

The Navy ROTC Experience and College Student Persistence

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## **Dedication**

I dedicate this research paper to my family whose love and support has anchored me throughout the entire process of its development and construction. My wife, Shellea, has been my vessel of faith through 25 years of marriage, graduate school and a full career in the United States Navy. To her I owe my eternal gratitude, love and devotion forever. My children Charlie, Kate and R.J. have continually provided me the strength and encouragement to continue. They have buoyed me through numerous military deployments, overseas assignments and now graduate school. It is their joy in life that is of the utmost importance to me, and it is the joy they bring me that keeps me sailing. Thank you, and I love you all!

## **Abstract**

This paper explores three scholarly perspectives of college student persistence and discusses the relevance of these perspectives in analysis of the Navy Reserve Officer Training Corps (NROTC) experience on campus. The three perspectives vary in significance, but each has applicability informing on the issue of NROTC student persistence. Tinto (1973) provided theories and models that examine the college student experience in relation to persistence; whereas, others inform on pre-college attributes and student aid as they relate to persistence. There is much existing scholarly research on the topic of persistence with respect to traditional college students, but very little that applies these theories and perspectives to NROTC students. This paper presents analysis of each of these three perspectives as they inform on NROTC student persistence, and provides NROTC stakeholders a means of assessing influences on NROTC student persistence decisions within the college environment.

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## **Chapter 1**

### **Introduction**

The Navy Reserve Officers' Training Corps (NROTC) units on campuses across the United States serve as developmental incubators for the majority of active serving officers in the United States Military (Downs, 2009). Dozens of campuses throughout the United States maintain NROTC units that train, develop and educate students enrolled in these programs charged with leading the armed forces in the future (Department of Defense, 2006). With over 2,000 officers trained each year on these campuses, university faculty and staff as well as the US Military are major stakeholders in the education and training of these future military leaders (Department of Defense, 2012). NROTC students are similar to all college students in that some persist, while others selectively drop the program prior to four-year completion (Downs, 2009).

Pascarella and Terenzini (1992), Tinto (1975), and Astin (1998) have informed us thoroughly on the factors leading to traditional college student persistence. However, this particular cadre of NROTC students has additional considerations when assessing factors leading to their college completion that is less informed (Sander, 2013). For instance, the military environment that NROTC students are immersed in brings unique physical, scholastic and leadership requirements during the college years. Also, the post-graduation commitment obligates students to various years of military service after completion of their studies, which may add additional complexity to the college completion equation not common among other traditional students (Department of Defense, 2012).

As tuition and college fees continue to rise, the federal government, colleges and universities are deeply vested in the success of NROTC students (Downs, 2009). The federal government provides scholarship money, while colleges and universities provide campus infrastructure and support for these students throughout their undergraduate experience (Rittenhouse & Kwinn, 2005). Unfortunately, there is a dearth of scholarly research about military and veteran students, including NROTC students on campuses, and even more limited research focused on the persistence of these students within higher education (Sander, 2013). College faculty members and administrators within the field of higher education should care about this topic because of the resources invested in the NROTC (Dao, 2012; Rittenhouse & Kwinn, 2005). Given the vast amount of resources invested in NROTC units across the country, and the large cross section of stakeholders engaged on this issue, the topic of persistence in the NROTC program is worthy of scholarly research. Understanding the factors that contribute to persistence of the NROTC student would benefit all involved and contribute to scholarly research in the area of persistence within the field of higher education.

### **Importance of NROTC on Campus**

The US military understands and appreciates the positive effects of NROTC units as they provide a tremendous cross section of young men and woman to serve as the future leaders of the U.S. Armed Forces (Department of Defense, 2012). The benefits of the program for the military range from gaining diversity, to broadening culture and increasing political integration of the officer corps (Dao, 2012). Exposing future officers to the intellectual virtues of civilian universities improves and broadens

the military mind (Downs, 2009). Previous research suggests the positive attributes, such as discipline and leadership, of officers trained within the NROTC is well understood by senior leaders within the Department of Defense (Downs, 2009; Ireland, 2011). The literature also points out that self-image and commitment to a career role can be bolstered among students who complete NROTC programs (Reich & Rosenberg, 2004).

Campuses also perceive NROTC programs to be of value to their institutions. For example, the Massachusetts Institute of Technology (MIT) pledged to keep the NROTC on campus due to its contribution to preparing the citizen soldier, and to the diversity of thought NROTC students bring to the college (Neiberg, 2000). NROTC may also bring additional resources to campuses. Significant US federal funding is provided to offset costly campus infrastructure and educational requirements by providing military training on campus in accordance with the U.S. Congressional Land Grant Act of 1862. In general, college faculty and staff accept this as advantageous on campuses across the United States (Abrams, 1989).

### **Significance of Topic and Knowledge Gap**

Investigation of this topic suggests a dearth of research in assessment of military and veteran students, including NROTC students on campuses across the nation, especially in the application of research as it applies to college students today (Sander, 2013). Merriam (2009) challenges scholars to envision how broad topics such as this one might be narrowed into focused scholarly inquiries. Given the lack of empirical studies of NROTC programs across the country, studies are needed to examine college student success and persistence while enrolled in NROTC programs.



The aim of this study is to better understand the NROTC experience as it relates to persistence of these students in college. This area of research will assist stakeholders in understanding student persistence through the NROTC program. The role of campus social interaction, financial aid and pre-existing factors with respect to college students within NROTC on campus will be explored in this context.

Few empirical studies exist on the effects of the NROTC on college students today. Outside of the well published topic of gays on campus and the resentment of NROTC for its anti-gay views prior to President Obama's repeal of "Don't ask, don't tell" in 2011, there is very little research on what attributes the NROTC programs and student brings to a campus (Ireland, 2011). Similarly, there exists a vast quantity of scholarly publications on the progressive movements in the late 1960s through the 1980s on the topic of military on campus during and after the Vietnam era (Meiners & Quinn, 2011). What does not exist in any significant quantity is research on the successes (or failures) of NROTC students in their college experiences, particularly as it pertains to their reasons to persist. This domain of study deserves more attention given its importance in creating the next generation of military leadership.

### **Purpose of Study and Research Question(s)**

The purpose of this study is to examine persistence in higher education for students enrolled in an NROTC program. The central research question guiding the study is: *How does the NROTC experience influence student persistence and the pathway to graduation?* In this study, persistence is defined as a traditional college student's ability to persist towards the completion of an undergraduate degree while enrolled in the NROTC Program. Persistence refers to students who remain enrolled in

college for four consecutive years and graduate with an undergraduate degree, as opposed to the concept of “retention” that focuses on a student’s return to college from year to year (Pascarella & Terenzini, 2005). NROTC students are considered traditional college students in accordance with Tinto’s (1975) definition. This is due to NROTC Program entrance requirements stating students must not have reached their 27th birthday by December 31 of year in which graduation and commissioning are anticipated, and that they typically complete an undergraduate degree in four consecutive years (NROTC, 2015).

Secondary research questions for this study include:

- What role do campus environment, involvement and socialization play as they relate to persistence among NROTC students?
- How do pre-college attributes impact the pathway to graduation among NROTC students?
- What are the influences of scholarships or financial aid on college student decisions to persist within the NROTC?

### **Definition of Terms**

Traditional student: Students that matriculate into college within a few years of graduating from high school and achieve college graduation in four consecutive years (Tinto, 1975).

Pre-college attributes: Those attributes or qualities students have established or displayed within, and about them prior to attending college (Astin, 1993).

Persistence: Describes a student's ability to persist towards the completion of a degree or certificate. Additionally, describes the number of students who have graduated or are still enrolled typically after completing at least two consecutive years of college following initial matriculation (Pascarella & Terenzini, 2005).

Retention: The return and enrollment of college students from their first year into their second years of tracking, and then for each year there-after (Pascarella & Terenzini, 2005). Retention Rate: A measure of how many freshmen continue their studies into their sophomore year, and then for each year there-after (Azorus, 2010).

Persistence Rate: A measure of the overall student body that start and then graduate; instead of retention which, as reported in IPEDS (Integrated Post-secondary Education Data System), only measures first year students converted to second year students.

Persistence measures the conversion rate semester to semester for all years until graduation (Azorus, 2010) (IPEDS, 2015).

Transfer-out Rates: Number and percent of students in a first-year (freshman) cohort who did not graduate, but subsequently enrolled at another college or university (Terenzini & Pascarella, 1980).

Dropout: Non-returning students at the end of the measurement period. Also referred to as early departure (Astin, 1993).

Stop-out: Students who stop out and return sometime during their academic career (Astin, 1993).

### **Summary**

Research exists on the positive effects of NROTC programs on college campuses to the US military (Dao, 2012). Past research has analyzed the benefits of the NROTC program for the military that range from diversity, to culture, to political integration of the officer corps (Dao, 2012). Additionally, the NROTC exposes future officers to the intellectual virtues of civilian universities which improves and broadens the military mind (Downs, 2009). Downs (2009), and Ireland (2011) provide the positive attributes, such as discipline and leadership, of officers trained within the NROTC. Reich and Rosenberg (2004) point out that self-image and commitment to a career role can be bolstered among students who complete NROTC programs, and Nieberg (2000) suggests that colleges and universities also perceive NROTC programs to be of value through the diversity of thought NROTC students bring to their institutions. Lastly, Abrams (1989) suggests NROTC brings additional resources to campuses, and that college faculty and staff understand these advantages.

However, Sander (2013) points out that there is a dearth of research on military and veteran students attending college including the effects of NROTC programs on individual college students today and in the colleges as a whole. In other words, what is lacking within the scholarly research on the NROTC is study on the experiences of the students themselves. What are the factors that influence them to stay within the NROTC? Recognizing these gaps in the literature, the contribution of this study is to inform our understanding on the reasons why NROTC students stay to completion. A

review of this subject matter will contribute to past literature by understanding pathways to NROTC student persistence. The central research question guiding this study is: *How does the NROTC experience influence student persistence and the pathway to graduation?*

## **Chapter 2**

### **Introduction**

This chapter begins with a brief history of the NROTC program, followed by a review of scholarly perspectives on persistence in higher education. The Reserve Officers' Training Corps (ROTC) is a college-based program for training commissioned officers of the United States Armed Forces (U.S.C.10, 1956). The Navy Reserve Officers' Training Corps (NROTC), the Air Force Reserve Officers' Training Corps (AFROTC), and the Army Reserve Officers' Training Corps (AROTC) are subsets of the U.S. Department of Defense ROTC program, and are administered separately by each military service on college campuses across the United States (Department of Defense, 2006). Of note, the United States Marine Corps is part of the Department of the Navy, therefore; US Marine Corps officers are trained within the Navy Reserve Officers' Training Corps (NROTC) Units on campus (U.S.C.10, 1956).

The topic of persistence in this study has additional significance in that once an NROTC student persists into the second year of college and accepts the federal financial aid, they are committed to the US Navy or Marine Corps and considered to be part of the U.S. Military (NSTC-OD, 2015). Typically, all NROTC students that continue into the second year of the program intend on persisting to graduation. Upperclassmen do occasionally attrite from the NROTC program due to academic, moral or physical dismissals based on failed university and/or Department of the Navy standards. However, NROTC upperclassmen rarely depart of their own desires. If, for one of these reasons, an NROTC student is dismissed or withdraws from the NROTC program after enrollment in the second year of college, they are required to enlist in

military service, or pay back all financial aid received, plus interest, to the federal government at the behest of the Secretary of the Navy (NSTC-1533/135, (Rev. 09-13)).

The persistence behavior of college students within the NROTC will be the focus of this study. This historical and theoretical context will inform the methodology of this study which appears in Chapter 3.

### **History of NROTC**

The Naval Reserve Officers Training Corps (NROTC) Program was established in 1926 to provide a broad base of citizens knowledgeable in the arts and sciences of Naval Warfare. The program provided an opportunity for young men to undertake careers in the naval profession. In the beginning, there were six NROTC units located throughout the nation. In June of 1930, 126 midshipmen graduated from college, and received commissions in the United States Navy. These were the first officers commissioned through the NROTC (NSTC-OD, 2015). The first officers commissioned through the NROTC at the University of Minnesota took place in 1939 (UMNNROTC, 2012).

