into the academic realm they have chosen.

# **Role of Perceived Stress in Student Veterans Academic Pursuits**

Research question four asks, what were the students perceived stress levels and when did they peak. Perceived stress is the focal point of this case study and minimizing it is the goal of the mentorship program. During each student veteran's transition from the military to the academic world they are very likely to experience a range of perceived stress levels resulting from this transition and external factors they must cope with. "College stressors have wide varieties, from academic work to uncertainty about the future, from difficulties in interpersonal relationships to dating problems, from self-doubt to family issues" (Chao, 1999, p. 5). Given the already multiple stressful situations in colleges one can get an idea of the importance of identifying life stressors and helping student veterans deal with them. Being able to identify these stressors will greatly increase their chances of success. Identifying each student veterans level of perceived is the focus of research question four

"For students to manage their perceived stress, positive social support is an essential as good soil to plants. Besides, useful coping is a tool to handle stress. Specifically, although students typically live under stress, some students seem to manage stress better than other's" (Chao, 1999, p. 5). Management of perceived stress is a vital aspect of the transition process and having mentors available to help each student makes their transition easier. Each mentor and the researcher were available to meet with each student and identify any who seem to be at a greater risk of increased level of perceived stress. Once the at-risk students were identified the program could be crafted in a more productive and helpful manner. This allowed the mentorship program not to act as a "one size fits all" program and to be specifically designed to benefit each student.

#### **CHAPTER 3**

#### METHODOLOGY

# **Design of Study**

Once the researcher crafted an initial plan for the overall mentorship program he had to then design this case study and enable it to best address the question posed: how can this mentorship program help student veterans lower their levels of perceived stress and better handle their transition from military service into the academic world? Additionally, he examined what effects the fluctuations in perceived stress would have on these student's academic pursuits and how this mentorship program could help these students cope with these elevated perceived stress levels. "Once you have a clearly identified a research question, your next step is to figure out how to best answer that question. Your question defined every aspect of your study" (Clark, 2012, p. 45). A mentorship program such as this deals with so many prominent issues that identifying the most prominent for each specific student veteran is a vital aspect of the study design process. "As you identify and plan you project, you should think carefully about many issues: your research question, whom you will study, what you expect your outcomes to be, and what types of methods you will use" (Clark, 2012, p. 46).

# **Method Overview**

The objective of this study and mentorship program is to find and identify the major hurdles incoming military veterans, who are pursuing a degree in one of the STEM fields through the College of Engineering and Information Technology at Georgia Southern University, experience as they transition from military life to the academic world. The objective is also too figure out what the major stressors are that result in varying levels of perceived stress and how these students can best cope with each issue they encounter. Once the key issues most student veterans experience are identified this program is designed to address everyone's specific issues through the intervention of mentorship consisting of a group of veterans on the faculty and staff of Georgia Southern as well as the researcher and professional mentors. These veteran mentors as well as the tools incorporated within the program provided guidance, support and stress relief to the group of student veteran mentees who decide to participate in this study. This support was offered and available through all aspects of the student veterans transition from the military into school, throughout their tenure in school and into the professional world.

# **Creation of Mentorship Program**

Given the low retention and graduation rates that were found during the research stage of this case study, the researcher is looking at what holds veterans back from wanting to pursue a college degree. Building on the concept of a mentorship program that will help student veterans during their transitional process from the military into the academic world the first research question for this paper states, what motivated these student veterans to join this mentorship program? Following research question one, a point that was touched on in Cass 's (2014) work, research question two asks, how did these student veterans use the mentorship program? Research question two has five parts, each dealing with different aspects of the program (the Facebook page, group meetings, individual meetings, the mentors and community development), all of which will be explored throughout this document. Now relating to Cohen, Underwood and Gottlieb's (2000) development of social support measurement and intervention, the third research question asks, was the mentorship program, helpful? If so how and if not please explain why and what could be done differently. Focusing of Cohen's (1983) work on perceived stress research question four states, what was each students perceived stress levels? Data from the research will show that these student veterans experience increased levels of perceived stress throughout their progress during each semester. A sub question to research question four, and one of the main goals of the program, was how did each student cope with their increased level of perceived stress and lower these levels, thus increasing the chances of their successful completion of their degree? Using this mentorship program as a tool to help each student assimilate from military cultures into the academic world more successfully and hopefully with lower levels of perceived stress, will that increase the likelihood of these incoming veteran's students seeing a positive return on their academic investment.

This mentorship program was built by contributions from military veterans on the faculty and staff at Georgia Southern and their desire to help incoming student veterans succeed in the pursuit of higher education. As previously mentioned all participation, from both the mentors and mentees was voluntary. If the perspective student's saw value in what the researcher was attempting to do they then went through a brief enrollment process where helpful information such as age, race, service background, military background, etc. was gathered for future use and comparison to other case study members.

# **Participants**

When looking at research question one (what motivated these student veterans to join the mentorship program?) and for that matter all research questions specific to this case study, it is important to understand the specific demographics the researcher was targeting and the duration of this case study. The first major questions the researcher asked during the development of this program was the "who", "how long" and "how many" of what would make up the body of the mentorship program. For this program, the "who" were the student veterans in CEIT. The "how long" was for a period of one school year (with the hope that the mentorship program will continue and be championed by current students and faculty members once the initial members of the researcher have completed their time at Georgia Southern). The "how many" was however many student veterans within CEIT wished to join and participate in the program (after the completion of the spring 2017 semester there have been 11 mentors and 14 students). These three-combined aspects made up the framework this program was built upon.

Moving down to research question three which asks, was this mentorship program helpful, why or why not? It is important to have an idea of the personnel involved in this case study. This program is one that will always be evolving and as such during this study the number of mentors and mentees fluctuated. Mentees, like the mentors, are under no obligation to continue their participation in this program if they do not see the value. During this study we did not have any student leave the program but seven of them did completed their time at the university and achieved a degree in their desired field. Conversely, the study was always looking to grow and would never turn away an interested student veteran. The current breakdown, as of the end of the spring 2017 semester can be viewed in Table 8. A breakdown of the overall demographics of the mentorship program, both mentor and mentee specific can be viewed in appendix I.

Table 8

Mentorship Program Participation Numbers		
Faculty and Staff Veteran Mentors	11	
Undergraduate Student Veteran Mentees	12	
Graduate Student Veteran Mentees	2	

# **Study Tools**

Once a defined objective had been established and a group of the targeted demographic of student veterans had joined the program research question one can be proposed and answered. Research question one asks, what motivated the student veterans to join this mentorship program? For the purpose of this mentorship program and this case study the data gathered by the RAND Corporation study (2010) which was presented in the literature review section of this document were used as focal points. Specifically, which motivating factors encouraged these students to return to school, what barriers did they run into that prevented them from going back to school and what problems did they encounter once in school that may jeopardize the successful completion of their goals.

These three questions were posed to each student through different questionnaires at multiple points during their time in the program. Each questionnaire was completed during one of the individual meeting with the researcher. Data collected, which will be further presented in the results section of this document, shows that each of these issues increases the potential for elevated perceived stress levels to negatively affect the student's chances of academic success. This mentorship program was designed with the goal of lowering the perceived stress levels and improving the odds of successful academic completion of the goals the veterans who participated in this program were striving for in comparison to those who do not participate in the mentorship program

The framework of this mentorship program was largely crafted in the pattern Packard (2016) used in her work *Successful STEM Mentoring Initiatives for Underrepresented Students*. Packard's work deals largely with students from low income families. For this mentorship

program the researcher replaced the demographic of students from low income backgrounds with the demographic of military student veterans. For the theoretic development and studying of the student veterans in this program the researcher relied heavily on Cohen, Underwood and Gottlieb's work *Social Support Measurement and Intervention* and specifically three perspectives which are focused on in chapter two of the above-mentioned work. The three perspectives are the stress and coping perspective, the social constructionist perspective and the relationship perspective.

In addition to the mentorship aspect of the program there were several data gathering opportunities that were utilized to develop a baseline for everyone who participated in the study and then further to track and assist each student veteran with identified obstacles they encountered during their time in school. Major tools used in the study were questionnaires that were given to both the mentors and mentees. There were two main questionnaires given each semester, an intake evaluation at the beginning of each semester and an exit interview conducted at the conclusion of each semester. They were used for general information gathering and to gauge their current levels of perceived stress. In most cases, a vital part of the student veteran's success in college was being able to take prior situational knowledge, modify the intended use and apply it to the new situations. This an issue they encountered throughout the duration of their college careers and employment pursuits.

