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Motivational and Persistence Factors for Military Spouses Earning a College Degree

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**MOTIVATIONAL AND PERSISTENCE FACTORS FOR MILITARY SPOUSES
EARNING A COLLEGE DEGREE**

by

Lisa A. Keenan

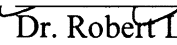
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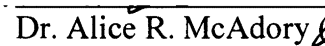
A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of
DOCTOR OF PHILOSOPHY
OCCUPATIONAL AND TECHNICAL STUDIES
OLD DOMINION UNIVERSITY

April 2012

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ABSTRACT**MOTIVATIONAL AND PERSISTENCE FACTORS FOR MILITARY SPOUSES
EARNING A COLLEGE DEGREE**

Lisa A. Keenan
Old Dominion University, 2012
Director: Dr. John M. Ritz

Projections estimated that nontraditional student enrollment in post-secondary education would increase by 19% as compared to traditional student enrollments of 10% from 2006 through 2017. Adult students were less likely to complete a college degree compared to traditional students, and drop-outs cost taxpayers billions of dollars in lost taxes. Military spouses were a sub-group of nontraditional students with unique challenges and stressors due to their military lifestyle. Limited research-based literature existed on military spouses enrolled in post-secondary education. Financial incentives such as My Career Advancement Account (MyCAA) and the transferability of the Post-9/11 GI Bill enabled military spouses to participate in post-secondary education at unprecedented numbers. This research study sought to determine factors that motivated and enabled military spouses to earn a college degree. The research questions guiding this study included: (1) What factors motivated military spouses to earn a college degree? (2) What factors enabled military spouses to persist in earning a college degree? and (3) What factors needed to be known by colleges and universities to assist military spouses in earning a college degree?

Data for this study were collected using a survey that included closed-form Likert-scale questions, open-form questions, and demographic questions. Seven hundred

fifty-two military spouse students completed the survey. Descriptive statistics and multiple regression analyses were used to address the research questions.

The findings of this study indicated that “personal fulfillment/satisfaction, college degree is a necessary career requirement, enjoy learning for the sake of learning, and the college/university accommodates ‘my’ developmental needs” were significant factors for military spouses’ motivation to earn a college degree. The factor “support and encouragement from other people (family, friends, or co-workers)” was identified as the significant persistence factor for military spouses earning a college degree. These five factors were further explained as the factors that colleges and universities needed to know to assist military spouses in earning a college degree. Colleges and universities with military spouse populations should consider evaluating their programs and services to examine if they support adult developmental needs and use the findings from this study to enhance recruiting and retention strategies for military spouses.

DEDICATION

The learning that evolved from this study is dedicated to those who never had the chance to pursue higher education because of their special needs, such as my loving niece (Andraea Walls, 1976-2010). To my children, Rick and Kelly, who have always been told about the importance of an education, I hope my accomplishments have inspired you to never stop learning.

Lisa A. Keenan

ACKNOWLEDGMENTS

Many individuals have contributed to my successful completion of this dissertation. I would like to recognize those who made a powerful contribution towards this achievement. I would like to acknowledge my husband, Major Daniel S. Keenan, USMC (Ret.), who has always been a great supporter of all my goals. I may never have pursued my first college degree if it were not for his support and encouragement. I would like to thank my daughter Kelly, who provided regular reminders of how far behind I was in completing my doctorate degree compared to her dad. Her verbal reminders helped to keep me motivated.

I would like to acknowledge another military spouse, my sister, Michelle King and her husband Colonel Larry King, USMC (Ret.), for taking care of my daughter while I completed my residency requirements at ODU. They provided a great comfort to me so I could focus on my studies. Their support in my time of need was appreciated.

I would like to acknowledge my parents who were great role models. My mother was a homemaker, and my father served in the U.S. Marine Corps for 27 years. My mother did it all, almost single-handedly, with seven children, no car, and no driver's license, while my father served in World War II, the Korean War, and the Vietnam War. She was my inspiration and role model.

Next, I would like to acknowledge my dissertation chair, professor, and advisor, Dr. John Ritz (former U.S. Army) who had a significant impact on my motivation and persistence to earn my doctorate degree. I can best describe his impact on me through the following letter I submitted to nominate Dr. Ritz for the ODU 2009-2010 Doctoral Mentoring Award. To my dismay, after submission, I was informed that Dr. Ritz was a

recent recipient of this honor and was not an eligible nominee at that time. However, I want to share my feelings and thoughts on why I would recommend him for another doctoral mentoring award. Here are *some* highlights from the letter I submitted:

“Based on my experiences with Dr. John Ritz as my doctoral mentor, I always felt that my work and progress was just as important to him as his professional responsibilities. Dr. Ritz is a faculty member who can be relied upon to help students at any time regardless of the amount of his collegial responsibilities. I feel confident that when I correspond with Dr. Ritz, he has our best interest at heart, and truly understands the needs of adult learners. While working on my dissertation, he continually challenged me to master a body of knowledge and develop my critical thinking skills. What I respect about his mentoring approach is that he is not critical of the student, but rather inspires each student to be critical thinkers through the use of non-prescriptive, developmental questions he provides. Dr. Ritz and I had many conversations regarding my future career opportunities, and he has helped me recognize and prioritize finishing the doctorate as my most important goal right now. He has not only supported my intellectual knowledge, but has been instrumental in providing advice on personal and professional matters relating to my job and career opportunities. I am also inspired by his mastery of teaching. From my experiences as a high-school teacher, university instructor, and curriculum designer for faculty training on effective teaching, he applies all the best practices when teaching adult students. His style, pace, organization of instructional material, and delivery boosted my confidence in my ability to continue in the program. He is a role model for other professionals to emulate. Dr. Ritz has been a significant factor in my motivation and persistence to complete the doctoral degree. He truly cares about his mentees, and he

possesses those qualities that inspire me and others to be the best, regardless of the amount of time and energy it consumes.” Thank you, Dr. Ritz, for all of the inspiration, support, and encouragement you provided to me. It was greatly appreciated and recognized.

I would also like to acknowledge my supportive committee members, Dr. Robert ‘Bob’ Lucking and Dr. Alice McAdory (former U.S. Air Force spouse). I was very fortunate to have them serve on my dissertation committee. Their time, expertise, and guidance will always be appreciated.

Finally, Old Dominion University will always hold a special place in my heart. The doctoral degree program and services provided via distance education was extraordinary in many ways. The distance education option was a motivator and persistence enabler for me to earn this degree. I would like to thank the ODU faculty for all their expertise, support, and criticism they provided. It was truly an everlasting gift.

Lisa A. Keenan

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CHAPTER I

INTRODUCTION

When workers earned a college degree, not only did they tend to benefit personally and professionally, society and institutions of higher education benefited as well (Merisotis, 2007). The recipient of a college degree tended to have lower rates of unemployment, greater health and life expectancy, and increased civic participation. College degreed individuals generally benefited with increased savings, improved working conditions, and both professional and personal mobility. According to Day and Newberger (2002), over an adult's working life, high school graduates could expect, on average, to earn \$1.2 million and those with a bachelor's degree, \$2.1 million. Recently released data from the U.S. Department of Labor (2010) showed that with each consecutive college degree, median earnings rose, and average rates of unemployment fell. The data represented the economic value of education from those with less than a high school diploma up to those who held a doctoral degree (see Figure 1). Furthermore, society benefited through greater productivity, increased workforce flexibility, increased tax revenues, and a decreased reliance on governmental support from having employees with college degrees (Merisotis, 2007). Carnevale and Desrochers (2004) posited that the American workforce required college educated individuals for the benefit of transitioning from a post-industrial society to a future informational society. In 2000, Day and Newberger (2002) reported that 84% of American adults age 25 and over had at least completed high school and 26% had a bachelor's degree or higher, both all-time highs. The National Center for Educational Statistics (NCES) reported that enrollment in post-secondary education from 1997-2007 increased significantly. A greater rise in non-traditional

student enrollments (19 percent) compared to traditional students (10 percent) was projected from 2006 through 2017 (NCES, 2008b).

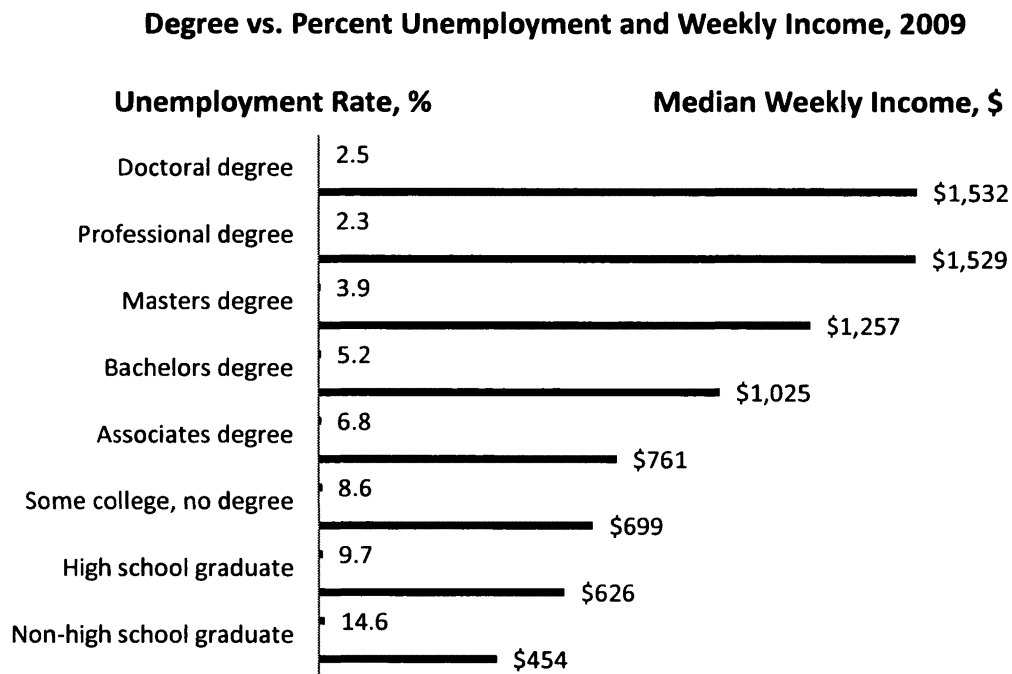


Figure 1. Education pays in higher earnings and lower unemployment rates.
Source: U.S. Department of Labor, Bureau of Labor and Statistics 2010.

Students who attend college and drop out after the first year cost taxpayers billions of dollars in lost taxes. In addition to lost time, debt, and uncertain futures for those who drop-out, reports estimated that between 2003 and 2008, first year drop-outs cost states almost \$6.2 billion, an additional \$1.5 billion in federal, plus \$1.4 billion in state grants for students who did not return their sophomore year (Schneider, 2010). Also, the likelihood of adults completing a baccalaureate degree remained between 7 to 9% for those ages 22-24 who enrolled part-time, and the odds rose to 20% for adults' ages 25 to 40 who enrolled full-time (Jacobs & King, 2002). Since attaining a college degree had reverberating effects on many aspects of society, and dropping out of college cost

taxpayers billions of dollars, more research on motivation and persistence factors of those earning a degree were important to comprehend how these variables affected completion of a degree.

Considering that adults were less likely to complete a degree compared to traditional students, this researcher sought to study military spouses earning a college degree because of their multiple roles and complex lives. Their husband's/wife's occupation as a U.S. service member made the goal of obtaining a college degree more challenging than other adult degree seekers. Many adults attending college had spouses whose occupations made achieving a college degree a complex process (Segal & Segal, 2004). For example, police duties and mining work are dangerous jobs, similar to serving in the military. Most of the time physicians are on call, similar to the military. Executives and other occupations may require relocating to another state or overseas, similar to the military. Professors work long hours, similar to the military. However, the main difference between the military spouse and other adult spouses earning a college degree is that the U.S. service member is likely to experience all of these demands, which affects the military spouse's life as well (Segal & Segal, 2004).

Military spouses "represent a valuable resource for the Nation's labor market" according to former Assistant Secretary of Defense Alphonso Maldon (U.S. Department of Defense, 2000, para. 7). Moreover, the Department of Defense (DoD) and the Department of Labor had recognized the need for educational opportunities for military spouses to acquire a college degree or earn professional credentials and therefore implemented the My Career Advancement Account (MyCAA) program. This program provided spouses with financial assistance for the pursuit of educational goals including a

college degree related to portable careers such as, but not limited to, health services, financial services, business/management, human resources, education, construction trades, homeland security, hospitality management, information technology, and real estate (U.S. Army, 2009). In addition, the Department of Defense authorized the transferability of a U.S. service member's Post 9/11 GI Bill educational benefits to family members to include spouses (GI Bill, 2009). Previous research conducted by the RAND National Defense Research Institute (2004) concluded that military spouses' choice of occupation and motives for working depended tremendously on their educational levels (Harrell, Nelson, Castaneda, & Golinelli, 2004).

Due to the financial benefits accorded to those married to active duty service members in the Post-9/11 GI Bill and the My Career Advancement Account (MyCAA) programs, spouses were using their benefits to obtain a degree or credentials at unprecedented levels—136,000 enrolled in 2009. In addition the Pentagon paid out \$215 million in MyCAA benefits and expected that number to rise to \$250 million in 2011 with expected costs of \$190 million per year after 2012 due to eligibility program changes (Baron, 2010).

Statement of the Problem

The focus of this study was to determine factors that motivated and enabled military spouses to earn a college degree (undergraduate or graduate).

Research Questions

This research was guided by the following three research questions (RQ):

RQ₁: What factors motivated military spouses to earn a college degree?

RQ₂: What factors enabled military spouses to persist in earning a college degree?

RQ₃: What factors needed to be known by colleges and universities to assist military spouses in earning a college degree?

Background and Significance

Findings from this study were important to government institutions that developed, planned, and funded programs designed for military spouses. Findings from this study were also important for institutions of higher education with degree earning populations of military spouses for the purpose of understanding this population when designing recruiting or retention strategies (Kasworm, 2003). It was important to understand the motivation and needs of military spouses enrolled in post-secondary education “since participation in adult education is largely a voluntary activity, knowing who is participating, reasons for participating, and what conditions are likely to promote greater participation can help providers better serve adult learners” (Merriam, Caffarella, & Baumgartner, 2007, p. 53). Also, increased accountability demands on higher education institutions from federal policy makers had called for the use of college graduation rates as an indicator of educational quality (Adelman, 1999; American Association of State Colleges and Universities, 2002; Cook & Pullaro, 2010).

Military spouses reported that the military lifestyle negatively affected their employment and educational opportunities (Harrell et al., 2004). In 2009, U.S. Government funded programs were implemented to enhance educational opportunities. With the increased enrollment from this population in colleges and taxpayer funded programs designed to aid spouses, it was important to research the motivational and persistence factors related to obtaining a college degree. In addition, the need to determine the factors that motivated military spouses to seek a degree and the factors that

enabled them to persist arose because of the unmatched challenges military spouses experienced while earning a college degree due to their military lifestyle. Overall, most college students had life, work, personal, and family challenges while earning a degree. However, military spouses may have endured the same challenges plus the stressors of family separation with a service member's deployment to hostile environments and even more. Completing a post-secondary degree as the spouse of a military member was difficult. The transient lifestyle, long separations, frequent reunions, lack of childcare (Drummet, Coleman, & Cable, 2003), and loss of transfer credits when moving between institutions (Dempsey, 2008) made the attainment of educational goals even more challenging. In addition, many spouses felt that their needs were second to their service members' military obligations (Harrell et al., 2004). For example, they often felt like a single-parent because of temporary and extensive deployments, training demands, and the need for the service member to be available at any time (Harrell et al., 2004). Therefore, childcare was primarily the responsibility of the military spouse, especially since extended family members often lived far away.

Unlike their civilian counterparts, those who married into the military endured a future of adjustments, stressors, and unpredictability that came along with the military service member's obligation to the U.S. Armed Forces (Drummet, Coleman, & Cable, 2003). According to McNulty (2008), families of military service members were dealing with limited resources, strains, military events, life events, and repeated deployments which often times extended beyond 12 months. In addition, reunification involved a period of adjustment that could be complicated by mental or physical adjustments for both the service member and his or her family members (Hogancamp & Figley, 1983).

Although education bears a strong relation to employment opportunities, military spouses saw their military lifestyle as negatively impacting their ability to engage in post-secondary educational opportunities, thus limiting their earning potential and employment opportunities (Castaneda & Harrell, 2008).

Military spouses were a focus of attention by national leaders and military officials in the Armed Forces because of the significant role they played in the morale and retention of our U.S. military forces. Former President George W. Bush declared May 9, 2008, as Military Spouse Day (Proclamation 8252, 2008) and recognized that while our service members protect our country, their spouses live with “uncommon challenges, endure sleepless nights, and spend longer periods raising children alone” (p. 659). Furthermore, a very powerful advocate for the military family was First Lady Michelle Obama. Walsh (2009) reported that “improving the lives of military families” (para. 1) had become her “signature initiative” (para. 1). She declared that concerns of the military family were part of her campaign agenda. According to Michelle Obama, President Obama believed that “service doesn’t end with the person wearing the uniform; the war doesn’t end when a soldier returns home” (Walsh, 2009, para. 6). She recognized that military spouses had to balance work and children while their partners were unable to lend a hand due to their duties in faraway places. The First Lady stated that military family members had their own “special courage and strength” (Walsh, 2009, para. 6); however they needed all the outside support they could acquire.

Research indicated that women married to U.S. service members had difficulty finding jobs and one of the reasons that military personnel were leaving the service may be related to limited career opportunities for their spouses (Schwartz & Griffith, 1991). In

2010, First Lady Michelle Obama recognized the difficulty military spouses had obtaining employment and embarked on a platform to encourage employers to hire veterans and military spouses as evidenced by her remarks that she would use her platform and visibility to “spark not just a national conversation, but national action to give our vets and military spouses the opportunities they deserve” (Henderson, 2010, para. 22). The military spouse’s satisfaction with the military lifestyle had significant consequences not only on the family, but on the long term success of the armed forces recruiting and retention measures (Segal, 1986), and increased satisfaction resulted in more commitment from both service members and their spouses. Since 1979 each branch of the military at base level established offices to coordinate family service support functions that included family support centers for military families (Hunter, 1982). Satisfaction with the environment for military families was a key determinant of contentment with the military lifestyle (Bowen, 1986; Moybray & Scheirer, 1984; Orthner & Bowen, 1982; Orthner & Pittman, 1988; Szoc, 1982).

Despite the military strains of frequent moves, long spouse absences, and child care dilemmas, some spouses enrolled in a college degree program while their service member was on active duty. Understanding what factors motivated military spouses and what factors enabled persistence towards completing a college degree provided quantitative research data for the DoD to use when making decisions regarding development, design, and assessment of programs and initiatives for military spouses. The military establishment was concerned with retention and family lifestyle. According to former Assistant Secretary of Defense Alphonso Maldon, “we cannot develop policy or programs without considering the full implication of what we do and how it affects

these other components,” such as community well-being, economic well-being, and family well-being (U.S. Department of Defense, 2000, para. 2). Thus, government sponsored and funded programs were implemented to help military spouses obtain a degree for career enhancement and ultimately these initiatives had intentions of contributing to the military family well-being.

Bowen (1989) stated that over the last decade, military organizations have devoted significant attention to quality of life issues for military families. Furthermore, Chairman of the Joint Chiefs of Staff asserted to Congress that quality of life issues were “inseparable from overall combat readiness” (Myers, 2004, p. 24). Additionally, Castaneda and Harrell (2008) reported that studies conducted by private sectors found that individuals who pursue interests outside of the home were both physically and psychologically healthier. This implied that military spouses who pursued a college degree were happier, healthier and more supportive of the military lifestyle than those who did not pursue interests outside of the home. A major quality of life feature that had not been researched was the extent to which a military spouse had the opportunity to pursue higher education credentials or a degree, and how motivational factors and persistence factors impacted this endeavor.

The RAND National Defense Research Institute (2004) recommended that the DoD determine its official position on military spouse education and develop a policy statement that reflects the DoD’s support, encouragement, and investment in military spouse education. Spouse education could be addressed through such means as encouraging education providers to maximize the number of classes offered on military

bases, ease the transferability of courses, pursue in-state tuition rates for military spouses, and create online or distance learning opportunities (Harrell et al., 2004).

In summary, employment and educational opportunities for military spouses were negatively affected because of their military lifestyle (Harrell et al., 2004). Government funded programs were implemented to improve employment and educational opportunities for military spouses. The U.S. Armed Forces and institutions of higher education were concerned with matters pertaining to military spouses motives for earning a college degree and what factors enabled them to persist. It was common knowledge that satisfaction with the military lifestyle affected successful recruiting and retention of active duty forces (Myers, 2004). Identifying military spouses' factors for earning a degree and the factors needed for persistence hold the potential to contribute to the knowledge base of information for the Department of Defenses' programs and initiatives designed to improve the well-being of the military family and recruitment and retention of service members. In addition, with an expected increase in the number of military spouses earning a degree due to generous government initiatives, institutions of higher education had a vested interest in the recruitment and persistence of students in degree programs. Understanding the factors that motivated military spouses to earn a college degree and the factors that enabled spouses to persist can provide data for colleges and universities to use when designing recruitment and retention strategies. This study also contributed to the scholarly community by providing data and research pertaining to non-traditional student motivation and persistence factors, ultimately benefiting educators, advisors, counselors, administrators, policy-makers, government officials, and others who had a vested interest in understanding military spouses in higher education.

Limitations

The limitations of this study were as follows:

1. Data collected were limited to military spouses who were currently enrolled in one of four colleges surveyed during the fall 2011 semester. These higher education institutions included a university in southeastern Virginia, a university and a community college in southeastern North Carolina, and an online university located in the Midwest.
2. Data collected were limited to unequal representations from four branches of the U.S. Armed Forces (Army, Navy, Air Force, and Marines). Although the intent was to survey spouses from all DoD branches of the military, the results of the sample were dependent upon the enrollment of DoD spouses at the four colleges that participated in the study.
3. Military spouses who possessed their college degree goal, and/or those who were not currently enrolled in higher education, were not included in this research.
4. This study measured motivation and persistence at a particular moment in time during the fall of 2011 as opposed to over a period of time.

Assumptions

This study was based on the following assumptions:

1. The post-secondary institution where the military spouse was enrolled offered one or more of the following degrees: associates, bachelors, or masters.
2. Military spouses understand the differences between degree, licensure, and credential earning purposes for enrolling in college. A degree-earning student

intends on acquiring an associate, baccalaureate, master's, or doctorate degree at the completion of college. A student attending college for a professional license may already possess a degree and is required to only take college courses for licensure to achieve a credential such as a paralegal certificate as opposed to a college degree.

3. Military spouses taking the survey would have similar motivational factors and persistence factors that other degree earning adults have.

4. Despite the challenges military spouses endured while being married to a U.S. service member, spouses were using their government sponsored financial benefits to earn a college degree.

5. Institutions of higher education, and U.S. government agencies such as the Department of Defense and the Department of Labor, were interested in military spouses' motivation and persistence to earn a college degree.

Research Procedures

The subjects for this study were identified as U.S. active duty service members' spouses who were currently enrolled in one of the four colleges where the research took place. A survey was created to answer the research questions pertaining to motivational and persistence factors for military spouses earning a college degree. Validation occurred through pilot testing the instrument with military spouses and through the review and analysis of experts in the field of higher education. The researcher contacted colleges where large populations of military spouses were enrolled to include both brick and mortar and distance learning institutions. An e-mail containing the need for the research, as well as the link to the electronic survey was sent to the host colleges to be distributed

to military spouses currently enrolled at their institution. The survey was administered during fall of 2011 and included Likert-scale questions to measure the motivational and persistence factors for military spouses earning a college degree. Follow-up was planned until sufficient data were collected. Data were compiled and statistical analyses were employed to determine answers to the research questions presented for this study.

Definitions

The following list of terms and their definitions will aid the reader in understanding this study:

Distance Education – Distance education is defined as a formal education process in which students and instructor are not in the same place. Instruction may be synchronous or asynchronous, and it may involve communication through the use of video, audio, or computer technologies, or by correspondence (including written correspondence and the use of technology such as CD-ROM) (NCES, 2008a).