The Marine Corps entered the NROTC Program in 1932, offering qualified NROTC graduates commissions in the United States Marine Corps. In 1972, the Secretary of the Navy authorized 16 women to enroll in the program and attend school at one of four colleges. The NROTC Program includes commissioning programs for both the Navy and the Marine Corps as the Marine Corps remains part of the Department of the Navy (Department of Defense, 2006).

NROTC students attend college like other students, but also receive basic military and officer training. The students participate in regular drills during the school

year, and extended active duty training activities during the summer for up to six weeks (NSTC-OD, 2015). NROTC students are considered on active military duty as midshipmen in each of their years of college during this summer training (NROTC, 2015).

There are three basic parts to a student's NROTC commitment in a typical week: At least one day a week is set aside as a uniform day, in which the midshipmen spend several hours attending military training such as inspections, close-order drill practices, and training lectures (either by officers attached to the NROTC unit or guest lecturers). The training is usually in the late afternoon after most classes have ended for the day, or in early mornings before classes (NSTC-OD, 2015). It is common for Marine Option midshipmen and MECEPs to have an additional training period for Marine-specific training (USMC-Public-Affairs, 2015).

Usually two to three physical training sessions are required in a week (depending on the specific NROTC unit), generally early in the morning (NROTC, 2015). It is common for Marine Option midshipmen and MECEPs to have additional physical training periods (USMC-Public-Affairs, 2015).

In addition to those activities, there are regularly scheduled classes in Naval Science that must be taken on top of the usual college course load. The classes are in Naval history, Naval engineering and weapons, leadership and ethics, and other areas. Besides Naval Science classes, the Navy requires its midshipmen to complete two semesters of calculus, two semesters of calculus-based physics, one semester diverse cultures, one year of English grammar and composition, and either National Security Policy or American Military Affairs. The Marine Corps only requires National Security



Policy/American Military Affairs classes for its midshipmen (NSTC-OD, 2015). Table 1 Shows a typical week for NROTC midshipmen. In addition to Table 1, midshipmen are obligated to attend academic, physical or military counselling with class officers according to personal schedules not shown in this table.

Day Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
5 AM		Required					
6	Physical	Military		Physical	Physical		
7	Training	Drill		Training	Training		
8		Period					
9	Naval Sci			Naval Sci			
10	Class	Uniforms		Class			
11		All					
12 PM		Day				Football, or	
1						Parade, or	
2						InterSquad	
3						Comp, or	
4						Rifle Comp	
5	Rifle	or Sword	or Flag	or Parade	Practice		
6							
7	Study		Study	Study	Study hours required all four years for GPA's below 2.5		
8	hours		hours	hours			
9							
10 PM							

Table 1. Depicts the typical week for NROTC students.

The mission of the NROTC Program is to develop young men and women morally, mentally, and physically, and to instill in them those attributes commensurate with officer positions within the Navy and Marine Corps (NROTC, 2015). The program educates and trains young men and women for leadership roles in an

increasingly technical Navy and Marine Corps. Currently there are 61 NROTC units/consortiums hosted at 75 schools throughout the United States. The NROTC Program is available at over 160 colleges and universities that either host NROTC units or have cross-town enrollment agreements with a host university (NROTC, 2015). Selected applicants for the program are awarded scholarships through a highly competitive national selection process, and receive full tuition and other financial benefits, such as stipends, at many of the country's leading colleges and universities (NSTC-OD, 2015). Applicants access NROTC from all 50 States and US Territories. Applicants represent all races and religions demographically, but must be US citizens (Department of Defense, 2012).

NROTC units are organized as battalions, and also include NROTC students under "Marine Option" who will eventually be commissioned as officers in the Marine Corps. Marine NROTC students may be formed in a separate company when the program includes sufficient numbers. All NROTC students are referred to as midshipmen (NROTC, 2015).

In Chapter 1, the significance and relevance of NROTC was discussed as NROTC students are developed into military officers and educated as traditional college students on college campuses across the United States. The opening chapter also noted the paucity of scholarly research on the factors that lead to persistence of military and veteran students, which includes NROTC students on campus (Sander, 2013). The next section articulates scholarly research associated within the topic of student persistence on college campuses. Although, much has been written on the topic of persistence as it applies to traditional college students, the focus of this chapter will

be on the existing research as it informs our understanding of the NROTC experience and college student persistence.

Three specific areas of the persistence literature will be in this reviewed in this chapter. First, the existing research on the environment, involvement and socialization perspective of the college experience as a whole will be examined to theorize why NROTC students persist to graduation. Second, the research on pre-college attributes associated with persistence will be analyzed as it relates to the NROTC experience. Third, the literature on financial aid as it relates to persistence among NROTC students will be reviewed. The application of these perspectives as they relate to the persistence of NROTC students is the basis of the chapter.

### **Persistence Literature in the ROTC Context**

A handful of studies provide scholarly perspectives about persistence as it relates to the unique ROTC context. As noted in the opening paragraph of Chapter 2, the Navy ROTC (NROTC) is a subset of the Department of Defense service wide ROTC program (Department of Defense, 2006). Reich and Rosenberg (2004) point out issues such as self-image and commitment to a career role that can be measured to predict whether students actually remain in ROTC programs. Their article is relevant to this research topic through its evaluation of 23 university students enrolled in the Army ROTC unit at Rutgers University in New Jersey. Reich and Rosenberg (2004) asked these 23 students to describe themselves within 13 selected terms from an ideographically generated list of traits. Among the self-images described were the reflected self-image in the ROTC (the way others see me now in the ROTC), actual career self, and the desired career identity.

This quantitative study employed hierarchical modeling called HICLAS (hierarchical classes) aimed at recovering the underlying structure in a data matrix. The method explored differences among self-images of each of the students studied in predicting intentions to continue in the ROTC program at Rutgers and in predicting behavioral commitment to the ROTC program at the university. The authors found that the reflected self-image/actual career self-discrepancy was the better predictor of intention to continue, and was the only discrepancy score to predict whether or not students actually remained in ROTC (Reich & Rosenberg, 2004). Additionally this quantitative study suggests that the discrepancy between these images of self may inform people's judgment of whether they fit in within an ROTC group (Reich & Rosenberg, 2004). In other words, students' image and sense of belonging with Army ROTC and the institution itself is an important predictor of ROTC program persistence.

DeMoulin and Ritter (2000), used a combined qualitative and quantitative analysis of 154 high school Junior Air Force Reserve Officers' Training Corps (JAFROTC) students and 142 college juniors and seniors inquiring about how they viewed success of individuals in a democracy. This study relied on student interviews and surveys composed of 200 questions to assess the democratic maturity of the selected individuals. The concept of "democratic maturity" comes from John Dewey's definition of a democracy simply stated as "the interdependence of independent individuals" (DeMoulin & Ritter, 2000). The Democratic Maturity Test (DEMO) was created by Cassel and Kolstad (1998) and it measures personal maturity as the basis of "independence" in the Dewey definition (ability to make a living in economic competition).

Part 2 of the test measures Social Integration, and as the "interdependence" portion of the Dewey definition (ability to get along with all kinds of people - different races, religions, and cultures) (Cassel & Kolstad, 1998). The test is designed to assess the degree to which certain critical factors that are essential for effective living and success in a democracy are present in our high school and college programs (DeMoulin & Ritter, 2000). The concept of Democratic Maturity as used by DeMoulin and Ritter (2000) describes a socialization or "fitting in" process students encounter when matriculating into the JAFROTC. In general, JAFROTC and, more importantly, NROTC Units are populated by groups of independent students working collectively in an interdependent environment.

Relying on these concepts, DeMoulin and Ritter (2000) compared sophomores through seniors in high school with college juniors and seniors by interviewing students within both levels to gather data for analysis on the effects of leadership and education, and evaluating scholastic accomplishments (DeMoulin & Ritter, 2000). The study demonstrated through a combination of qualitative and quantitative analysis that JAFROTC fosters "democratic maturity" significantly better at the high school level for students than college programs do at the upper division college level. The concept of Democratic Maturity can help inform our understanding of pathways to completion among NROTC students.

Johnston (2010) conducted research on a U.S. Army ROTC program offering both formal and informal learning experiences and provided social and psychological development variables that contribute to retention (i.e., continuation into the second year of college). This study examined the extent to which the social and psychological

variables, including hardiness, influenced the retention of participants in U.S. Army ROTC in higher education (Johnston, 2010). Surveys were administered to participants in U.S. Army ROTC programs, and the results were analyzed using a logistic regression model to determine the probability of persistence in higher education. The study determined that psychosocial factors and the concept of hardiness played significant roles in student retention within the Army ROTC at The Ohio State University. Hardiness is defined by the author as an attitude and belief system founded in the perspective comprised of commitment (a belief that the activities of life had meaning and value), control (a belief that the individual had the greatest control over the decisions that influenced outcomes in life), and challenge (a belief that life was characterized by change that made it interesting and a source of growth) (Johnston, 2010).

Midshipmen in the NROTC program incur a five year commitment in the US Navy or Marine Corps following their commissioning (Department of Defense, 2006). This commitment is thoroughly explained to every midshipman, and potentially has a bearing on their ultimate decision to persist. As previously discussed in several areas, in general, there is a limited amount of scholarly research with respect to military and veteran students on campus, including literature on the affect this commitment has on NROTC student persistence (Rittenhouse & Kwinn, 2005; Sander, 2013). However, literature from a parallel experience involving federal recruitment programs can be helpful in assessing the effects of compensatory service leading to loan or scholarship forgiveness.

A study in *The Journal of the American Medical Association* (JAMA) states

that there are a number of governmental programs used by Community Health Centers (CHCs) to increase the flow of clinicians to underserved areas, which are widely used by rural and urban grantees alike (Rosenblatt, 2006). This study indicates that rural CHCs have difficulty in recruiting and retaining an adequate workforce. Rural CHCs face some unique recruitment challenges and often lack the services and amenities that are sought by health professionals, factors that have been shown to be relevant to rural workforce recruitment and retention. One of the most effective ways to attract rural health professionals is to offer medical school loan forgiveness to physicians for service in rural and underserved areas (Rosenblatt, 2006). Rosenblatt (2006) states that “of the current rural physician staff, 44.5% are enrolled in one of these loan forgiveness programs” (p. 1045).

Another study in *The Journal of the American Medical Association* suggests that the federal government has played a key role in efforts to encourage primary care physicians and other health care practitioners to work in underserved areas. The most visible federal program has been the National Health Service Corps (NHSC), which supports students and young practitioners with scholarships and loan repayment incentives in exchange for a specified period of work in shortage areas (Pathman, 2000). The NHSC has supported some 20,000 health care practitioners and received wide recognition for its efforts because the loan forgiveness program is widely seen by potential medical students as a way to serve, primarily in underserved areas, and have medical school financially compensated (Pathman, 2000).

Both of these studies from JAMA address the effects of providing academic scholarships for required service of a pre-determined amount of time. Although the

required service discussed is not in the military, the concept of required service associated with academic scholarships is very similar to that of the NROTC program. These JAMA studies address the effects of loan forgiveness on medical students' persistence, therefore, they can be helpful in informing our understanding of the persistence decisions of NROTC students as a parallel experience, and be useful with respect to the research topic.

The work of the scholars in the persistence related literature informs our understanding of persistence within differing ROTC units and parallel environments. This prior research has value to understanding contributors to the question of persistence in similar areas of consideration within ROTC. However, they are limited in that they only explore persistence within the ROTC and related areas in general and not within program specific (NROTC) and experiential contexts. In addition, they are primarily quantitative studies that limit ones understanding about the ROTC experience and how students understand and make meaning of their participation in these programs.