This study also employed monthly individual meetings with each student veteran, these meetings were used to address specific issues the student veterans were facing and to develop a plan of approach to deal with each issue. These meeting were an opportunity to speak directly to the most pressing issues faced as identified in the questionnaire filled out during the intake process. During these meetings, a perceived stress test was given to gauge how well each student veteran was coping with the stress of their transition. The researcher identified three points during each semester (beginning, during midterms and prior to finals) where stress levels fluctuate, and the perceived stress tests were administered to each student veteran during these time periods. The stress test used in this study was adapted from Cohens (1983) work on perceived stress. For the purposes of this study the researcher opted to go with the ten-question format. A copy of the perceived stress test is attached as Appendix A.

During the fall 2016 semester the researcher only conducted one individual meeting per semester. The singular individual meeting proved to be so beneficial for both the student veterans and the researcher that the decision was made to conduct an individual meeting at four separate times (one per month) during the upcoming spring 2017 semester. These meetings focused on individual issues each student was experiencing and the goal was to try to work through each issue to help alleviate the elevated perceived stress levels of the student veterans in the program. The specific topics of each meetings was left up to the students if it focused on a current stressor in their lives. After each meeting the students were asked to identify their preferred topic for the following meeting. This process of identifying and acknowledging the issues they are facing helped each student realize what they need to work on an allowed the researcher time to prepare for each upcoming individual student veterans meeting.

Each student veteran filled out both an intake and exit interview questionnaire for general data gathering and to identify and then can address specific issues each student veteran was facing. These questionnaires were used as tools to help the researchers identify the largest motivating factors, barriers to success and problems each student veteran is facing. These identified issues were the largest hurdles each student veteran faced as they strove to complete their desired degree. The intake interview questionnaire, which was given to each student during the initial meeting with the researcher was comprised of questions identifying personal characteristics such as age, gender, each individual's military service information, current academic information, questions regarding their decisions to go to colleges as well as having each student rank order the same three sets of questions (motivating factors, barriers and problems) the RAND corporation study (2101) asked in their national survey.

The exit interview questionnaire, which is given to each student during their fourth and final individual meeting of the semester, consisted of questions relating to each student veteran's experiences in both the mentorship program and school during the previous semester. It was used by the researcher to evaluate the program and be sure the recommended and necessary changes are made prior to the beginning of the following semester. Additionally, each student veteran was again asked to rank order the three questions proposed in the RAND study to see where're each student trouble areas currently lie and what shifts in their personal data may have occurred over the duration of the semester. Copies of each of these documents can be found in appendix B and C respectively.

During each semester, individual meetings were held with each student veteran participating in the mentorship program. For each individual monthly meeting, there is a general question list. This questionnaire was amended after the first individual meeting to fit the specific needs of each student veteran; however, the general structure remained the same. The information gathered in a one-on-one setting, usually in the library or in the cafeteria of the IT building om Georgia Sothern's campus. During each meeting, the goal was to develop a plan of approach that would help each student overcome the specific hurdles they were dealing with which caused them increases in their levels of perceived stress and issues in their academic progress. The general structure form used in these individual meetings can be viewed in appendix D.

The researcher's initial assumptions called for a program that did not impose any specific meeting times or obligations on the students. The students request for a more structured group meeting schedule be incorporated into the mentorship program at the beginning of the spring 2017 semester. Each month (on the third Monday and Tuesday of the month from 11:30-12:30) there were two group meeting opportunities. These meetings were set in an open forum and outside of the opening brief conducted by the researcher the topic of the day was delivered by the student veterans in attendance.

Looking back into research question two and how the student veterans used the tools of the mentorship program, one such tool was the private Facebook page that the researcher developed. This Facebook page was a private forum for the members to discuss anything they wished. It served as an advertisement board for members to post things of interest, as a study tool where members can reach out for assistance when needed, as a social forum where members can continue to build their own sense of community and finally as a potential employment pipeline where current and former members can share employment opportunities they feel may be appealing to military veterans within the mentorship program.

The Facebook page will remain open to all members (current and former) so they may continue their interactions with their peers and mentors once they have completed their time at Georgia Southern. Using the overwhelming position that social media holds in current society the researcher expects the use of this platform to become increasing important as the program grows. The ability for current and former members to stay connected via the webpage will serve all participants well as they begin to move onto post academic life pursuits. One of the answers research question two was seeking was to help these student veterans develop a sense of community that can benefit them moving forward. The Facebook page acts as a major asset for these student veterans and their community building efforts. This page gave the researcher the opportunity to observe interactions between the student veterans from the outside and to add content to spark interaction on certain topics that can be beneficial.

Specific to the veteran mentors, all filled out a data gathering questionnaire which was used to help show similarities to the student veteran mentee population. These forms were dropped off at each mentor's office by the researcher. This brief drop-off or pick-up meeting allowed the researcher to have a brief one-on-one meeting with each mentor and answer any questions they may have just prior to their start in the program/case study. A copy of the mentor questionnaire can be found in appendix E. Each mentor has been given a mentor contact form that they will fill out and return after each meeting with a veteran mentee. A copy of this form can be viewed in appendix F. In addition to the two above mentioned forms each mentor had the opportunity to attend all group meeting and are encouraged to meet individually with as many of the student veterans as possible.

To market this study to the specific student veteran demographic it targets a marketing plan was put into action. This marketing plans consisted of flyers that were distributed across campus. Each flyer explained the mentorship program as well as provided contact information if someone is interested in setting up a face-to-face meeting with the researcher. This flyer is also posted on the TV monitors in the IT building, the engineering building and the library. The flyer used in the study can be seen in Figure 1. Additionally, a radio interview was conducted and broadcasted on the campus radio network. Within military circles word of mouth is a very powerful tool and that form of marketing was also in use and has proven to be beneficial.

Figure 1: Advertisement Flyer Used in Recruitment for the Mentorship Study

# Attention Veterans!!

- Are a <u>Veteran</u> majoring in <u>CE, CM, CS, EE, IT or ME?</u>
- Need a friendly face on campus that is familiar with military and academic life?
- Come check out my study of <u>how best to support veterans in the classroom</u>...
- · Meet other veterans who have experienced college after their military service..
- · Less than 50% of veteran students receive their degrees in 4 years...
- We can and must help our veterans do better...
- I look forward to hearing from and meeting you...



Dr Keith Landry, PE IT Bldg Room 3400J klandry@georgiasouthern.edu 912-478-5473 Rangers Lead the Way!

# **Success of Mentorship Program**

Focusing on research question three which asks, was this mentorship program helpful, why or why not, it is equally as important to understate the success criteria of the program. The criteria for success of this case study was to evaluate if this mentorship program could be beneficial to incoming veteran's students during their transition from the military or civilian life back into the academic world. This case study aimed to see what the motivating factors were for these students to join this program and how these student veterans used the resource at their disposal once in the program. As well as to see what aspects of the program were helpful for these students and what the program could have done better to assist each student veteran during their transition into school.

If, upon data gathering, the perceived stress levels of any student reach a dangerously elevated level the specific issues concerning each student will be evaluated. If a situation were to arise where a student veteran was experiencing dangerously elevated levels of stress, further action up to and including the contacting of the school crisis management team would have been taken to ensure the specific student receives the necessary care. For the collected perceived stress scores the analysis allows for one standard deviation from the mean over the score to indicate elevated levels of perceived stress.

Moving ahead to research question four which asks, what are the student veterans current perceived stress levels and how are they coping with these elevated levels of perceived stress, the researcher used the Cohen perceived stress scale to test and evaluate the students stress levels. The perceived stress scale was created by Sheldon Cohen in 1983 and comes in three different formats, the four, ten and fourteen question formats. For this mentorship program, the researcher chose to go with the ten-question format. This perceived stress scale is scored on a Likert scale of 0 - 4 (0 = never to 4 = almost always) and the scores were reliable (PSS during the Fall 2016 semester  $\alpha = .79$ , PSS at Beginning of Semester  $\alpha = .87$ , PSS at Midterms  $\alpha = .88$  and PSS at Finals  $\alpha = .79$ ). This perceived stress scale was given to each student in questionnaire form during their individual meetings at three defined times during the semester (the beginning, during midterms and just prior to finals.

# **Program Modifications**

The last major focus area for research question three lies in the modifications that were or could be made to the mentorship program. Throughout the entire duration of this program any suggestion stemming from any of the above-mentioned communications with the student veterans, mentors or the researcher, that could benefit future program participants, were considered by the researcher and implemented if they could add value and usefulness to the mentorship program. As the study progresses student veterans could leave CEIT for personal reasons or graduate. When that happened, retention data will be noted for the eventual comparison to the USG retention and graduation rates.