Family Environment – the services and programs provided to military families including but not limited to spouse employment and training, services for families with special needs, education, and support for families during separations (Bowen, 1984).

Military Spouse – A person whose spouse (wife or husband) is a member of a nation's armed forces (<http://www.milspouse.com/>).

Motivation – Something that energizes, directs, and sustains behavior (Ormrod, 2008).

My Career Advancement Account (MyCAA) – A Department of Defense program designed to aid military spouses of active duty and activated Reserve and National Guard service members worldwide with employment, career, education/training counseling, and financial assistance (U.S. Army, 2009).

Persistence – Success towards academic goals, regardless of attendance at multiple institutions or cycles of stopping out of college (Hensley & Kinser, 2001; Tinto, 1993).

Post 9/11 GI Bill – Post 9/11 GI Bill provides financial support for education and housing to service members with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days (GI Bill, 2009). Unused educational benefits were transferrable to eligible spouses and children.

Social Status – Having prestige and a higher social class (Kasworm & Blowers, 1994).

Overview of Chapters

This chapter highlighted the economic and personal importance of obtaining a college degree. It examined some the challenges that military spouses faced while trying to further their education and earn a college degree, since they reported that the military lifestyle had negatively affected their employment and educational opportunities. Government organizations recognized the importance of military spouses' satisfaction with the military lifestyle and implemented programs designed to further their post-secondary education. The specific focus of this study was to determine factors that motivated and enabled persistence for military spouses to earn a college degree. Three research questions guided this study: (1) What factors motivated military spouses to earn a college degree? (2) What factors enabled military spouses to persist earning a degree? and (3) What factors needed to be known by colleges and universities to assist military spouses in earning a college degree? Background information was provided to explain the need to research a specific sub-group of degree seekers, military spouses, because of their unmatched military lifestyle challenges they endured while earning a college degree.

Chapter II reviews the literature pertaining to military spouses which includes economic benefits endowed while being married to a U.S. service member as well as the financial incentives provided to military spouses for post-secondary education. Next, studies on adult motivational reasons for participating in higher education were explained to identify significant and least significant factors pertaining to this topic. Persistence was the final construct reviewed to explain the models that have been used in higher education and determine if they were applicable to a population such as military spouses. Literature on distance education persistence was also included. Since most adult persistence literature identified the barriers and needs of adult learners, the researcher included a review of these constructs as well. Research data, expert views, and major theoretical perspectives were reviewed, which partially explained the complex nature of understanding adult motivation and persistence.

Chapter III describes the methods used to collect and analyze the data. This chapter describes the population, selection criteria, independent and dependent variables, instruments used to gather data, procedures for statistical analysis of data, and summary.

Chapter IV details the findings of the research. This chapter includes results on the motivational factors and persistence factors for military spouses pursuing a degree.

Chapter V includes a summary of the study. Significant points of the literature review, methodology, instrument design, data collection and statistical procedures were highlighted. Conclusions were drawn for each research question and recommendations were made based on the results of the study.

CHAPTER II

REVIEW OF LITERATURE

This literature review examined the benefits provided to spouses of U.S. service members as well as their employment difficulties and educational opportunities. It also illuminated challenges faced by adults, such as military spouses, pursuing a post-secondary degree. In addition, the motivation and persistence literature was reviewed as it pertained to degree attainment for nontraditional students. In higher education, military spouses were defined as nontraditional students versus traditional students since most had one or more nontraditional characteristics, e.g., married, commuters, employed, have children. The goal was to examine the motivational and persistence factors for adults pursuing higher education.

The organization of this review was as follows. First, there was a need to understand military spouses, and the non-educational benefits they received from being married to a U.S. service member. Understanding the non-educational benefits for military spouses provided a broader perspective into the military lifestyle that impacted a spouse's life. Next, educational benefits accorded to military spouses were explored due to perceived significance and relationship they had on the motivation and persistence of a military spouse towards the attainment of a college degree. Since military spouses were categorized as adult learners, the latter section provided an analysis of the demographics of adults participating in higher education, challenges they endured, and the motivational factors for participating in higher education. Finally, student persistence in higher education was reviewed to identify which factors influenced adults to persist in higher education. A definition of persistence was provided and models of traditional and non-

traditional student persistence were explained. Since military spouses could choose distance learning options, research pertaining to distance education persistence was included. Barriers to participation and adult needs were reviewed in order to facilitate an understanding of their relationship to persistence. The literature in this chapter supported the purpose of this study which was to determine factors that motivated and enabled persistence for military spouses to earn a college degree.

Military Spouses and Benefits

A spouse is generally perceived as one who is married to another. A military spouse is one who is married to a U.S. service member and/or *married to the military*. The colloquialism, *married to the military*, implies that often times the spouse must endure and overcome whatever the military institution requires of a service member since it impacts her/his life as well. Segal and Segal (2004) declared the military as a “greedy” institution because it requires significant commitment, time, and energy while limiting participants’ other roles. As such, the military spouse had to assimilate her/his life around the service member’s duties and obligations.

The military did provide benefits to service members and their spouses such as access to medical care, free legal assistance, discounted shopping on military bases, housing allowances, job security for the service member, a sense of belonging, and community as well as pride in being married to someone protecting the nation’s security (Segal & Segal, 2004). Additionally, in the event of a service member’s death, spouses were offered several forms of compensation such as dependency and indemnity compensation, proceeds from SGLI (life insurance) as well as burial assistance (Military.com, 2010). Booth, Segal and Bell (2007) reported that (1) commissary and

exchange privileges, (2) the security and stability of the service member's job, and (3) opportunities for the service member while serving her/his country were given high levels of military life satisfaction by spouses. Conversely, some aspects of military life generated lower levels of satisfaction from spouses: (1) deployments and family separations, (2) availability of child care, (3) employment and career opportunities for spouses, and (4) the amount of support for the family provided by the unit and from upper levels of leadership.

Stressors for Military Spouses

The twenty-first century ushered in dramatic increases in military deployments overseas, due to the national commitments in Afghanistan and Iraq. According to Congressional Research Service (2007), 150,000 to 200,000 military personnel were deployed overseas in 2007. As the armed forces increased the length and frequency of deployments, the tempo of additional duties, responsibilities, and stress for spouses at home were amplified. When there was a separation due to military obligations, a spouse had to proactively adapt to new roles that may have formerly been handled by the service member, e.g., manage the needs of the child, balance family finances, logistics for child care, and elder care (Spera, 2008).

These changes brought about from deployments could affect spouses' mental health due to the added stress factors. For example, researchers found that as the length of family separation increased, satisfaction with the Army life decreased (Booth, Segal, & Bell, 2007). Successful coping during deployments was associated with greater numbers of personal, social, and Army assets available to the family, perceived support from Army leaders, and use of Army agencies (Orthner & Rose, 2005). Advanced deployment

notices, changes in return dates (Hosek, Kavanagh, & Miller, 2006), open-ended deployments, i.e., unspecified duration (Martin, Vaitkus, Johnson, Mikolajek, & Ray, 2006), deployment zone safety concerns (Segal & Segal, 1993), and the mission's purpose (Segal, Segal, & Eyre, 1992), were also found to be related to spouses preparedness and ability to cope with deployment. Spouses of junior enlisted personnel were a group recognized as less prepared and less able to cope with deployment (Booth, Segal, & Bell, 2007; Spera, 2008). Conversely, Spera (2008) reported that spouses who felt well supported from their community stakeholders were more likely to cope well with deployment than those who felt unsupported. He further suggested that protective measures from three domains, e.g., formal agencies, leadership support, and informal networks could help spouses cope during stressful times of deployments.

Regardless of the benefits provided to military spouses, and the stressors associated with deployments, 2,794 family members revealed that 94% of military families either agreed completely or somewhat with the statement – “The general public does not truly understand or appreciate the sacrifices made by the service members and their families” (Blue Star Families, 2009, para. 2). Frequent deployments, increased stress during deployments, and limited resources were some of the concerns of military spouses. However, attempting to overcome these concerns through employment was another problem faced by military spouses as explained in the literature.

Military Spouses and Employment

According to spouse perceptions, coupled with past quantitative research based on U.S. Census and U.S. Department of Defense (DoD) statistics, many military spouses experienced negative employment outcomes (Harrell et al., 2004). Compared to civilian

wives, military wives had lower wages, and employers were hesitant to hire them because of their transient lifestyle (Harrell et al., 2004). Research showed that Army and Marine Corps wives could significantly improve their employment chances by obtaining higher education (Castaneda & Harrell, 2008). For example, Army wives with college degrees increased their odds of having a job by 125% compared with Army wives who had only a high school education. Furthermore, Harrell et al. (2004) analysis of factors revealed that spouses with a college education were less likely to cite escape from boredom and extra spending money as reasons to work. The primary and most frequently reported work incentive for these spouses was financial necessity, with 25% of spouses holding a college degree expressing this sentiment.

Castaneda and Harrell (2008) affirmed that spouses married to junior enlisted service members (E4 and below) cited financial necessity as their primary reason for working. For example, annual income and hourly wages (in 1999 dollars) showed earning disparities between civilian wives and military wives. Income gaps ranged from \$5,500 between Navy and civilian wives to \$7,400 between Marine Corps and civilian wives; hourly wage disparities showed military wives generally earned about \$3 per hour less than civilian wives (Harrell et al., 2004). Dempsey (2008) suggested there was a \$12,000 wage gap between college-educated civilian and military wives. The most common occupations for working spouses lacking a college degree were retail sales and hotel and restaurant jobs (Harrell et al., 2004). Attending college full-time was difficult if spouses needed to work for financial necessity. However, if a spouse chose to attend college, this placed an additional burden on family expenses since the expense of tuition competed with child care. The service member's frequent absences from home, combined with

subsequent reorganization of family life, were major stressors to the spouse (Rosen & Moghadam, 1990). With relocations often including international sites (Drummet, Coleman, & Cable, 2003) costs to attend college and relocating may have impacted the spouse's ability to participate or complete a post-secondary education. Dempsey (2008) claimed that spouses had to choose between paying exorbitant out-of-state tuition if they stayed behind or lose a substantial number of credits if they moved with the service member to the next duty station. On August 14, 2008, in-state tuition changes for military service members, spouses, and children were signed in to law (DANTES, n.d.). These changes were implemented by the Higher Education Opportunity Act (H.R. 4137) that included an amendment for U.S. service members, spouses, and children to receive in-state tuition at public colleges and universities in the state where they reside or are permanently stationed for periods of enrollment after July 1, 2009 (DANTES, n.d.). However, when it came to transfer credit, most of the public universities and top-tier private colleges and universities did not accept all of the credits from previous colleges. Harrell et al. (2004) claimed that "relocations also increase the cost of their education, because of the academic redundancies caused by the moves and tuition wasted on classes they could not finish..." (p. 134). Moreover, spouses who persevered and completed a degree while relocating, reported that it took them much longer to complete because they had to repeat classes or different degree plan program requirements (Harrell et al., 2004). Another barrier to participation in education was the uncertainty of the future, such as impending moves, discouraging spouses from pursuing education (Harrell et al., 2004). Finally, most childcare agencies had long waiting lists, and child care enrollment

restrictions prevented or limited the college student from pursuing the degree at her/his pace (Dempsey, 2008).

Military spouses' employment and educational opportunities were negatively affected because of their military lifestyle (Harrell et al., 2004). Hence, the U.S. Government funded and implemented educational programs and opportunities for the spouses of U.S. service members. The following section reviewed the literature on the RAND National Defense Research report on challenges to military spouses employment and education (Harrell et al., 2004) followed by an explanation of two educational benefits for spouses: MyCAA program and the Post-9/11 GI Bill transfer benefit.

Educational Programs for Military Spouses

Literature and research pertaining to military spouses and post-secondary education is sparse. One of the few studies related to military spouses and education was completed by the RAND National Defense Research Institute (2004). The RAND Corporation is a non-profit organization designed to inform policy and decision-making through research and analysis (RAND, 2010). Using quantitative data from over 1,100 military spouse interviews, the research study explored which occupations military spouses pursued, their motivations for work, and their perceptions of how the military lifestyle affected their employment or education (Harrell et al., 2004). The following recommendations were derived from this study as they pertained to military spouses and education:

1. DoD should recognize and officially establish that DoD benefits when military spouses achieve higher education. Previous studies associated military spouses' higher wages with greater satisfaction with the military lifestyle (USMC, 2002).

However, Harrell et al. (2004) suggested that military spouses with “greater earning potential may result in families prioritizing her career over a continued military lifestyle” (p. 199). It was also recommended that if DoD promotes spouse education, albeit costly to the organization, funding should only be provided for those courses that were completed, unless relocation led to the withdrawal from courses. The study revealed that junior enlisted spouses were likely to return to their extended families when the service member was away.

2. To reduce educational costs, an exploration of in-state tuition rate possibilities for military spouses was recommended.

3. DoD should work to strengthen its relationship with universities to include the Servicemembers Opportunity Colleges (SOC) program. This program was established in 1972 for service members to pursue educational opportunities worldwide, regardless of their transient lifestyle. SOC is funded by the DoD through a contract with the American Association of State Colleges and Universities (AASCU). SOC operates with the DoD active and reserve components of the military services as well as 15 higher education associations (Servicemembers Opportunity Colleges, 2010). RAND also recommended more non-technical program offerings, increasing the number of courses offered on military bases, and making it easier for military spouses and service members to transfer previously earned college credits.

4. The final recommendation to DoD was to seek avenues of support for online education such as providing or loaning computers, or subsidizing the costs

associated with distance education, and enhancing distance-learning facilities and options with universities (Harrell et al., 2004).

Following the RAND research study on military spouses' employment and education, the DoD established opportunities for military spouses to pursue higher education. The two most significant DoD sponsored and funded initiatives were the transferability of the Post-9/11 GI-Bill and the Military Spouse Career Advancement Account (MyCAA) program. The following literature provided details about each of these educational opportunities.

Post-9/11 GI Bill

The Post-9/11 GI Bill provided financial support for education and housing for U.S. service members with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days. As of August 1, 2009, approved training under this Bill included graduate and undergraduate degrees and vocational/technical training. The Bill covered tuition based upon the highest in-state tuition charged by a public educational institution in the state where the school was located. The amount of support that an individual qualified for depended on the type of degree being pursued and where he/she lived (U.S. Department of Veterans Affairs, 2009).

Effective, August 1, 2009, and for the first time in history, service members enrolled in the Post-9/11 GI Bill program had the ability to transfer their unused educational benefits to their spouses or children. Spouses could use the benefit while the member remained in the Armed Forces or after separation from active duty for up to 15 years (GI Bill, 2009). This transferability option was an important recruiting and

retention incentive according to Department of Defense officials (Miles, 2010b). The majority of the 50,000 dependents using the GI Bill benefit were attending public universities. A provision to the Post-9/11 Veterans Education Assistance Act of 2008, known as the Yellow Ribbon Program, was implemented to enhance the GI education program (U.S. Veterans Affairs, 2009). Under the Yellow Ribbon Program, up to 50% of the higher costs (tuition expenses that exceed the highest public in-state undergraduate rate) were waived and/or offset by the school, whereby the Veterans Administration (VA) matched the same amount (Miles, 2009). For example if a participating university tuition bill was \$20,000 and the Post-9/11 GI Bill only paid \$15,000, the VA and the university would split the \$5,000 difference according to Duckworth, VA Assistant Secretary for Public and Intergovernmental Affairs (Miles, 2009). With the Yellow Ribbon Program's continued growth, students were able to attend some of the nation's most prestigious and costly private schools. In October 2010, there were 145,000 approved service member requests to transfer benefits to about 331,000 family members according to Pentagon spokeswoman Lainez (Miles, 2010b).

MyCAA Program

Prior to the implementation of the Post-9/11 GI Bill both the U.S. Department of Labor and the U.S. Department of Defense sponsored MyCAA initiatives whereupon spouses of active duty service members were eligible for up to \$6,000 in aid for career training and education assistance (U.S. Army, 2009). The career fields that were most relevant to the government because of their portability were education, construction, financial services, health services, information technology, and real estate (U.S. Army, 2009). In 2007, the MyCAA financial assistance program was implemented to help

spouses of junior service members pursue education, training, certificates, or licenses. The program was expanded in March 2009 to include all service members pay grades and spouses' programs of study. During this expansion, more than 136,000 military spouses applied, with about 98,000 taking courses and/or approved for financial assistance to take courses (Jordan, 2010). Due to the overwhelming popularity of the program, the Department of Defense temporarily halted new enrollments in January 2010 for program review and realignment to ensure its sustainability (Miles, 2010a). New parameters were implemented that reflected the original intent of the MyCAA program. Changes included a reduction in the maximum financial benefits from \$6,000 to \$4,000 for military spouses of active duty service members in pay grades E1 to E5, W1 to W2, and O1-O2, as well as more robust career counseling services. Secretary of Defense Gates ultimately decided to limit educational opportunities to portable careers such as real estate licenses or home-health care provider accreditations, as opposed to allowing military spouses to pursue a range of educational opportunities such as four-year degrees (Miles, 2010a). According to Stanley, the Undersecretary of Defense for Personnel and Readiness, these changes were necessary in light of the U.S. Government's fiscal realities (Wilson, 2010).

With these educational benefits and opportunities available to military spouses, it was important for higher education institutions and DoD to understand this population of adult non-traditional college students' reasons for earning a college degree. The next section reviewed the literature on the characteristics and growth of adults in higher education as well as the challenges faced by adults who chose to participate in post-secondary education to earn a college degree.

Adults in Higher Education

The Council for Adult and Experiential Learning (CAEL, 1999) defined adult learners as persons who are no longer financially dependent upon their parents or guardians, or have major life responsibilities outside schooling through work, home, or community, or whose principal identities have evolved beyond the role of full-time student and typically is over age 24, married, or has dependents. Adult students have been defined in a variety of ways. Many researchers have included at least one of the following in the adult learner definition: working, attending college part-time, a parent, being a high school drop-out, or delaying college enrollment for at least one year. Horn, Peter, and Rooney (2002) stated that according to U.S. Department of Education data, 75% of college students meet one or more of these criteria.

Maehl (2004) indicated that the population of degree seekers since World War II had gone from a privileged five percent to an achievement open to everyone. In the United Kingdom, MacDonald and Stratta (2001) argued that higher education opened up to those groups who did not traditionally participate, including “the unemployed, those on low incomes, those without qualifications, the unskilled, ex-offenders, part-time and temporary workers, older adults, those with literacy, numeracy or learning difficulties, disaffected youth and some minority ethnic groups” (pp. 249-50). Adults were enrolling or re-enrolling in college degree programs at record numbers. Overall degree attainment increased between 1997 and 2008 (see Table 1).

Table 1

Number of degrees conferred by degree-granting institutions and percent change by control of institution and type of degree: Academic years 1997–98 and 2007–08

Type of Degree and Academic Year	Total	Public	Private		
			Total	Non-Profit	Profit
Associate's					
1997-98	558,555	455,084	103,471	47,625	55,846
2007-08	750,164	578,520	171,644	44,788	126,856
Percent Change	34.3	27.1	65.9	-6	127.2
Bachelor's					
1997-98	1,184,406	784,296	400,110	386,455	13,655
2007-08	1,563,406	996,435	566,634	490,685	75,949
Percent Change	32	27	41.6	27	456.2
Master's					
1997-98	430,164	235,922	194,242	188,175	6,067
2007-08	625,023	299,923	325,100	270,246	54,854
Percent Change	45.3	27.1	67.4	43.6	804.1
First Professional					
1997-98	78,598	31,233	47,365	47,018	347
2007-08	91,309	37,278	54,031	53,225	806
Percent Change	16.2	19.4	14.1	13.2	132.3
Doctoral					
1997-98	46,010	29,715	16,295	15,944	351
2007-08	63,712	38,315	25,397	23,037	2,360
Percent Change	38.5	28.9	55.9	44.5	572.4

Adapted from "The condition of education 2010" by S. Aud, W. Hussar, M. Planty, T.

Snyder, K. Bianco, M. Fox, L. Frohlich, J. Kemp, & L. Drake, 2010, National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Washington, DC. Information contained herein is in the public domain.

Higher education was more accessible than ever before with technology enabling learning at a distance. Many adults pursued a college degree and many faced numerous barriers regardless of their motivational levels. Adults earning a college degree faced the

challenge of juggling parenting and job/school responsibilities. Some realized after corporate downsizing that they could not compete in today's global economy without a different or advanced degree (Hardin, 2008). Businesses required their employees to have skills and knowledge that would enable competitiveness in the job market. Employers were requiring employees to access new knowledge through college participation (Kasworm, 2003), and adults sought college degrees to make a career shift or advance in a job (Niemi & Ehrhard, 1998).

Adult Motivation to Participate in Higher Education

In order for a person to make a decision to try, he/she has to have an underlying motive for wanting to try. Motives are defined as “reasons people hold for initiating and performing voluntary behavior” (Reiss, 2004, p. 179). This definition can be directly linked to someone who decides to pursue a college degree in that the student must have an underlying reason or motive that perpetuates the behavior into action. Ormrod (2008) defined motivation as an internal state that directs behavior toward particular goals, leads to increased energy and effort, increases initiation and persistence in activities, and determines which consequences are reinforcing and often enhances performance. Motivation is often cited in professional education literature and is an important variable for adult learner success (Moore & Kearsley, 2005). Motivation is highly valued in the real world because of its consequences—production (Ryan & Deci, 2000).

The construct of motivation is complex, particularly in terms of adults earning a college degree. Motivation can be either intrinsic or extrinsic. Deci and Ryan (2000) defined intrinsic motivation as performing an activity for the inherent satisfaction of the activity itself. A person earning a college degree would have intrinsic tendencies if the

motive for earning a degree was for pleasure, interest, personal satisfaction, or joy gained from learning. Extrinsic motivation is defined as the engagement in an activity because it leads to a separate outcome as opposed to the inherent value of the activity. Examples of extrinsic motivation include performing a behavior to obtain a tangible reward or to avoid a punishment (Deci & Ryan, 2008). Extrinsic motivators for adults earning a college degree could be praise, increased pay, or career advancement. Research on motivations for adults participating in higher education found evidence that supported both intrinsic motivations toward personal development and growth as well as extrinsic motivations such as career goals (Kasworm, 1990; Morstain & Smart, 1974; Smart & Pascarella, 1987).

Adults had many roles and responsibilities that affected their behaviors, attitudes, and motivation toward an activity. Changing events related to family, work, or personal matters were three primary categories that offered explanations for motivation toward degree attainment. For many adults, participation in higher education offered a glimmer of hope during periods of transition and uncertainty.

Multiple studies have asked adults what their underlying motivational orientations were for participating in post-secondary education. Although most respondents reported multiple reasons for participation, the most commonly cited motive was job-related (Aslanian & Brickell, 1980, 1988, 2001; Cross, 1981; Fairchild, 2003; Kiger, 1995; Knox, 1977; Merriam et al., 2007; Sewell, 1984; Smart & Pascarella, 1987; Valentine, 1997). Survey design may restrict participants to select one single motive for education participation, suggesting that results may not reflect a possible range of motives. When participants had the option of selecting multiple motives for participation,

adult respondents often chose both career-related and personal growth motives as reasons for participation in higher education (Pourchot, 1999). However, surveys administered by the National Center for Educational Statistics (NCES), which limited student choices to the single most important motive for participation in education, consistently revealed career-related motives for adults' participation (Merriam et al., 2007).

Horn (1996) found 75% or more nontraditional students enrolled in higher education cited personal enrichment, interest in the subject, development of skills for job advancement, or for a new career as important motivational factors for participating in higher education. Some were motivated by economic, technological, and demographic developments (Richardson & King, 1998); maintaining social friendships, meeting external expectations, professional advancement, escape or stimulation, or pure interest (Digilio, 1998); and betterment of economic life (Swenson, 1998). Justice and Dornan (2001) suggested that significant life events or a reevaluation of life goals were also motives for adults participating in higher education.