### **Approaches to Studying Persistence in Higher Education**

Scholars focus on various factors that are most influential in helping students persist in college. Some scholars study persistence as a function of the quality of a student's interactions with the academic and social systems of the college (Chickering & Reisser, 1993; Pascarella & Terenzini, 1980; Tinto, 1982). In other words, the accumulations of student experiences within the social context of the college are suggested to be significant factors leading to student persistence. Others offer explanations of persistence by suggesting that students enter college with individual



characteristics that play a more significant role in determining whether a student persists (Astin, 1993; Boyd & Mckendry, 2012; Tierney, 1992). The suggestion from these scholars is that students acquire the ability to persist from something gained prior to their exposure to the social regimen of the college campus and associated college experiences. Finally, others investigate the role that financial aid or scholarship considerations play in determining a student's ability to persist (Bettinger, 2004; Dowd, 2004; Jensen, 1981). This scholarly paradigm would suggest that a student's reception of financial aid to offset the costs of college play an influential role in determining college students' persistence.

### **Three Conceptual Perspectives**

A review of the literature suggests that scholars who study persistence in higher education fall into three overlapping conceptual categories. These categories include the environmental, involvement and socialization perspectives, the pre-college attributes perspective, and the scholarships and financial aid perspective. The balance of this chapter discusses these perspectives as they inform the research question guiding this study.

#### **Environment, Involvement and Socialization Perspective**

**Introduction.** This first grouping of scholars address the issue of persistence by providing analysis of the campus experience through the environment, involvement and socialization process once the student is in college. In this literature review, this perspective represents the leading scholars in the field of persistence as their respective works are internationally acclaimed and understood within higher education as bellwethers on this topic. Well written and oft referenced for over forty years, the

works of these researchers present models and theories that have been tested, and supported over time (Metz, 2002; Metzner & Bean, 1987). The primary scholars in the environment, involvement and socialization grouping include Tinto (1975, 1982, 1987, 2006), Pascarella and Terenzini (1980, 2005), Astin (1985, 1993, 1998), and Chickering and Reisser (1993). How these scholars' research on college student persistence from the environment, involvement and socialization perspective applies to NROTC students' persistence will be aligned with the research question guiding this study. This review begins with a summary of Tinto's work.

**Tinto.** Tinto (1975) provides in-depth analysis of early departure behaviors in higher education, and presented theories and models designed to map out the domain of student persistence and withdrawal from institutions of higher education. Tinto's (1975) scholarly work presents extensive research on college student persistence as a manifestation of interplay between individual commitment to the goal of college and the commitment to the institution. Tinto (1975) presents, in detail, a longitudinal study suggesting student social interaction and commitment during the college years is the key to persistence. The author explained persistence primarily as a function of the quality of a student's interactions with the academic and social systems of the college.

The bulk of Tinto's persistence research over the years was focused on traditional college students (Metzner & Bean, 1987). Traditional college students are typically under 25 years of age, enrolled full time and reside at their college (Metzner & Bean, 1987). With one notable exception, the NROTC is comprised primarily of traditional college students directly from high school, and thus fits this population of study well (Department of Defense, 2006). The notable exception is the minority of

NROTC students that return to college campuses upon being selected for NROTC following initial time as enlisted members within the U.S Navy or Marine Corps. However, even these students are required to complete their undergraduate education in four consecutive years, but their age requirement at commissioning can be extended to 30 for Marine Corps and 31 for Navy enlisted to officer NROTC students (NROTC, 2015; USMC, 2015). As a rule, an unrestricted officer without prior enlisted service must be commissioned by age 27 (Department of Defense, 2006). The entire NROTC program, including scholarships and stipends, is predicated on four-year college completion for all traditional college student participants to meet this military commissioning age requirement (Rittenhouse & Kwinn, 2005). Upon successful four year college completion, the NROTC student receives a commission as an unrestricted officer in either the United States Navy or Marine Corps (NSTC-OD, 2015). Tinto's theories and models on student persistence are potentially applicable to any NROTC program across the country as the majority of NROTC students are traditional college students.

Tinto (1975), (1982), (1987), and (2006) suggest that college is a social system, and that the lack of integration into the social system of the college will lead to low commitment to that social system, and this will increase the probability that individuals will decide to leave college and pursue alternative activities. Tinto (1975) also found that academic integration into the college system is integral in the college students ultimate decision to persist. In other words, commitment to academic achievement can lead to the students overall feeling of purpose in college, which channels into a student's integration into the college life. It is the interplay between individual's

commitment to the goal of college completion, and the commitment to the institution that determines whether the student displays drop out behavior (Tinto, 1975). Tinto's work relates to the current study in that NROTC is its own social system within the college environment, thus, integration within this system is potentially significant to persisting in it. Additionally, the concept of college completion as a goal leading to commissioning as a military officer will be explored as a potential motivating factor in accordance with Tinto's (1975) modeling.

Tinto's (1975), (1982), and (1987) research also suggested that supportive groups within a student's college experience are critical to their social integration within the college environment. This concept includes friendships and associations (Tinto, 1975). Tinto (1975) found that these aspects of the college experience greatly assist with the social integration. Therefore, a student's exposure to and integration with fellow students with similar directions and associations greatly increase the chances of college completion. This literature informs our understanding about how student persistence decisions with respect to the basic military nature of the NROTC on campus fosters esprit-de-corps. The concept of the NROTC unit with one function, one common goal and individual commitment is the hallmark of military education and training (Downs, 2009). Comrades in pursuit of a singular goal enable friendships and associations within the NROTC units (Dao, 2012).

Tinto (1975), (1982), (1987), and (2006) states that academics and faculty interaction with college students have significant bearing on the overall persistence decision. Commitment to academic achievement demonstrates commitment to a goal and to the institution (Tinto, 1975; Braxton, 2000). One of the main contributors to a

student's commitment to academic achievement is their personal involvement with faculty (Tinto, 2006). Specifically, this means that the more a student perceives quality interaction with faculty, the more he/she feels personally committed to the achievement of grades and to their standing in the institution as a whole. This interaction does not mean daily coffee and social interaction between students and faculty (Metz, 2002). It does, however, imply that a respectful dialogue exists between the faculty and student enabling the student to feel satisfied with his educational direction (Metzner & Bean, 1987). The NROTC is designed to provide a manageable student to faculty ratio as to where student-faculty interaction is readily attainable (Rittenhouse & Kwinn, 2005).

Tinto's (1975) work also took into account a variety of other issues that factor into the college student persistence equation. In particular, characteristics of the institution such as the quality of faculty, facilities, and sports programs are part of the modeling equation (Tinto, 1975). Similarly, family issues such as income level, social status and number of siblings are part of Tinto's models and theories (Tinto, 1975). Each of these issues plays a role with respect in the persistence of all college students (Astin, 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 1980; Tinto, 1975).

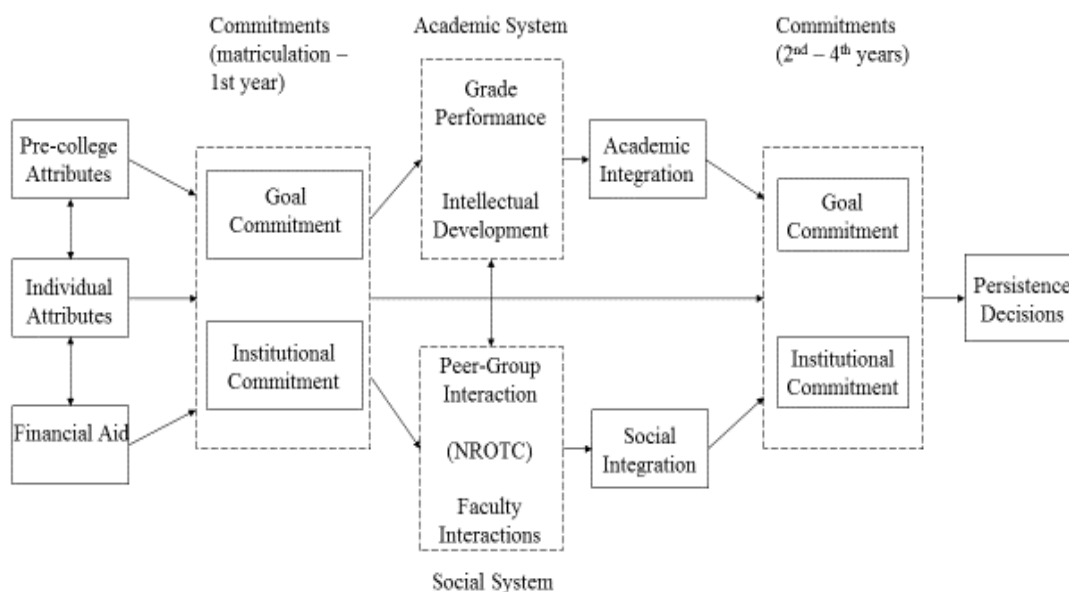


Figure 1. Tinto's (1975) persistence model adapted for NROTC

Tinto's (1975) theoretical model of student persistence, adapted for NROTC students in Figure 1, suggests that the process of persistence decisions within the college years can be viewed as a longitudinal process of interactions between the individual, the academic and environment, involvement and socialization processes of the college and the NROTC unit. It is these goal and institutional commitments that are both important predictors and reflections of the person's experiences in the college environment (Tinto, 1975). It is during this period in which a person's experience in those systems continually modify his/her goal and institutional commitments in ways which lead to persistence to graduation.

**Pascarella and Terenzini.** Next among this perspective, Pascarella and Terenzini (1980) sought to determine whether a multidimensional measure of social

and academic integration based on a Tinto (1975) model of academic and social integration would significantly discriminate between freshman year retention and voluntary early departure. The premise of the research was that a significant portion of student attrition might be prevented through “timely and carefully planned institutional intervention” (Pascarella & Terenzini, 1980, p. 61).

Pascarella and Terenzini (2005) looked closely at traditional college students and provided analysis on nearly fifty years of studies on gains students make during the college years. Their findings are markedly consistent across these decades of research and suggest trends do exist that help one predict college student persistence (Lewis, 1992; Pascarella & Terenzini, 2005). Pascarella and Terenzini (1981) agreed with Tinto (1975) suggesting that the construct of students’ integration into the social and academic systems of an institution are at the conceptual core of Tinto’s model. As previously discussed, NROTC students are primarily traditional college students. As such, their experiences are likely to be similar to the many samples of students observed by Tinto, and Pascarella and Terenzini in their classic research. Pascarella and Terenzini (1981) suggested that the higher the degree of the integration of the individual into the college systems, “the greater will be his commitment to the specific institution and to the goal of college completion” (p. 110). The NROTC program obligates students to fulfill requirements within their military units on campus for at least one full day per week and multiple NROTC specific classes each school year (Department of Defense, 2006). In other words, NROTC students are traditional college students that are immersed into an on campus environment that provides a social and academic structure. In accordance with the persistence theories of this

grouping of scholars, NROTC faculty members mentor, counsel and teach students on a weekly basis enabling the student-faculty relationship to cultivate.

Pascarella and Terenzini (1981) similarly suggested that indicators of social integration include the frequency and quality of contacts with peers, the sense of shared values in non-academic areas, and the involvement in the non-classroom life of the institution. It is this social integration that plays an indicative role in college students' desire to commit to the institution and the goals of that social grouping (Pascarella & Terenzini, 1991; Tinto, 1982). In other words, commitment to the social structures and goals of the institution significantly leads to college student persistence. The NROTC program provides students with deliberate and distinct social, academic and shared values to enrolled students (Rittenhouse & Kwinn, 2005). As such, the exploration of the theories of Pascarella and Terenzini on traditional college student persistence has potential parallels to the persistence decisions of NROTC students.

Pascarella and Terenzini (1991) further suggested scholars no longer regard learning as an act of acquiring or absorbing a set of objectively verifiable facts and concepts and committing them to memory. Instead, these scholars argue that much of a learner's knowledge is actively constructed by the learner personally vested in the college environment (Pascarella & Terenzini, 1991). Furthermore, Pascarella and Terenzini (2005) referred to psychological studies by Erik Erikson (1959), (1963), and (1968) when claiming that the individual's environment shapes the particular character and extent of student development in critical ways. In particular, what happens to a student on campus during the college years is far more the determinant of educational outcomes than anything specific about the institution (Pascarella & Terenzini, 2005).