#### **CHAPTER 4**

# **RESULTS AND ANALYSIS**

## **Common Themes Found in Research Questions**

Looking at research question one, what motivated the student veterans to join the mentorship program, a few themes stuck out. All the themes mentioned in this section came directly from the student's responses to the intake and exit questionnaires given. Theme one is the low retention and graduation rates of student veterans which stand at 46% and 78% respectively for Georgia Southern. Theme two was the difficulty during the transition phase some of the students experienced. Difficulties such as juggling school, work, family, age differences with their peers, a long duration between high school and college. Theme three was common difficulties the student veterans shared in building a community they could be a part of. Aspects such as maturity, spending less time on campus due to family and work obligations and age difference. Each theme payed a large part in these students experience in school. The mentorship program was used as a tool to make their academic experience more successful.

Research question two, how did the student veterans use the mentorship program, has many themes as well. These themes include the use of the Facebook page, interactions in the group meetings and interactions in the individual meetings. The Facebook page acted as a community forum where the students could share common knowledge and ideas that could act as a benefit. The group meetings were used to help each student connect with the others in the program and shared beneficial ideas. The individual meetings were used for the researcher and mentors to address any obstacles the student veterans were encountering and together, work through them. Research question three which askes, was the program helpful, why or why not, also had common themes that appeared during the case study. More concrete answers on this question would require more of a longitudinal study (something that will be addressed in the future recommendations section) but common themes were present. Largely the student veteran seemed to benefit from this program. During the year of this case study no student left the program and all of those who were approaching graduation did graduate. Again, something that will be addressed in the future recommendation section is retention and graduation rates in comparison to the USG averages but this program currently holds a 100% retention and graduation rate. A rate much higher than the national averages of 78% an 46% respectively.

Looking at research question four, what were the student veterans perceived stress levels and how did they cope with these perceived stress levels, there were common themes. The students stress levels were lowest in the beginning of the semester and peaked during the time leading into finals. Further research and a longer case study period will be needed to provide results on best mitigation stress factors. However, by knowing when most student veterans experience elevated perceived stress levels and who the "at risk" students were allowed the researcher to focus added attention on certain individuals in the mentorship program.

#### **Retention and Graduation Rates of Participating Student Veterans**

When breaking down the analysis metric of this program the increased levels of perceived stress among the student veterans and in turn the retention and graduation rates of its members, one must remember that this document represents only one years' worth of data. If this mentorship program were to continue for a longer duration the numbers from this case study would be used as a benchmark for future comparison. The current break down of retention and graduation rates for the student veteran is explained in the below section.

The retention rate of the student veterans within this mentorship program from the beginning of the spring 2016 semester through the completion of the fall 2017 semester (one complete calendar school year) is at 100% in comparison to the 78% national student veteran retention rate average. The graduation rate of the student veterans within this mentorship program from the beginning of the spring 2016 semester through the completion of the fall 2017 semester) semester (one complete calendar school year) is at 100% is at 100% (seven students graduated) in comparison to the 46% national student veteran graduation rate average.

# **Motivating Factors, Barriers and Problems**

As elaborated on earlier in this document a study conducted by the RAND Corporation and the Institute for Veterans and Military Families (2015) identified the national top motivating factors, barriers and problems veteran's students face when returning to the academic world in their pursuit of higher education. These issues were used as focus points to give the researcher an idea of what each of the members current issues may be as each student veteran entered this mentorship program. This program used the same ranking system as the RAND study, but no statistical comparison was made between the two case studies. To provide a snap shot of where the results for each case study fell the following table was created. For comparison purposes of our student cohort with the national student veteran data presented in the RAND study (2010) the researcher asked each student veteran to rank order the same questions in their intake interview questionnaire. The data can be viewed in below Table 9.

	Issues	RAND Rank	Case Study Rank
		Order	Order
	Career/job Improvements	1	4
	Self-Improvement	2	3
Motivating	Increased Salary	3	2
Factors	Professional Advancement	4	5
	To Use Earned VA Benefits	5	1
	Financial Resources	1	3
	Personal/family Obligations	2	4
Barriers	BI Bill Benefits Expired	3	2
	Health/disability Issues	4	1
	School/job Conflict	5	5
	Age Difference with Student Peers	1	4
	Financial Resources	2	3
Problems	Working Fulltime	3	2
	Family Responsibilities	4	1
	Few Veteran Resources on Campus	5	5

Table 9Veteran Mentorship Program Data in Comparison to the RAND Study Data

The numbers represented in this document are specific to the fourteen student veterans recruited into the mentorship program between August 2016 and May 2017 (the one complete calendar school year of this program). Of the fourteen student veterans, seven have graduated and seven continued their participation through the end of this case study. All the seven graduates have agreed to stay active in the program and act as a peer mentor to the existing students in whatever capacity they are able to. Throughout the course of this study only one of the fourteen students were ever in an "at risk" situation of having to leave school (financial and family issues were at the center of their struggle). This student was able to work with the resources available in the mentorship program and adjust their course load (go from a full-time student to a part time student) and remain actively enrolled in the university. The above findings show a trend that participation in this student veterans mentorship program can increased one's odds of staying in school and graduating.

#### **Motivational Themes of Mentorship Program Student Veteran Population**

Throughout the course of the data gathering activities in this mentorship program the researcher noticed many themes that demonstrated the motivations many of the student veterans had for joining the mentorship program. As was shown in the results section, the researcher asked the student veterans participating to answer the same three questions (what are their motivating factors, barriers and problems) that the RAND corporation asked in their study. Specific to this study cohort the following answers were provided: their main motivating factor was to use their earned GI Bill benefits, the main barrier they encounter was their health/disability issues and the main problem they faced was personal and family obligations.

Another major motivating theme demonstrated by the student veteran population was their reasoning behind deciding to attend Georgia Southern University. The data gathered showed that the number one motivating theme for choosing Georgia Southern was location. This theme was then followed by the campus being advertised as "veteran friendly" and then coming in as the third most common theme was that of the engineering programs being offered. These three specific themes show that the students do have motivating factors and they often share these driving forces with their new-found peers within the mentorship program. Knowing of these shared motivational themes, such as job advancement, increased salary and providing for one's family, allowed the researcher to help ensure each student's expectation was being met and to better gauge the issues and what to expect from future incoming student veterans.

#### **Perceived Stress Scale Test**

As previously mentioned, another change in the program for the spring 2017 semester was the increase in the amount of perceived stress tests that were given to the student veterans in the program. During the fall 2016 semester each of the study participants were given one perceived stress scale test (PSS). The study participants were asked to fill out these PSS documents to see where each student stress levels currently lay. While this PSS was beneficial it only provided a snapshot of the veteran's students current stress level, but it gave no insight into how their stress levels fluctuated throughout the semester. To develop a more well-rounded depiction of each student's stress levels the decision was made to give the PSS at three separate times during the semester (beginning, during midterms and just prior to finals). This increased frequency gave the researcher a better representation of the three most vital time periods during the semester where a student's stress levels may peak.

The number of participating students from the fall 2016 semester to the spring 2017 semester changed. After the fall 2016 semester two of the students graduated. Those graduating students were replaced by three new student veterans coming into the program for the spring 2017 semester. Thus, during the fall 2016 semester the program consisted of ten student veterans and during the spring 2017 semester the program consisted of eleven total student veterans. The total number of students who were given the PSS during both semesters was fourteen. The PSS results from each specific test and their trends is explained below.

For the PSS given during the fall 2016 semester (a = .79, m = 10, SD = 2.83) ranged from 4 – 21. The PSS given in the beginning of the spring 2017 semester ( $\alpha$  = .87, m = 12, SD = 6.53) ranged from 4 – 23. The PSS given just prior to midterms of the spring 2017 semester ( $\alpha$  = .88, m= 13, SD = 6.64) ranged from 2 – 25. Finally, the PSS given just prior to finals of the spring 2017 semester ( $\alpha$  = .79, m = 14, SD = 6.25) ranged from 4 – 25. These results can be viewed in separate table form in appendix G. When scoring the perceived stress test's, the researcher developed three groups (low, middle and high) for the perceived stress scores. Low test scores range from 0-9, middle stress scores range from 10-19 and high-test scores are that of 20+. These specific parameters were adopted from Cohen's (1983) writing on the development of this scale and test. These score ranges and correlating stress ranges were adapted directly into this study with no adjustments. These parameters can be viewed at the bottom of the perceived stress test questionnaire in appendix A. The numerical breakdown of student veteran scores can be viewed in Table 10. The number underneath each group represents the number of students who scored in each perceived stress score range. The PSS results from the fall 2016 semester as well as the results of the three PSS tests given during the spring 2017 semester can be viewed appendix H.