To summarize the above, Merriam et al. (2007) stated that "it has become evident that learners' motivations for participating in adult education are many, complex, and subject to change" (p. 65). The following review will elaborate on perspectives on adult motivations to participate in higher education including categorical orientations that began with Houle's (1964) typology and self-reported data from relevant research studies.

Categorical Orientations

The following literature will explain early research on adult motivation for participating in higher education. Motivations to participate are varied and intricate.

Providing literature on early studies which categorized motivational orientations for adult participation in higher education will aid in understanding self-reported studies in adult learning motivation.

One of the pioneer studies on adult motivation was Houle's (1961, 1984) research on motivational orientations for adults participating in education. His case study (1961) consisted of 22 adult learners who were active participants in adult education. His conclusions revealed that adult students participated in higher education to pursue a goal, an activity, or learning for the sake of learning. In an effort to further affirm and refine Houle's research, others such as Boshier (1971, 1977), Burgess (1971), Morstain and Smart (1974), and Sheffield (1964) developed factor analytic instruments.

Expanding on Houle's (1961) progressive study, Sheffield's (1964) factor analysis of adult learner orientations expanded Houle's three motivational orientations to five: 1) learning, 2) desire for sociability, 3) personal goals, 4) societal goals, and 5) need fulfillment. Further expanding on both Houle's and Sheffield's studies, Burgess (1971) conducted a factor analysis of adult motivation, finding seven groupings, five of which paralleled Sheffield's findings: 1) to know, 2) reach a personal goal, 3) reach a social goal, 4) religious goal, 5) escape, 6) take part in activity, and 7) comply with formal requirements.

In 1971, Boshier further explored Houle (1961) and Sheffield's (1964) motivational orientations and developed a framework to describe the motivations to participate in continuing education activities. Boshier's (1971) Educational Participation Scale (EPS) defined a seven factor structure of motivation to participate in education that paralleled Houle's typology. These motives for participation were grouped as follows: 1)

communication improvement, 2) social contact, 3) educational preparation, 4) professional advancement, 5) family togetherness, 6) social stimulation, and 7) cognitive interest in a particular subject. The EPS is a forty-eight item inventory (later refined to forty-two items) in which the learner indicates his or her reasons for participation by selecting one answer from a nine-point scale that ranges from very little influence = 1 to very much influence = 9. Fujita-Starck (1996) used Boshier's EPS with 1,142 university students to confirm the seven-factor typology proposed by Boshier in 1991.

Six motivational factors for adults participating in higher education were identified by Morstain and Smart (1974), categorized, and used in their study (social relationships, external expectations, social welfare, professional advancement, escape stimulation, and cognitive interest). The motivational factor to seek professional advancement was ranked highest, followed by cognitive interest and to a lesser extent, social welfare which is defined as the motive to better serve mankind (Morstain & Smart, 1974). Escape/stimulation was ranked lowest. Morstain and Smart (1974) called for more research on specific characteristics of the adult learner such as income level, degree aspiration, and vocational objective to determine the variation in the motivational levels.

Self-Reported Studies

The following review illuminates the motivational factors for students participating in higher education through the examination of multiple research studies arranged in chronological order. Through quantitative or qualitative research, each study revealed various reasons for adults participating in higher education.

Aslanian and Brickell (1980) surveyed almost 2,000 adults 25 years or older and reported that 83% of adults who participated in education over the preceding 12 months

acknowledged that their participation in education was connected to preparing for change or coping with a life-changing event. Unlike traditional college students, adults did not see a college degree as a means to an end, but rather as a coping mechanism for transitional changes in their lives. Life changing events, also known as transitions, included marriage, retirement, job changes (firing or promotion), and birth of children. The remaining 17% of adults were participating in learning for its inherent value such as mental alertness or for personal satisfaction. Repeating the study 20 years later, Aslanian (2001) found that 85% of the sample indicated a transition in their lives as a key motivator for furthering their education.

Malcolm Knowles provided an understanding of adult education with his coining the term “andragogy” (Tice, 1997). Knowles (1984) defined andragogy as “the art and science of helping adults learn” (p. 6). It is the external motivators such as a better job or salary that he claims are often the reasons for adult participation in higher education. He posited that intrinsic motivators such as self-esteem, self-confidence, competency, and self-actualization were more potent. Knowles (1980) took the position that the desire for growth is “perhaps the most basic universal drive of all [it is] an especially strong motivation for learning, since education is, by definition, growth in knowledge, skills, understanding, attitudes, interests, and appreciations” (p. 84). Providing adult students with choices that offered flexible study paths within a course or degree program as well as understanding that adult learners are capable of determining their own learning needs (Knowles, 1984) could enhance maximum fulfillment of intrinsic motivation (Kember, 1990).

Other studies followed the recommendations for more research on specific characteristics relating to degree and vocational objectives. According to some researchers, nurses' motives for earning a baccalaureate degree included the following: a) personal achievement, b) broaden professional competence, c) access to better job opportunities and higher pay, d) pleasure from learning new ideas, e) preparation for new roles, f) obtain a comprehensive liberal arts/scientific background that complemented nursing knowledge, g) attainment of a highly regarded college degree, h) facilitate the pursuit of a master's and doctoral degrees in the future, and i) preparation for possible mandatory baccalaureate degree pre-requisite for entry into professional practice in nursing (Bardossi, 1980; Cassels, Redman, Haux, & Jackson, 1988; Fotos, 1987; Hillsmith, 1978; Lange, 1986; Lange & Duffy, 1986; McGrath & Bacon, 1979).

Thompson's (1992) review of research pertaining to adults participating in higher education suggested that "most of the participation research has been limited to studying components of the phenomenon and implies that participation is synonymous with motivation" (p. 95). Her study explored participation holistically. The participants in her study were registered nurses who were 1) enrolled in Bachelor of Science in Nursing (BSN) degree programs, or 2) contemplating pursuing the nursing degree, or 3) had dropped out of a BSN program. Her research findings illuminated seven themes for participating in higher education: a) commitment, b) finding the right time, c) allocating time and energy, d) juggling, e) maintaining a balance, f) support, and g) non-support. These seven themes gave rise to the belief by Thompson (1992) that when an adult decided to participate in education to get a degree, her/his internal and external motivational orientations were integrated and multi-faceted.

Allen (1993) noted that motivation to attend college for many women occurred with their changing role in the family. Transitional points in their lives could be due to financial difficulties brought on by a divorce, death of the spouse, or children starting school or leaving home. In addition, motivational levels were based on how competing drives (i.e., conflicting demands on one's time, energy, activities) were resolved. According to Home (1995) female learners experienced considerable stress related to role conflict (dealing simultaneously with incompatible demands) and role contagion (difficulty dealing with one role while worrying about the responsibilities of another) when trying to balance work, family, and being a full-time student.

Kaplan and Satiel's (1997) research study suggested that an adult's decision to participate in higher education was the result of multiple motivational factors. They contended that changes in family situations, occupational pressures, and individual factors were motivators for pursuing higher education. Family structural changes included the death of a spouse, disability, divorce, or unemployment. This change could affect household finances. Developmental factors were role model for children and retirement preparation. Work related pressures such as new technology, downsizing, and stagnation in career paths or professional growth were other motives for participating in higher education. The use of educational credentials to screen job applicants further contributed to a motivational desire for education. Last, adults participated in higher education when they viewed it as worthwhile and attainable based on their needs, abilities, and chances of being successful.

In a study that compared the motivations of students who attend two-year and four-year institutions, Broekemier (2002) reported his results from 400 questionnaires

distributed to community college and university students aged 25 or over. He revealed that obtaining a better job with another employer as the most frequently chosen response for both two-year and four-year adult college students, followed by gain general knowledge and enhance self-esteem. The influence of friends or family was least mentioned by both college populations. There was no significant difference on enhancement of self-esteem, to take classes for a specific interest, or to meet new people between groups.

Kasworm's (2002) research identified four themes for adult college participation and posited that these motives could change during one's college experience. The first theme included participation due to a personal life transition such as divorce, children entering school, recent job loss, or denial of a promotion because of lack of education credentials. Second, other adult students were more proactive in their motivation to acquire a degree for the purpose of greater benefits and rewards (Kasworm & Blowers, 1994). These adults made conscious decisions to participate in higher education by relocating to a community near a university, working for a company with tuition-reimbursement, and/or negotiating support for college from family members. Later, Kasworm (2002) added that these proactive planners were more likely to seek external or adult degree programs via distance-education delivery systems or specialized instructional scheduling to accommodate their complex lifestyle. Third, mixed motivators including life transitions and proactive planning were reflected by other adults as their motives for participating in college. The final theme included motivation from societal norms and power relationships in their environment (Kasworm & Blowers, 1994; Quinan, 1997). For example some adults believed that a college degree would place them

in a higher social class standing that would include social invitations from other college-educated co-workers, leading to opportunities for more rewarding work assignments. Smart and Pascarella (1987) determined that a person who is dissatisfied with her/his leadership opportunities and academic image were motives for adults participating in higher education. West (1996) theorized that adult students aided with the support of others viewed education as a chance to alter their image or repair careers and build a stronger sense of self-esteem. Courtney (1992) suggested that motivation is related to self-beliefs and self-identity. He posited that adults often struggle to rebuild a sense of self-identity through participation in higher education.

In the Noel-Levitz (2010) report, data from 33,128 students at 63 four-year institutions and 4,547 students from 26 two-year institutions were collected from fall 2007 through spring 2010. The researchers analyzed adult learners' satisfaction-priorities. The 47 items of expectation Adult Learner Inventory (ALI) was developed by Noel-Levitz and CAEL (a non-profit organization concerned with adult lifelong learning opportunities). The ALI 47 items of expectation were analyzed statistically and conceptually to provide eight composite scales. These scales followed seven of the eight CAEL (2000) Principles of Effectiveness for Serving Adult Learners: 1) outreach (overcoming barriers of time, place, and tradition), 2) life and career planning (assessment and alignment of an adult learners life and career goals), 3) financing (promotion of options in financing), 4) assessment of learning outcomes (definition and assessment of knowledge, skills, and competencies acquired by adult learners), 5) teaching-learning process (multiple methods of instruction), 6) student support systems (comprehensive academic and student support), and 7) technology (use of information

technology to deliver information). The students responded to statements of expectation with an importance rating and a satisfaction rating. Twenty motivational factors of importance for four-year students included: availability of childcare, labor union support, courses held at employment site, employer endorsement, ability to design my own program, distance from campus, tuition reimbursement from employer, high rate of job placement, program accreditation by professional organization, credit for learning gained from life and work experience, availability of online courses, cost, reputation of institution, requirement for current or future job, ability to transfer credit, availability of financial assistance, time required to complete program, flexible pacing for completing a program, convenient time and place for classes, and availability of program wanted. Twenty motivational factors of importance for two-year colleges included: labor union support, courses held at employment site, availability of child care, employer endorsement, tuition reimbursement from employer, credit for learning gained from life and work experience, program accreditation by professional organization, ability to design their own program, availability of online courses, high rate of job placement, reputation of institution, ability to transfer credits, time required to complete program, distance from campus, availability of financial assistance, flexible pacing for completing a program, requirement for current or future job, cost, convenient time and place for classes, and availability of program wanted. The ratings were on a seven-point Likert-scale with seven representing highest importance or satisfaction. Student responses were averaged to produce a mean importance for each category. For purposes of this research, only the importance scores were reported to discern which motivational factors were important for adults participating in higher education (see Figure 2).

Motivating Factors of Importance for Participation: Four Year College

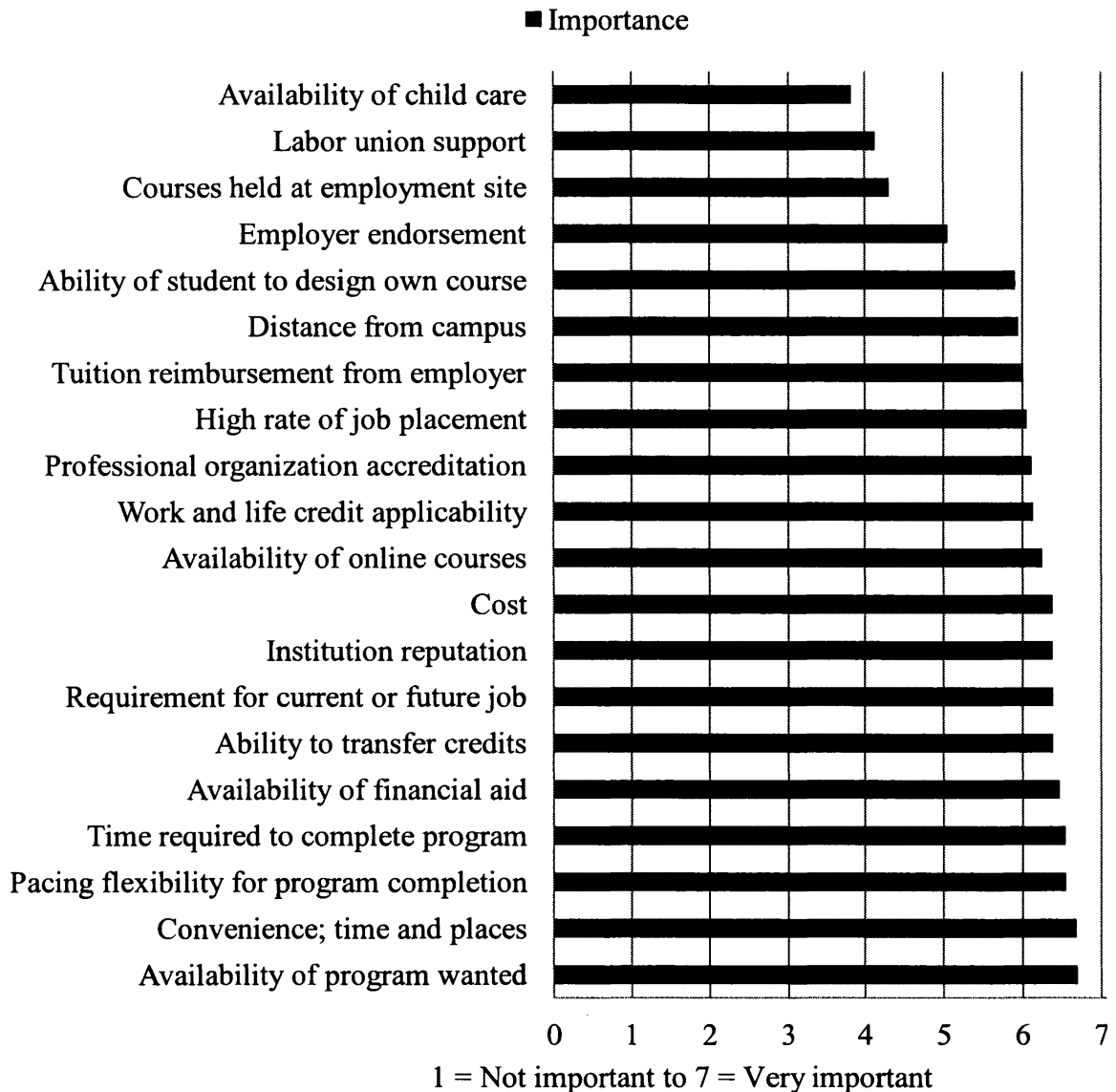


Figure 2. 2010 National adult learners' satisfaction-priorities report. Source: Noel-Levitz, Coralville, IA. Copyright by Noel-Levitz, Inc. Adapted with permission from Noel-Levitz, Inc.

The primary motivating factors for four-year university students participating in an academic program were availability of degree and convenience of time and places for

classes, followed by flexible pacing for completing the required courses, and time required to complete the course of study. Availability of financial assistance and ability to transfer credits were other strong factors for participation.

For community college students the primary motivating factor for participation was availability of program, followed by convenient time and place for classes. The next two significant factors were cost and requirement for current or future job (see Figure 3). In order to meet the needs of adult students it was important to understand their motivations to help ascertain their satisfaction with programs and practices at their respective college or university. Noel-Levitz (2010) recommended that assessment in student satisfaction should be a systematic process. They not only identified motivating factors for adult learners, but Noel-Levitz also outlined how institutions can meet adult needs through CAEL's (2000) Principles of Effectiveness for Serving Adult Learners.

The literature review in this section reviewed research on motivating factors for adults participating in post-secondary education. Adult lives were complex and their motives for participation were varied. Although motivation is complex, researchers uphold that it does play a role in participation and persistence in post-secondary education (Aslanian & Brickell, 1980, 1988; Gage & Berliner, 1998; Henry & Basile, 1994; Nelson & Low, 2003; Pourchot, 1999; Ramist, 1981).

The next section of literature review will provide information on persistence in higher education beginning with traditional models explaining early studies and their applicability or lack of applicability to adult students. Persistence factors for adults will be reported as well as an explanation of the barriers and needs of this population pursuing higher education.

Motivating Factors of Importance for Participation: Community College

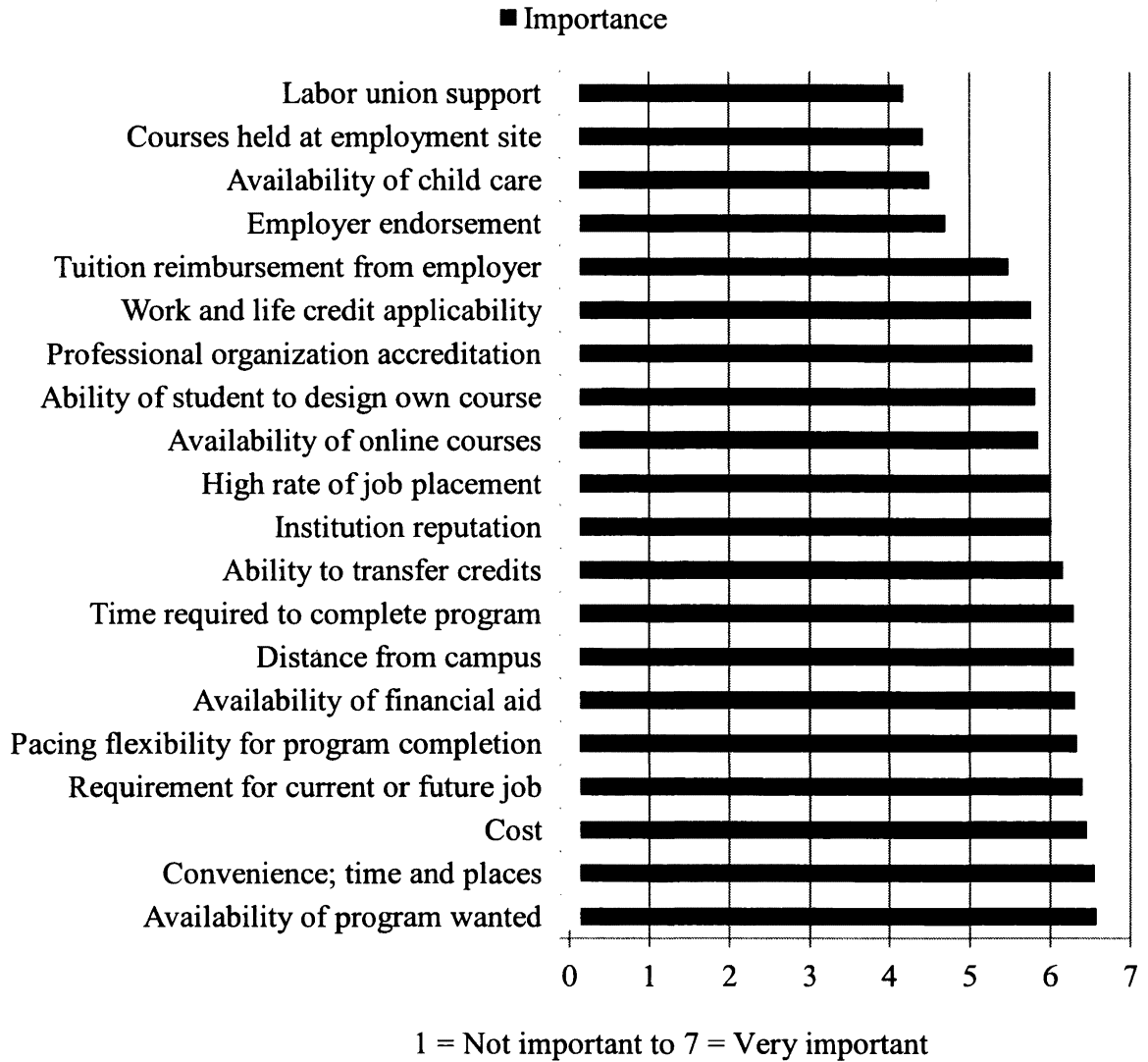


Figure 3. 2010 National adult learners satisfaction-priorities report. Source: Noel-Levitz, Coralville, IA. Copyright by Noel-Levitz, Inc. Adapted with permission from Noel-Levitz, Inc.

Adult Persistence in Higher Education

Student persistence is a tool used to measure higher education program effectiveness. Rovai (2003) defined persistence as continued action on the part of an individual regardless of the obstacles present. Hagedorn (2006) defined student persistence as enrollment in college until completion of a degree. Kinser and Deitchman (2007) identified two types of persistence: tenacious (students who had stopped out of college at least once without earning a degree) and standard (students who never stopped out of college without earning a degree). For the purpose of this study, student persistence is defined as success towards attainment of academic goals, regardless of attendance at multiple institutions or cycles of engagement and disengagement from college (Hensley & Kinser, 2001).

The study of student persistence in higher education is difficult (Adelman, 1999; Braxton, 2000). It is not uncommon for modern college students to cycle in and out of college to earn an undergraduate degree (Adelman, 1999; Adelman, Daniel, & Berkovits, 2003; Hensley & Kinser, 2001; Kerka, 1998). Sixty-percent of students attended more than one college while earning a bachelor's degree (Kinser & Deitchman, 2007). Stopping out, dropping out, or opting out of college makes it difficult to track a student to his or her degree completion. Adelman (1999) suggested that student persistence studies follow the student rather than focus on the ability of institutions to retain students. However, following every student from college to college until degree completion is difficult and costly. Albeit, Ewell, Schild, and Paulson (2003) proposed a linked, comprehensive state-level retention data base on student postsecondary enrollment as being a more accurate measure of persistence, while recognizing the political and

organizational difficulties in doing so. Until that idea becomes a reality, researchers sought to understand the reasons why students are currently enrolled (persisting) in college (Kinser & Deitchman, 2007).

Much of the literature on student persistence focused on the younger, traditional college student with fewer models related to the nontraditional student whose issues and challenges were numerous (Donaldson & Graham, 1999; Hossler & Bean, 1990; Moxley, Najor-Durack, & Dumbrigue, 2001; Tinto, 1987, 1993). Although extensive literature existed on traditional student persistence, nontraditional student persistence literature was rudimentary (Donaldson & Graham, 1999; Hensley & Kinser, 2001; Jacobs & King, 2002; McGivney, 2004; Naretto, 1995). Additionally, Allen (1999) and Chao and Good (2004) reported a need for more research on persistence of sub-groups such as military spouses in higher education.

Two of the most important and influential models of persistence based on environmental variables and social integration of students into campus life were developed by Tinto (1975, 1987, 1993) and by Bean and Metzner (1985). Tinto's theoretical model of persistence (1973) included components such as the following: a) pre-entry characteristics (prior schooling and family background), b) goals/commitment (student aspirations and institutional goals), c) institutional experiences (academics, faculty interaction, co-curricular involvement, and social interaction with peers), and d) academic and social integration. This model was applied to various undergraduate populations with an understanding that Tinto's integration model had limited applicability to the persistence of nontraditional students (Maxwell, 1998; Rendon, Jalomo, & Nora, 2000). Evidences revealed that emphasis on social and academic

integration may be unreliable and less influential for studying the nontraditional student population (Bean & Metzner, 1985; Walleri & Peglow-Hoch, 1988). According to Tinto's (1993) social integration thesis, adult students would be less likely than younger students to finish their degrees since older students are less integrated into campus life. Jacobs and King (2002) suggested that part-time enrollment was the principal cause of lower degree completion rates. This applied to not only adults, but traditional students as well. It would be logical, therefore, to assume that part-time students were less integrated. Further, Jacobs and King (2002) suggested that competing time commitments with part-time student enrollment might be a better explanation for lack of student persistence than lack of integration.