As described by all scholars within this grouping, it is the experiences within the college environment on campus that most affects the decisions a student will make during their four years on campus (Astin 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 1980; Tinto, 1975). With regard to persistence, the NROTC provides its own brand of environment on college campuses to affect student's educational outcomes.

**Astin.** Another scholar, Astin (1993) offered findings on how students change in college and why they change in their pursuit of college completion. Astin (1993) suggested that student persistence is tied to student involvement and adaptation to the environment during their four years in college. Astin's (1998) analysis of the pre-existing, social and after college factors influencing persistence is discussed within his Input-Environment-Output (I-E-O) theory. Astin's I-E-O research offers an explanation of the puzzle of persistence from multiple paradigms and perspectives.

Astin (1993) utilized the input-environment-output (I-E-O) model as a conceptual guide for studying college student development. *Inputs* refers to the characteristics students enter college with; *environment* refers to the various programs, policies, faculty, peers and experiences to which the student is exposed during college; and *outputs* refers to the students characteristics following exposure to the college environment (Astin, 1993). Astin's I-E-O model crosswalks between two scholarly groupings reviewed for this literature review. In this grouping, Astin's (1993) research on *environment* during the four years of college provides critical modeling for addressing the research question to compare and contrast persistence data of students in the NROTC program. The second application of Astin's (1993) *input* modeling will be

addressed in a following grouping of scholars relevant to this literature review.

Astin's (1993) research and I-E-O modeling theory attempted to explain the effects of environmental influences on student change or growth, focusing on factors in which college faculty and administrators have some programmatic and policy control. Furthermore, Astin (1985) proposed a "theory of involvement" to explain the dynamics of how students change or develop during the college years. Astin's (1985) theory of involvement can be stated simply: "students learn by becoming involved" (p. 133). In concert with the research of Tinto and Pascarella and Terenzini of previous paragraphs, the "E" (or environment) in Astin's (1993) I-E-O theory provides a vehicle in which to assess, compare and contrast those experiences NROTC students encounter during their four years that affect their decisions to persist. As Astin (1993) suggested, it is only those factors that faculty and administrators can affect during the four years in college that are controllable. Although Astin (1993) suggested that many other factors exist that contribute to the overall persistence equation for each and every student, we study those issues we can control as faculty and administrators as to seek improvement in the college experience which can lead to increased persistence. The NROTC program presents a separate form of environment to enrolled students (Downs, 2009). As such, Astin's I-E-O model and theories can potentially inform pathways to predict, assess and improve the NROTC environment and student persistence.

Astin's (1993) research harmonized with Pascarella's and Terenzini's (1980) research, and Tinto's (1975) research in that it emphasizes the criticality of the social interaction of students during the college years. Astin (1993) stated "The single most important environmental influence on student development is the peer group" (p. xxii).

Astin's (1985) "theory of involvement" highlighted the great potential that student involvement has for enhancing most aspects of the undergraduate student's intellectual and intuitive development. Academic performance and retention (persistence) are positively associated with academic involvement, involvement with faculty and with student peer groups (Astin, 1993; 1998). Conversely, a vast spread of student's intellectual and intuitive development is adversely affected by forms of involvement that isolate students from peers or remove the student physically from the campus such as: living at home, commuting, employment off campus and watching television (Astin, 1993). The NROTC program is designed around the establishment of an internal-campus community for the NROTC student (Rittenhouse & Kwinn, 2005). In other words, the NROTC program provides an on-campus student environment that is definable within the frameworks and theories Astin has developed following his many years of research.

**Chickering and Reisser.** Another team of influential scholars, Chickering and Reisser (1993) described institutional influences and broad changes in students as they move through higher education as modeled by Seven Vectors of analysis of student behavior. Chickering and Reisser (1993) published a Seven Vectors analysis of college student persistence describing seven separate steps students' progress through as they relates to social exposure and developmental processes. As such, Chickering and Reisser have common frameworks in presenting analysis on college student persistence with the other researchers in this grouping.

The Chickering and Reisser (1993) Seven Vectors model is predicated on educating the whole student through the understanding of what student development

looks like and how to foster it during the four undergraduate years. Chickering and Reisser (1993) suggested that their model enables higher education practitioners to “view their students, their courses, and their programs more clearly and to use them as beacons of change” (p. 44). The dynamic of college student persistence is studied to assist faculty and administrators in the implementation of programs and practices that facilitate student persistence (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). In other words, it is research such as Chickering and Reisser (1993), as well as the other scholars in this grouping, that allows faculty and administrators to adjust institutional programs to improve levels of persistence for college students during the four years of undergraduate education.

The Seven Vector model, as summarized by Chickering and Reisser (1993) provides college faculty and administrators a tool to analyze the college undergraduate environment and facilitate changes that potentially enhance the students experience and positively affect their ultimate persistence decisions. Chickering’s and Reisser’s (1993) Seven Vectors are summarized as follows:

1. *Developing competence*. Three kinds of competence develop in college – intellectual competence, physical/manual skills, and interpersonal competence (Chickering & Reisser, 1993).

2. *Managing emotions*. Anxiety, anger, fear, hurt, longing, depression, desire, guilt, shame and other emotions have the capability of derailing the educational process if they become excessive and overwhelming (Chickering & Reisser, 1993).

3. *Moving through autonomy toward interdependence*. This step is punctuated by the student’s ability to function with relative self-sufficiency, “to take responsibility

for pursuing self-chosen goals and to be less bound by others opinions” (Chickering & Reisser, 1993, p. 47).

4. *Developing mature interpersonal relationships*. Developing mature relationships involves tolerance and appreciation of differences and the ability to make lasting commitments based on honesty and responsiveness among people. “The shift is from too much dependence or dominance toward an interdependence of equals” (Chickering & Reisser, 1993, p. 48).

5. *Establishing identity*. Development of identity is the process of discovering the kinds of experience and the levels of intensity and frequency of those experiences that bring satisfaction in a safe or destructive fashion (Chickering & Reisser, 1993).

6. *Developing Purpose*. “Developing purpose entails an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and persist despite obstacles” (Chickering & Reisser, 1993, p. 50).

7. *Developing integrity*. Developing integrity involves the establishment of personal values. In this final vector a person learns to use principled thinking when balancing self-interests while forming core values that respect others points of view, and reflect socially responsible behavior (Chickering & Reisser, 1993).

Chickering and Reisser (1993) offered that “human development should be the organizing purpose for higher education” (p. 265). Their basic premise in offering the Seven Vectors as a model for student development is that four-year institutions can have significant impact on student’s development as human beings along the vectors as they are presented (Chickering & Reisser, 1993). Development in an environment that molds students into an understanding of and conformity to the military culture that lies

ahead of them is the objective of the NROTC program (Department of Defense, 2006; Rittenhouse & Kwinn, 2005). Therefore, the Seven Vector model has potential application toward understanding NROTC students' persistence. This is the essence of the environmental concept discussed by all scholars in this grouping. The college, and NROTC environment can be structured and changed to affect the outcomes of the students served.

**Summary.** Each of the scholars from the first grouping addresses the issue of persistence by providing analysis of the campus experience through a socialization or integration process. These studies primarily start from the point that the student enrolls in college. Tinto (1975) developed an explanatory, predictive model of the early departure process which has at its core the concepts of academic and social integration in the institution. The model is longitudinal and regards persistence or dropout behaviors primarily as a function of the quality of a student's interactions with the academic and social systems of the college (Tinto, 1975). Tinto's (1975) model would be applied in this study to determine its effectiveness with this particular cadre of NROTC students. NROTC students' social and integration experiences during the four years on campus are similar to that of traditional college students with some particular differences (Downs, 2009). A determination as to the significance of the Tinto (1975) model in relation to the NROTC students' persistence would be of value as a potential predictive tool for future admissions, and provide needed research (Sander, 2013).

Astin (1993), Chickering and Reisser (1993), and Pascarella and Terenzini (1980) similarly addressed the issue of persistence as a function of the social and integration experience of students while in college. Each of these classic scholars

evaluates the environment college students are exposed to during the college years how this relates to student persistence. The common theme among these scholars is the application of the social and integration experiences of traditional college students as they apply to their persistence decisions. The literature within this scholarly perspective (and common theme) informs on how we understand NROTC student persistence decisions.

### **Pre-College Attributes Perspective**

**Introduction.** A second grouping of scholars' have explored persistence as it relates to characteristics students' possess prior to entering college. This grouping of scholars' research is relevant as it pertains to those factors college students possess prior to entry into a four-year institution that have an effect on their ultimate decision to persist. College students' integration and socialization into the college environment is a significant factor leading to student persistence (Astin, 1993; Chickering & Reisser, 1993; Terenzini & Pascarella, 1980). The pre-existing factors college students' possess at matriculation affect their socialization and integration, and are therefore significant in the persistence equation (Pascarella & Terenzini, 1980; Tinto, 1975). NROTC students are, more broadly, college students, and thus these pre-existing factors are important to examine as it relates to persistence.

**Astin.** Astin (1993) was discussed in the first grouping of scholars when considering the effect of the college environment as it applied to student integration and socialization. Within this grouping of scholars, Astin (1993) is considered a second time through lens of the "I" (or input) in his prolific I-E-O theory. Astin (1993) suggests that his I-E-O model provides educators, students, and policymakers with a

better basis for knowing how to achieve desired educational outcomes. Within this grouping of scholars Astin's research is relevant as it pertains to those factors college students possess prior to entry into a four year institution that have an effect on their ultimate decision to persist.

When considering the effects of pre-college attributes on student persistence, Astin's (1993) presentation of his I-E-O model suggested that thirty-three different student input characteristics carried significant weight in predicting degree completion. Astin (1993) claimed the single strongest predictor of degree completion is the student's high school GPA. SAT Mathematical and Verbal scores were also relatively strong predictors (Astin, 1993; Brint, 2003; Kelly, 1996). Other significant variables of the "Input" portion of Astin's (1993) model are the student's socio-economic status, religion, gender, inclination toward science, and hedonism. "In other words, those entering freshman that are most likely to complete a bachelor's degree within four years have high grades in high school and high scores on the SAT/ACT, come from higher socio-economic levels, are either Roman Catholic or Jewish, are woman, are non-hedonistic and are disinclined toward science" (Astin, 1993, p. 193). As there is with any set of college students, few NROTC students possess each of these input characteristics as outlined by Astin (1993). However, this model informs how input characteristics can predict degree completion for traditional college students (Astin, 1993). NROTC students are traditional college students, and this model can assist in the persistence equation for the NROTC program.

Other input variables that carry significant weight in the persistence equation include a desire to become more knowledgeable about personal areas of interest as a



reason for attending college, a self-rating of leadership abilities, science preparation in high school, a self-rating of physical strength, high school academic rank and a personal assessment of social activism (Astin, 1993). It is within these areas of Astin's (1993) input factor discussion of the I-E-O model that NROTC students may be more aptly and effectively assessed as compared to non-NROTC traditional college students. An NROTC student's leadership abilities, physical strength, sense of priority in order ranking and social activism (patriotism) have been indicated as contributors to NROTC Program applicability (Rittenhouse & Kwinn, 2005; Johnson, 2012). Astin's I-E-O modeling accounts for these variables in students' ultimate persistence decisions (Astin, 1985). Astin (1993) did not directly present analysis on NROTC students. His I-E-O model was developed for college goers as a general population (Astin, 1998). Astin's theories and models have been utilized to present analysis on students from under-represented populations, two- year institutions and a variety of other distinct student populations (Metz, 2002; Pascarella & Terenzini, 1980; Tierney, 1993b). Astin's I-E-O model and theories have great potential to inform pathways for predicting persistence within NROTC student applicant populations, and is relevance to the research question.