Perceived Stress Test Score Ranges						
Test Period	Low 0-9	Average 10-19	High 20 +			
Fall 16'	6	3	1			
Spring 17' – Beginning	6	3	2			
Spring 17' – Midterms	3	6	2			
Spring 17' – Finals	2	6	3			

Table 10

As you can see from the above table most students perceived stress levels rise as they progress through the semester. On average, the perceived stress levels peak at the conclusion of the semester when the students are approaching their final examinations and possible class advancement or graduation. The themes determined through the administration of these tests show that for "at risk" students the mentorship program needs to focus on providing more support towards the end of each semester. Identifying and focusing on those students who are experiencing elevated levels of perceived stress as they approach finals is intended to provide these students with a better chance of doing well and progressing on in their academic pursuits.

#### **CHAPTER 5**

#### DISCUSSION

# **Current Student Veteran Enrollment, Retention and Graduation Data**

The starting point for this case study and what research question one asks is what motivated these student veterans to join this mentorship program. Before you can begin looking at research question one you must understand why the researcher chose this issue as a topic to focus on. "Being called to active duty for an assignment that involves service in a combat zone represents a major transition; leaving that zone to return home and entering college are both transitions as well" (DiRamio et al., p. 75). During the initial development phase of this student veteran mentorship program there were many alarming statistics that caught the attention of the researcher and drove him to establish a program that could help veterans during their transition into the academic world. The low retention and graduation rates of current military student veterans (78% and 46% respectively) as well as the varying levels of perceived stress seen in our military student veterans were the main driving forces but, there are other motivating factors behind the study as well.

Per the National Veterans Education Success Tracker (NVEST) data, the age of completion for most military student veteran (38%) is between 25-29, which is much older than your typical student. The fact that over half of our nation's military student veteran are not earning the degree they set out to achieved is alarming and needs direct attention. This study was developed with the goal of helping the student veterans at Georgia Southern University succeed in the goal they set out to accomplish.

#### **Motivating Factors, Barriers and Problems Discussion**

As previously mentioned, the findings of the one study which was conducted by the RAND corporation and The Institute for Military Veterans and Families which identified the major motivating factors, barriers and problems veterans face when returning to the academic world is a focal point of this case study. "Unlike traditional undergraduates, who typically enroll in college immediately after high school, attend school full time, depend on their parents financially and have no spouse or dependents student veterans tend to look more like nontraditional students because of the years they've spent in the military before enrolling in their current educational programs" (Steel, 2010, p. 1). These issues have been determined to be the major hurdles many student veterans will face before and during the academic journey as well as what motivated many of the student veterans to participate in the mentorship program. The researcher, having then raised the same group of questions to the specific student veteran cohort participating in the mentorship program identified the major motivating factors, barriers and problems specific to this mentorship program. These issues are what our student veterans are dealing with in their attempts to go back to school, further their education and increase their likelihood for success in their future professional pursuits.

The variation between the data collected from members of the mentorship program versus the national average can be attributed to a few things. First is the relatively small size of the mentorship programs student veteran's participation (a total of 14 students). The small membership numbers make this program somewhat easily workable for the researcher but may not depict a large enough sample size to compare with the national average. Second would be the location of Georgia Southern and its proximity to both Hunter Army Airfield and Fort Stewart (both Army bases) giving this study an Army heavy population. This fact may shift that data to be more representative of Army student veterans rather than of student veterans. Third is the fact that each group of student veterans are different and the issues the members of this program identified with are specific to them. Data charts like the one listed previously were used to give the researcher an idea of what the most common issues may be but each student veterans are an individual and are dealing with their own separate set of issues. The fact that this mentorship program can be flexible and adapt to each specific student's needs makes it unique and a tool that can be used in many different situations to affect positive change.

#### **Mentor Meetings**

As previously stated, research question two asks how did the student veterans in the mentorship program use the different tool they had access to. One of the major tools each case study participant utilized was the availability of direct meetings with any of the mentors in the program. The initial concept for this mentorship program was for most of the interaction to be directly between the mentors and the mentees. By having mentors available that each student could reach out to would be an additional tool for them to use during their transitional process. This availability of a mentor on campus to assist each student with whatever they may need would ease their transition and help to keep their perceived stress level at a manageable range.

Pulling theme data from the meetings with the student veterans and the questionnaires tells the researcher that more than half of the student veterans in the program never reached out to any of the mentors and only half of the mentees were ever contacted directly by the mentors. This lack of voluntary interaction was unexpected and went against the hoped for development of a helpful community within the structure of the mentorship program. As previously mentioned, the assumption was that once the mentees were introduced to veteran mentors on

campus they would naturally flock to them when in need of guidance. However, this has proven to not be the case. In the beginning of the program we saw little interaction at all, outside of the direct meetings between the mentors and the mentees. As the semester progressed the interaction did pick up fractionally but not anywhere near the extent that was hoped for or that would be substantial enough to have a beneficial impact on the student veterans in the program.

Not only was the researcher not seeing direct contact between the mentors and the mentees but they were seeing an overall lack of interest in the mentorship program from both the mentees and mentors. This was baffling because each of these mentors and mentees volunteered to join the program and displayed signs of excitement when doing so. This lack of involvement went as far as not responding to the researcher's weekly data request follow ups to see how many interactions each mentor had with a mentee during the previous week. Once this trend was noticed each mentor was contacted directly to investigate the reason behind the lack of interest.

As discovered after individual investigation by the researcher it was not a lack of interest in the program that caused the lack of participation it was two simple facts. First, the student veterans were not directly reaching out to the mentors of any specific reasons or with any regularity. Therefore, the mentors simply lost focus with the program. Second, when each mentor agreed to join the program it was at the beginning of the semester, a time when they tended to have ample free time. However, as the semester progressed each mentor became busy with their work/teaching/personal obligations and were not able to focus as much time as anticipated within the program. Upon reflection, these reasons are not surprising and there is not much that can be done to increase this participation in a voluntary program. These above stated facts are the main reasons for the increased interaction between the researcher and the student veterans and not the initial thought mentor/mentee relationship.

In response to the lack of mentor/mentee interaction, in the second semester the researcher put larger weight on the development of the peer to peer aspect of this mentorship program. The reasoning behind the further development of the peer to peer aspect was that hopefully with closer age ranges, more academic and social interaction and perhaps some class overlap these students will be more likely to develop their own version of an academic community and use each other as resources when things get difficult. At the start of the second semester the program had two graduate student members acting as peer mentors to the undergraduate student veterans.

### **Group Meetings**

Another of the tools requested for and used by the student veteran population was that of the group meetings. The requested implementation of the monthly group meetings during the spring 2017 semester came with mixed results. The researcher noted that although the group meetings have helped to increase the occurrences of interactions between the student veterans, the researcher and the mentors they have not fixed the problem entirely. Even with having the monthly group meetings in an easily accessible area (CEIT 3<sup>rd</sup> floor conference room which is central located on campus, has multiple access points and is a focal point for many of the classes and faculty offices for the engineering program) and on two separate days (usually Monday and Tuesday) before lunch, only a select group of both mentors and mentees regularly attended. Encouragingly, all attendees stated how much they enjoyed the meetings and that the meetings did in fact help develop a stronger sense of community within the mentorship program. This

lack of attendance has been attributed (through polling efforts during the individual meetings) to busy schedules by both parties.

With this being a voluntary program, one with no incentives outside of the offering of assistance with current issues, there is no way to further entice students and mentors to attend any of the aspects of the program if they do not feel the need or have the time. It is a positive that many of the students are not in crisis mode and do not need to attend these meeting instead of their other academic responsibilities but, lack of attendance does negatively affect the development of a supportive community within the structure of the mentorship program and provides little assistance to those student veterans who are in need. Most of the students attending were underclassman and this fact gives promise to the further development of additional underclassman with the upperclassman transitioning to peer mentors is the future of this program. If this program were to continue the focus would be on the development of a strong and growing community of student veterans within the university that can provide constant support and guidance for each new wave of incoming student veterans.

## **Individual Meetings**

The most useful tool for both the student veterans and the researcher has proven to be that of the monthly individual meetings. These meetings were so important to the health and strength of this mentorship study that, for the spring semester, the occurrences of the individual meetings increased from once per semester to once per month (four times per semester). This increase stemmed from two observations from the previous semester (fall 2016). First, due to the lack of mentor/mentee interaction outside of set meetings within the structure of the mentorship program the researcher wanted to set more regular meeting times with each student to be sure they are receiving the support needed. A more scheduled meeting structure also gave the student veterans a more structured program, which is what they all asked for.