Another model of persistence (Astin, 1985, 1993) asserted that the higher the level and intensity of their involvement in the institutional environment and feeling a sense of community, the greater the chances for student persistence. Graham and Gisi (2000) argued that usually there was little time for campus involvement outside the classroom for nontraditional students because of work, families, and roles in the community. Furthermore, although adults may have limited interaction with the college community, they may engage in social activities beyond the campus from family, friends, coworkers, or other social venues. Conversely, traditional student involvement comes from peers and in peer-related activities on campus (Bean & Metzner, 1985; Kasworm, 1990, 1995; Kasworm & Blowers, 1994; Kasworm & Pike, 1994).

Expanding on the previous work of Tinto (1973, 1975) and Astin (1985), Bean (1985) integrated student goals, expectations, academic variables, and external and internal environmental factors into a revised model of persistence. Later work by Metzner

integrated Bean's (1985) previous research elements of nontraditional students with the influence of environmental factors on student departure and attrition. The Bean and Metzner (1985) model included academic variables, e.g., high school performance and grade point average, as well as psychological variables, e.g., satisfaction, family acceptance, stress on student persistence. Instead of including social integration as a variable for nontraditional students, Bean and Metzner (1985) focused on external environmental factors, e.g., hours of employment, finances, outside encouragement, family responsibilities. In addition, they concluded that students' reports of financial difficulty were directly correlated to attrition from college, and "many older students expressed concern about the ability to finance a college education" (p. 503).

Bean and Metzner (1985) proposed a model grounded on Tinto's (1975) model and earlier psychological models to explain attrition of nontraditional students, whom they defined as older than 24, not a campus resident (commuter), part-time student, or some combination of these three factors. They argued that older students have different support structures than younger students, and they draw more support from outside the academic environment. These variables, many of which are outside the control of the school, may discourage students from attending school by putting too much pressure on their time, resources, and sense of well-being. Furthermore, Metzner and Bean (1987) found that although integration variables were not significant for nontraditional students, GPA and institutional commitment directly affected persistence through their impact on perceptions of a postsecondary education's usefulness in gaining employment, satisfaction, and opportunity to transfer to another institution.

Cabrera, Castaneda, Nora, and Hengstler (1992) found significant overlap between the models of Tinto (1975, 1987, 1993) and Bean and Metzner (1985). They concluded that the interplay between institutional, personal, and external factors needed to be considered in developing programs to increase persistence. Therefore, a synthesis of Tinto's and Bean's and Metzner's models may be a better predictor of the persistence on nontraditional adult students than either model by itself (Rovai, 2003).

In order to compensate for adults lack of traditional campus involvement, Donaldson and Graham (1999) focused on other adult attributes related to persistence, e.g., commitment to the student role, possessing adequate study skills, clear academic goals. Support systems such as colleagues, friends, and family who supported the students' enrollment in college were factors that directly correlated to adult learner persistence (Donaldson & Graham, 1999). Support from internal and external communities was also found to be a compelling influence on the persistence of adults (Naretto, 1995; Nora, 2001). Chartrand's (1992) study of nontraditional student adjustment maintained that support from family and friends influenced student decisions to persist. Scott, Burns, and Cooney's (1996) study of adult female college students suggested that a combination of lack of family support or hostility, along with financial difficulties, may contribute to drop out, especially if the value of graduating seems low.

College attendance patterns were cited as being a contributor to adult persistence according to McGivney (2004). Unlike the linear traditional student attendance pattern, adult learner attendance patterns were complex. McGivney (2004) remarked that adult persistence patterns were upwards, downwards, sideways, or zigzagged in comparison to the more linear pattern that traditional students typically follow. They withdraw, stop out

for certain amounts of time, and then reenroll (Kerka, 1998). This type of attendance pattern put adult students at risk for never completing their college degree. The most efficient way for a student to earn a bachelor's degree was attending college immediately after high school graduation. According to Carroll (1989), when students do not follow this traditional pathway "they either do not earn a bachelor's degree or their degrees require more time and money" (p. 2).

Hensley and Kinser (2001) researched adult learner persistence and discovered that the reasons students stop out of college were similar to explanations for their current enrollment in college. They asserted that factors that determined previous withdrawals from colleges were the same factors that provided persistence and commitment to return to college, i.e., students who did not persist in college in the past for financial difficulties were now enlightened that their financial well-being could improve with a college degree. Also, students who reported leaving college because of child-rearing demands now desired a college education to serve as role models for their children. The typical adult student stressors prevalent in past college experiences, e.g., age, children, divorce, negative academic experiences, financial challenges, and lack of goals were now seen as motivating forces contributing to their tenacious persistence toward their reengagement in college and continued enrollment.

Adult students held multiple roles that competed with their ability to participate in post-secondary education (Home, 1998) and overall education experience (Carney-Crompton & Tan, 2002). These roles included: student, married, divorced, employed full-time or part-time, parent, caregiver, and community participant. Family and education have been called "greedy institutions" because of their demand for a large measure of

energy, time, and commitment (Coser & Coser, 1974). Compared to other undergraduates, parents are at greater risk for stopping out of college for a period of time (Horn et al., 2002). These competing demands made it difficult for adult students to persist and earn a degree. Many multiple-role women struggled with the impact of combined role demands (Edwards, 1993). Unlike employment which had set schedules and responsibilities, family and academic responsibilities seemed to “never end” (Home, 1998, p. 93). Domestic and child rearing duties were the primary responsibility of the woman, placing academic tasks such as studying in second place. Many women also participated in the workforce and were often responsible for family members beyond the nuclear family which explained why an adult female student may not persist in her education (Scott, Burns, & Cooney, 1996). Balancing multiple roles was difficult and could make the most eager student vulnerable to drop-out. Older students tended to enroll part-time more than younger students which underscored the presence of competing social roles. Jacobs and King’s (2002, p. 225) research of women, ages 15-44, revealed that “part-time employment is the principal cause of lower completion rates at older ages.” In addition, educational prospects were hindered for younger women more than older women if they had pre-school aged children. Younger children (under age 13) are less autonomous and their needs less flexible, adding to a mother’s mental and physical overload and stress (Home, 1998). Jacobs and King (2002) suggested that older women may have better resources to manage school and family and perhaps a sharpened sense of the importance of a college degree. They recommended that financial supports, as well as other supports that enable adult students to enroll full-time, would enhance student chances of completing degrees. Financial aid had been found to be a significant factor in

retention for many students (Paulson & St. John, 2002; St. John & Starkey, 1995). Adults were generally financially independent and had responsibilities for the care of others as well. Yet, fear of incurring debt to attain a college degree may have contributed to the drive to maintain full-time employment while carrying a full course load, thus becoming unmanageable for many (Hardin, 2008).

As stated earlier, competing demands made it difficult for an adult to persist and earn a degree. One theory claimed that adult students could be better equipped for the rigors of college if their resources exceeded their responsibilities. McClusky's (1970) Theory of Margin advocated that "adulthood is a time of growth, change, and integration in which one constantly seeks balance between the amount of energy needed and the amount available" (Merriam, Caffarella, & Baumgartner, 2007, p. 93). In other words, when earning balance, Load (L) of life (that which consumes energy) and Power (P) of life (that which allows one to deal with the load) were conceptualized as a ratio between the two conflicting elements. If one had more Power (P) than Load (L), then there was a greater margin to participate in post-secondary education to obtain a degree (Merriam, Caffarella, & Baumgartner, 2007). In the case of military spouses, the external factors that impacted their load would be family, deployed husband/wife, work, and community responsibilities.

According to McClusky (1970), the theory operated around the amount of power available and the amount of load a person had accumulated.

Margin may be increased by reducing Load or increasing Power, or it may be decreased by increasing Load and/or reducing Power. We can control both by modifying either Power or Load. When Load continually matches

or exceeds Power and if both are fixed and/or out of control, or irreversible, the situation becomes highly vulnerable and susceptible to breakdown. If, however, Loan [sic] and Power can be controlled, and better yet, if a person is able to lay hold of a reserve (Margin) of Power, he is better equipped to meet unforeseen emergencies, is better positioned to take risks, can engage in exploratory, creative activities, is more likely to learn, etc., i.e., do those things that enable him to live above a plateau of mere self subsistence. (p. 82)

Hiemstra (1993) acknowledged that internal factors, e.g., desires, aspirations, and future expectations, affected a person's margin of load. Conversely, the amount of external factors available, such as family support, social abilities, and economic abilities, determined their power. For military spouses, these factors are relevant and significant considering their military lifestyle. Thus, for military spouses to engage successfully in earning a post-secondary degree, she/he must have some margin of power (resources) available for application to the amount of effort, time, and energy required to pursue a college degree. The act of balancing multiple demands and responsibilities was a task that most adult students had to endure if they pursued a college degree.

Merriam et al. (2007) remarked that McClusky's theory was better suited as a counseling tool rather than an explanation of adult learning. Similarities between McClusky's theory and Schlossberg's model for counseling adults in transition were identified by Merriam et al. (2007). Schlossberg's model used the strength of four factors to determine the ability to work through a transition: the situation, the self (internal

strengths), external supports, and strategies a person had developed to handle stress (Schlossberg, 1984, 1987).

Also, McClusky's theory did not address the nature of learning but rather when it is most likely to occur. The idea of acquiring a margin of power to enable learning was not necessary according to Wolflin's (1999) study. She discovered that overloaded adults were just as likely to learn as those with a margin of power and argued that overloaded adults' readiness to learn was a matter of whether or not the course was perceived as essential, or meaningful, and whether or not the learning method was perceived as convenient (Wolflin, 1999). Finally, Merriam et al. (2007) pointed out that McClusky did not address the argument that learning itself has the potential to increase a person's power. Having more resources (power) available to handle the requirements necessary (load) to complete a degree is one factor that may impact degree attainment for a military spouse.

Distance Education Persistence

It was important to understand persistence for college students enrolled in distance education programs since nontraditional students were more likely to participate in distance education than other students (Ashby, 2002; NCES, 2002) because of the access, flexibility, and convenience of asynchronous courses offered via the World Wide Web. Online learners grew more than 21% since 2002, with fall 2006 enrollment at about 3.5 million in the United States (Allen & Seaman, 2007). Ashby (2002) and Muller (2008) also reported that distance learners were more likely to be female and married and tended to have family and job responsibilities that restrained them from attending traditional on campus classes. Nontraditional students could "overcome some of the

difficulties they encounter in coordinating their work and school schedules or in obtaining the classes they want by participating in distance education” (NCES, 2002, para. 1). Fifty to seventy-five percent of nontraditional students reported that work interfered with school, i.e., affected their class schedule, number of classes they could enroll in, choice of classes, access to the library (Horn, 1996). Since military spouses shared many similar characteristics described by Ashby (2002) and considering one of the universities in this study was an online university, it was important to include literature on distance education persistence.

Diaz (2002), Levy (2007), and Parker (1999) discovered that students attending distance learning courses dropout at substantially higher rates than their counterparts in face-to-face on-campus courses. Two of the most pressing contributors to a distance education student’s lack of persistence included monetary costs and family issues (Darkenwald & Valentine, 1985; Merisotis & Phipps, 1999). Additionally, feelings of isolation in distance learning environments, as well as a lack of direct teacher contact, may result in students’ feeling disconnected to a community of learners which could affect persistence towards degree completion (Zielinski, 2000). Distance learning requires learners to be self-disciplined in setting their own time and pace to learn. McGivney (2004) suggested that distance learners may receive less guidance on their work required and how to manage it. Students may succumb to competing pressures without the necessary discipline required to maintain good study habits. Without the ability to adjust work schedules, make adequate child care arrangements, and pay for college, Rovai (2003) claimed that distance education students were unlikely to persist in any post-secondary education, regardless of their pre-existing academic skills. Home (1998)

reported that distance education helped reduce multiple role conflicts for women, since “flexible, individualized time frames allowed distance education students to reduce conflict by putting academic work aside when family crises erupted” (pp. 94-95).

Traditional brick and mortar instruction did not take into account the “domestic demands on women and the particular structure of their working day” (Miles, 1989, p. 10).

Distance learning provided a student with more autonomy of time, place, and pace of learning (Home, 1998).

Kember (1989, 1990, 1995) reformulated Tinto’s (1975) model to accommodate adult students in distance education learning environments. Distance education students had more demanding commitments to work, family, and social lives and thus, Kember (1995) reported that if external influences from a campus have a significant impact on traditional students, they are likely to be important to nontraditional students. Kember’s (1995) model included background variables related to a student’s family, home situation, work environment, and educational history. The model also presented a cost/benefit analysis for a student considering whether to drop out or continue studying. The student had to decide if the financial cost was worth the benefit derived from studying and earning a degree. Due to changes in goal commitments, grades, support, and external factors, e.g., work and family, continual reassessment of costs by the student would prevail to determine if course completion benefits superseded financial costs. These included internal and external benefits such as personal fulfillment and any material benefits derived from completing coursework or achieving the degree. Students decided if the cost for tuition, books, travel, and loss of earnings was worth the losses associated with family time, career opportunities, or social activities. If a student persisted then

he/she determined that the benefits of earning a degree outweighed the financial and personal costs associated with it.

McGivney's (2004) data on factors that contributed to adult student persistence included personal factors as well as several institutional factors. She maintained that motivation, supportive family or partner, financial support, sound pre-entry advice and information, high-quality course content and delivery, effective tutors, supportive learner groups, and efficient follow-up for those at risk of non-completion were factors that contributed to persistence. Distance learning may require a larger degree of motivation because of the lack of "pull" (McGivney, 2004, p. 42) factors normally associated with traditional classroom environments, i.e., set course times, face to face contact with tutors, social outlets. She suggested that adult students had greater motivation than younger students because they had to make sacrifices to participate, the length of time it took them to participate, and further education was needed for career reasons. A supportive spouse or family significantly contributed to the persistence of adults who were engaged in programs that consumed time, finances, and mental commitment. Fletcher (2002) and Kirk (2002) reported that adults receiving financial support were 38% less likely to drop out than adults without financial support. McGivney (2004) indicated that persistence rates for distance learners were lower than conventional learners and may be because of additional financial pressures, e.g., help with childcare. Providing distance learning students with accurate information on the course content, required workload, and sources of supports may improve student persistence, since research indicates that extensive and accurate information is not always provided according to McGivney (2004). Quality course content and presentation of instructional materials are "extremely" (McGivney,

2004, p. 43) important for distance learning students which requires large amounts of independent study. Having caring tutors and faculty who demonstrate an interest in the student was also important to adult persistence. Good feedback from tutors and advisors “can have a decisive impact on progress and persistence” (McGivney, 2004, p. 44) of distance learning students. Having a supportive learning group can help to maintain motivation to persist through regular contact with tutors, study groups, and other informal learner networks. Lastly, older students tended to embrace institutional efforts acknowledging class absenteeism through a phone call or written communication. They perceived this action as evidence of staff concern for their well-being. Providing class notes and/or handouts for extended absenteeism has been found to prevent total withdrawal by those concerned about their ability to maintain the level of work required (McGivney, 2004).

In a study to determine the factors that influenced adult learners’ decision to drop out or persist in online learning, Park and Choi (2009) discovered that adult learners were more likely to drop out of online courses when they do not receive support from their family and/or organization. Learners were less likely to drop out when courses were relevant to their own lives and when they were satisfied with the courses. Park and Choi (2009) recommended that external factors such as support from family members should not be overlooked by instructional designers. Consideration of the learner’s situation by offering tutorials, using motivational strategies, providing internal communication support, as well as informing family members and employers about the advantages of the online course were suggestions recommended by the researchers when designing online courses. In order to enhance student motivation (satisfaction) and preference for the

course, instructional designers should consider external rewards such as praise and opportunities to apply learned tasks to their lives.

Nontraditional students had characteristics unlike traditional students and should be studied using persistence models based on nontraditional student attributes. Although traditional student persistence models embodied some elements that may pertain to nontraditional students, targeting specific persistence variables for this population would be more relevant to understanding their needs. Many of the studies that supplied the foundation of retention literature in higher education were built upon the traditional view of students as opposed to the diverse student population of today (Pascarella & Terenzini, 1998). Researchers have not reached a consensus regarding online persistence factors (Finnegan, 2005). However, researchers have reported a need for more research on persistence of nontraditional sub-groups, e.g., commuters, social, ethnic, gender (Allen, 1993; Chao & Good, 2004). Military spouses were a sub-group of this century's diverse student population. They possessed unique characteristics within the nontraditional student category and should be studied to discover their persistence enablers. The demographic characteristics of undergraduate students continued to change (Keller, 2001; Pascarella & Terenzini, 1998; Woodard, Love, & Komives, 2000), thereby requiring a study to examine the variables that were applicable to specific nontraditional sub-groups and their relationships to retention (Reason, 2003).

Adult Needs and Barriers

Researchers stated that adult learners in formal higher education demonstrated better study habits, higher motivation, and earned comparable or higher grade point averages than their late adolescent counterparts. Conversely, adult students exhibited

lower graduation rates and took longer times to complete degrees (Brickell, 1995; Horn, et al., 2002; Kasworm & Pike, 1994). Competing demands, e.g., work, marriage, divorce, children, part-time enrollment, aging parents, financial strains, made it more difficult for older students to complete their studies (Fairchild, 2003; Jacob & King, 2002). These conflicts were examples of situational barriers that affected a student's academic success. Since situational barriers were unique to each individual, institutions of higher education could not remove them. However, institutions could provide student services that include one-stop-shop format, web-based services, extended office hours (Fairchild, 2003), and adult orientations that could, 1) help students be proactive in determining realistic expectations required to balance college with family, school, and work, and 2) help students formulate social support networks (Carney-Crompton & Tan, 2002). Situational barriers could include mothers of young children under the age of 13 feeling guilty when they were unavailable for their children (Terell, 1990). Hardin (2008) suggested that adult students needed "services that will smooth their academic adjustment by allowing them to focus on their role as student" (p. 52). Support services could include directories of on and off campus resources to include assistance with finances, childcare, crisis call lines, legal matters, and church organizations (Hardin, 2008).

Unlike situational barriers, institutional barriers were college/university policies and procedures that hindered the success of adult students. To help adult learners attain their academic goals, "colleges must strive to remove the barriers adult students face" (Hardin, 2008, p. 51). For example, availability of night, weekend, and online courses, extended faculty hours, quality day care, accurate advisement, and quality instruction were primary concerns expressed by adult students (Nordstrom, 1997; Hammer, Grigsby,

& Woods, 1998). One solution to a child-care barrier would be to offer low-cost childcare on campus (Fairchild, 2003) and possibly reduce conflicts regarding splitting their time between children and school (Terrell, 1990). Adult learners perceived themselves as customers and expected their needs to be met in a timely and customer-friendly manner (Hadfield, 2003). Adult students were concerned with time management (Nordstrom, 1997; Hammer, Grigsby, & Woods, 1998), and thus addressing institutional barriers that were concerns of adults would help accommodate students by efficiently managing and prioritizing their time which was already divided by multiple competing demands.

O'Connor's (1994) case study on the needs of adult university students suggested that more sensitivity by professors to the students' roles outside the classroom, more contact with professors, and less instruction by graduate assistants were important adult needs. The findings from Muller's (2008) research of adult women persisting in online degree-completion programs revealed the facilitating factors (those that enhanced persistence) e.g., engagement in a learning community, schedule convenience, personal growth, peer support, feeling challenged, and faculty support outweighed the barriers to persistence, e.g., multiple responsibilities, disappointment in faculty, face-to-face preference, feelings of anxiety in managing assignments, technology challenges such as lack of skills or access to Internet, and feeling overwhelmed. A strong face-to-face presence was not as important when compared to other barriers. The responses from Muller's participants echoed the same desire for more faculty interaction as suggested by O'Connor (1994). According to Herbert (2006), when faculty interaction is infrequent, the rate of learner satisfaction is low.

The need for more content relevant to their professional contexts, as suggested in Park and Choi's (2009) study, was another important persistence enabler found in Muller's (2008) study. Muller (2008) recommended that institutions of higher education should consider the time demands on working women and how that may conflict with their studies. A reduction in the length of some courses to shorter one-credit modules could be beneficial to adults with multiple demands on their time. In addition to providing accommodating online delivery models and support services, faculty facilitation of courses needed improvement to sustain persistence for adults in degree completion programs.

With the rise of distance education programs that commonly consisted of nontraditional students and the lower retention rates associated with these students, the need to examine ways of increasing student persistence was important (Rovai, 2003). Non-persistence was a complex issue. There were many reasons adults did not complete their programs of study. True reasons for withdrawal may not be revealed in order to preserve one's self-esteem. Barriers prevented or limited adult students' ability to be successful in completing a college degree. Some barriers were student-owned and could be difficult to overcome. Institutions of higher education, however, could review the services they provided to adults to determine if they were meeting the unique needs of the nontraditional students (O'Connor, 1994). Meeting the needs of adult students could lead to increased satisfaction, success, and persistence for students (Noel-Levitz, 2010; CAEL, 2000, 2005).

Summary

Chapter II included a review of economic benefits provided to spouses of U.S. service members (military spouses) and an explanation of the educational benefits available to military spouses for post-secondary education. Stressors associated with being a military spouse were also reviewed. Since military spouses were categorized as adults and nontraditional students, a review of the literature was provided that related to adults' motives for participating in higher education as well as the challenges and transitions they encumbered. Moreover, the research questions guiding this literature review were directly related to the need for an exploration and review of the motivational factors for adults participating in higher education. This query aided the researcher in obtaining an answer to the research question: What factors motivated military spouses to earn a college degree? Transitional events such as marriage, divorce, job loss, job change, death, birth of children, and empty nest syndrome influenced adult motivation to participate in education. Often, these transitions and life-changing events influenced the students' motivational reasons for earning a degree (social influence, job, career, finances, role model, self-fulfillment, and others). Houle's (1961) research on motivational orientations established the foundation for categorizing factors related to adult participation in higher education followed by other researchers who tested or expanded his work. Other researchers surveyed adults to determine their motivational factors and found motives such as work or career advancement, higher pay, prestige, enhanced self-esteem, personal achievement, gain general knowledge, and role model for children were some important factors.

Additionally, the construct of persistence was defined and reviewed. Traditional and nontraditional models of persistence were reviewed including elements of persistence for those enrolled in distance education. Adult student lives were complex and often included life transitions that impacted their ability to persist in their pursuit towards educational goals. Barriers and facilitators of persistence were reported. Barriers may be situational or institutional. Researchers have suggested that support from family, friends, colleagues, financial assistance, attending full-time, participating in distance learning, institutional adult friendly information and services, and having resources such as child care were factors that facilitated college persistence. Review of the literature on persistence was provided to aid the researcher in obtaining the answer to the research question: What factors enabled military spouses to persist earning a degree? The combined literature on motivation and persistence also provided an aid to the researcher in obtaining an answer to the research question: What factors needed to be known by colleges and universities to assist military spouses in earning a degree? Chapter III will provide demographics of the research population of students that were used in this study and review the methods and procedures of gathering and analyzing research data.

CHAPTER III

Methods and Procedures

The methods and procedures that were used in this study were described in this chapter. It included a description of the research design, population and sample, instrument design, and electronic survey used to gather data to answer the research questions. The methods of data collection and statistical analysis implemented were explained.

Research Design

This study used a convenience sample survey design to obtain a numeric description of military spouses' beliefs regarding their motivation and persistence toward degree completion. This nonprobability sample was chosen based on the convenience and availability of the colleges and universities willing to participate. Survey research was the preferred method of collecting data for this research because of its rapid turnaround in data collection as well as the economy and ease of the design (Babbie, 1990).

Population

All military spouses enrolled in one of four colleges were invited to participate in this research during the fall 2011 semester. The four colleges participating in the distribution of the survey included one community college in southeastern North Carolina, one university in southeastern North Carolina, one university in eastern Virginia, and one virtual [online] university in the Midwest. These schools were selected because of the number of military spouses enrolled at their institution (between 100 and 1,000). An attempt was made by the researcher to include military spouses from all branches of the DoD military. This population represented a heterogeneous demographic

that included military spouses from the following branches of the U.S. Armed Forces: Army, Navy, Air Force, and Marines.