**Tierney.** Among the many scholars investigating pre-college attributes, Tierney (1992a) employed critical theory to understand Native American experiences in higher education, focusing particularly on the recruitment and retention of Native Americans by postsecondary institutions. Tierney (1992a) offered potential persistence solutions for Native Americans pursuing college degrees based on characteristics they can develop before entering college. Tierney (1992a) provided in depth analysis on the

effects of culture, ancestry, and perception of Native Americans as they apply to the question of persistence. Although this particular research has Native Americans as its central focus with respect to the persistence discussion, the concepts of culture, ancestry and perceptions as pre-college entry characteristics are all common among college students (Hurtado, Engberg, Ponjuan, & Landerman, 2002; Tierney, 1992a). Cross-walking this thought, it is also conceivable that NROTC college students would have a developed culture, ancestry and set of perceptions prior to matriculation into a four year institution that could be informed by Tierney's research. For example, family experiences related to siblings or parents enrolled previously in NROTC programs may shape one's views about college and the NROTC experience (Johnson, 2012). Johnson (2012) notes that Col. David W. Chase, who oversees the Army ROTC Program at Virginia Tech, was stunned that there is no conclusive evidence nor one specific answer as to why students join the ROTC'; however, he stated that "many (ROTC) students have parents or relatives in the military" (p. 1).

A possible parallel discussion here is represented by the potential of college students to join fraternities or sororities largely because they may have had family members previously or currently associated with the Greek culture on campus. However, any correlation that exists here with respect to a student's propensity to join a fraternity or sorority is largely one of socio-economic consideration, not due to family considerations or connections with the Greek culture, and thus not a parallel experience that can assist or inform this research (Levine & Sussmann, 1960).

Tierney (1992a) presented in-depth analysis on Native Americans and how the world of higher education applies to them, reflecting influences of family, culture,

gender, and class on student experience. Native Americans that attend mainstream institutions undergo a disruptive cultural experience not because the college experience is a normal rite of passage, but because the institution is culturally distinct from the Native American student's own culture (Tierney, 1992a). Tierney's (1992a) analysis suggested that there is a significant difference between the dominant culture on college campuses and that of Native American students that affect their persistence decisions in negative manner. He argues that the influence of cultural differences is so vast that the Native American students feel ostracized or not-accepted on most college campuses (Tierney, 1992a). The cultural differences felt by Native Americans on college campuses as described in Tierney's research is troubling, a cause for concern and needs to be addressed as a priority within higher education. However, it is a parallel argument of a less socially disturbing cultural difference with respect to NROTC students which makes Tierney's relevant in the context of this study. Specifically, since the activism of the 1960s, there has been tension between campus and military cultures, and students coming from military family backgrounds and /or students enrolled in NROTC may encounter these tensions when arriving on campus.

Tierney (1992b) argued that pre-college attributes affecting students, in general, such as culture, family and social background are significant characteristics that affect their respective persistence decisions. Historically, students have been expected to acculturate into the institution they are attending in order to persist to graduation (Tierney, 1992a; 1992b). NROTC students come to college with a variety of backgrounds and pre-college attributes (Rittenhouse & Kwinn, 2005). NROTC students are expected to acculturate into the institutions they are attending as is

required of all traditional college students (Rittenhouse & Kwinn, 2005; Tierney, 1992b). Additionally, NROTC students are expected to acculturate into a military environment on campus (Dao, 2012; Rittenhouse & Kwinn, 2005). The college and NROTC environment may or may not be welcoming to various groups based on their compatibility with campus culture.

The military environment of the NROTC is replete with its own set of rules that requires separate classes, short haircuts, required physical training and the wearing of uniforms on campus (Dao, 2012; Downs, 2009; Rittenhouse & Kwinn, 2005). As such, the NROTC student is physically separated in the Armory building, required to groom and appear differently, and obligated to take on additional requirements that are out of the mainstream experiences of other traditional college students. NROTC students have been disliked and disrespected at various times on college campuses over the last forty-five years (Dao, 2012; Downs, 2009). The feeling of being different and the requirement to assume a different culture are negative contributors to the persistence decision (Tierney, 1992a). Tierney's research is relevant to this study in a parallel observation of pre-college attributes of culture, social and family background as they apply to NROTC students and their ultimate persistence decisions. Additionally, the concept of the NROTC student "just being different" and the influence of military culture on campus as it pertains to college student persistence can be critically analyzed utilizing Tierney's models and research methods.

**Boyd and McKendry.** Another research team, Boyd and McKendry (2012), examined a research project within a Scottish university to identify some of the aspects of "support and the overarching student experience which contribute to resilience of

nursing students” (p. 59). The premise of the study was to better understand the factors students in nursing possess prior to college which allowed them to overcome potential difficulties and resolve to persist in their studies. In the context of this second grouping of scholars, Boyd and McKendry (2012) assessed variance in background characteristics such as gender, race, ability and experiences as well as demographic characteristics of families, activities and prior achievements as they relate to nursing student persistence.

Boyd and McKendry (2012) utilized a grounded theory analysis to draw out four areas they believe significant toward nursing student experiences and decisions to stay on or withdraw from college. These four areas are academic achievement, learner confidence and engagement, previous educational experience, and environmental variables (i.e. finances, employment, health and comfort). The authors addressed the social aspect of the college experience as significant to persistence, but they developed the pre-college decision of program choice as a vital predictor of college persistence for nursing students.

Additionally, Boyd and McKendry (2012) explored the significance of variances in background characteristics such as gender, race, ability and work experience and the demographic characteristics of families, students’ activities and prior academic achievements. The study found that pre-college dispositions were critical to explaining persistence. Students that stated the desire to care for people as their reasoning for entering the nursing program during the interviews tended to persist to degree completion (Boyd & McKendry, 2012). The importance of personal attributes was raised as significant and discourses of ‘love’ and ‘caring’ highlighted

these nursing students' enthusiasm and commitment ultimately leading to their decision to persist in the program. This relates to NROTC in that those students inclined to matriculate and persist within the NROTC Program may have intent to serve in the military, a propensity to patriotism, or a desire to wear a uniform for example prior to college entrance. Johnson (2012) states that the U.S Army has seen a "surge of patriotism at schools across the country", and that many have expressed a desire to serve (p. 1). Boyd & McKendry (2012) is relevant in evaluating enthusiasms and commitments students possess prior to NROTC and college enrollment that ultimately lead to their decisions to persist.

Through the course of responding to this research question on NROTC student persistence, one may posit that NROTC students had pre-college sentiments towards particular qualities. Qualities such as patriotism, service, or leadership come to mind, but there is very little data on what motivates NROTC students to persist (Johnson, 2012).

**Hurtado, Engberg, Ponjuan, and Landerman.** Similarly, Hurtado et al. (2002) examined how students' pre-college experiences predisposed them to different educational outcomes. How individual, family, neighborhood, high school and personal experiences affect these educational outcomes (referred to as democratic outcomes) is the central thesis of the study (Hurtado et al., 2002). Although the democratic outcomes of this study are not dominated by the concept of persistence, the scholarly analysis presented informs on these pre-college attributes as they affect a broader understanding of social engagement on campus (Hurtado et al., 2002). Additionally, this study informs on how these pre-college attributes affect students' abilities to

socialize and integrate into the college environment that is increasingly becoming diverse (Maldonado, Rhoads, & Buenavista, 2005; Hurtado, Engberg, Ponjuan, & Landreman, 2002; Bali, Anagnostopoulos, & Roberts, 2005).

Active student social engagement is a significant positive contributor in the persistence equation of traditional college students (Astin, 1993; Pascarella & Terenzini, 1980; Tinto, 1975). With the college campuses and the NROTC program becoming increasingly multicultural and gender neutral, the possibility of understanding those pre-college characteristics that facilitate NROTC student integration into these environments could be of great benefit in explaining NROTC student persistence. The US Military strongly desires greater diversity and multicultural influence within its ranks (Department of Defense, 2006). The research of Hurtado et al. (2002) can inform our understandings about how these pre-college attributes affecting NROTC student social engagement in multi-cultural campus activities may lead to a greater understanding of student success within the NROTC program and the ultimate decision to persist.

**Summary.** Most of the existing scholarly research on persistence draws on the premise that students enter college with certain characteristics that facilitate or detract from persistence in college (Astin, 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 1980; Tinto, 1975). Pre-existing factors include characteristics such as: family, culture, gender, religion, neighborhood, high school achievement, standardized test scores (ACT/SAT) and socio-economic status. This second grouping of scholars points to the significance and influential aspects of these pre-existing characteristics as they relate to student persistence. In doing so, they provide useful analysis on how one

might effectively incorporate these characteristics into persistence modeling.

Astin (1993) explored input variables that include: a student's desire to become more knowledgeable about personal areas of interest as a reason for attending college, a self-rating of leadership abilities, science preparation in high school, a self-rating of physical strength, high school academic rank and a personal assessment of social activism. These pre-existing factors are potentially significant to the NROTC student in particular, and Astin's I-E-O model can help us understand these input characteristics and their implications for NROTC students' persistence.

Tierney (1992) suggested that the pre-existing factors of college student culture and background have a significant role in informing theory on student participation that college officials can use when advancing recruitment and retention decisions.

Meanwhile, Boyd and McKendry (2012) assessed what pre-existing factors allow students to overcome potential difficulties and resolve to persist in their studies. In particular, their exploration of the pre-college factor of 'appropriateness of program choice' and the importance of personal attributes in the persistence decision of nursing students will inform pathways for comparison of NROTC students persistence decisions.

Hurtado et al. (2002) presented analysis on pre-college attributes that affect educational or democratic outcomes which is based in social engagement within diverse and multi-cultural institutions. Through an understanding of these analyses and application of concepts to the NROTC program it is possible this literature could inform on pathways to assist NROTC students in broader social integration leading to a better persistence explication.



Each of these scholars makes compelling contributions regarding the influence of pre-existing characteristics as major contributors to college student persistence. The common theme among these scholars is the influence of these pre-existing characteristics as major contributors to traditional college students as they apply to their persistence decisions. The field of higher education is lacking research in this area of persistence as it pertains to military, veteran and NROTC students (Sander, 2013). The perspective of this group of scholars informs research on those pre-existing characteristics that lead to the persistence of NROTC students.

### **Financial Support Perspective**

**Introduction.** The third grouping of scholars' considered for this study present analysis on the effects of scholarships or financial aid with respect to college student persistence. Due to the high costs of tuition at colleges and universities student financial aid programs have become essential to both student and institution (Jensen, 1981).

The full financial aid package for NROTC students is as follows:

- Full tuition at colleges or universities facilitating NROTC Units (including out-state fees).
- Stipend of \$750 per academic year for textbooks (\$375 per semester or \$250 per quarter).
- Provide all uniforms.
- Three summer navy training cruises.
- Subsistence allowance each academic month.

2015 (subsistence rates/month):

Freshmen - \$250

Sophomore - \$300

Junior - \$350

Senior - \$400 (NSTC-OD, 2015).

The length of scholarship benefits is predicated upon the student's degree plan. Students will receive scholarship benefits only for the time required to receive their Baccalaureate Degree or 4 years, whichever comes first. If additional benefits are necessary, students may request and, in some cases based on needs of the navy, be granted fifth-year benefits (NSTC-OD, 2015).

**Jensen.** Jensen (1981) provided an analysis of the effects of financial aid on traditional college students over a four year period controlling for other determinants of persistence. Jensen (1981) considered several types of financial aid including scholarships, grants and loans. Although there are mixed results from the literature, the general conclusion emerging from research in this area indicates that the receipt of student aid is positively related to persistence (Jensen, 1981). This perspective is relevant to this study in that all NROTC students are traditional students and most receive financial aid (Rittenhouse & Kwinn, 2005).