Second, the researcher found the individual meetings conducted during the fall 2016 semester to be very beneficial and a tremendous help in determining how each student was doing, what their levels of perceived stress may be and who may need more attention or resources from participants in the program. All participating students mentioned they did not mind having mandatory meetings built into the program. The individual meeting aspect proved to be the one constant that allowed the researcher to collect data and evaluate the progression of the student veterans, the mentorship program and the evolving case study. Each student was present at each monthly meeting (rescheduling did occur, but a meeting was never missed).

Meeting monthly allowed the researcher to track the students' progress from month to month and reevaluate the mentorship approach as needed. This program is not "one size fits all" and individual attention and modification are major components that enable it to help each specific student. Meeting one-on-one and on a regular basis allowed the researcher to gather valuable data from each individual and enabled the program to be adaptive and provide the most efficient and beneficial support possible for each student veterans in the program. The increase in the frequency of the individual meetings has proven to be one of the most beneficial changes adopted for the spring 2017 semester to the mentorship program.

#### **Facebooks Role in the Mentorship Program**

Another major tool that was used by the student veterans in the mentorship program was the private Facebook page that was developed and administered by the researcher. "Facebook is a social networking site of particular interest to researchers due to its heavy usage patterns and its technological capabilities, which allow for the bridging of online and offline relationship" (Johnson, Tanner, Lalla & Kawalski, 2009, p. 24). As previously mentioned this Facebook page served may purposes in the mentorship program including: serving as an advertisement board for members to post things of interest, as a study tool where members can reach out for assistance when needed, as a social forum where members can continue to build their own sense of community and finally as a potential employment pipeline where current and former members can share employment opportunities they feel may be appealing to military veterans within the mentorship program. All the above-mentioned uses contributed to the participant's ability to develop a new form of academic based community and social capital within the mentorship program and the university. Again, using data gained through the interaction of the program the researcher could determine themes associated with the used of the Facebook page. All but two of the study participants used the Facebook page in some manner, be it group interaction, employment postings, social gatherings advertisement or simply to make fellow peers award of a tool used that they found helpful.

With the development of social media and the prominent role it plays in both academic and social circles, a private Facebook page allowed the student veterans to interact in a secure environment with all the easy they have become accustom to with social media. Easy of communication was a key element in the success of this program. As mentioned previously this is voluntary program and something all students, mentors and the researcher were participating in addition to their academic and family responsibilities. Ease of communication between all parties made participation more likely and thus increased the effectiveness of this program and case study.

# Was the Mentorship Program Helpful? Why or Why Not? - Themes

The researcher used the data gathered from the student veterans participating in the program as well as the conclusions from both the fall 2016 and spring 2017 semesters to provide answers to help answer research question three which asks, was this mentorship program helpful? During the data gathering process there were specific themes that stuck out regarding the mentorship program and its use. These themes identified which aspects of the program were found to be helpful and which aspect were not.

Frist, participating student veterans stated that the mentorship program had been helpful in providing them with support when needed, also in developing a community they can relate to within the university and much needed peer to peer interaction. Second, the student veterans stated that for some of them (the upperclassman) this program was not needed. As can be deducted from our 100% graduation rate, they were already well on their way to successful completion of their degree. These students joined the program to share their experiences and help the younger students. Additionally, they stated that the lack of mentor/mentee interaction showed them little value within the mentorship program.

Of the support offered and received the largest themes were assistance with difficult classes, helping to use better time management skills now that they are responsible for setting their own schedules and just knowing the program was there when they needed assistance. The largest theme showing student benefit, and something that was implemented during the second semester of this case study, was the aspect of monthly group meetings. All participating student veterans felt it was imperative for a group meeting to be set at a specific time and location. This aspect was paramount in developing a sense of community each student could depend on.

#### **Conclusion of Fall 2016 Semester**

Again, considering research question three which asks, was this mentorship program helpful? Why or why not? The researcher will use the conclusions found after the fall 2016 semester to elaborate. At the conclusion of the first semester of this mentorship program (fall 2016) all collected data was evaluated and necessary changes were implemented. The main documents that were used, in addition to the overall retention and graduation rates for the participating students, to gauge the impact of this program were the perceived stress scale which was distributed only once during the fall 2016 semester and the intake and exit interview questionnaire for each student.

As previously elaborated on the researcher learned of many important aspects within the mentorship program that needed to be modified for it to better serve the participating student veterans. Within the mentorship program it was proven to be much harder than initially expected to spark the hoped-for mentor/mentee interaction outside of the set meetings structure that makes up the framework of this mentorship program. To help increase this interaction more specific meeting structures were implemented. The researcher also learned of the need for more direct structure built into the mentorship program. The student veterans unanimously stated that they wanted group meetings and for the researcher to set specific meetings throughout the semester for when they are going to meet. The major changes were: three PSS tests instead of just one per semester, four individual meetings each month instead on just one per semester.

The program aspects including the group meetings, more frequent individual meetings and the integration of more structure into the mentorship program, that will be implemented in for the spring 2017 semester, were aimed at helping the student veterans in the program develop a more defined and functional sense of community within the university. Through the student veterans' response to the intake and exit questionnaires, the individual meetings and general conversation all members of the program stated they lacked a sense of community they felt could be used as a support system when in need. These new program aspects were used to directly increase the group/community interaction of the members of this mentorship program and to provide more frequent contact with all members. Having more frequent direct contact allowed the researcher to stay in closer contact with the needs of the study participants, focus more attention of those students in need and make minor changes to the program when needed.

One assumption the researcher had going into the study was that the target group of students needed to be freshman and sophomores. That, for the most part, if student veterans can make it through the major prerequisites of freshman and sophomore years and make it to the time they declare and get into their major these student veterans are then largely on a path for successful completion of their goal. This assumption was proven correct when all participants were asked during the individual meetings. During the first round of recruiting most of the student veterans joining were upperclassman (eight upperclassmen and two underclassmen).

An observation made by the researcher during the individual interviews with each student was that all the student veterans who were thriving in their academic pursuits had a defined set of structures implemented in their daily lives. The student veterans who were struggling in the academic pursuits were struggling to develop their own form of structure in their lives now that they no longer had the military to set their structural boundaries. This issue of defined structure became a focal point in many of the individual meetings.

#### **Conclusion of Spring 2017 Semester**

Once again discussing research question three which asks, was this mentorship program helpful? Why or why not? The researcher will use the conclusions found after the spring 2017 semester to elaborate. A recap of the new additions to the mentorship program implemented at the beginning of the second semester (spring 2017) and their results are as follows: new group meetings will be implemented each month, an increase in the occurrence of the individual meetings from once per semester to once per month (this increase in individual meeting frequency was used to help spark more interaction thus resulting in more direct structure in the program), an increase in the amount of perceived stress tests from once per semester to three times per semester (this increase in PSS test's will provide a more detailed picture of the varying levels of perceived stress for the students), further development of the peer mentor aspect of the program and an increased focus on recruiting freshman and sophomores into the program.

One beneficial observation taken from the spring 2017 semester was the influx of new students (all freshman and sophomores) into the program and the effect their participation had on the mentorship program. This program was developed to target underclassman and after the fall 2016 semester there were only two underclassmen in the group. Bringing in five new student veterans (all underclassman) during the spring term allowed this program to be more in touch with its targeted demographic and begin to affect positive change in their academic path. Having mostly upperclassmen during the fall 2016 semester was helpful in refining the program and working out some of the issues the researcher encountered. This then allowed the researcher to deploy a fully functional program during the spring 2017 semester when the student veteran mentorship program demographic shifted to a more underclassmen heavy centric.

As this mentorship program progressed the researcher could lean on both the staff/faculty mentors and the graduating peer mentors as helpful and useful tools for the underclassmen student veterans in the program. This allowed each student veteran more options of whom to reach out to when they encountered an issue requiring assistance. Allowing each student options of who to contact was meant to increase the likelihood of a member of the program reaching out for assistance when assistance was needed. The researcher's goal was to develop a program that was not "one size fits all" solution but rather designed to cater to the needs of a diverse student veteran population, these changes allowed them to do that.

# **Perceived Stress Scale Data Discussion**

Research question four asks what was the perceived stress levels of the student veterans participating in the mentorship program and how did they cope with these stress levels. Having a numerical representation, such as the one previously listed in the perceived stress scale results section, which indicates the most stressful times for the student veterans throughout the semester allowed future actions of the researcher to be preventative in nature and work with these at-risk students well in advance of these stressful and vitally important periods of their academic careers. Knowledge like this allowed this program to be specifically tailored to the needs of each student veterans and provided them will the assistance needed to be successful.