Research Variables

Two independent variables were used in this study: motivation and persistence. Motivation was defined as an internal state that directs behavior toward particular goals (Ormrod, 2008). Persistence was defined as perseverance toward academic goals regardless of attendance at multiple institutions or number of stopping out cycles (Hensley & Kinser, 2001).

The independent variable motivation was measured by identifying factors from the literature review that were important motivators for adults pursuing post-secondary education. Motivational factors were social support, job/career, social status, institutional support/options, career requirement, personal satisfaction, earn more money, and enjoy learning. The independent variable persistence was measured by identifying factors from the literature review that were important persistence enablers for adults pursuing post-secondary education. Persistence factors were social support, financial, distance education, institutional support/options, engagement, caring faculty/staff, and child care (see Table 2). The dependent variable was the desire to earn a degree.

Instrument Design

A survey was developed by the researcher to gather data on the motivational and persistence factors for military spouses earning a college degree. The survey consisted of closed-formed Likert-scale questions and open-form questions. Survey questions for RQ₁ and RQ₂ were modeled after previously reported research studies, e.g., Aslanian & Brickell, 1980; Broekemier, 2002; Chartrand, 1992; Houle, 1964; Kasworm & Blowers,

Table 2

Research question concept matrix

Concept Measured	Observable Measures	Literature Review
RQ ₁ Motivation	Social support	Thompson (1992); Kasworm (2008)
	Job or career	Knowles (1984); Thompson (1992); Horn (1996); West (1996); Broekemier (2002); Kasworm (2002); Noel-Levitz (2010)
	Social status	Morstain & Smart (1974); Smart & Pascarella (1987); Kasworm & Blowers (1994); West (1996); Quinan (1997)
	Institutional support/options	Knowles (1984); Noel-Levitz (2010)
	Career requirement	Burgess (1971); Boshier (1971); Morstain & Smart (1974); Knowles (1984); Thompson (1992); Horn (1996); West (1996); Digilio (1998); Kasworm (2002); Noel-Levitz (2010)
	Personal satisfaction	Sheffield (1964); Burgess (1971); Aslanian & Brickell (1980); Knowles (1984); Smart & Pascarella (1987); Horn (1996); West (1996); Broekemier (2002)
	Earn more money	Knowles (1984); Kasworm (2002) Lange (1986)
	Enjoy learning	Houle (1964); Sheffield (1964); Boshier (1971); Burgess (1971); Morstain & Smart (1974)

Table 2
(Continued)

Concept Measured	Observable Measures	Literature Review
RQ ₂ Persistence	Social support	Bean & Metzner (1985); Chartrand (1992); Hiemstra (1993); Kember (1995); Kinser & Deitchman (2007); Naretta (1995); West (1996); Donaldson & Graham (1999); Nora (2001); Carney-Crompton & Tan (2002); McGivney (2004); Park & Choi (2009)
	Financial assistance	Bean & Metzner (1985); Darkenwald & Valentine (1985); Merisoti & Phipps (1999); Fletcher (2002); Jacobs & King (2002); Kinser & Deitchman (2007); Kirk (2002); Rovai (2003); McGivney (2004); Hardin (2008)
	Distance education option	Home (1998); Wolfin (1999); Ashby (2002); Kasworm (2002); NCES (2002); Mueller (2008)
	Institutional support/options	O'Connor (1994); Horn (1996); Nordstrom (1997); Hammer, Grigsby & Woods (1998); Fairchild (2003); Hadfield (2003); McGivney (2004); Hardin (2008)
	Engagement with adult learners	O'Connor (1994); Zelinski (2000); McGivney (2004); Mueller (2008)
	Caring faculty/staff	O'Connor (1994); McGivney (2004); Mueller (2008)
	Childcare resources	Terrell (1990); Fairchild, (2003); Jacobs & King (2002); Rovai (2003)

1994; Kinser & Deitchman, 2007; Lange, 1986; Noel-Levitz, 2010. Other survey questions were developed from empirical literature related to adult student motivation and persistence, e.g., Broekemier, 2002; Home, 1998; Kasworm, 2008; McGivney, 2004; Terrell, 1990. To collect demographic data for military spouses affiliated with the Army, Navy, Air Force, or Marines, Survey Question (SQ) 1 asked the respondent to select their service member's branch of service. Those respondents who selected one of the four branches of the DoD U.S. Armed Forces were then provided with the ability to complete the other survey questions. Any respondent who selected Other (National Guard, Reserves, Coast Guard) was provided with a thank you for their interest message, stating that the researcher was not collecting data on those spouses at this time. These respondents were automatically exited out of the survey. Two other demographic questions were asked to identify gender (SQ 21) and to identify the number of semesters or quarters of continuous enrollment pursuing a degree (SQ 22).

For RQ₁, What factors motivated military spouses to earn a college degree?, respondents were provided with the question What motivates you to seek a college degree? Motives are defined as reasons people hold for initiating and performing voluntary behavior. Eight factors were provided (SQ 2-9) for respondents to identify the degree to which each factor affected her/his motivation towards degree completion using a five-point Likert-scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree). They included: SQ (2) The influence of family, friends, or co-workers, SQ (3) Job advancement opportunities will increase, SQ (4) The increased social status I will have, SQ (5) The college/university accommodates my needs and educational goals, SQ (6) Because it is necessary for the career I plan on pursuing, SQ (7) For the personal

fulfillment/satisfaction I will gain, SQ (8) Because I can earn more money, and SQ (9) Because I enjoy learning for its own sake. Survey Question 10 provided participants an opportunity to report other factors (not included in the survey questions) that were contributors to their motivation to earn a degree. Since adult motivational reasons for earning a degree were complex and multi-faceted, SQ10 asked students to briefly describe in typewritten text any other factors (not previously mentioned) that contributed to their motivation to earn a degree.

For RQ₂, What factors enabled military spouses to persist in earning a degree?, respondents were provided with the question What factors enable you to persist towards degree completion? Persistence is defined as success towards attainment of academic goals regardless of attendance at multiple institutions or cycles of engagement or disengagement from college. Seven factors were provided (SQ 11-17) for respondents to identify the degree to which each factor affected her/his persistence towards the degree using a five point Likert-scale (ranging from 1= Strongly Disagree to 5=Strongly Agree). They included: SQ (11) Family, friends, or co-workers encouragement and support, SQ (12) Financial assistance from the military, SQ (13) Attending a higher education institution that offers distance education courses or degree programs, SQ (14) Attending a higher education institution that accommodates adult student needs. Students who agree or strongly agree with this statement will have a follow-up question asking them to select all options that applied to their agreement with this factor. This follow-up question was not included in the multiple regression analysis used to determine which factors enabled military spouses to earn a degree. It was included to identify the reasons for agreeing with SQ 14 in order to provide further data on how a college accommodated their adult needs.

SQ (15) Being able to engage with other adult learners, SQ (16) Having faculty and staff who are caring, and SQ (17) Having reliable and affordable childcare. Since adult persistence factors that enabled degree completion were complex and multi-faceted, SQ18 asked students to briefly describe in typewritten text any other factors not previously mentioned that contributed/enabled them to persist towards degree completion.

Questions 19 and 20 were measures used to support the independent variable measures. Question 19 asked students to indicate on a five-point Likert-scale the degree to which they agreed with the proposed question regarding their motivational level to complete the degree. Question 20 asked respondents to indicate on a five-point Likert-scale the degree to which they agreed with the proposed question regarding their persistence towards degree completion.

Questions 21 and 22 were demographic questions. Question 21 asked participants to identify their gender, and question 22 asked respondents to identify how many semesters they had continuous enrollment pursuing a degree. See Appendix A for a copy of the survey.

Pilot Study

The purpose of the pilot study was to strengthen the validity of the instrument. This survey was reviewed for content validity through an analysis by five subject matter experts working in the field of psychology, adult learning, and higher education administration. The experts were selected because of their research experience and leadership skills in the field of higher education administration, adult learning, and/or military families. An e-mail request to participate in the pilot study was sent to each

individual (see Appendix B). Participants were then sent an introductory letter that included the statement of the problem, research questions, as well as an attached research question concept matrix (see Appendices C and D). The survey and survey rating form (see Appendix E) provided critique through the following seven questions:

1. Does the survey fulfill the data collection needs of the study as defined in the statement of the problem and the research questions?
2. Were the directions for completing the survey clear?
3. Were the statements clear?
4. Were there statements that needed revision?
5. Were there any grammatical, structure, or spelling errors?
6. Are there any motivational factors that need to be added to the survey?
7. Are there any persistence factors that need to be added to the survey?

The researcher reviewed the recommendations and comments made by each of the experts and made changes as needed to strengthen the survey's validity. Decisions to accept or decline recommendations with a brief rationale were reported in Table 3.

The revised survey was piloted with five military spouses enrolled at a university in southeastern North Carolina to determine reliability (see Appendix F). Students were sent an email inviting them to participate in the pilot study (see Appendix G). Those who agreed to participate voluntarily were sent a letter that included the survey link and a survey critiquing form (see Appendix H). The five survey participants were asked to complete the survey online and provide the researcher with their comments or suggestions regarding clarity of purpose, directions, survey questions, and technical applications. Each student participant was provided with a \$10 Wal-Mart gift card for

their participation in the pilot study. Respondent comments were used to determine if the survey questions meant the same thing to all respondents.

The pilot study allowed the researcher to make any changes necessary to the survey questions to strengthen the validity of the survey before it was sent to the military spouses. It also provided verification to the researcher on how the logistics of the survey collector settings worked and alerted the researcher about any difficulties that were not anticipated during the survey proposal stage.

Table 3

Pilot study recommendations

Recommendations/Comments	Course of Action Taken
Purpose: Add "of DoD active duty military forces" after the words "military spouse."	Accepted
Directions: Consider starting the order of the Likert-scale with Strongly Agree instead of Strongly Disagree since most studies start with the positive.	Accepted
Directions: Consider using four-point Likert-scale since a neutral choice is a chance to opt-out.	Declined - Neutral choice is relevant in rating one's beliefs.
Throughout the survey: Replace the words "obtain" a degree or "earn" a degree with "complete" a degree.	Declined - Revised to reflect such statements with "earn" a degree.
Throughout the survey: Be consistent with either using neutral words or personalizing the wording. e.g., a degree vs. your degree.	Accepted and changed questions to reflect personalization.
SQ 1, Choice E Other, add the word "Reserves."	Accepted

Pilot study recommendations (continued)

Recommendations/Comments	Course of Action Taken
SQ 1, If Choice E is selected: Clarify that although the Coast Guard is a branch of the U.S. Armed Forces, this study only focuses on spouses of DoD active duty military forces.	Accepted
SQ 2, Triple barreled question. Study will not reveal which of the three factors may have had a strong influence. Consider a separate question for each factor.	Declined - Does not align with the study's research questions.
SQ 4, Define "social status" for clarity.	Accepted
SQ 5, Double barreled question. Respondents will not know which of the two words "needs and educational goals" to respond to. May cause a neutral response.	Accepted and deleted "educational goals." Added "developmental" before needs.
SQ 6, For better sequencing, move this career requirement question before survey question on job advancement.	Accepted and is now SQ 3 on the revised survey.
SQ 7, Add the word "college" before the word "degree."	Accepted
SQ 13 & 14, Revise statements to read "Opportunity to attend a higher education institution..." instead of "Attending a higher education institution that..."	Declined - Use of word "opportunity" may imply not yet currently attending an institution offering distance education courses/degree programs.
SQ 17, Similar question about having caring faculty is asked in second part of SQ 15, consider removing it.	Accepted and deleted SQ 17 from initial survey.
SQ 18, Add the word "credentialed" to "Having reliable and affordable childcare."	Declined - Does not meet the study's research questions.
SQ 19, For consistency, remove the word "enablers" and replace with "factors."	Accepted

Pilot study recommendations (continued)

Recommendations/Comments	Course of Action Taken
Consider including a persistence factor on financial assistance other than from the military such as employer, family, grants, loans, or scholarships.	Accepted. This factor is SQ 13 on the revised survey.
Consider more demographics such as race, rank, age, employment, or highest degree earned to further expand research.	Declined - Does not align with the study's research questions.
<p>Note. Survey question numbering/alignment with factors changed after pilot study recommendation/feedback. Recommendations listed above reflect initial survey (pre-pilot) question numbering (see Appendix A). See Appendix F for revised survey.</p>	

Method of Data Collection

The researcher employed an online tool, SurveyMonkey™, a commercial product, to deploy the survey. This product afforded the researcher an opportunity to construct a survey, e-mail it to participants, and collect descriptive information for further analysis (Creswell, 2009). The survey was administered online for economic advantages and efficiency.

This study sought four institutions of higher education that had populations of military spouses earning a degree. Two institutions provided an email roster of their currently enrolled military spouses. Two other institutions provided an email roster of their currently enrolled military dependents (spouses and children). These institutions did not have the ability to identify, with accuracy, the number of military spouses out of their total military dependent population. This required the researcher to employ several measures with these two colleges to prevent and eliminate non-spouses from participating in the survey: 1) the email sent to university military dependents (n=504) and community

college military dependents (n=1630) stated that only military spouses partake in the survey, 2) the survey's purpose and introduction specified that the survey was for military spouses of DoD service members, and 3) for Survey Question 1, any respondent who selected choice E (Other: National Guard, Reserves, U.S. Coast Guard or NOT a Military Spouse) was removed from the online survey after a brief explanation for the omission along with a thank you.

Prior to the distribution of the survey, a letter that identified the purpose, extent of time, potential impact, and outcomes of the research was provided to each personal contact at the college or university (see Appendix I). The information in the e-mail was pre-approved by Old Dominion University Institutional Review Board (IRB). One college preferred to distribute the email inviting military spouses to participate in the research from their institutional email account. This required the assistance of an advisor from that institution. Other colleges provided the military spouse data to the researcher for her to use in the distribution of the invitation to participate in the research.

The survey was administered in fall 2011. All military spouses who were enrolled at the colleges included in this study were sent invitations to participate in this study. See Appendix J for the introductory e-mail to participate in the study. The purpose of the study and notification of how their participation may benefit institutions of higher education, government, and military organizations was provided. Participants were also eligible to enter a drawing after completing the survey for one of five \$50 Visa gift cards. Entering the drawing required participants to provide their name and e-mail address where they would be contacted (if their name was drawn) to supply a forwarding mailing address. All students were given assurances by the researcher that identities and personal

information would be confidential and participation was voluntary. If survey respondents chose to participate, their responses were anonymously submitted to SurveyMonkey, the electronic data collector. The researcher was the only person who had access to the survey results. Any names provided from this study were disassociated during the coding and recording process.

The researcher sent a two week follow-up email to military spouse students at three of the participating universities inviting them to participate in the research study if they had not already participated. The community college advisor sent the follow-up email to their military spouses. Since survey results were anonymous, the follow-up email was sent to all students listed on the email rosters, not just those who may have already participated (see Appendix K). Follow-up continued as necessary, until a sufficient sample was reached for a valid survey (Bartlett, Kotrlik, & Higgins, 2001; Sapsford, 2007).

Statistical Analysis

Data were collected and tabulated. Descriptive statistics were employed to describe data from the survey. The total number of survey respondents was reported (n=752). Number and percentages were used to identify the branch of service associated with survey participants. The number of responses was calculated to determine the total number of respondents' selections based on the Likert-scale choices. The percentage of responses for each question was calculated to determine percentages related to each Likert-scale choice. The mean score was calculated to determine the central tendency for each question.

Regression analysis was then used to measure the predictor/independent variables affect on the outcome/dependent variable for RQ₁ and RQ₂. Since many researchers believed that much of human behavior is determined by a combination of many factors (Meyers, Gamst, & Guarino, 2006), multiple regression analysis was employed to answer the research questions. Multiple regression analysis can serve two purposes: predictive (i.e., identifying which independent variables predicts military spouse motivation and/or persistence towards degree completion) and explanatory (i.e., explication of the underlying dynamics to indicate which combination of construct variables may be strongly associated). Multiple regression analysis using multiple R and R^2 was applied to determine which predictor variables for motivation (RQ₁) and which predictor variables for persistence (RQ₂) determined the outcome/dependent variable. A minimum significance level of $p < .05$ was sought by the researcher to indicate significance.

The survey included two questions (SQ 10 and 19) that were open-form. The researcher collected and analyzed the typewritten responses from these questions. The number and percent of written comments for SQ 10 and SQ 19 were reported. Each respondent's written response was recorded. Additional comments that were identical to any of the Likert-scale survey questions were excluded from the final summary. All written responses were then reviewed for any clusters that may have emerged from the collective data. These clusters were identified and reported.

Summary

The methods and procedures used to gather and analyze data for this study were outlined in Chapter III. One demographic characteristic (branch of service) was included for the purpose of attempting to acquire a heterogeneous military spouse sample and

eliminate respondents whose spouse was not a member of one of the four branches of the U.S. Armed Forces. A description of the survey and question alignment to independent variables was explained in order to enable the prediction and strength of effect on the dependent variables, e.g., military spouses' motivational level for earning a post-secondary degree, and military spouses' persistence level for completing the degree. The independent variables were further explained and aligned with research and survey questions. This chapter illustrated the instrument design explaining how the survey was validated and administered. The method of data collection through Survey Monkey™ was explained identifying the anonymity and confidentiality of the participant and the participation incentive. The survey included 17 closed-form Likert-scale questions, two open-form questions, one follow-up question, and three demographic questions. Ten of the 23 survey questions addressed RQ₁ (motivation) and ten questions addressed RQ₂ (persistence). Finally, this chapter described the statistical analysis measures the researcher intended to use to describe the results. Measures included descriptive statistics (number, percentages, and mean) and multiple regression analysis to identify which independent variables predict military spouses' motivation and persistence towards degree completion. A description of how the data from the two open-form questions would be reported was included. The data collected in this study will be used to report the findings in Chapter IV.

Chapter IV

Findings

The purpose of this study was to identify the factors that motivated and enabled military spouses to earn a college degree and determine what factors needed to be known by colleges and universities to assist military spouses in earning a degree. This chapter reported the data collected with the intent of answering the following research questions:

RQ₁: What factors motivated military spouses to earn a college degree?

RQ₂: What factors enabled military spouses to persist in earning a college degree?

RQ₃: What factors needed to be known by colleges and universities to assist military spouses in earning a college degree?

The response rate, survey responses, regression analysis, and a summary of findings were presented in this chapter.

Response Rate

The population of this study included military spouses of DoD service members who were enrolled at one of four participating colleges/universities. The sample used for this study consisted of 3288 military spouses of which 752 completed the survey. The following information was provided for individual college response rates. The online university included 476 military spouses of which 198 responded for this university's response rate of 42%. The university in Virginia included 678 military spouses of which 248 responded for this university's response rate of 37%. One university and one community college did not have precise numbers of military spouses enrolled at their college. They did maintain records for their military dependents (which included both spouses and children) enrolled at their college. The survey was submitted to all military

dependents at these two institutions, targeting only military spouses. The university in North Carolina included 504 military dependents of which 118 military spouses responded for a response rate of 23%. The community college included 1630 military dependents of which 188 military spouses responded for a response rate of 12% (see Table 4).

Table 4

Survey Responses

Post-Secondary Institution	Number of Survey Invitations Sent	Number of Responses	%
Online University	476 (military spouses)	198	42
University in (VA)	678 (military spouses)	248	37
University in (NC)*	504 (military dependents)	118	23
Community College (NC)*	1630 (military dependents)	188	12
Total	3288	752	23

Note. In determining the total response rate (23%) for all four institutions the following should be considered. *Data from these two institutions included a roster of military dependents (spouses and children). Measures were employed to prevent and eliminate non-spouses from participating in the survey.

The researcher utilized several measures to prevent non-spouses at the university in North Carolina and the community college from completing the survey: 1) the email sent to university military dependents (n=504) and community college military dependents (n=1630) stated that only military spouses partake in the survey, 2) the purpose and introduction specified that the survey was for military spouses of DoD service members, and 3) for Survey Question 1, any respondent who selected choice E (Other: National Guard, Reserves, U.S. Coast Guard, or NOT a Military Spouse) was automatically removed from the online survey after a brief explanation for the omission along with a thank you.

The overall response rate for all four colleges participating in the study was 23%. There were 752 military spouses who completed the survey, which was a sufficient sample for significance (Bartlett, Kotrlik, & Higgins, 2001; Sapsford, 2007).

Survey Responses

Survey Question 1 asked participants to identify their spouses' branch of service. Three hundred seven (41%) participants were Army military spouses, 235 (31%) participants were Navy military spouses, 138 (18%) participants were Marine Corps military spouses, and 72 (10%) participants were Air Force military spouses. See Table 5.

Table 5

Branch of Service

Branch of Service	n	%
Army	307	41
Navy	235	31
Marines	138	18
Air Force	72	10
Total	752	100

Research Question 1 – What factors motivated military spouses to earn a college degree?

Survey Questions 2 through 9 were prefaced with the question: What motivates you to earn a college degree? Using a five-point Likert-scale, participants identified to what extent each factor contributed to their motivation to earn a degree.

Survey Question 2 asked to what extent the influence of other people (family, friends, or co-workers) motivated them to earn a college degree. One hundred forty-five (19.3%) participants selected Strongly Agree, 261 (34.7%) participants selected Agree, 151 (20.1%) participants selected Neutral, 117 (15.6%) participants selected Disagree, and 62 (8.2%) participants selected Strongly Disagree. The mean score for SQ 2 was

3.42. Its standard deviation was 1.21. The mean indicated that respondents felt Neutral about this factor as a motivator. See Table 6.

Table 6

Influence of Other People

Scale	n	%	M (SD)
Strongly Agree	145	19.3	3.42 (1.21)
Agree	261	34.7	
Neutral	151	20.1	
Disagree	117	15.6	
Strongly Disagree	62	8.2	

Survey Question 3 asked to what extent a college degree was a requirement for their career motivated them to earn a college degree. Five hundred forty-eight (72.9%) participants selected Strongly Agree, 141 (18.8%) participants selected Agree, 27 (3.6%) participants selected Neutral, 18 (2.4%) participants selected Disagree, and two (.3%) participants selected Strongly Disagree. The mean score for SQ 3 was 4.65. Its standard deviation was .69. The mean indicated that respondents Strongly Agreed with this factor as a motivator. See Table 7.

Table 7

College Degree is a Necessary Requirement

Scale	n	%	M (SD)
Strongly Agree	548	72.9	4.65 (.69)
Agree	141	18.8	
Neutral	27	3.6	
Disagree	18	2.4	
Strongly Disagree	2	.3	

Survey Question 4 asked to what extent job advancement opportunities motivated them to earn a college degree. Five hundred eighteen (68.9%) participants selected Strongly Agree, 163 (21.7%) participants selected Agree, 42 (5.6%) participants selected

Neutral, eight (1.1%) participants selected Disagree, and four (.5%) participants selected Strongly Disagree. The mean score for SQ 4 was 4.61. Its standard deviation was .70.

The mean indicated that respondents Strongly Agreed with this factor as a motivator. See Table 8.

Table 8

Job Advancement Opportunities

Scale	n	%	M (SD)
Strongly Agree	518	68.9	4.61 (.70)
Agree	163	21.7	
Neutral	42	5.6	
Disagree	8	1.1	
Strongly Disagree	4	.5	

Survey Question 5 asked to what extent having increased social status motivated them to earn a college degree. One hundred twenty-three (16.4%) participants selected Strongly Agree, 190 (25.3%) participants selected Agree, 234 (31.1%) participants selected Neutral, 137 (18.2%) participants selected Disagree, and 50 (6.6%) participants selected Strongly Disagree. The mean score for SQ 5 was 3.27. Its standard deviation was 1.14. The mean indicated that respondents felt Neutral about this factor as a motivator. See Table 9.