Jensen (1981) explored persistence or retention as a major goal of student aid policy. That is, once students have entered the institution of their choice with financial aid they would be able to persist to full degree completion without limitations due to their socioeconomic background (Jensen, 1981). Jensen (1981) concluded that student financial aid is positively related to persistence, and that scholarship or grant aid is more positively related to persistence than are loans. Jensen (1981) further concluded

that the greater the amount of assistance received by high achieving students, the greater the chance of persistence. Lastly, student loans or any form of financial aid that requires the student to pay back the funding is usually related to decreases in persistence (Jensen, 1981).

All NROTC students eventually receive financial aid in the form of tuition scholarship and/or stipend with the majority receiving full tuition and book fees from the Department of Defense at matriculation (Rittenhouse & Kwinn, 2005). Not all NROTC students receive the full scholarship and stipend for the full four years, but all NROTC students by the junior or senior year receive financial aid. Throughout the literature in this grouping of scholars, financial aid in the form of loans is seen at best as a non-contributor to student persistence, with most studies suggesting loans as having a negative effect (Bettinger, 2004; Cabrera et al., 1992; Dowd, 2004; Jensen, 1981). NROTC students do not need to pay back the scholarship or stipend money if they persist to graduation and commissioning in the US Military (Department of Defense, 2006). However, each NROTC student that persists to graduation and receives a commission in the U.S. Military is required to serve in the US Military for approximately five years (Rittenhouse & Kwinn, 2005). This arrangement leads to some questions as it relates to commitment and obligation. Does the commitment to five years in the military constitute a payback of the scholarship money? Do NROTC students observe the five year payback similarly to the payback of monetary loans other traditional college students owe following graduation? How does this affect NROTC student persistence? Jensen's (1981) work can inform one's understanding of these issues.

**Bettinger.** Bettinger (2004) investigated how financial aid affects persistence with a specific focus on the effects of federally awarded Pell Grants. The researcher suggested that financial aid, in general, has a slightly positive effect on college student persistence. Bettinger (2004) identified that the effects of financial aid on student persistence may be of interest to both policymakers and educational researchers. Most NROTC students receive financial aid (Downs, 2009). The majority receive full scholarships at the time of commitment to a specific institution and NROTC program (Rittenhouse & Kwinn, 2005). Although Pell Grants are not exactly the same as NROTC scholarships, parallel discussions can be made with respect to the financial aid NROTC students receive from the conclusions within Bettinger's (2004) research.

Through a regression analysis of national student data Bettinger's (2004) results suggested that Pell Grants reduce dropout rates. Most importantly, Bettinger implies that federal and state "financial aid matter and that they influence the likelihood that students continue from year to year in college" (p. 230). NROTC students receive financial aid, and there is a dearth of scholarly research on the effects of that aid on military, veteran and NROTC student persistence (Sander, 2013). In many cases, the financial aid is substantial as NROTC scholarships are generally for full tuition (Dao, 2012). Bettinger (2004) further suggested that front-loaded financial aid programs may improve student retention in college. The majority of the NROTC scholarships are front loaded, meaning that students receive the scholarships at the beginning of their freshman year, and maintain the scholarship funding throughout their four years as long as they remain in good standing within the university and NROTC Program (Rittenhouse & Kwinn, 2005; NROTC, 2015).

Bettinger's (2004) research is primarily focused on financial aid in the form of Pell Grants and their effect on college student persistence. Pell Grants are awarded on a need basis whereas NROTC scholarships are awarded on merit (Bettinger, 2004; NROTC, 2015). On the other hand, Pell Grants are similar to NROTC scholarships as they do not require a monetary payback and are typically applied to college tuition payment (Bettinger, 2004; NROTC, 2015). The distinguishing features of need, merit, and repayment are important to understanding the persistence equation among NROTC students.

**Cabrera, Nora, and Castaneda.** Cabrera et al. (1992) examined the role of finances on college persistence by presenting a causal model relying on differing theoretical frameworks of awarding financial aid. Findings from this study point out that financial aid has a significant total effect on persistence (Cabrera et al., 1992). The results "specifically underline the indirect nature of financial aid in the persistence process in that it affects the student's academic integration, socialization processes, as well as his or her resolve to persist in college" (p. 589). The exploration of the academic and social integration for NROTC students will be significant when responding to the research question and the effects of financial aid, and how it can inform on the persistence decision. The perspective within this study is also a bridge to the first grouping of scholars because the effects of financial aid on student persistence relates to the integration and socialization question.

Cabrera et al. (1992) asserted that little attention has been paid to the underlying process linking financial aid with pre-college variables and with the academic and social integration factors related to college experiences. Furthermore,

research designs typically have not tested the causal relationships among finance factors, student characteristics, and integration as they relate to persistence (Cabrera et al., 1992). Cabrera et al. (1992) also explored the role of finances in a college persistence model based on conceptual frameworks advanced by Tinto (1975) and Bean (1982). Specifically, they explored the direct and indirect effect of student financial aid on persistence in the context of such important noneconomic variables as “significant others' influence, precollege academic achievement, academic and social integration, goal and institutional commitments, and intent to persist” (Cabrera et al., 1992, p. 572).

**Dowd.** Similarly, Dowd (2004) examined the distribution of financial aid among financially dependent four-year college students and the effectiveness of different types of financial aid in promoting student persistence and timely bachelor's degree attainment. Dowd (2004) concluded that among the financial aid variables, state and federal grants have a positive effect, while the effects of other forms of aid are insignificant. In other words, financial aid that provides meaningful relief from tuition and cost of living debt demonstrates a positive effect on persistence; whereas, loans and smaller amounts of financial aid have little to no effect on persistence. Consistent with much of the literature reviewed for this grouping, the most significant outcome of any financial aid package is the relief it provides from employment burdens which interferes with student campus socialization and integration (Dowd, 2004). This perspective also bridges to the first grouping of scholars.

Dowd (2004) suggested that student financial aid enables social integration, which has a positive effect by enabling better academic performance. In addition,

financial aid may enable students to work fewer hours and become more academically integrated into college activities as well (Dowd, 2004). This is also a conclusion previously reached by Cabrera et al. (1992). Academic and social integration have strong positive effects on college student persistence (Astin, 1985; Tinto, 1975). Dowd's (2004) findings indicated that policy makers who wish to promote "timely bachelor's degree completion should favor policies that enable public college students to live on campus" (p. 24). Campus living fosters the integration in the academic environment, the development of peer groups and social networks, and the ease of access to faculty and administrative advisors (Davig & Spain, 2004). In turn, students with these advantages develop a "firmer goal commitment and confidence in their ability to complete their degrees" (Dowd, 2004, p. 24). Dowd's (2004) perspective also bridges to the first grouping of scholars as it relates to the socialization and integration question.

All NROTC students that persist past the sophomore year receive scholarship for tuition and most receive stipend for cost of living and books (Department of Defense, 2006). NROTC students are traditional college students and subject to the same on campus and academic requirements as every other traditional college student at the institution (Rittenhouse & Kwinn, 2005). Students' academic and social integration is significant in predicting college student persistence (Astin, 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 1980; Tinto, 1975). The research of Cabrera et al. (1992) and Dowd (2004) is relevant for this study on NROTC persistence as it directly addresses financial aid with respect to students' academic and social integration into the college.

**Summary.** Each of the scholars in this grouping examines the effects of financial aid on college student persistence. Jensen (1981) considered several types of financial aid including scholarships, grants and loans and concludes that the receipt of student aid is positively related to persistence. Bettinger (2004) presents detailed analysis on financial aid and Pell Grants and their effects on college student persistence. His conclusions are obtained through regression analysis finding a positive correlation exists between financial aid and persistence. Both Jensen (1981) and Bettinger (2004) can be used to inform one's understanding of persistence data in the study of the NROTC persistence.

Cabrera et al. (1992) and Dowd (2004) concluded that financial aid is most important to college students by giving them the financial freedom to live, to study, and to socialize on campus. Academic and social integration are indicators and predictors of college student persistence (Astin, 1985; Tinto, 1975). The research of Cabrera et al. (1992) and Dowd (2004) is relevant for this study on NROTC persistence as it reviews the elements of financial aid as pertaining to students' academic and social integration, which can inform pathways of understanding persistence within the NROTC.

The common theme among these scholars is the influence of financial aid on traditional college students as it applies to their persistence decisions. Therefore, literature within this scholarly perspective (and common theme) informs on how we understand NROTC student persistence decisions.

### **Conclusion**

This literature review has presented the perspectives of three groupings of



scholars as relevant to research on college student persistence in the NROTC program. First, the classic research from leading scholars in the field of persistence within higher education showcases the importance of environment, involvement, and socialization critical to persistence. NROTC students are traditional college students and the research of these scholars is relevant in a comparison of these issues to persistence within the NROTC. Specifically, the research of Tinto, Pascarella and Terenzini, Astin, and Chickering and Reisser provide insight into this highly significant area of environment, involvement and socialization in the study of NROTC student persistence.

The second grouping of scholars helps us better understand pre-college attributes that significantly affect the persistence decisions of college NROTC students. These pre-college attributes range across multiple characteristics such as: socio-economic status, religion, gender, family, ACT/SAT, high school GPA as well as many others (Astin 1993). How these pre-college attributes directly or indirectly affect the persistence decisions of NROTC students is critical to understanding and addressing this issue.

Lastly, the perspective of the third grouping of scholars informs on the effects of financial aid packages on NROTC students persistence. All NROTC students receive financial aid before they graduate (Rittenhouse & Kwinn, 2005). The scholars within this grouping present analysis on the relationship between financial aid and student persistence in various manners (Bettinger, 2004; Cabrera et al., 1992; Dowd, 2004; Jensen, 1981). This literature illustrates the relationship of financial aid in persistence decisions among NROTC students.

Each of these perspectives makes the major contribution to the literature on college student persistence. The common theme among scholars in the literature reviewed is that it informs on traditional college students and their persistence decisions. NROTC students are traditional college students in accordance with the Tinto (1975) definition. Higher education is lacking research in this area of persistence as it pertains to military, veteran and NROTC students (Sander, 2013). The perspectives of this literature reviewed help understand NROTC student persistence decisions and provide pathways to understanding this topic more thoroughly.

## Chapter 3

### Design of the Study

This study examines and provides understanding on persistence in higher education for students enrolled in the NROTC program. “How” the NROTC experience influences these student’s persistence decisions, and “why” they stay in college until graduation and commissioning in the US Navy or Marine Corps provides the general context for the study. In specific, this study acquires meaning and understanding of the effects of the socialization process and existing pre-college attributes, and the influence of financial aid with respect to NROTC students and their persistence decisions in college. Yin (2014) suggested that the more the research questions seek to explain some present circumstance as in “how” or “why” some social phenomenon works, the more that case study research will be relevant. Merriam (2009) suggests that qualitative case studies share with other forms of qualitative research the search for meaning and understanding. Stake (1995) implies that within a research question is a puzzlement, a need for general understanding, and feel that “we may get insight into a question by studying a particular case” (p. 3). With respect to the purpose and nature of this study, a qualitative case study method presented. This chapter provides an overview of a qualitative case study method, its philosophical makeup and data analysis methods to address the study’s research question(s).

### Research Question(s)

This study addressed the broad question: *How does the NROTC experience influence student persistence and the pathway to graduation?* There are supplemental

questions that formulate the basis of the study and facilitate the development of interview questions. These questions are as follows:

- a. What role do campus environment, involvement and socialization play as it relates to persistence among NROTC students?
- b. How do pre-college attributes impact the pathway to graduation among NROTC students?
- c. What are the influences of scholarships or financial aid on college student decisions to persistence within the NROTC?

Each of these questions attempts to identify those issues that affect the NROTC student's persistence decisions and receive a commission as an officer in the U.S. Navy and Marine Corps. Research questions will also be provided at Appendix A. These questions form the basis to present the case study method to the data analysis within this research.

### **Basic Elements of Research**

Crotty (1998) states that there are four questions at issue that make-up the basic elements of any research process. These questions are:

- What methods (techniques or procedures to gather and analyze data) do we propose to use?
- What methodology (strategy or plans of action, process, or design) governs the choice and use of methods?
- What theoretical perspective (philosophical stance) lies behind the methodology in question?
- What epistemology (theory of knowledge embedded) informs this theoretical

perspective?