When looking at the PSS results from the fall semester compared to that of the spring semester (Table 12 p. 57 and appendix G and H) the falls' results indicate a lower level of stress. This is not surprising as the spring semester is when most students will be completing a class level and/or on the verge of moving forward in their academic progression. Students tend to feel the effects of stress in their lives more dominantly when they are on the verge of substantial change (such as that of moving forward in their academic progress), for this reason the spring term tends to spark more stressful reactions from the student veterans. Historically, and for the previous mentioned reasons, the fall semester causes less stress in students than does the spring.

As you can see from the tables in appendix H, the results of the three PSS given during the spring 2017 semester, the students overall stress levels increase as they approach midterms and then finals. This tells us that the mentorship program needs to focus more attention on preparing each student for these stressful situations. A preemptive approached to these stressful periods of each semester will help these students prepare in advance for each period and will help decrease levels of stress during important points in the semester. Being proactive in dealing with upcoming high stress events will serve these student veterans both during their academic career and in their eventual professional pursuits.

In order to show a clear picture of the where the case study's demographic of student veterans fall in the different perceived stress ranges remember that low stress is scored from 0-9, average stress is scored as 10-19 and high stress is scored as 20+. As previously stated this perceived stress test was given at four different time (once in the fall 2016 semester and at three separate times during the spring 2017 semester). The perceived stress ranges are as follows; low stress = 0-9, average stress = 10-19 and high stress = 20+. Over the four test periods the most students showed up on the low stress level twice and the average tress level twice. The highest number of students in the high stress level range occurred during the test given just prior to finals and came in with three students showing high stress levels. To view the detailed table and detailed perceived stress test results please refer to the perceived stress section in the results chapter of this document and appendix G and H.

Focusing on the second part of research question four which asks, how did these student veterans cope with their perceived stress, the researcher has found a number of different methods that can assist the student veteran cohort. The top three themes that were demonstrated during this case study were addressing perceived stress at identified times of likely "high stress events" such as midterms and finals. This mentorship program was used to develop a community that these student veterans can rely upon for support during these "high stress events". The mentorship program was also used to help these student veterans during their transitional times, both into college and into the workforce, so that they know they have support and know where to find that support when needed.

If, through the implementation of this mentorship program, the researcher can help these student veterans address the key aspects and time periods that commonly cause students to experience elevated levels of perceived stress the program can hopefully increase these student's chances of academic success. Through this case study the researcher was able to use the collected data and determine where these "high stress events" commonly come into play and can now provide suggestions as to when and where the mentorship program needs to focus most of its attention. Combining the data of the likely "high stress periods' with that of the most common stressors these students face enabled this case study to deliver a representation of common perceived stress factors within its student veterans demographic and provide recommended solution for future programs aimed at helping veterans in their academic pursuits.

#### **Planning and Scheduling Challenges**

Another area of focus is the planning and scheduling aspects that were incorporated into this case study as vital organizational aspects. The main facet of the planning and scheduling challenges of this program was how to efficiently deal with the many difficulties stemming from managing a large group of people (mentors, mentee and researcher) and how proper planning and scheduling techniques helped clear up the lines of communication and moved the program along. In a project of this size, one with many moving parts and one that deals with many different people and their varying schedules, it would have been impossible to have a successful outcome without proper planning and scheduling methods firmly in place from the start of the program and followed through until the conclusion of the program.

At the conclusion of this study (May 2017) it consisted of eleven mentors, fourteen student veteran mentees and the main researcher. All parties involved volunteered and were participating in this program in addition to their responsibilities as students, parents and/or employees. This fact provided for a large scheduling challenge when it came to setting the individual and group meetings that this program consisted of. Further accounting for unforeseen situations that often arose and required rescheduling, one can begin to get an idea of the scope of the planning and scheduling challenge that were associated with this program.

The last major issue that was dealt with regarding the planning and scheduling challenges of this mentorship program concerns the many different data gathering opportunities that were conducted throughout the duration of the program. In each semester, there were four individual meetings with the mentees, one group meeting per month with the researcher, mentees and mentors and then an end of semester recap. Having so many meetings and having each meeting deal with a different student and their specific set of needs provided an additional planning and scheduling hurdle that had to be overcome using detailed schedules and constant communication with all participating parties.

#### **Recommendation for Future Work**

The possibility of future work in this area will continue to be investigated and will be implemented into the existing framework of this program when appropriate. All data is specific to each individual student veterans and the path they take through their university experience. There are many opportunities evolving around this mentorship program that will allow for the continuation of the ground work laid during the year of this case study. The opportunity for a longitudinal study that would track a student veteran cohort from their freshman year through to their graduation would allow this program to function on a more robust scale. A longitudinal study would also allow for the data gathered during this case study to then be compared to the student veteran's peers who opted to not participate in the mentorship program. This would provide a better depiction of the true impact this program had on the perceived stress levels as well as the retention and graduation rates of its members.

Much work can be done on the removal of some of the negative aspects of military culture these students bring with them that are detrimental to their success. Many of the traits learned in the military are beneficial to incoming students but some can also be detrimental. Things such as not asking question for fear of disapproval to the elements of over pride fullness that deter these students from asking for help when it is needed. These two topics are just a few of the potential areas for future research on the topic of student veteran's collegiate success.

A topic to be discussed in the continuation of this program is the perceived stress data as well as the retention and graduation numbers that could then be compared with this programs student veteran cohort versus the national averages as well as the student veteran on campus who chose not to participate in the mentorship program. This comparison to the national averages would paint a much larger overall picture of the current student veteran's situation and allow this program to maximize what it could provide for each student veteran demographic. A future aspect of development for this program would be allowing it the ability to gather data and then compare the retention and graduation rates of student veterans who opted to join this mentorship program with that of student veterans whom did not. If that comparison aspect were to be added to the mentorship program the hope would be for the comparison to show the direct correlation to academic success and participation in this mentorship study.

The development of a First Year Experience (FYE) class that would target military veterans interested in one of the STEM fields of study would also be a benefit. This would allow both educators and student veterans to come into contact earlier in their academic career and possibly help certain students make it through some of the required prerequisites they must take during their freshman and sophomore years before getting into their major class work. The perceived stress test result suggests increased focus on students during critical points in the semester. Further work identifying the specific time periods these students are at risk of high stress, the individual major stressors they are encountering and the methods that could be used to help these students deal with these stressful times could go far in terms of providing these student veterans with the support they need.

#### Conclusion

Dealing with the major hurdles military student veterans face when entering the collegiate atmosphere and how they then manifest into a sense of perceived stress that negatively effects each student's chances of successful completion of their desired degrees are critical issues and the focus of this study. With the de-escalation in many of the large conflicts

in the middle east and the shift to a "less boots on the ground" wartime mentality, there will be a constant increase of veterans returning home and looking to further their education. They have GI Bill benefits they earned and need to be given all the support available to help ensure complete utilization of these benefits and successful completion of their degree.

When you then add the transition back into academia to that already difficult scenario veterans face when reentering society after having served in the military you develop a very complex situation that can often result in academic failure. This mentorship program was designed to assist each student veteran with their transition and this case study was designed to track the progress made in those efforts. Although hard graduation data for the completed student cohort is not available due to the one-year duration of this program and case study, half (7) of the fourteen student veterans who joined the program did graduate and the others are all tracking positively towards completion of their specific goals.

Regarding the students' levels of perceived stress, this study was able to identify the peak occurrence times of elevated levels of perceived stress which will allow future researchers the opportunity to focus more direct attention on possible struggling students at these critical junctures in their academic journey. Knowing when occurrence of elevated perceived stress might be and who the at-risk students are, will allow future researchers to be proactive instead or reactive with individual students in need of additional attention. It will also allow these researchers the ability to delegate their resources appropriately and not waist time on students who are not in need to additional help.

This case study focused on student veterans in the College of Engineering and Information Technology (CEIT), specifically student veterans pursuing a degree in one of the four STEM fields (science, technology, engineering and math). With the implementation of the mentorship program consisting of veteran faculty and staff members this case study focused of aspects of the implemented mentorship program aimed at decreasing the perceived stress levels and increasing the chances the participating student veterans had at achieving academic success. This mentorship program tried to help these student veterans deal with the many stressors they faced which often manifest in an increased presence of perceived stress in their lives. These factors, which occurred during their time at school and in the program, have a negative effect on each student and lessen their potential for academic success. The tools provided within the mentorship program will serve them well as they continue their education and then move into their chosen professional field. Given the guidance and assistance these student veterans received while participation in this mentorship program their path to success should be much clearer and the chances they will succeed in their desired goal should rise.