Table 9

Increased Social Status

Scale	n	%	M (SD)
Strongly Agree	123	16.4	3.27 (1.14)
Agree	190	25.3	
Neutral	234	31.1	
Disagree	137	18.2	
Strongly Disagree	50	6.6	

Survey Question 6 asked to what extent the college/university accommodated their developmental needs motivated them to earn a college degree. One hundred eighty-one (24.1%) participants selected Strongly Agree, 319 (42.4%) participants selected Agree, 187 (24.9%) participants selected Neutral, 36 (4.8%) participants selected Disagree, and 12 (1.6%) participants selected Strongly Disagree. The mean score for SQ 6 was 3.84. Its standard deviation was .91. The mean indicated that respondents Agreed with this factor as a motivator. See Table 10.

Table 10

College/University Accommodates My Developmental Needs

Scale	n	%	M (SD)
Strongly Agree	181	24.1	3.84 (.91)
Agree	319	42.4	
Neutral	187	24.9	
Disagree	36	4.8	
Strongly Disagree	12	1.6	

Survey Question 7 asked to what extent personal fulfillment/satisfaction motivated them to earn a college degree. Five hundred seventy-one (75.9%) participants selected Strongly Agree, 146 (19.4%) participants selected Agree, 16 (2.1%) participants selected Neutral, 0 (0%) participants selected Disagree, and one (.1%) participant selected Strongly Disagree. The mean score for SQ 7 was 4.75. Its standard deviation was .50. The mean indicated that respondents Strongly Agreed with this factor as a motivator. See Table 11.

Survey Question 8 asked respondents to what extent earning more money motivated them to earn a college degree. Three hundred ninety (51.9%) participants selected Strongly Agree, 263 (35%) participants selected Agree, 66 (8.8%) participants

Table 11

Personal Fulfillment/Satisfaction

Scale	n	%	M (SD)
Strongly Agree	571	75.9	4.75 (.50)
Agree	146	19.4	
Neutral	16	2.1	
Disagree	0	0	
Strongly Disagree	1	.1	

selected Neutral, 15 (2%) participants selected Disagree, and one (.1%) participant selected Strongly Disagree. The mean score for SQ 8 was 4.40. Its standard deviation was .75. The mean indicated that respondents Agreed with this factor as a motivator. See

Table 12.

Table 12

Earn More Money

Scale	n	%	M (SD)
Strongly Agree	390	51.9	
Agree	263	35.0	4.40 (.75)
Neutral	66	8.8	
Disagree	15	2.0	
Strongly Disagree	1	.1	

Survey Question 9 asked respondents to what extent learning for the sake of learning motivated them to earn a college degree. Two hundred seventy (35.9%) participants selected Strongly Agree, 304 (40.4%) participants selected Agree, 120 (16%) participants selected Neutral, 31 (4.1%) participants selected Disagree, and one (.1%) participant selected Strongly Disagree. The mean score for SQ 9 was 4.09. Its standard deviation was .89. The mean indicated that respondents Agreed with this factor as a motivator. See Table 13.

Table 13

Learning for the Sake of Learning

Scale	n	%	M (SD)
Strongly Agree	270	35.9	4.09 (.89)
Agree	304	40.4	
Neutral	120	16.0	
Disagree	31	4.1	
Strongly Disagree	8	1.1	

Survey Question 10 asked respondents to briefly describe any other factors (not previously mentioned in the survey) that motivated them to earn a degree. After recording each comment, the researcher eliminated comments related to survey questions and then clustered similar responses. There were 183 respondents who answered SQ 10. The following is a listing of comments. Eighty-five (46.4%) respondents commented on “being a role model for their children,” 27 (14.7%) respondents commented on “wanting to be able to help/contribute to their family,” 19 (10.3%) respondents commented on “being able to support the family if something should happen to their service member,” 12 (6.5%) respondents commented on “being able to support their service member after transition from military service,” 11 (6.0%) respondents commented on “knowing that they will be able to serve others,” eight (4.3%) respondents commented on “being the first in their family to attend college,” eight (4.3%) respondents commented on “attending college helps pass the time while the service member is away,” seven (3.8%) respondents commented on “being self-sustaining/independent,” four (2.1%) respondents commented on “being unemployed,” and two (1.0%) respondents commented on their “self-confidence.”

These comments were representative of motivational factors previously identified in the literature review. Thus, these additional factor comments made by the respondents

were not recognized as new categorical orientations or motives for adults earning a college degree. See Table 14. Considering that these additional factors were not included in this study's regression analysis, further examination of these factors in future studies may be warranted.

Table 14

Other Motivational Factors (not mentioned in the survey)

Other Factors	Previous Study	n	%
Role model for children	Personal development (Kaplan & Satiel, 1997)	85	46.4
Help/contribute to family	Personal goal or better economic life (Burgess, 1971); (Swenson, 1998)	27	14.7
Support family if something should happen to service member	Preparing for change (Aslanian & Brickell, 1980)	19	10.3
Support service member after transition from military career	Preparing for change (Aslanian & Brickell, 1980)	12	6.5
Ability to serve others	Social welfare (Morstain & Smart, 1974)	11	6.0
First in the family to attend college	Reach a personal goal (Burgess, 1971)	8	4.3
To help pass the time	Escape or stimulation (Digilio, 1998)	8	4.3
To be self-sustaining	Personal development (Kasworm, 1990; Morstain & Smart, 1974; Smart & Pascarella, 1987)	7	3.8
Because I am unemployed	Personal development or escape/stimulation (Swenson, 1998); (Digilio, 1998)	4	2.1
My self-confidence	Self-confidence (Knowles, 1984)	2	1.0

Research Question 2 – What factors enabled military spouses to persist in earning a college degree?

Survey Questions 11 through 19 asked participants about their persistence to earn their college degree. Using a five-point Likert-scale, participants identified to what extent each factor contributed to their persistence to earn a degree.

Survey Question 11 asked respondents to what extent support and encouragement from other people (family, friends, or co-workers) enabled them to persist towards degree completion. Three hundred twenty-seven (43.5%) participants selected Strongly Agree, 299 (39.8%) participants selected Agree, 82 (10.9%) participants selected Neutral, 14 (1.9%) participants selected Disagree, and 12 (1.6%) participants selected Strongly Disagree. The mean score for SQ 11 was 4.25. Its standard deviation was .85. The mean indicated respondents Agreed that this factor enabled them to persist towards degree completion. See Table 15.

Table 15

Support and Encouragement from Other People

Scale	n	%	M (SD)
Strongly Agree	327	43.5	4.25 (.85)
Agree	299	39.8	
Neutral	82	10.9	
Disagree	14	1.9	
Strongly Disagree	12	1.6	

Survey Question 12 asked respondents to what extent financial assistance from the military enabled them to persist towards degree completion. Two hundred three (27%) participants selected Strongly Agree, 109 (14.5%) participants selected Agree, 132 (17.6%) participants selected Neutral, 160 (21.3%) participants selected Disagree, and 131 (17.4%) participants selected Strongly Disagree. The mean score for SQ 12 was 3.13.

Its standard deviation was 1.47. The mean indicated respondents felt Neutral that this factor enabled them to persist towards degree completion. See Table 16.

Table 16

Financial Assistance from the Military

Scale	n	%	M (SD)
Strongly Agree	203	27.0	3.13 (1.47)
Agree	109	14.5	
Neutral	132	17.6	
Disagree	160	21.3	
Strongly Disagree	131	17.4	

Survey Question 13 asked respondents to what extent financial assistance from other than military sources (loans, grants, scholarships, family, or employer) enabled them to persist towards degree completion. Two hundred seventy-seven (36.8%) participants selected Strongly Agree, 216 (28.7%) participants selected Agree, 106 (14.1%) participants selected Neutral, 80 (10.6%) participants selected Disagree, and 53 (7%) participants selected Strongly Disagree. The mean score for SQ 13 was 3.80. Its standard deviation was 1.25. The mean indicated respondents Agreed that this factor enabled them to persist towards degree completion. See Table 17.

Table 17

Financial Assistance from Other than Military

Scale	n	%	M (SD)
Strongly Agree	277	36.8	3.80 (1.25)
Agree	216	28.7	
Neutral	106	14.1	
Disagree	80	10.6	
Strongly Disagree	53	7.0	

Survey Question 14 asked respondents to what extent attending a higher education institution that offered distance education courses or degree programs enabled them to

persist towards degree completion. Three hundred twelve (41.5%) participants selected Strongly Agree, 199 (26.5%) participants selected Agree, 149 (19.8%) participants selected Neutral, 55 (7.3%) participants selected Disagree, and 18 (2.4%) participants selected Strongly Disagree. The mean score for SQ 14 was 4.00. Its standard deviation was 1.0. The mean indicated respondents Agreed that this factor enabled them to persist towards degree completion. See Table 18.

Table 18

Distance Education Courses or Programs

Scale	n	%	M (SD)
Strongly Agree	312	41.5	4.00 (1.0)
Agree	199	26.5	
Neutral	149	19.8	
Disagree	55	7.3	
Strongly Disagree	18	2.4	

Survey Question 15 asked respondents to what extent attending a higher education institution that accommodated adult student needs enabled them to persist towards degree completion. Three hundred seven (40.8%) participants selected Strongly Agree, 257 (34.2%) participants selected Agree, 126 (16.8%) participants selected Neutral, 28 (3.7%) participants selected Disagree, and 16 (2.1%) participants selected Strongly Disagree. The mean score for SQ 15 was 4.10. Its standard deviation was .96. The mean indicated respondents Agreed that this factor enabled them to persist towards degree completion. See Table 19.

Survey Question 16 asked respondents to select any (and all) choices provided that impacted their Strong Agreement or Agreement with SQ 15. The following numbers and percentages were based on 564 participants who selected Strongly Agree or Agree with SQ 15. Four hundred ninety-seven (88.1%) respondents selected “flexible course

Table 19

Higher Education Institution that Accommodates Adult Student Needs

Scale	n	%	M (SD)
Strongly Agree	307	40.8	4.10 (.96)
Agree	257	34.2	
Neutral	126	16.8	
Disagree	28	3.7	
Strongly Disagree	16	2.1	

schedules (times offered, locations, including online),” 347 (61.5%) selected “availability of financial aid,” 322 (57.1%) selected “having faculty, advisors, and administrators who are caring,” 264 (46.8%) selected “support services (tutoring, technology, advising, library services),” 240 (42.6%) selected “cost of attendance,” 116 (20.6%) selected “safe school environment,” and 29 (5.1%) provided “other” comments. After the researcher eliminated “other” comments that were previously asked in the survey, one factor was identified: “university reputation.” This factor was previously identified in the literature review as a reason for adults participating in higher education (Noel-Levitz, 2010). As such, it was not identified as a new factor of importance for adults attending colleges that accommodated adult student needs. See Table 20.

Table 20

Reasons for (Strongly Agree or Agree) With SQ15

Factors	n	%
Flexible course schedules (times offered, locations, including online)	497	88.1
Availability of financial aid	347	61.5
Having faculty, advisors, and administrators who are caring	322	57.1
Support services (tutoring, technology, advising, library services)	264	46.8
Cost of attendance	240	42.6
Safe school environment	116	20.6
Other	29	5.1

Survey Question 17 asked respondents to what extent being able to engage with other adult learners enabled them to persist towards degree completion. One hundred twelve (14.9%) participants selected Strongly Agree, 303 (40.3%) participants selected Agree, 242 (32.2%) participants selected Neutral, 52 (6.9%) participants selected Disagree, and 21 (2.8%) participants selected Strongly Disagree. The mean score for SQ 17 was 3.59. Its standard deviation was .93. The mean indicated respondents Agreed that this factor enabled them to persist towards degree completion. See Table 21.

Table 21

Engage with Other Adult Learners

Scale	n	%	M (SD)
Strongly Agree	112	14.9	3.59 (.93)
Agree	303	40.3	
Neutral	242	32.2	
Disagree	52	6.9	
Strongly Disagree	21	2.8	

Survey Question 18 asked respondents to what extent having reliable and affordable childcare enabled them to persist towards degree completion. One hundred ten (14.6%) participants selected Strongly Agree, 81 (10.8%) participants selected Agree, 370 (49.2%) participants selected Neutral, 75 (10%) participants selected Strongly Disagree, and 92 (12.2%) participants selected Strongly Disagree. The mean score for SQ 18 was 3.06. Its standard deviation was 1.15. The mean indicated respondents felt Neutral that this factor enabled them to persist towards degree completion. See Table 22.

Survey Question 19 asked respondents to briefly describe any other factors (not previously mentioned in the survey) that contributed to their persistence to earn a degree. After recording each comment, the researcher eliminated duplicate comments asked in

Table 22

Having Reliable and Affordable Childcare

Scale	n	%	M (SD)
Strongly Agree	110	14.6	3.06 (1.15)
Agree	81	10.8	
Neutral	370	49.2	
Disagree	75	10.0	
Strongly Disagree	92	12.2	

the survey questions and then clustered their comments. The following clusters of persistence factors for earning a college degree and the number of spouses who commented to each factor emerged (n=20). Eighteen (90%) respondents commented on their “self-motivation and determination,” and two respondents (10%) commented on their “total investment thus far” (too much financial loss if they quit now). These additional factor comments made by the respondents were not recognized as new persistence factors that enabled an adult to earn a college degree since they were identified in the literature review. Considering that these factors were not included in this study’s regression analysis, further examination of these factors in future studies may be warranted. Table 23 includes the respondents’ comments aligned with the persistence factor identified in the literature review.

Table 23

Other Persistence Factors (not mentioned in the survey)

Other Factors	Previous Study	n	%
Self-motivation/determination	Self-motivation (McGivney, 2004)	18	90
Total financial investment	Cost/benefit (Kember, 1995)	2	10

Independent Variable Measures

Survey Question 20 asked respondents to rate their motivation level to earn their degree. Five hundred eleven (68%) participants selected Strongly Motivated, 195 (25.9%) participants selected Motivated, 14 (1.9%) selected Neutral, nine (1.2%) selected Not Motivated, and two (.3%) selected Strongly Not Motivated. The mean score for SQ 20 was 4.65. Its standard deviation was .61. The mean indicated that respondents were Strongly Motivated to complete their college degree. See Table 24.

Table 24

Motivational Level for Degree Completion

Scale	n	%	M (SD)
Strongly Motivated	511	68.0	4.65 (.61)
Motivated	195	25.9	
Neutral	14	1.9	
Not Motivated	9	1.2	
Strongly Not Motivated	2	.3	

Survey Question 21 asked respondents to rate how confident they were in their persistence to earn their degree. Six hundred twenty (82.4%) participants selected Strongly Confident, 0 (0%) participants selected Confident, 111 (14.8%) participants selected Neutral, three (.4%) participants selected Not Confident, and zero (0%) participants selected Strongly Not Confident. The mean score for SQ 21 was 4.69. Its standard deviation was .74. The mean indicated that respondents were Strongly Confident that they would earn a college degree. See Table 25.

Demographic Questions

Survey Question 22 asked respondents to identify their gender. There were 705 (96%) female participants and 29 (4%) male participants.

Table 25

Confidence Level for Persistence to Earn a College Degree

Scale	n	%	M (SD)
Strongly Confident	620	82.4	4.69 (.74)
Confident	0	0	
Neutral	111	14.8	
Not Confident	3	.4	
Strongly Not Confident	0	0	

Survey Question 23 asked respondents to identify how many semesters or quarters they had continuous enrollment pursuing their college degree (including summer terms). Thirteen (1.7%) participants selected zero semesters or quarters, 131 participants (17.4%) selected one to two semesters or quarters, 180 (23.9%) participants selected three to four semesters or quarters, 138 (18.4%) participants selected five to six semesters or quarters, 95 (12.6%) participants selected seven to eight semesters or quarters, and 176 (23.4%) participants selected nine or more semesters or quarters. The mean score for SQ 23 was 3.9. Its standard deviation was 1.5. The mean indicated that the average number of semesters or quarters of continuous enrollment was four (approximately two years).

See Table 26.

Table 26

Number of Semesters or Quarters of Continuous Enrollment

Scale	n	%	M (SD)
0	13	1.7	
1-2	131	17.4	
3-4	180	23.9	3.9 (1.5)
5-6	138	18.4	
7-8	95	12.6	
9 or more	176	23.4	

Multiple Regression Analysis

To determine the answer to RQ₁, What factors motivated military spouses to earn a college degree?, the researcher conducted a multiple regression analysis using the following eight variables: influence of other people, college degree is a necessary requirement, job advancement opportunities, increased social status, college/university accommodates my developmental needs, personal fulfillment/satisfaction, earn more money, and learning for the sake of learning. The regression model helped predict motivation, $R = .44$, $R^2 = .19$, $F_{(8,712)} = 21.27$, $p < .001$. Using a minimum significance level of $p < .05$, the predictors for motivation were as follows: “For the personal fulfillment/satisfaction I gain from having earned a college degree,” $B = .27$, $t(712) = 7.46$, $p < .001$; “Because it is a necessary requirement for the career I plan on pursuing,” $B = .16$, $t(712) = 4.07$, $p < .001$; “Because I enjoy learning for the sake of learning,” $B = .15$, $t(712) = 4.29$, $p < .001$; and “The college/university accommodates my developmental needs,” $B = .12$, $t(712) = 3.44$, $p < .001$.

Next, in order to determine what factors enabled military spouses to persist in earning a college degree? (RQ₂), the researcher used the following seven variables: having support and encouragement from other people, having financial assistance from the military, having financial assistance from other than the military, having distance education courses or degree programs, attending an institution that accommodates adult student needs, being able to engage with other adult learners, and having reliable and affordable childcare. The regression model was not a significant predictor of persistence, $R = .113$, $R^2 = .01$, $F_{(7,711)} = 1.32$, $p = .239$. Using a minimum significance level of $p <$

.05, the only predictor for persistence was “support and encouragement from other people (family, friends, or co-workers),” $B = .07$, $t(711) = 2.00$, $p = .046$.

In order to determine an answer to the third research question, What factors needed to be known by colleges and universities to assist military spouses in earning a degree? (RQ₃), the results of the multiple regression analysis were reviewed. Only factors meeting the $p < .05$ significance level were used to determine what factors needed to be known by institutions of higher education. Four factors were identified as predictors of motivation: personal fulfillment/satisfaction, requirement for career, learning for the sake of learning, and the college/university accommodates my developmental needs. One factor was identified as a predictor of persistence: support and encouragement from other people (family, friends, or co-workers).

Further Analysis

There were 705 (96%) female participants and 29 (4%) male participants. The researcher conducted a t -test to determine any difference in motivation by gender. Due to a violation of the Levene's test of equal variances (Meyers, Gamst, & Guarino, 2006) there was no significant effect on motivation by gender $t(28.85) = 1.73$, $p = .10$. The mean for females was 4.66 (SD = .59), and the mean for males was 4.34 (SD = .97). The researcher then conducted another t -test to determine any difference in confidence by gender. Results revealed no significant effect on confidence by gender $t(732) = -.29$, $p = .77$. The mean for females was 4.68 (SD = .74), and the mean for males was 4.72 (SD = .70). The researcher analyzed the additional factor comments for SQ 10 and SQ19 by gender and did not determine any significant points made by the males that were different from the female military spouses' additional factor comments.

Summary

This chapter presented the findings from this study with the focus of answering RQ₁: What factors motivated military spouses to earn a college degree?, RQ₂: What factors enabled military spouses to persist in earning a college degree?, and RQ₃: What factors needed to be known by colleges and universities to assist military spouses in earning a college degree? The data analysis included 752 (n=752) military spouses who participated in answering the online survey questions concerning their motivation and persistence to earn a college degree.

Descriptive statistics for Survey Questions (2-9) addressed RQ₁, What factors motivated military spouses to earn a college degree? Six factor means ranged from 3.84 to 4.75 indicating agreement or strong agreement with these factors contribution towards motivation. See Table 27.

Table 27

Motivational Factors for RQ₁

Factors	M (SD)
Personal fulfillment/satisfaction	4.75 (.50)
Necessary requirement for career	4.65 (.69)
Job advancement opportunities	4.61 (.70)
Earn more money	4.40 (.75)
Learning for the sake of learning	4.09 (.89)
College/university accommodates developmental needs	3.84 (.91)

An open-form survey question (SQ 10) resulted in a total of 183 other comments that spouses believed were motivating factors. The comment “being a role model for my children” was the comment most often mentioned as a motivating factor.

Next, descriptive statistics for Survey Questions (11-15, 17-18) addressed RQ₂, What factors enabled military spouses to persist in earning a college degree? Five factor means ranged from 3.59 to 4.25 indicating Agreement or Strong Agreement with these factors contribution towards persistence. See Table 28.

Table 28

Persistence Factors for RQ₂

Factors	M (SD)
Support and encouragement from other people	4.25 (.85)
Higher education institution accommodates adult needs	4.10 (.96)
Distance education courses or degree programs	4.00 (1.00)
Financial assistance from other than the military	3.80 (1.25)
Engage with other adult learners	3.59 (.93)

Survey Question 16 allowed respondents to select reasons for agreement with SQ 15 (attending a higher institution that accommodates adult student needs). The choices in SQ 16 were not included in the multiple regression analysis. This question was a tool used to further clarify how an institution accommodated their adult student needs. Number of selections and percentages were reported for each reason listed and “other” factors were recorded. Flexible course schedules, availability of financial aid, and having faculty, advisors, and administrators who are caring were the main reasons selected.

An open-form survey question (SQ 19) resulted in a total of 29 other comments that spouses believed were persistence factors. Self-motivation and determination was the comment most often reported. For SQ 20, military spouses indicated on the independent variable measure that they were strongly motivated to earn a college degree. Military spouses indicated on the independent variable measure (SQ 21) that they were strongly confident that they would persist to earn a degree.

A multiple regression analysis was performed to answer RQ₁ and RQ₂. Results identified four variables as predictors of motivation with significance at the $p < .05$ level (personal fulfillment/satisfaction, college degree is a necessary requirement, learning for the sake of learning, and college accommodates my developmental needs). Only one persistence variable was identified as significant at the $p < .05$ level (support and encouragement from other people).

Research Question 3, What factors needed to be known by colleges and universities to assist military spouses in earning a degree?, was dependent upon the results from the multiple regression analysis. Those factors that emerged as significant for motivation (personal fulfillment/satisfaction, career requirement, learning for the sake of learning, the college/university accommodates my developmental needs) and persistence (support and encouragement from other people) were identified as the factors that needed to be known by colleges and universities. These factors and their importance to colleges and universities with military spouse populations were further addressed in Chapter V, Summary, Conclusions, and Recommendations.

CHAPTER V

Summary, Conclusions, and Recommendations

This chapter summarized the study. This included a restatement of the problem, research questions, limitations, and a brief description of the population. Significant points from the literature review were followed by a review of the methodology, instrument design, data collection and statistical procedures. Conclusions were drawn for each of the research questions and outcomes were explained. This chapter concluded with recommendations based on the results of the study and suggestions for future research.

Summary

The problem of the study was to determine factors that motivated and enabled military spouses to earn a college degree. Three research objectives guided this study: (1) What factors motivated military spouses to earn a college degree? (2) What factors enabled military spouses to persist in earning a college degree? and (3) What factors needed to be known by colleges and universities to assist military spouses in earning a college degree?

Limitations for this study consisted of including only DoD military spouses who were currently enrolled in one of four participating colleges surveyed during the fall 2011 semester. Data did not include Coast Guard, National Guard, or Reserve spouses. Military spouses who attained their final college degree goal, and/or those who were not currently enrolled in higher education, were not included in this study. This study measured motivation and persistence during the fall of 2011 as opposed to over a period of time.

The research population consisted of military spouses enrolled in one of the following four post-secondary education institutions during the fall 2011 semester. One university was an online university located in the Midwest, one university was located in southeastern North Carolina, another university was located in eastern Virginia, and the community college was located in North Carolina.

The literature review began with an examination of the benefits provided to spouses of U.S. service members. Two educational benefits were specifically highlighted, MyCAA and the transferability of the Post-9/11 GI Bill. Eligible military spouses could use these financial benefits to earn a college degree or licensing credential. These benefits were implemented to assist military spouses whose lifestyle negatively affected their employment and educational opportunities (Harrell et al., 2004). In 2009, military spouses were using MyCAA benefits at unprecedented levels. The program became so popular that DoD reviewed and realigned the program to ensure its sustainability. Changes to the program included limiting eligibility requirements to certain ranks and reducing the maximum financial benefit to \$4,000.