So there are epistemologies, theoretical perspectives, and methodologies. If method is added, there are four elements that inform one another as depicted in Figure 2 (Crotty, 1998).

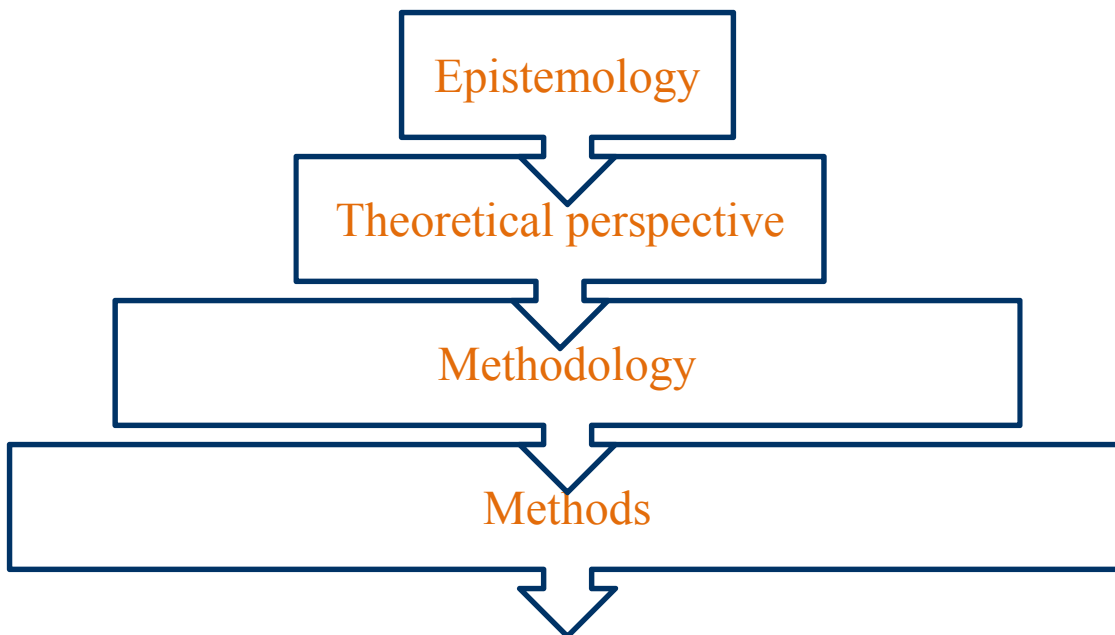


Figure 2. Elements of research

### Elements of this Study

#### Research Method: Case Study

Cresswell (2007) states “case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in depth data collection involving multiple sources of information (e.g. interviews, observations and document/report review), and reports a case description and case-based themes” (p. 73). This research provides an understanding to the NROTC experience, and those influences that affect the NROTC student persistence and the pathway to graduation. Creswell’s (2007) definition of case

study is applicable and reflects the direction of this research. Additionally, the case study can answer the “how” and “why” with respect to the phenomenon of NROTC student persistence within a bounded system (Yin, 2011).

For this study the bounded system is defined as the University of Minnesota NROTC Unit on the Twin Cities Campus in Minneapolis, Minnesota. This bounded system is designed to answer the specific questions related to student persistence within the targeted entity defined as the midshipmen (students past the freshman year) committed to graduation within this NROTC Unit. I chose qualitative case study method because this research addresses *how* the socialization process of the NROTC environment, pre college factors and financial aid considerations affect NROTC students’ decisions to persist and *why* NROTC students persist, in specific within the bounded system of the University of Minnesota’s NROTC Unit.

Qualitative case study has been examined extensively by Merriam and Stake. Merriam’s (2008) definition of case study is simple. “A case study is an in-depth description and analysis of a bounded system (p. 40)”. Stake summarized the concept of the case study as “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (p. xi). Case studies designs are not chosen to produce generalizations. More traditional comparative and correlation studies do this better, but valid modification of generalization can occur in case study (Merriam, 1988; 2009). Procedures for increasing the validity of this research will be discussed later in this chapter (e.g. triangulation). The real essence of case study is particularization, not generalization (Stake, 1995). It is important to take a particular case and come to know it well, not primarily as to how it differs from others,

but what it offers from its own particular existence. Chapter 1 discusses the dearth of research previously conducted on the topic of persistence within the NROTC.

Consequently it is not the focus of this research to compare and contrast with any research that currently exists on NROTC persistence.

Stake (1995) suggests that the particularistic nature of case study precludes the concept of generalization being discussed similarly to quantitative studies that use statistical generalization. However, *naturalistic generalizations* can be constructed. “Naturalistic generalizations are conclusions arrived at through personal engagement in life’s affairs or by vicarious experience so well constructed that the person (reader) feels as if it happened to themselves” (Stake, 1995, p. 85). Stake (1995) claims that experiential learning begets naturalistic generalizations. Merriam (2009) suggests that naturalistic generalization are conclusions arrived at through the capture of complex action, perception and interpretation obtainable through qualitative case study research.

Merriam (2009) states that “case study has proven particularly useful for studying educational innovations, evaluating programs, and informing policy” (p. 51). Consequently, although case study research is not designed to produce mass generalizations in comparative format, it does provide the prerequisite background data on the case in question to draw conclusions and understanding that can inform all stakeholders on best practices and processes. The intent of this research is to provide naturalistic generalizations that inform understandings on the topic of persistence within the NROTC for stakeholders of the NROTC Program within academe and the U.S. Department of Defense.

Research reviewed and presented within Chapter 2 suggests the on-campus

socialization experiences of traditional college students (and NROTC students) play a vital role in determining their ultimate decisions to persist (Tinto, 2006; Astin, 1993). Chadderton and Torrance (2011) state the following in their definition of the complex nature of case study:

Case study is an ‘approach’ to research which seeks to engage with and report the complexity of social and educational activity, in order to represent the meanings that individual social actors bring to those settings and manufacture in them. Case study assumes ‘social reality’ is created through social interaction, albeit situated in particular contexts and histories, and seeks to identify and describe before trying to analyze and theorize-i.e. it places description before explanation. It asks the basic question ‘what is going on here?’ before trying to account for it (p. 53).

This definition points out the descriptive element of case study as a research method, but more importantly it is the social reality element as a characteristic of the method that makes it germane to this study (Chadderton & Torrance, 2011). Persistence is primarily a function of the quality of a student's interactions with the academic and social systems of the college (Tinto, 1987; Pascarella & Terenzini, 2005). This aspect of case study research allows for a presentation of the socialization process of students within the NROTC program that does lead to a thick, rich description of pathways leading to their persistence decisions.

I draw upon the description of the case study method from both Stake and Merriam throughout this study to anchor my research. Stake (1995) suggests that it is not unusual for the choice of the case to not be a choice at all. It happens when we are



naturally curious about a particular agency, or when we understand and take the responsibility of evaluating a program. The case comes to us naturally (Stake, 1995). We are interested in it, not because by studying it “we learn about other cases or about some general problem, but because we want to learn about that particular case” (Stake, 1995, p. 3). Stake calls this type of work *intrinsic case study*. Merriam (2009) suggests that the *intrinsic case study* is undertaken when the researcher is interested in a particular case itself. In other words, it is intrinsically interesting to the researcher. The intrinsic case study is well suited for me personally as I have an intrinsic interest in the case due to my background. My background and its relevance to this study are discussed later in this chapter.

Merriam provides the structure to conduct the research. She provides simplicity, and a step by step process of conducting qualitative research in detail, singling out case study as her focus of a flexible yet definitively structured research method. The decision to focus on qualitative case study stems from the fact that this design is chosen precisely because researchers are interested in “insight, discovery and interpretation rather than hypothesis testing” (Merriam, 2009, p. 42). When ascertaining the aspects of the NROTC experience that influence student persistence or pathway to graduation insight, discovery and interpretation should be a part of the research method chosen (Merriam, 2009). Lastly, both Merriam and Stake support descriptive methodological approaches to inform any phenomenon within case study research. This descriptive approach was extremely useful in response the research question.

### **Methodology**

Merriam (2009) suggests that qualitative case studies can be characterized as

being “descriptive” in nature. Descriptive means that the end product of a case study is a rich, thick description of the phenomenon under study (Merriam, 2009). *Thick description* is a term from anthropology and means the complete, literal description of the entity being investigated. Case studies have been labeled holistic, lifelike and exploratory (Merriam, 2009). These descriptions can be creative, requiring prose and literary techniques to convey the researchers understanding of the case (Merriam, 2009). Stake (1995) states that “qualitative research tries to establish an empathetic understanding for the reader, through description, sometimes thick description, conveying to the reader what experience itself would convey” (p. 39). Crotty (1998) notes that *heuristic* inquiry is a descriptive methodology that informs research methods, particularly qualitative in nature. Heuristic is defined as the illumination of the readers understanding of the phenomenon under study (Guba & Lincoln, 1982). Stake (1995) explains that case studies illuminate our understanding of experience, and calls the conclusions formulated from this process “naturalistic generalization”.

Qualitative case study is valued for its ability to capture complex action and perception through an interpretive theoretical perspective and report narratives that feed into these naturalistic generalizations about a phenomenon (Merriam, 2009; Hetherington, 2013; Stake, 1995). This type of thick descriptive narrative was ideal for heuristically summarizing the factors that influence NROTC students in their persistence decisions and informed directly to the case study method.

### **Epistemological Approach Informing Theoretical Perspective**

Stake (1995) suggests that most contemporary qualitative researchers nourish the belief that knowledge is constructed rather than discovered, and that the role of the

interpreter, and gatherer of information is central to understanding any phenomenon. Human construction of knowledge (epistemology) is what we have come to believe, not what has been verified outside of experience (Stake, 1995). Human construction of knowledge appears to begin with sensory experience of external stimuli (Guba & Lincoln, 1982). *Constructivism*, as opposed to objectivism (and positivism), as an epistemological foundation, is the commitment to the belief that what we take to be object knowledge and truth is the result of perspective (Crotty, 1998). Constructivists' truths are not independent; they are functions of our understandings and realities (Cresswell, 2007). Merriam (2009) suggests that the purpose of constructivism is to describe and understand information, and to interpret data within the studied environment in order to formulate this understanding.

Crotty (1998) states that the *interpretive* theoretical perspective “emerged in contradiction to positivist perspectives in attempts to understand and explain human and social reality” (p. 66). The interpretive theoretical approach looks for “culturally derived and historically situated interpretations of the social life world” (Crotty, 1998, p. 67). The interpretive theoretical perspective as informed by the constructivist orientation provides for the intense interaction of the researcher with persons in the field and elsewhere (Stake, 1995).

Frederick Erickson (1986) claimed that the primary characteristic of qualitative research is the centrality of interpretation. In other words, within the constructive epistemology and interpretive theoretical perspective, the researcher's interpretations followed by descriptions of data are what establish the basis of understandings within qualitative case study research. How the NROTC college environment, pre-college

attributes and financial aid students receive affected NROTC student persistence was mostly determined by the observations of the researcher within this case while immersed in the culture. How I processed data received and actions observed are the essence of the knowledge constructed and interpretations made. The rich, thick descriptions formulated of the NROTC students persistence decisions eventually lead to naturalistic generalizations and assertions that help understand the pathways to graduation.

### Summary

The four elements that informed this research are: case-study method; the descriptive (heuristic) methodology; the interpretive theoretical perspective and the constructive epistemology. Figure 3 depicts the interaction of the elements of this research.