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#### **APPENDIX** A

#### **COHEN PERCEIVED STRESS**

The following questions ask about your feelings and thoughts during <u>THE PAST MONTH</u>. In each question, you will be asked HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are small differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don t try to count up the exact number of times you felt a particular way, but tell me the answer that in general seems the best.

For each statement, please tell me if you have had these thoughts or feelings: never, almost never, sometimes, fairly often, or very often. (Read all answer choices each time)

	Never	Almost Never	Sometimes	Fairly Often	Very Often
<b>B.1.</b> In the past month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
<b>B.2.</b> In the past month, how often have you felt unable to control the important things in your life?	0	1	2	3	4
<b>B.3.</b> In the past month, how often have you felt nervous or stressed?	0	1	2	3	4
<b>B.4.</b> In the past month, how often have you felt confident about your ability to handle personal problems?	0	1	2	3	4
B.5. In the past month, how often have you felt that things were going your way?	0	1	2	3	4

B.6. In the past month, how often have you found that you could not cope with all the things you had to do?	0	1	2	3	4
<b>B.7.</b> In the past month, how often have you been able to control irritations in your life?	0	1	2	3	4
B.8. In the past month, how often have you felt that you were on top of things?	0	1	2	3	4
B.9. In the past month, how often have you been angry because of things that happened that were outside of your control?	0	1	2	3	4
<b>B.10.</b> In the past month, how often have you felt that difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

## Perceived Stress Scale Scoring

Each item is rated on a 5-point scale ranging from never (0) to almost always (4). Positively worded items are reverse scored, and the ratings are summed, with higher scores indicating more perceived stress.

PSS-10 scores are obtained by reversing the scores on the four positive items: For example, 0=4, 1=3, 2=2, etc. and then summing across all 10 items.

Items 4, 5, 7, and 8 are the positively stated items.

Your Perceived Stress Level was \_\_\_\_\_

Scores around 13 are considered average. In our own research, we have found that high stress groups usually have a stress score of around 20 points. Scores of 20 or higher are considered high stress, and if you are in this range, you might consider learning new stress reduction techniques as well as increasing your exercise to at least three times a week. High psychological stress is associated with high blood pressure, higher BMI, larger waist to hip ratio, shorter telomere length, higher cortisol levels, suppressed immune function, decreased sleep, and increased alcohol consumption. These are all important risk factors for cardiovascular disease.

#### **APPENDIX B**



A Case Study of Student Veteran Efficacy in the College of Engineering & IT @ Georgia Southern Student Questionnaire

Name:

Date:

Interviewer:

- Age :
- Gender :
- Ethnicity : (Caucasian) (African American) (Hispanic) (Asian) (Other)
- Preferred name/nickname:
- Best contact method and information:
- Academic major:
- Credits scheduled this semester:
- Full-time or Part-time: (FT) (PT)
- Branch of Service: (Army) (Navy) (Air Force) (Marines) (Guard) (Reserves)
- Years of service: (0-5) (6-10) (10-15) (15+)
- Combat Deployment (Country/Years):

- Wounded : (Yes) (No)
- Service Connected Disability Rating: (None) (<50%) (>50%)
- What was your highest level of classification? :
- Married: (Yes) (No)
- Dependents: (Yes) (No)
- Length of commute to Georgia Southern University (Average Time):
- Are you working and attending Georgia Southern? (Yes) (No)
  - If Yes, how many hours per week? :
- How did you hear about this study? :
- What were the deciding factors you considered when choosing to attend Georgia Southern?

• Please provide you Facebook name so we can invite you to the study group page:

# **Study Specific Questions**

- What has GSU/CEIT done to assist you in your transition to academic life?
- What improvements would you like to see from GSU/CEIT that would help with your transition to academic life based on your experience so far?

• What is your main motivation for pursuing higher education?

- Please rank order these concerns as they relate to your seeking a STEM degree
  - Career/Job Improvements
  - Self-Improvement
  - Potential for Increased Salary
  - Professional Advancement
  - To Use Earned VA Benefits

 What do you see as the biggest barrier to receiving your degree on time facing you as a student veteran?

- Do any of these barriers noted by other veterans apply to you and if so please number in order of importance:
  - Financial Resources \_\_\_\_\_
  - Personal/Family Obligations \_\_\_\_\_
  - GI Bill Benefits Expired
  - Health/Disability Issues
  - School/Job Conflict
- What do you see as the biggest problem facing you this semester as a student veteran?
- Do you feel any of these problems currently apply to you? If so please number in order of importance.

•	Age Difference with student peers	
•	Financial Resources	
•	Working Full Time	
•	Family Responsibilities	
•	Few Veteran Resources on Campus	

- Do you have any specific issues you need immediate assistance with this semester?
- Is there anything else you feel we should know that would help us better assist you this semester?
- Do you have any questions for me (us) at this time?

# **APPENDIX C**



A Case Study of Student Veteran Efficacy in the College of Engineering & IT @ Georgia Southern Student End of Semester Questionnaire

- Greetings
- **Purpose of interview**: Provide review of your experience with this study during the past semester. Allow student and researcher the opportunity to ask questions, add critiques and provide suggestions for the study moving forward.
- **Questions**: Allow student veteran opportunity to ask any initial questions they may have before we begin our interview.
- General Review Questions
  - Has this program been useful for you during the previous semester? Why/why not?
  - What aspects did you find helpful/useful?
  - What aspects need to be improved?
  - What aspects did you not utilize? Why?
  - What are the most important issues you faced during the previous semester?

- What are the most pressing issues you foresee moving forward?
- In regard to your mentor match are you satisfied? Were they helpful?
- Are you more comfortable with a mentor of the same gender?
- Are you more comfortable with a mentor who served in the same service branch as you?
- Are there any aspects of this study that you would suggest we avoid in the future? Why?
- Additional comments/suggestions?

# **APPENDIX D**



# A Case Study of Student Veteran Efficacy in the College of Engineering & IT @ Georgia Southern Individual Meeting

## - Questions

- Have you reached out to any of the mentors?
  - If not, why not?
- Have you been contacted by any of the mentors?
- What support have you received that has been helpful?
- What support have you not been offered that could be helpful?
- If this was your first semester what are some things/information you would like to have access to?
- In your transition to college what aspects from the military were helpful? What parts of military culture did you have to move away from?
- Do you feel comfortable posting on the Facebook page?
- Would you be willing to post things that could be helpful younger students?
- Would you like us to organize a group get together outside of school and sporting events? (BBQ, ect)
  - If so, what would be fun for you?
  - Would your schedule allow you to attend?
- Have you ever attended a SAME (society of military engineers) meeting?
- Did you come straight from the military to school or did you take some time between?
  - What stressors in life developed before you returned to school?
- Give stress test
  - How has the stress of school affected you?
  - How do you cope with stress?
- FYI
  - I will be sending you a brief end of semester questionnaire after finals have ended. Would you please fill it out and send it back to me? This data is vital for our study and my thesis. I appreciate you taking the time to be a part of this program and help me with the data collection.
  - Starting next semester, we will begin having monthly meeting with you, me and a mentor. They will be held January through April (4 meeting) and we will figure out a day and time that will be convenient for each of us.

## **APPENDIX E**



# A Case Study of Student Veteran Efficacy in the College of Engineering & IT @ Georgia Southern Mentor Questionnaire

Name:

Date:

#### **Office Location:**

- Age:
- Race:
- Gender:
- Preferred name/nickname:
- Best contact information and method:
- Branch of Service: (Army) (Navy) (Air Force) (Marines) (Guard) (Reserves)
- Years of service: (0-5) (6-10) (10-15) (15+)
- Combat Deployment (Country/Years):
- Wounded: (Yes) (No)
- Service Connected Disability Rating: (None) (<50%) (>50%)
- Married: (Yes) (No)
- Dependents: (Yes) (No)
- Length of commute to Georgia Southern University (Average Time):

**APPENDIX F** 



A Case Study of Student Veteran Efficacy in the College of Engineering & IT @ Georgia Southern Mentor Interaction Log