With the growth of military spouses pursuing higher education, adults' motivation to earn a degree was reviewed. Adults had complex lives and challenges unlike the traditional campus student. Motivations to pursue higher education were as multi-faceted as their complex lives. Early research by Houle (1961) stated that reasons for participation could be to pursue a goal, an activity, or learning for the sake of learning. Other researchers stated that multiple factors such as changes in family situations, occupation, and personal factors were motivators to seek higher education. Post-secondary education institutions offering degree programs that included convenience of

time and place, flexibility of program, and financial aid were other motives for adults to earn a degree (Noel-Levitz, 2010).

Multiple roles and competing demands made it difficult for adult students to persist towards degree completion. Adult persistence was reviewed beginning with a definition of persistence as success towards attainment of academic goals, regardless of attendance at multiple institutions or cycles of engagement and disengagement from colleges (Hensley & Kinser, 2001). Traditional student persistence models had limited applicability to nontraditional student persistence (Maxwell, 1998; Rendon, Jalomo, & Nora, 2000). Traditional student persistence relied on campus involvement whereby many adult students had limited interaction with the college. Adult models of persistence included other variables such as support systems outside of college (family, friends, and co-workers), the availability of financial aid, and childcare resources. Distance education persistence was reviewed since nontraditional students were more likely to participate in distance education than other students. The flexibility and convenience of asynchronous courses enabled those with job responsibilities and children to participate unlike traditional on campus classes. However, drop-out rates for distance learning courses were higher than face-to-face on campus courses (Diaz, 2002; Levy, 2007; Parker, 1999). Lack of persistence in distance education courses may be due to monetary costs, family issues, feelings of isolation, and lack of self-discipline.

The literature review ended with a review of adult needs and barriers in higher education. Situational barriers such as work, marriage, children, and financial strains made it difficult for older students to complete their studies (Fairchild, 2003; Jacob & King, 2002). Post-secondary institutional barriers also hindered the success of adult

students. Some of the needs expressed by adult students to remove institutional barriers included extended faculty hours and convenient classes. Since adult students were concerned with time-management, addressing institutional barriers was important for adult student success.

The instrument design consisted of a survey developed from the literature review including other studies seeking similar information (Aslanian & Brickell, 1980; Broekemier, 2002; Chartrand, 1992; Houle, 1964; Kasworm & Blowers, 1994; Kinser & Deitchman, 2007; Lange, 1986; Noel-Levitz, 2010). Research variables were identified and aligned to answer the research questions. Research Question 1 independent variables for motivation included: influence of other people (family, friends, or co-workers), college degree is a necessary career requirement, job advancement opportunities, increased social status, college/university accommodates my developmental needs, personal fulfillment/satisfaction, earn more money, and learning for the sake of learning. Research Question 2 independent variables for persistence included: support and encouragement from other people (family, friends, or co-workers), financial assistance from the military, financial assistance from other than the military (loans, grants, scholarships, family, or employer), distance education courses or programs, higher education institution accommodates adult student needs, engage with other adult learners, and having reliable and affordable childcare. The dependent variable was to earn a degree.

The survey consisted of closed-formed Likert-scale questions, open-form questions, and demographic questions. The validity of the survey was strengthened through a pilot study. Five experts in the field of adult education reviewed the survey and

provided feedback to the researcher who made appropriate changes where necessary. A pilot test of the survey with five military spouses was then conducted to verify their understanding of the questions, ensure the logistics of the electronic survey had no perceived technical problems, and test for reliability of responses. Using the review and analysis of the feedback from the experts and students, a final survey was developed for the study.

Data collection required the assistance of registrars and advisors from the four participating colleges to assist with the collection of student email addresses of currently enrolled military spouses. Some colleges were able to identify their military spouse population, and other colleges could only identify their military dependent population. Measures were employed to invite only military spouses to partake in completing the survey. The invitation to participate in the study included an introduction, purpose, and an electronic link to complete the survey. All students were given assurances by the researcher that identities and personal information would be anonymous and participation was voluntary. The number of surveys sent was 3,228, resulting in 752 completed surveys, with a response rate of 23% which was a significant sample (Bartlett, Kotrlik, & Higgins, 2001; Sapsford, 2007) to use for making projections about this population.

The methods and procedures used to answer the research questions consisted of descriptive analysis for Likert-scale survey questions. This included reporting the number of responses, percentages, mean, and standard deviation for each question. For open-form questions, the researcher collected and analyzed all comments, removed duplicates of previously mentioned factors in the survey questions, clustered responses, and included the number of respondents and percentages for each cluster. Multiple regression analysis

was conducted to determine RQ₁, What factors motivated military spouses to earn a college degree?, and RQ₂, What factors enabled military spouses to persist in earning a college degree? Using the results from the statistical analysis, the researcher could answer RQ₃, What factors needed to be known by colleges and universities to assist military spouses in earning a college degree?

Conclusions

This study examined the factors that motivated military spouses to earn a college degree and the persistence factors that enabled military spouses to earn a college degree. The findings of the data collected provided the factors that needed to be known by colleges and universities to assist military spouses in earning a college degree. Upon examination of the results from the descriptive and multiple regression analysis statistics used to answer RQ₁ and RQ₂, the following conclusions emerged.

Research Question 1 was, “What factors motivated military spouses to earn a college degree?” Study findings using descriptive statistics indicated that military spouses Strongly Agreed that personal fulfillment/satisfaction ($M = 4.75$), necessary requirement for career ($M = 4.65$), and job advancement opportunities ($M = 4.61$) were motivational factors for earning a college degree. Military spouses Agreed that earning more money ($M = 4.40$), learning for the sake of learning ($M = 4.09$), and college/university accommodating developmental needs (3.84) were motivational factors for earning a college degree. Military spouses had internal motivational reasons for earning a degree such as personal fulfillment/satisfaction and learning for the sake of learning. They also had external motivators for earning a degree that were career related such as: requirement, advancement, or earn more money. These data are congruent with previous

research acknowledging career and personal growth reasons as the most often selected motivators for pursuing higher education (Pourchot, 1999). The institution of higher education also played a role in a military spouse's motivation to earn a degree to the extent that they accommodate their developmental needs. How colleges and universities accommodated their needs was further reported in Research Question 2.

The study considered eight motivation variables that were derived from the review of literature on adult motivation. The following variables in this study were not significant predictors of motivation for this research study's military spouse students: the influence of other people (family, friends, or co-workers) ($p = .095$); job advancement opportunities will increase after I earn my degree ($p = .072$); the increased social status I will have after I earn my degree ($p = .906$); and because I can earn more money with a college degree ($p = .135$). Although previous studies suggested these variables were important to adult motivation, they were not significant predictors of motivation for military spouses earning a college degree.

Multiple regression analysis identified the factors that significantly predicted military spouse motivation, ($R = .44$, $R^2 = .19$, $F_{(8,712)} = 21.27$, $p < .001$ accounting for 19% of the variance). Four factors emerged as being significant at the $p < .01$ level. The four factors were "personal fulfillment/satisfaction," $B = .268$, "college degree is a necessary requirement for the career I plan on pursuing," $B = .161$, "learning for the sake of learning," $B = .150$, and "the college/university accommodates my developmental needs," $B = .122$.

Two of the four significant predictors were intrinsic/internal motivators towards personal growth (personal fulfillment/satisfaction and learning for the sake of learning),

while the other two significant predictors were extrinsic/external motivators (college degree is a necessary requirement for the career I plan on pursuing and the college/university accommodates my developmental needs). These results support previous research that adult motivation to participate in higher education can be either extrinsic or intrinsic (Kasworm, 1990; Morstain & Smart, 1974; Smart & Pascarella, 1987).

Past studies indicated that when adults had options to select multiple reasons for participation in higher education (and are not restricted to selecting the single most important motive), respondents often chose both career-related (extrinsic) and personal growth (intrinsic) reasons (Pourchot, 1999) as supported by this research. When adults were restricted to choose the single most important motivator for participation in higher education, career-related motives were consistently revealed (Merriam et al., 2007). For military spouses in this study, results revealed that personal fulfillment ($B = .268$) was a stronger predictor than career related motivation ($B = .161$). This finding is incongruent with previous findings on adult motivation to earn a college degree (Merriam et al., 2007).

When respondents had the option of providing additional motivational factors (not previously mentioned in the survey), 85 (46.4%) out of 183 comments stated that “being a role model for their children” motivated them to earn a college degree. Twenty-seven (14.7%) respondents commented that “helping/contributing to the family,” 19 (10.3%) commented on being able to “support family if something should happen to their service member,” and 12 (6.5%) commented on “supporting their service member after transition from a military career,” motivated them to earn a college degree. These additional factor

comments made by the respondents were not identified as new categorical orientations or motives since they were previously identified in the literature review as motivating factors for adults pursuing higher education (Aslanian & Brickell, 1980; Burgess, 1971; Kaplan & Satiel, 1997; Swenson, 1998). The comments most often reported as motivating factors acknowledged the “family” in some context. Together, 143 (78%) of these additional comments indicated the significance of contributing to the family’s well-being, in some capacity, as an important motivating factor for earning a college degree. This factor should be further analyzed in future research studies pertaining to military spouses enrolled in post-secondary education.

Research Question 2 was, “What factors enabled military spouses to persist in earning a college degree?” Study findings using descriptive statistics indicated that military spouses Agreed that support and encouragement from other people ($M = 4.25$), higher education institution accommodates adult needs ($M = 4.10$), distance education courses or degree programs ($M = 4.0$), financial assistance from other than military ($M = 3.80$), and engagement with other adult learners ($M = 3.59$) were persistence factors for earning a college degree. With the exception of support and encouragement from other people, military spouses Agreed with four factors that enabled them to persist towards degree completion that were directly related to college/university services or program offerings. Adult persistence patterns can be awkward because of their complex roles (McGivney, 2004) which may conflict with their degree completion. The importance of distance education may be a mode of course or program delivery that can help strengthen military spouses’ college persistence patterns. By participating in distance education courses or programs, persistence towards degree completion can continue regardless of

relocation, which occurs frequently in a military lifestyle. Since adults were more likely to participate in distance education than other students (Ashby, 2002; NCES, 2002), engagement with other adult learners would most likely occur as well. However, distance learning courses have higher dropout rates than traditional courses (Diaz, 2002; Levy, 2007; Parker, 1999) due in part to monetary costs and family issues (Darkenwald & Valentine, 1985; Merisotis & Phipps, 1999). Having more support and encouragement from family, as well as financial aid opportunities available, may reduce the dropout rates in distance education courses of which military spouses are enrolled. The importance of colleges and universities services and programs offered contributing to military spouses' degree completion persistence is evident from the above descriptive statistics for these factors. The importance of institutional offerings towards military spouses persistence towards degree completion can be further underscored by a finding in Research Question 1 whereby military spouses Agreed that the college/university accommodating developmental needs ($M = 3.84$) was also a motivating factor to earn a degree.

This study considered seven persistence variables that were derived from the review of literature on adult student persistence. The focus of adult student persistence was further narrowed by only researching military spouses' persistence to earn a college degree. The following variables in this study were not significant predictors of persistence for this sub-group of adult students: financial assistance from the military ($p = .142$); financial assistance from other than military (loans, grants, scholarships, family, or employer) ($p = .512$); attending a higher education institution that offers distance education courses or degree programs ($p = .561$); attending a higher education

institution that accommodates adult student needs ($p = .674$); being able to engage with other adult learners ($p = .344$); and having reliable and affordable childcare ($p = .320$).

The regression analysis did not significantly predict persistence, ($R = .113$, $R^2 = .01$, $F_{(7,711)} = 1.32$, $p = .239$). Included in the analysis were seven independent variables for persistence of which “support and encouragement from other people (family, friends, or co-workers),” $B = .07$, $t(711) = 2.00$, $p = .046$ emerged as the only predictor variable. The significance of this factor was affirmed by Bean and Metzner’s (1985) argument that older students have different support structures than younger students and they draw more support from outside the academic environment when it came to persistence in higher education. Further, Donaldson and Graham (1999) and Park and Choi (2009) stated that support from family, friends, and colleagues was directly correlated to adult learner persistence.

A follow-up question (not included in the regression analysis) asked respondents to identify how colleges or universities accommodated adult student needs. Four hundred ninety-seven (88.1%) military spouses selected flexible course schedules (times offered, locations, including online), 347 (61.5%) selected availability of financial aid, and 322 (57.1%) selected having faculty, advisors, and administrators who are caring. The literature review highlighted the importance of these persistence factors in helping adult students earn their college degree (McGivney, 2004; Mueller, 2008). Due to a military spouse’s transient lifestyle, and considering the popularity of this selection made by spouses, flexible course schedules may be the most important offering colleges and universities can provide to help them earn their degree.

When respondents had the option of providing additional persistence factors (not previously mentioned in the survey), 18 (90%) out of 20 comments stated that “self-motivation/determination” was a persistence factor for earning their college degree. This comment was not identified as a new persistence factor for adults earning a college degree since it was previously identified in the literature review as a persistence factor (McGivney, 2004). It is evident that this additional persistence factor mentioned by the military spouses was the only internal persistence factor mentioned in the survey. All of the survey factors for persistence were external. This factor should be further analyzed in future research studies pertaining to military spouses enrolled in post-secondary education.

Research Question 3 was to identify “What factors needed to be known by colleges and universities to assist military spouses in earning a degree?” Merriam, Caffarella, and Baumgartner (2007) stated that “since participation in adult education is largely a voluntary activity, knowing who is participating, reasons for participating, and what conditions are likely to promote greater participation can help providers better serve adult learners” (p. 53). In addition, increased accountability demands on higher education institutions from federal policy makers had called for the use of college graduation rates as an indicator of educational quality (Adelman, 1999; American Association of State Colleges and Universities, 2002; Cook & Pullaro, 2010). This study’s results identified the motivational and persistence factors for military spouses earning a college degree that may be useful resources for colleges interested in recruiting and retaining military spouses. These motivational factors (personal fulfillment/satisfaction, college degree is a necessary requirement for my career, learning for the sake of learning, and

college/university accommodates my developmental needs) can be used by post-secondary institutions to develop research-based recruiting and advising tools for military spouses. It is essential that colleges and universities ensure they offer programs and services that support adult developmental needs and recognize what (if any) institutional barriers may prevent successful recruitment and/or retention. Addressing institutional barriers that were concerns of military spouses would help accommodate students by efficiently managing and prioritizing their time which was already divided by multiple competing demands.

Military spouses' persistence factors were different than traditional student persistent factors. Traditional student persistence included greater levels of involvement in the institutional environment (Astin, 1985, 1993). Since military spouses had little time for campus involvement, Graham and Gisi (2000) believed that adult students may engage in social activities beyond the campus with family, friends, coworkers, or other social venues. Support systems had a significant influence on adult student persistence (Chartrand, 1992; McGivney, 2004; Naretto, 1995; Nora, 2001; Park & Choi, 2009; Scott, Burns, & Cooney, 1996) and/or were directly correlated to adult persistence (Donaldson & Graham, 1999). Support and encouragement from others (family, friends, and co-workers) was the only significant predictor of persistence, further supporting that military spouses' persistence was directly related to external factors such as social support beyond the college campus.

College advisors can use the findings from this study as a resource for the development and alignment of advising and counseling strategies. Faculty could use the findings from this study to employ motivational strategies in their program of studies that

may enhance military spouses' success in course completion. Admission counselors and recruiters should consider offering open house events and other college activities that encourage military spouse students to attend these events with family, friends, and co-workers. The people who attend the event with the military spouse would be able to use the knowledge gleaned from the institutional event to further support her/his enrollment and persistence in the college/university.

Recommendations

Based on the findings of this study, several recommendations were made. The first set of recommendations may be a valuable resource for future government sponsored initiatives focused on military family well-being. Other recommendations were made to benefit higher education recruitment and retention efforts targeting military spouses. Finally, recommendations were made for future research pertaining to military spouses.

1. It is recommended that DoD communicate the importance of family support and encouragement for military spouses pursuing higher education. Family Readiness Offices, those charged with the well-being of the military family, and DANTES could address and disseminate this information to service members with spouses earning a college degree. Taxpayer funded programs were provided to military spouses for post-secondary education. Communicating the importance of providing support and encouragement for military spouses earning a college degree may contribute to increased degree completion rates, whose data could be used to uphold the federally funded program incentives and help increase higher education graduation rates for military spouses.

2. It is recommended that career counselors and DoD agencies use the findings from this study (personal fulfillment and learning for the sake of learning as motivators) to communicate to employers the value in hiring military spouses who earned a college degree. Earning a college degree requires demanding work. Military spouses in this study were intrinsically motivated to earn a college degree. Personal fulfillment/satisfaction was the strongest predictor of motivation, with learning for the sake of learning being the third strongest predictor of motivation. Intrinsic motivation can be an attractive quality that many employers desire because of its outcomes—production (Ryan & Deci, 2000). Employee duties and responsibilities can be demanding. Employees who are personally fulfilled when working on challenging assignments and want to learn for the sake of learning are two qualities that employers would desire.

3. Similar to DoD's belief that military spouses' needed portable careers due to their military lifestyle, military spouses may need "portable" and/or convenient degree programs because of their military lifestyle. Flexible course schedules (times offered, locations, including online) was chosen most often by 497 (88.1%) of the spouses, as impacting their agreement with the importance of attending a college that accommodated adult student needs. Since many spouses were discouraged from pursuing education because of the uncertainty and timeliness of future or impending moves (Harrell et al., 2004), distance education options may encourage participation in post-secondary education because of its portability. Harrell et al. (2004) study reported that junior enlisted spouses often returned to their extended families when the service member was away. In this instance, distance education options can fulfill two military spouse needs of

being able to continue their education regardless of location, while receiving support and encouragement from family.

4. It is recommended that colleges/universities attempt to identify their military spouse population. Military spouses will be better served when counselors, advisors, faculty, and other administrators understand what percentage of this population is pursuing a college degree at their institution. Using the findings from this study, colleges can tailor their recruiting and retention strategies to future and current military spouse students.

Future Research

The following recommendations for future research were based on the findings from this study. Limited research-based information on military spouses exists. These studies may be valuable resources for the research community.

1. Results from this study revealed that “support and encouragement from other people (family, friends, or co-workers)” was the only significant predictor of military spouse persistence to earn a college degree. Future studies should attempt to identify what forms of support and encouragement impact military spouses’ persistence (i.e., verbal, financial, emotional, childcare, assistance with household chores), and which category of “other people” (children, spouse, parents, friends, co-workers, or others) have the most influence on military spouses’ persistence towards degree completion.

2. Future studies should consider analyzing motivating factors such as family well-being and persistence factors such as self-motivation/determination to determine their significance to military spouses pursuing higher education. Open-ended questions in this study revealed that family well-being was an important motive for military spouses

earning a college degree. Being a role model for children, contributing to the family, and being able to support the family in case something happened to their service member or after a military transition were specific comments that motivated military spouses to earn a degree. Military spouses also commented on their self-motivation/determination as a factor that helped them persist towards degree completion.

3. It is recommended that a future study be conducted to determine the significance and/or relationship military spouses earning their college degree has on their satisfaction with the military lifestyle. Military spouses' satisfaction with the military lifestyle had significant consequences, not only on the family, but on the long term success of the armed forces recruiting and retention measures (Myers, 2004; Segal, 1986). This study resulted in the emergence of personal fulfillment/satisfaction as the strongest predictor of military spouses' motivation to earn a college degree. The personal fulfillment/satisfaction that motivates military spouses to earn a college degree may be a contributor to military spouses' overall satisfaction with the military lifestyle. The results of such a study could be used to determine continued government funding for military spouse education.

4. It is recommended that future research examine the number of higher education institutions military spouses have attended and to what extent they were unable to complete their degree at each institution. Identifying whether it was due to a situational barrier or institutional barrier would help career counselors and institutions of higher education develop courses and degree options that could be attractive to military spouses to help them complete their college degree at their institution.

5. Harrell et al. (2004) reported that the military lifestyle negatively affected military spouses educational and career opportunities. With the growth of online learners in the U.S. (Allen & Seaman, 2007), military spouses attitudes and opinions regarding their educational opportunities may have changed. Military spouses who are/are not pursuing a college education should be included in a study regarding their educational opportunities. These results might prove useful to government agencies in their development of programs for military spouses and family well-being, as well as provide useful information to institutions of higher education for the development of recruiting strategies.

6. This study reported that a significant motivator for participation in higher education was the belief that a college degree was a necessary requirement for a military spouse's chosen career path. Additionally, the intent of MyCAA funding was to help military spouses finance the cost of college in order for them to obtain portable careers. Examining the following research questions would be useful information to support future funding for military spouses in higher education and/or a review of current career counseling support services offered to military spouses by the DoD. These two research questions could guide the study: How do military spouses determine that a college degree is a necessary requirement for her/his career?, and To what extent do military spouses have clear academic goals aligned with licensure and/or degree requirements for their chosen career path? Degree sought (A.A.S., A.A, B.S.), field of study (education, business, health, technology, etc.), and terminal career goal would be important variables for that study. This information could also help colleges/universities understand if the

results of the study warrant an examination of advising and/or career counseling services at their institution.

7. Since support and encouragement from other people was the only significant predictor of persistence, a study examining the attitudes and opinions of service members towards their spouses' participation in higher education and what types of support and encouragement they provide (if any) may be warranted. Their perceptions combined with the results from this study would be useful data for DoD policy makers concerned with the well-being of the military family and satisfaction with the military lifestyle.

8. Colleges and universities should survey their military spouses to determine if findings from this study reflect the opinions and attitudes of military spouses on their campuses. This information could be a resourceful tool in the alignment and confirmation of current or future institutional services, offerings, and programs that aim to meet the motivational and persistence needs of military spouses enrolled at their college or university.

9. Since military spouses and their service members share the same military culture and similar challenges, a kindred study using service members could provide cumulative information to institutions of higher education for recruitment and retention efforts of military affiliated students, as well as Department of Defense initiatives focused on family readiness and/or educational incentives. Defense Activity for Non-Traditional Education Support (DANTES) Third Party-Assessment contractors whose purpose is to assess and assist in the improvement of the quality of off-duty post-secondary educational programs and services would also benefit from a replicated study using active duty service members.

10. Lastly, previous studies suggested, and this researcher affirmed, that more research on persistence of other nontraditional sub-groups in higher education is recommended. Many of the studies on retention literature were built upon the traditional view of students. Nontraditional student enrollment was increasing significantly, and nontraditional students were less likely to persist in higher education compared to traditional students. Factors that enable persistence in higher education may be different for other sub-groups of nontraditional students, e.g., commuters, military affiliated, distance learners, social, ethnic, gender. Targeting specific variables related to individual sub-groups would be more relevant to understanding their needs.

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Appendix A

Initial Student Survey (Before Pilot Study)

Motivational and Persistence Factors for Military Spouses' Earning a Degree at a Post-Secondary Institution

Purpose: The purpose of this study is to determine the motivational and persistence factors that influence a military spouse (Army, Navy, Air Force, Marines) to obtain a college degree.

Directions: Please read each of the questions carefully and select the answer that best identifies your beliefs. Follow computer screen instructions until you have completed the 20 survey questions. At the end of the survey, you will have an opportunity to enter your name and email address for a chance to win one of five \$50 Visa gift cards. Your participation is entirely voluntary. You may refuse to participate or stop at any time without penalty.

The questions will use the following scale:

1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

1. Please identify your spouse's branch of service.

- A. Army
- B. Marines
- C. Air Force
- D. Navy
- E. Other (National Guard, U.S. Coast Guard)

Respondents who select choice E will be directed to another screen that reads:

Your time and efforts are appreciated. However, data is currently being collected on

military spouses associated with one of the four branches of the U.S. Armed Forces (Army, Navy, Air Force, Marines). Thank you for your interest. Those who select choices A-D will be directed to the survey.

What motivates you to seek a college degree? Motives are defined as reasons people hold for initiating and performing voluntary behavior.

2. The influence of family, friends, or co-workers.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

3. Job advancement opportunities will increase after I complete my degree.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

4. The increased social status I will have after I earn a degree.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

5. The college/university accommodates my needs and educational goals.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

6. Because it is a necessary requirement for the career I plan on pursuing.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

7. For the personal fulfillment/satisfaction I gain from having earned a degree.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

8. Because I can earn more money with a college degree.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

9. Because I enjoy learning for its own sake.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

10. Briefly describe any other factors (previously not mentioned) that contribute to your motivation to earn a degree. If you do not have any other motivators for earning a degree, leave blank and continue.

What factors enable you to persist towards degree completion? Persistence is defined as success towards attainment of academic goals regardless of attendance at multiple institutions or cycles of engagement or disengagement from college.

11. Family, friends, or co-workers encouragement and support.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

12. Financial assistance from the military.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree

5=Strongly Agree

13. Attending a higher education institution that offers distance education courses or degree programs.

1=Strongly Disagree

2=Disagree

3=Neutral

4=Agree

5=Strongly Agree

14. Attending a higher education institution that accommodates adult student needs.

1=Strongly Disagree

2=Disagree

3=Neutral

4=Agree

5=Strongly Agree

If you selected strongly agree or agree to question 14, please select all the choices below that impacted your agreement with this factor.

1=Flexible course schedules (times offered, locations including online)

2=Support Services (tutoring, technology, advising, library services)

3=Having faculty, advisors, and administrators who are caring

4=Availability of financial aid

5=Cost of attendance

6=Safe school environment

7=Other (Please write in your answer)

15. Being able to engage with other adult learners.

1=Strongly Disagree

2=Disagree

3=Neutral

4=Agree

5=Strongly Agree

16. Having faculty and staff who are caring.

1=Strongly Disagree

2=Disagree

3=Neutral

4=Agree

5=Strongly Agree

17. Having reliable and affordable childcare.

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

18. Briefly describe any other factors (not mentioned previously) that contribute/enable you to persist to earn your degree. If you do not have any other persistence enablers, leave blank and continue.

The next two questions ask you to rate your overall opinion on your motivation level and persistence level for degree completion.

19. How would you rate your current motivation level to complete your college degree?

- 1=Strongly Not Motivated
- 2=Not Motivated
- 3=Neutral
- 4=Motivated
- 5=Strongly Motivated

20. How confident are you that you will complete your degree?

- 1=Strongly Not Confident
- 2=Not Confident
- 3=Neutral
- 4=Confident
- 5=Strongly Confident

The last two questions are demographic questions.

21. Please identify your gender.

- A. Female
- B. Male

22. How many semesters have you had continuous enrollment pursuing a degree?

- A. 0
- B. 1-2
- C. 3-4
- D. 5-6
- E. 7-8

F. 9 or more

Thank you for your participation. This completes the survey. If you are interested in entering a drawing for one of five \$50 Visa gift cards, please click continue to enter your name and e-mail address which will be used to notify any recipients of their award in order to obtain a mailing address for the gift-card.

Appendix B

Letter to Subject Matter Experts Requesting Their Participation in Pilot Study

Dear XXXX:

You are being invited to participate in a research pilot study. The purpose of this pilot study is to receive feedback from subject matter experts working in the field of psychology, adult learning, higher education administration, and/or military families. Your expertise will provide valuable insight regarding the survey that will be deployed to military spouse students to determine their motivation and persistence factors for earning a post-secondary degree. This pilot study will be used as partial fulfillment of the requirements for my dissertation research at Old Dominion University, Norfolk, VA.

If you are willing to participate in the pilot study, please reply to this email. Your participation is voluntary. I will then forward an email that will include the (1) statement of the problem, (2) research questions, (3) 22 question survey, (4) research question concept matrix, and (5) survey rating form.

Thank you for your time. I look forward to hearing from you soon.

Sincerely,

Lisa A. Keenan, M.Ed.
Ph.D. Candidate, Occupational and Technical Education
Old Dominion University
Norfolk, VA

Appendix C

Letter to Subject Matter Experts Participating in the Pilot Study

Dear Participant:

Thank you for agreeing to participate in my research pilot study on motivation and persistence factors for military spouses earning a post-secondary degree. The information below will provide more information about the study.

Statement of the Problem

The problem of this study is to determine factors that motivate and enable military spouses to earn a college degree.

Research Questions

RQ₁: What factors motivate military spouses to earn a college degree?

RQ₂: What factors enable military spouses to persist in earning a degree?

RQ₃: What recommendations can be made to colleges and universities to assist military spouses in earning a college degree?

The following information is being attached to this email: (1) research question concept matrix (identifies the motivation and persistence factors used in my research and links them to the empirical research for each factor), (2) survey, and (3) survey rating form.

Upon completion, please return your survey rating form to me at XXXXXXXXX@odu.edu I look forward to your assistance.

Sincerely,

Lisa A. Keenan, M.Ed.
Ph.D. Candidate, Occupational and Technical Education
Old Dominion University
Norfolk, VA

Appendix D

Research Question Concept Matrix Motivation and Persistence Factors for Military Spouses Earning a Post-Secondary Degree

Concept Measured	Observable Measures	Literature Review
RQ ₁ Motivation	Social support	Thompson (1992); Kasworm (2008)
	Job or career	Knowles (1984); Thompson (1992); Horn (1996); West (1996); Broekemier (2002); Kasworm (2002); Noel-Levitz (2010)
	Social status	Morstain & Smart (1974); Smart & Pascarella (1987); Kasworm & Blowers (1994); West (1996); Quinan (1997)
	Institutional support/options	Knowles (1984); Noel-Levitz (2010)
	Career requirement	Burgess (1971); Boshier (1971); Morstain & Smart (1974); Knowles (1984); Thompson (1992); Horn (1996); West (1996); Digilio (1998); Kasworm (2002); Noel-Levitz (2010)
	Personal satisfaction	Sheffield (1964); Burgess (1971); Aslanian & Brickell (1980); Knowles (1984); Smart & Pascarella (1987); Horn (1996); West (1996); Broekemier (2002)
	Earn more money	Knowles (1984); Kasworm (2002); Lange (1986)
	Enjoy learning	Houle (1964); Sheffield (1964); Boshier (1971); Burgess (1971); Morstain & Smart (1974)

 Matrix
 (Continued)

Concept Measured	Observable Measures	Literature Review
RQ ₂ Persistence	Social support	Bean & Metzner (1985); Hiemstra (1993); Kember (1995); Kinser & Deitchman (2007); Naretta (1995); West (1996); Donaldson & Graham (1999); Nora (2001); Carney-Crompton & Tan (2002); McGivney (2004); Park & Choi (2009)
	Financial assistance	Bean & Metzner (1985); Darkenwald & Valentine (1985); Merisoti & Phipps (1999); Fletcher (2002); Jacobs & King (2002); Kinser & Deitchman (2007); Kirk (2002); Rovai (2003); McGivney (2004); Hardin (2008)
	Distance education option	Home (1998); Wolfin (1999); Ashby (2002); Kasworm (2002); NCES (2002); Mueller (2008)
	Institutional support/options	O'Connor (1994); Horn (1996); Nordstrom (1997); Hammer, Grigsby & Woods (1998); Fairchild (2003); Hadfield (2003); McGivney (2004); Hardin (2008)
	Engagement with adult learners	O'Connor (1994); Zelinski (2000); McGivney (2004); Mueller (2008)
	Caring faculty/staff	O'Connor (1994); McGivney (2004); Mueller (2008)
	Childcare resources	Terrell (1990); Fairchild, (2003); Jacobs & King (2002); Rovai (2003)

Appendix E

Pilot Study Survey Rating Form for Subject Matter Experts

Please use this form to evaluate the student survey (attached). Using a scale of 1 to 5, please place an X next to the survey rating for each question.

1. Not Applicable 2. Poor 3. Fair 4. Good 5. Very Good

Include any additional comments that will add to the efficiency in respondents' completion of the survey, clarity of content and visual symmetry.

1. Does the survey fulfill the data collection needs of the study as defined in the statement of the problem and the research questions?

1. Not Applicable 2. Poor 3. Fair 4. Good 5. Very Good

Comments:

2. Were the directions for completing the survey clear?

1. Not Applicable 2. Poor 3. Fair 4. Good 5. Very Good

Comments:

3. Were the statements clear?

1. Not Applicable 2. Poor 3. Fair 4. Good 5. Very Good

Comments:

4. Were there statements that needed revision? Please indicate on the survey.

5. Were there any grammatical or spelling errors? Please indicate on the survey.

6. Are there any motivational factors that need to be added to the survey?

1. Yes 2. No

Comments:

7. Are there any persistence factors that need to be added to the survey?

1. Yes 2. No

Comments:

Your input towards the validity of my survey is very important and appreciated. Please save this form with your ratings and comments, and return to me via email at XXXXXXXX@odu.edu

Thank you.

Lisa A. Keenan, M.Ed.
Ph.D. Candidate, Occupational and Technical Education
Old Dominion University
Norfolk, VA

Appendix F
Revised Student Survey

Motivational and Persistence Factors for Military Spouses' Earning a Degree at a Post-Secondary Institution

Purpose: The purpose of this study is to determine the motivational and persistence factors that influence military spouses of DoD active duty military forces (Army, Navy, Air Force, Marines) to complete college degrees.

Directions: Please read each of the questions carefully and select the answer that best identifies your beliefs. Follow computer screen instructions until you have completed the 23 survey questions. At the end of the survey, you will have an opportunity to enter your name and email address for a chance to win one of five \$50 Visa gift cards. Your participation is entirely voluntary. You may refuse to participate or stop at any time without penalty.

The questions will use the following scale:

5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, and 1=Strongly Disagree

1. Please identify your spouse's branch of service.

- A. Army
- B. Marines
- C. Air Force
- D. Navy
- E. Other (National Guard, Reserves, Coast Guard or I am NOT a military spouse)

Respondents who select choice E will be directed to another screen that reads:

Your time and efforts are appreciated. However, data is currently being collected on

military spouses associated with one of the four branches of the U.S. Armed Forces within the Department of Defense (Army, Navy, Air Force, Marines). Although the U.S. Coast Guard is a branch of the U.S. Armed Forces, this study only focuses on spouses of Department of Defense active duty military forces. Thank you for your interest. Those who select choices A-D will be directed to the survey.

What motivates you to complete a college degree? Motives are defined as reasons people hold for initiating and performing voluntary behavior.

2. The influence of other people (family, friends, or co-workers).

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

3. Because it is a necessary requirement for the career I plan on pursuing.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

4. Job advancement opportunities will increase after I earn my degree.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

5. The increased social status I will have after I earn a degree. (Social status is defined as having prestige and a higher social class)

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

6. The college/university accommodates my developmental student needs.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral

2=Disagree
1=Strongly Disagree

7. For the personal fulfillment/satisfaction I gain from having earned a college degree.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

8. Because I can earn more money with a college degree.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

9. Because I enjoy learning for the sake of learning.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

10. Briefly describe any other factors (not previously mentioned) that contribute to your motivation to earn a college degree. If you do not have any other motivators for earning a degree, leave blank and continue.

What factors enable you to persist towards degree completion? Persistence is defined as success towards attainment of academic goals regardless of attendance at multiple institutions or cycles of engagement or disengagement from college.

11. Support and encouragement from other people (family, friends, or co-workers).

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

12. Financial assistance from the military.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

13. Financial assistance from other than the military (loans, grants, scholarships, family, or employer).

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

14. Attending a higher education institution that offers distance education courses or degree programs.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

15. Attending a higher education institution that accommodates adult student needs.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

16. If you selected strongly agree or agree to question 15, please select all the choices below that impacted your agreement with this factor.

- 1=Flexible course schedules (times offered, locations including online)
- 2=Support Services (tutoring, technology, advising, library services)
- 3=Having faculty, advisors, and administrators who are caring
- 4=Availability of financial aid
- 5=Cost of attendance
- 6=Safe school environment
- 7=Other (Please write in your answer)

17. Being able to engage with other adult learners.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree
- 1=Strongly Disagree

18. Having reliable and affordable childcare.

- 5=Strongly Agree
- 4=Agree
- 3=Neutral
- 2=Disagree

1=Strongly Disagree

19. Briefly describe any other factors (not mentioned previously) that contribute/enable you to persist towards earning your degree. If you do not have any other persistence factors, leave blank and continue.

The next two questions ask you to rate your overall opinion on your motivation level and persistence level for earning your degree.

20. How would you rate your current motivation level to earn your college degree?

5=Strongly Motivated

4=Motivated

3=Neutral

2=Not Motivated

1=Strongly Not Motivated

21. How confident are you that you will persist to earn your college degree?

5=Strongly Confident

4=Confident

3=Neutral

2=Not Confident

1=Strongly Not Confident

The last two questions are demographic questions.

22. Please identify your gender.

A. Female

B. Male

23. How many **semesters or quarters** have you had continuous enrollment pursuing your college degree (including summers)?

A. 0

B. 1-2

C. 3-4

D. 5-6

E. 7-8

F. 9 or more

Thank you for your participation. This completes the survey. If you are interested in entering a drawing for one of five \$50 Visa gift cards, please click continue to enter your

name and e-mail address which will be used to notify any recipients of their award in order to obtain a mailing address for the gift-card.

Appendix G

Letter to Military Spouse Students Requesting Participation in Pilot Study

Dear XXXX,

You are being invited to participate in a research pilot study. The purpose of this pilot study is to receive feedback from military spouse students to determine the understandability and reliability of a survey that will be used in my dissertation research on military spouses motivational and persistence factors for earning a college degree. This pilot study will be used as partial fulfillment of the requirements in the attainment of a doctorate degree at Old Dominion University, Norfolk, VA.

As a participant, you will be asked to complete a 23 question electronic survey. After you complete the survey, you will complete a feedback form that focuses on your ability to understand the purpose of the study, directions, and the clarity of the survey questions.

Your participation is voluntary and your input will be confidential. If you agree to participate, a \$10 Wal-Mart gift card will be mailed to you at an address you provide upon completion of the pilot study.

If you are willing to participate in this pilot study, please reply to this email and I will then forward (1) an email with the survey link and (2) the critiquing form for you to complete and return to me via e-mail at XXXXXXXX@odu.edu

Thank you. I look forward to hearing from you soon.

Sincerely,

Lisa A. Keenan, M.Ed.
Ph.D. Candidate, Occupational and Technical Education
Old Dominion University

Appendix H

Military Spouse Pilot Study Critiquing Form

Please complete the 23 question survey for military spouse motivation and persistence to earn a post-secondary degree. Click on this link to start the survey – [LINK](#). After completing the survey, answer the questions below by providing typewritten detailed comments to each question.

1. Was the purpose of the study evident and clearly explained on the survey? If not, please explain what part(s) of the purpose you did not understand or require more clarification.
2. Were the directions for taking the survey clearly explained? If not, please explain what part(s) of the directions or lack of information regarding directions that were unclear.
3. Did you understand the survey questions? Were there any survey questions that were confusing or unclear? Please list by number and explain what was not clear.
(e.g., Survey question No. 6 left me confused because I do not know if I need a college degree for the career I am pursuing).
4. Did you experience any technical difficulties while taking the survey? If so, please explain what technical difficulty you encountered and how it was resolved or unresolved.

Please provide your name and mailing address to be used to mail the \$10 gift card to you in appreciation for taking time to be a part of this pilot study.

Name:

Mailing Address:

Please save and return this form in an email to XXXXXXX@odu.edu within one week.
Thank you for your time.

Lisa A. Keenan, M.Ed.
Ph.D. Candidate, Occupational and Technical Education
Old Dominion University
Norfolk, VA

Appendix I

Letter to College or University Point of Contact

Date

College or University Name
Point of Contact for Sending out the Survey
Address, City, State, Zipcode

Subject: Request for Permission to Administer Survey to Military Spouses Enrolled at Your Institution

Dear {POC's Name):

My name is Lisa Keenan and I am a Ph.D. candidate at Old Dominion University, Norfolk, Virginia. I am conducting research for my dissertation entitled *Motivational and Persistence Factors for Military Spouses Earning a Degree at a Post-secondary Institution*. This research will focus on (1) the motivational factors for military spouses earning a degree at a post-secondary institution, (2) the persistence factors that enable a military spouse to complete a degree, and (3) recommendations to colleges/universities to assist military spouses in earning a higher education degree. A copy of the Institutional Review Board approval from Old Dominion University is attached.

With your permission, I will forward the e-mail letter (invitation) to participate in the study to you or other designated university official. It is requested that he/she send this e-mail (which contains the survey link from SurveyMonkey™) to all your currently enrolled military spouses at your institution. The survey has 23 questions relating to their motivational and persistence factors for earning a degree (see attachment). The survey may take approximately 10 minutes to complete and students have the opportunity to enter a chance to win one of five \$50 Visa gift cards at the end of the survey. Two weeks after the initial launch of the survey, I will ask that the survey be sent out a final time to glean the greatest number of responses for this research. Student responses will help provide useful information to colleges, universities and government institutions on this topic. Student participation in this study is voluntary and all the results for this survey will be kept confidential. I am available to answer any further questions at XXX XXX-XXXX.

Thank you for your time and attention toward allowing permission to survey the military spouses at your institution. I look forward to hearing from you soon.

Sincerely,

Lisa A. Keenan, M.Ed.
Ph.D. Candidate, Old Dominion University

Appendix J

Email to Military Spouse Students Inviting Them to Participate in the Research Study

Dear Military Spouse Student,

You are being invited to participate in a research study designed to determine the motivational and persistence factors that influence a military spouse to obtain a college degree and identify what your college/university can do to help you persist towards degree completion. This study is being conducted in partial fulfillment of the requirements in the attainment of a doctorate degree at Old Dominion University, Norfolk, Virginia.

As a former military spouse, I take a sincere interest in research matters pertaining to military spouses. Your challenges and lifestyle is unmatched to your counterparts. Very limited research has been completed on military spouses. Thus, by partaking in the survey, you will be providing the research community as well as interested higher education institutions and government agencies with important statistical data.

All participants who complete the survey will be eligible to enter a drawing for a \$50 Visa gift card at the completion of the survey. Five cards of \$50 each will be given away. The drawing will take place in November 2011 and winners will be contacted via e-mail to obtain a mailing address.

Your identity will remain anonymous in all aspects throughout the study and thereafter. Your participation in this study is completely voluntary. You may refuse to participate or stop at any time without penalty. Taking this survey is your consent for the researcher to use the information you provide for this research study. Your identity will be protected and kept in guarantee by the researcher.

If you are a spouse of a Army, Navy, Air Force or Marine service member who is interested in completing the 23 question survey, please click on the SurveyMonkey™ link provided below which will take you to the survey. It should take approximately 10 minutes to complete. At the end of the survey, a link will be provided for those participants interested in entering the drawing.

LINK to the survey

Thank you in advance for your willingness to participate in this survey.

Lisa A. Keenan

Appendix K

Two Week Follow-up Email to Military Spouse Students Inviting Them to Participate in the Research Study if They Have Not Already Participated

Dear Military Spouse Student,

About two weeks ago you were sent an invitation to participate in a research study designed to determine the motivational and persistence factors that influence a military spouse to obtain a college degree and identify what your college/university can do to help you persist towards degree completion. This study is being conducted in partial fulfillment of the requirements in the attainment of a doctorate degree at Old Dominion University, Norfolk, Virginia. In the event you completed the survey, I thank you for your support and participation.

As a former military spouse, I take a sincere interest in research matters pertaining to military spouses. Your challenges and lifestyle is unmatched to your counterparts. Very limited research has been completed on military spouses. Thus, by partaking in the survey, you will be providing the research community as well as interested higher education institutions and government agencies with important statistical data.

All participants who complete the survey will be eligible to enter a drawing for a \$50 Visa gift card at the completion of the survey. Five cards of \$50 each will be given away. The drawing will take place in November 2011 and winners will be contacted via e-mail to obtain a mailing address.

Your identity will remain anonymous in all aspects throughout the study and thereafter. Your participation in this study is completely voluntary. Taking this survey is your consent for the researcher to use the information you provide for this research study. You can choose not to participate in this survey. Your identity will be protected and kept in guarantee by the researcher.

If you have not completed the survey previously, and are a spouse of a Army, Navy, Air Force or Marine service member who is interested in completing the 23 question survey, please click on the SurveyMonkey™ link provided below which will take you to the survey. It should take approximately 10 minutes to complete. At the end of the survey, a link will be provided for those participants interested in entering the drawing.

LINK to the survey

Thank you in advance for your willingness to participate in this survey.

Lisa A. Keenan

VITA

Lisa A. Keenan
108 Fishermans Cove
Sneads Ferry, NC 28460

Education:

Ph.D. 2012, Old Dominion University - Education
M.Ed. 1996, Kutztown University - Curriculum and Instruction
B.S. 1991, West Chester University - Secondary Education, Social Studies

Experience:

2008-Present Chairperson, Advising Veterans, Military Students and Family Members Group, National Academic Advising Association (NACADA)
2006-Present Academic Advisor, Watson School of Education, University of North Carolina Wilmington at Onslow Extension Site
2005-2010 Adjunct Faculty, Watson School of Education, University of North Carolina Wilmington
2003-2005 Recruiter/Mentor, Coalition for Transition to Teaching Federal Grant, Watson School of Education, University of North Carolina Wilmington
2002-2006 Adjunct Faculty, Coastal Carolina Community College, Jacksonville, NC
1993-2002 Teacher, 11th grade social studies, Kutztown High School, Kutztown, PA
1992-1993 Teacher, 9th grade social studies, Governor Mifflin High School, Shillington, PA

College/University Courses Taught:

EDN 495 Effective Teaching Strategies
EDN 203 Psychological Foundations of Education
EDU 116 Foundations in Education
EDU 163 School Learning

College/University Courses/Curriculum Developed:

EDN 495, Educational Psychology on-line module (2005)

Continuing Education Curriculum Developed:

Instructors' Academy faculty training module (2005)
Written and Oral Communication Skills for U. S. Marines (2003)

Professional Organizations:

-American Association for Adult and Continuing Education
-Iota Lambda Sigma, Workforce Development

Community Service

- Onslow County Schools Quality Council (2007-Present)
- U.S. Marine Corps Service Support Schools, Camp Johnson, NC—workshop on “Questioning and Reviewing” (2007)
- U.S. Marine Corps Service Support Schools, Camp Johnson, NC—workshop on “Brain-based Learning” (2003)
- U.S. Marine Corps Service Support Schools, Camp Johnson, NC—workshop on “Strategies to Enhance Student Learning,” Camp Johnson, NC (2004)
- Coach, U.S. Marine Corps Service Support Schools Instructor of the Year Competition (2004) Camp Johnson, NC
- Presidential Classroom Instructor, Washington, D.C. (2004-2008)
- USO Volunteer, Jacksonville, NC (2003-Present)

Presentations (Invited):

(2009, October). *Higher Education and the Military Student*. Veterans Affairs and Department of Defense Mental Health Summit, Washington, DC.

Presentations (Selected):

(2008, October). *Building Advising Support for Military Service Members and Veterans*. National Academic Advising Association (NACADA) National Conference, Chicago, IL.

(2008, May). *What’s on the Horizon in Best Practices Advising?* National Academic Advising Association (NACADA) Region 3 Conference, Columbia, SC.

(2006, September). *Advising Strategies to Keep Your Advisee from Going Adrift*. 24th Annual North Carolina Association of College Teachers of Education (NCACTE) Teacher Education Forum.

(2005, September). *Mentoring Support for Alternative Licensure Teachers Must be Flexible and Provided in a Variety of Formats: Using Technology as the Primary Mode of Mentoring*. 23rd Annual North Carolina Association of College Teachers of Education (NCACTE) Teacher Education Forum.

(2005, December). *Supporting Lateral Entry Teachers: Before, During and After*. 5th Annual North Carolina Mentors Conference, Greenville, NC.

(2004, September). *Mentoring Alternative Licensure Teachers: Successes and Challenges*. 22nd Annual North Carolina Association of College Teachers of Education (NCACTE) Teacher Education Forum, Raleigh, NC.