Mentor Name -

Student Name -

<u>Date</u> -

- Location of Meeting -

- Description of mentor/mentee interaction -

- Follow up recommendations -

# APPENDIX G Cohen Perceived Stress Test Score Results

GROUP	RANGE	LEVEL	RANGE	RESULTS
AVG	10	LOW	< 9	6
RANGE	4 - 21	MEDIUM	10 - 19	3
STD DEV	2.83	HIGH	> 20	1

## FALL 2016 PSS RESULTS

SPRING 2017 - BEGINNIN OF SEMESTER - PSS RESULTS

GROUP	RANGE	LEVEL	RANGE	RESULTS
AVG	12	LOW	< 9	6
RANGE	4 - 23	MEDIUM	10 - 19	3
STD DEV	6.53	HIGH	> 20	2

#### SPRING 2017 - MIDTERMS - PSS RESULTS

GROUP	RANGE	LEVEL	RANGE	RESULTS
AVG	13	LOW	< 9	3
RANGE	2 - 25	MEDIUM	10 - 19	6
STD DEV	6.64	HIGH	> 20	2

SPRING 2017 - FINALS - PSS RESULTS

GROUP	RANGE	LEVEL	RANGE	RESULTS
AVG	14	LOW	< 9	2
RANGE	4 - 25	MEDIUM	10 - 19	6
STD DEV	6.25	HIGH	> 20	3

# **APPENDIX H**

# **Cohen Perceived Stress Test – Individual Breakdown**

Questions #'s	1	2	3	4	5	6	7	8	9	10	
Veteran Students											Totals
Student 1	2	1	2	1	1	0	2	1	1	0	11
Student 2	0	0	2	0	1	0	1	1	2	0	7
Student 3	0	1	1	1	0	0	2	0	2	0	7
Student 4	2	4	3	0	2	2	3	1	2	2	21
Student 5	1	1	0	1	1	0	1	1	2	1	9
Student 6	2	2	2	0	1	1	1	2	2	1	14
Student 7	1	1	1	0	0	0	2	1	1	1	8
Student 8	1	0	2	1	0	2	1	1	1	1	10
Student 9	1	0	0	0	0	0	0	1	2	0	4
Student 10	1	0	2	1	1	0	1	1	1	0	8
Averages	1.1	1	1.5	0.5	0.7	0.5	1.4	1	1.6	0.6	9.9
Rounded Averages	1	1	2	1	1	1	1	1	2	1	12

# Cohens Perceived Stress Test - Fall 2016

					0				0		
Questions #'s	1	2	3	4	5	6	7	8	9	10	
Veteran Students											Totals
Stude nt 1	1	0	2	0	1	1	0	1	1	1	8
Stude nt 2	0	0	2	1	2	0	1	2	1	0	9
Student 3	1	1	2	0	0	0	1	1	1	0	7
Student 4	2	3	3	0	1	1	2	1	2	1	16
Stude nt 5	2	1	2	1	0	1	2	1	1	1	12
Student 6	2	1	3	1	1	2	2	2	1	1	16
Student 7	1	2	3	2	3	1	1	3	2	3	21
Stude nt 8	0	0	2	1	0	0	1	0	0	0	4
Stude nt 9	1	0	0	0	0	0	0	1	2	0	4
Student 10	1	0	0	1	1	0	4	1	0	0	8
Student 11	2	2	2	2	3	2	2	2	3	3	23
Averages	1.181818	0.909091	1.909091	0.818182	1.090909	0.727273	1.454545	1.363636	1.272727	0.909091	11.63636
Rounded Averages	1	1	2	3	3	1	3	3	1	1	19

# Cohens Perceived Stress Test - Beginning of Semester - Spring 2017

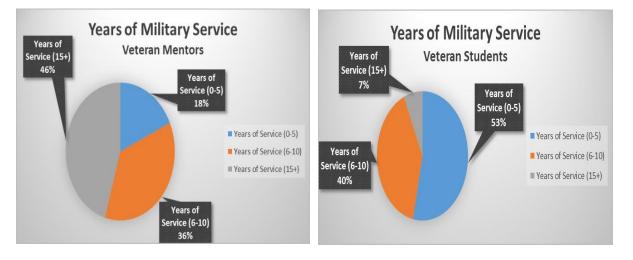
Questions #'s	1	2	3	4	5	6	7	8	9	10	
Veteran Students											Totals
Student 1	0	1	2	0	1	2	1	1	2	2	12
Student 2	1	0	0	1	1	3	1	1	0	0	8
Student 3	1	1	3	0	0	1	1	2	1	0	10
Student 4	2	4	3	0	1	2	2	1	2	2	19
Student 5	2	1	2	1	0	1	2	1	1	1	12
Student 6	2	1	2	1	1	2	1	2	2	1	15
Student 7	3	3	3	2	2	2	1	2	1	2	21
Student 8	1	1	2	1	0	1	1	1	2	2	12
Stude nt 9	1	1	0	0	1	1	0	1	2	0	7
Student 10	0	0	0	0	0	0	1	1	0	0	2
Student 11	2	1	3	2	2	3	3	2	3	4	25
Averages	1.363636	1.272727	1.818182	0.727273	0.818182	1.636364	1.272727	1.363636	1.454545	1.272727	13
Rounded Averages	1	1	2	3	3	2	3	3	1	1	20

Cohens Perceived Stress Test - Midterms - Spring 2017

# Cohens Perceived Stress Test - Prior to Finals - Spring 2017

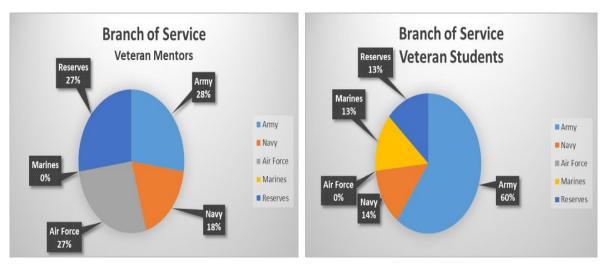
								-			
Questions #'s	1	2	3	4	5	6	7	8	9	10	
Veteran Students											Totals
Student 1	0	1	3	0	0	3	1	0	3	3	14
Student 2	1	0	2	1	2	0	1	2	1	0	10
Student 3	1	2	3	1	0	2	2	3	2	1	17
Stude nt 4	2	4	4	1	0	3	2	0	3	1	20
Stude nt 5	0	1	0	1	1	0	2	1	1	1	8
Stude nt 6	2	2	2	1	1	2	1	2	2	2	17
Stude nt 7	3	3	2	1	2	2	1	2	2	3	21
Student 8	1	2	2	1	0	2	1	1	2	1	13
Stude nt 9	2	0	4	0	1	0	1	0	2	0	10
Student 10	1	1	1	0	0	0	0	1	0	0	4
Student 11	2	2	3	3	2	3	3	1	2	4	25
Averages	1.363636	1.636364	2.363636	0.909091	0.818182	1.545455	1.363636	1.181818	1.818182	1.454545	14.45455
Rounded Averages	1	2	2	3	3	2	3	3	2	1	22

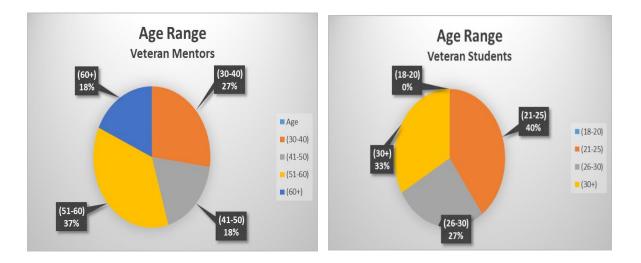
#### **APPENDIX I**



Mentor and Mentee Years of Military Service Breakdown

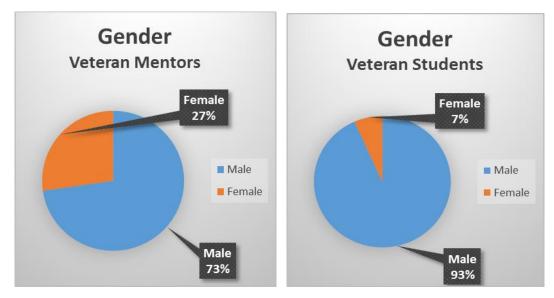
Mentor and Mentee Branch of Service Breakdown

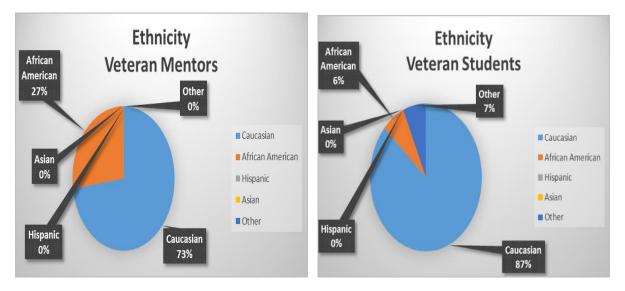




Mentor and Mentee Age Range Breakdown

#### Mentor and Mentee Gender Breakdown





Mentor and Mentee Ethnicity Breakdown