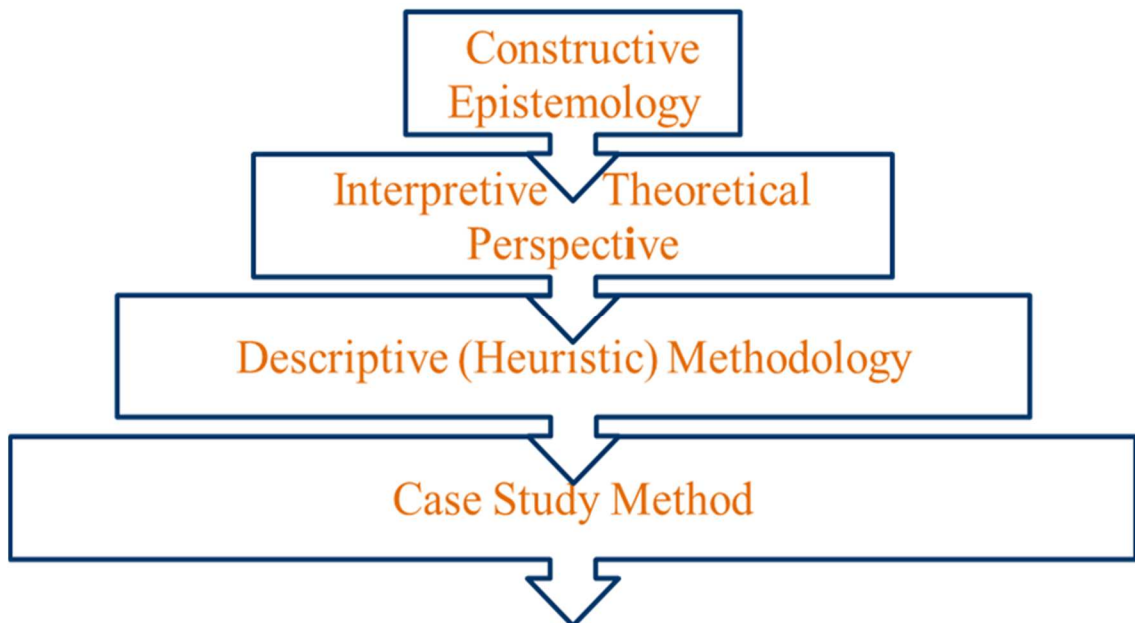


Figure 3. Elements of proposed research

### **Unit of Analysis and Justification**

The context of this analysis is defined within a case study framework. Flyvbjerg (2011) and Merriam (2009) suggests case studies focus on analysis of an individual unit or a bounded system. In accordance with this definition, the analysis within this research is derived from a unit with definable borders. Case studies focus on “relation to environment” or more simply...context (Flyvbjerg, 2011). As such the environment for this analysis focuses on the college campus (University of Minnesota) and the context is the experiences of those students enrolled in the NROTC programs (midshipmen). Analytical generalizations rest upon rich contextual descriptions including researcher’s argumentation on the application of interview findings toward other subjects and situations (Kvale & Brinkman, 2009). This research describes the campus environment NROTC students exist within at the University of Minnesota and generates findings based on inductive research that illuminates those issues which affect the NROTC student decisions to persist. Additionally, how required NROTC education and training affects the NROTC college students experience is considered within the research. Naturalistic generalizations are offered from within the phenomenon being studied that may be applied to other students in a similar environment.

The theoretical perspective that informs the methodology of the case study involves interpretive research. It is a qualitative case study of the bounded system of the NROTC Unit on the University of Minnesota campus which is comprised of students from the University of St Thomas, Macalester College and the University of Minnesota. Creswell and Miller (1997) suggest that the exploration of participants’

views about an incident can highlight the “culture at work”. The socialization experiences of a college student have a direct and impactful correlation to their eventual desire to persist to graduation within four-years (Terenzini & Pascarella, 1980). This research utilizes inductive reasoning to study the NROTC participant’s views on the experience of the NROTC program on campus. This descriptive methodological approach helps build a theory around a concept that explains what participants in a study are experiencing (Creswell & Miller, 1997). Those factors that influence, facilitate and enable student persistence were examined from within the social and educational construct of the NROTC program on campus. This bounded system is one in which I have unique experience with and access to as retired military and a prior NROTC Executive Officer. Lastly, my application to this bounded system qualifies as *intrinsic study* with an inductive approach to the assertions and naturalistic generalizations offered.

### **Researcher Background**

I am a retired senior military officer with nearly 30 years of active service in the U.S. Navy. Although the majority of my military career was in the field of aviation, I had the great pleasure of serving two assignments in higher education while on active duty. The first assignment in higher education was a three year position as the executive officer of the NROTC Unit at the University of Minnesota (2004-2007). At that time the NROTC unit was comprised of approximately 100 midshipmen (NROTC students) and ten staff personnel. My military rank and title placed me in administrative and academic oversight of this unit. In addition, the University of Minnesota afforded me the title and position of Associate Professor of Naval Science

which provided me the ability to teach and assign grades to those undergraduates taking my classes each college term over the three year assignment. All midshipmen were required to take the classes I taught, however; I had civilian students take my classes as well.

My second assignment in higher education was a three-year position as Associate Dean of Academics and U.S. Navy Chair at the Marine Corps University and Marine Corps War College in Quantico, Virginia (2008-2010). In this position I had oversight of the academics administered at the war college, and successfully designed and delivered master's degree courses to senior military and governmental officers. It was during these two tours of duty that I developed a great interest in higher education in general with a vested interest in military higher education as administered through the NROTC on college campuses. Consequently, the subject matter of this research is familiar and of significant interest to me.

### **Ethical Issues and Bias**

Kvale and Brinkman (2009) state “informed consent entails informing the research participants about the overall purpose of the interview, and through briefing and debriefing be informed about the purpose and the procedures of the research” (p.70-71). I used an approved University of Minnesota Institutional Review Board (IRB) informed consent form for doctoral students, and asked the current serving NROTC executive officer to administer the briefing and debriefing to participants. Additionally, I vetted the informed consent form through all leaders of the NROTC Unit on campus. It is my belief that IRB and NROTC command approval was essential to the successful completion of all research involving NROTC students. Each of the

interviewees were advised that the information they provided was voluntary and cancellation of interview and materials obtained during an interview was subject to withdrawal at any time. A copy of the consent form used for selected students is provided at Appendix B. A list of questions designed to ascertain the students understanding of the consent form is also provided at the end of Appendix B.

In addition to informed consent, confidentiality in research implies that private data identifying the participants will not be disclosed, particularly if the published information is potentially recognizable to others (Kvale & Brinkman, 2009). Each student interviewed was over 18 years of age, and the line of questioning was maintained within the context of the case study. The NROTC unit leaders were apprised of types of questions to be used in order to assuage any possible concerns from within the unit. The interview questions were designed to maintain anonymity as well as confidentiality thus mitigating any ethical fields of uncertainty related to the research. A pre-interview script used to thoroughly explain the confidentiality of the interview, and to ascertain the students understanding of this confidentiality, is provided in Appendix C.

According to Kvale and Brinkman (2009), “objectivity as freedom from bias refers to reliable knowledge, checked and controlled, undistorted by personal bias and prejudice (p. 242)”. To meet this requirement of objectivity and freedom from bias a good, solid, craftsman like research must be conducted producing knowledge that has been systematically cross-checked and verified (Kvale & Brinkman, 2009). In my research of NROTC student’s persistence, combined with the effects of the NROTC



educational and social environment, I identified my appreciation for the NROTC program. I am aware of my tendency to look positively upon its existence. I mitigated this prejudice by a thorough cross-check of all data received and by maintaining total objectivity throughout the information gathering process. I wrote personal memos and kept a professional journal during analysis to acknowledge bias. Constant inductive analysis of coded data and information assisted me in “keeping it real” with respect to the meaning of the transcribed words. I was well aware that the data I received during interviews may not reflect the attitude I have towards the NROTC program, and was prepared to provide analysis that may be negative to the experience of NROTC students on campus. Kvale and Brinkman (2009) discuss this issue as allowing the “object to object” (p. 243).

To avoid biases and ethical issues the interview questions were designed with purpose of content. Although I already understand the NROTC program very well, it was incumbent upon me to design questions that reflect the attitude of the NROTC student on campus. My personal investment in the NROTC program and the military in general is derived from the perspective of an adult serving professional officer. I was a navy company man when ships were still made of wood and the officers made of steel. The objectivity of the interviews captured the essence of the NROTC student that is still developing the vision for their personal future. The analysis and naturalistic generalizations of the data were then crafted to reflect the information received from the interviewees. Lastly, I clearly identified my personal background within the research and disclaimed any subjectivity towards a predisposed position of any kind. I strove to achieve the delicate balance between interviewer’s concern for pursuing

interesting knowledge and ethical respect for the integrity of the interview subject (Kvale & Brinkman, 2009).

### **Data Collection**

Data for this research was collected in a case study method utilizing an inductive approach to analyze the student's experiences within the NROTC environment. Semi-structured interviews, NROTC Unit observations and a document review were utilized to construct the study's analysis.

### **Interviews**

Semi-structured interviews were conducted to gather the actual words of the interviewees as to their experiences within the NROTC. During interviews, students described why they stay within the NROTC environment and persist to graduation. Additionally, they described the attributes they had prior to college and those acquired during college that facilitated their personal decisions to persist to graduation. The study included first-hand accounts from the NROTC students as to why they entered the program prior to college. Lastly, the effects of financial aid provided to the NROTC students as it relates to the question of persistence were analyzed within the case study. Basic military training and coursework within the NROTC is required in all NROTC units across the country, and interviewing students on this issue provided a basis for a constant comparison between NROTC programs nationally. This data was transcribed and coded allowing the researcher to select, separate and sort the data to begin an analytic accounting of them (Charmaz, 2006). The interview coding process is discussed in the data analysis section in this chapter.

I conducted the interviews over a two to three week period in fall semester 2015. Each interview was one and one half hour in length and audio recorded for transcription and data analysis purposes exclusively. All recordings of personal interviews were erased or destroyed upon completion of the study.

**Interview Focus.** All prospective interviewees were members of the NROTC program on the University of Minnesota Twin Cities Campus. In this way, each of the interviewees were from the same “bounded system” permitting an analysis of an individual unit focused on developmental factors in relation to environment (Flyvgjerg, 2011). The challenge was to interview a comprehensive cross-section of NROTC students in order to facilitate naturalistic generalizations reflective of the phenomenon as a whole. Once again, naturalistic generalizations are conclusions arrived at through the capture of complex action, perception and interpretation obtainable through qualitative case study research and interviews (Merriam, 2009).

**Interview Participants.** Finding the ideal interview subject is difficult; however, good interviewees are cooperative and well-motivated, knowledgeable, truthful and consistent (Kvale & Brinkman, 2009). Utilizing Kvale’s and Brinkman’s (2009) suggestions as to the most appropriate interviewees I endeavored to choose “subjects suitable to cross-sectional analysis of the case study” being representative of all NROTC students committed to graduation (p. 165). In specific, this required NROTC student’s that had completed the freshman year. Once a student, on scholarship, enters the sophomore year they become committed to the US Military and by the vast majority tend to persist to graduation. Once again, all these students tend to persist because an NROTC student that is dismissed or withdraws from the NROTC

program after enrollment in the second year of college is required to enlist in military service, or pay back all financial aid received, plus interest, to the federal government at the behest of the Secretary of the Navy (NSTC-1533/135, (Rev. 09-13)).

To gain a cross representation of these NROTC students a sampling of each of the three upper-classmen year groups was interviewed. This selection facilitated research on those student experiences within the NROTC program that affect persistence decisions at different junctures during the college years. Prior to the sophomore year, students are allowed the opportunity to withdraw from the NROTC program without incurring a service (enlisted) commitment or required to pay back scholarship moneys provided. The reasons for leaving the program (departure in freshman year) are not the focus of this study. The data obtained from the upperclassmen provided the information required to analyze those factors that affect the NROTC student's persistence decisions.

**Interviewee Recruitment.** Kvale and Brinkman (2009) suggest that an interviewee's motivation and willingness to the task can be instrumental to the success of the interview (p. 165). The selection process of interviewees for this research endeavored to ascertain which of the potential interviewee candidates was most willing to participate.

Recruitment strategy was facilitated by being available to the potential interviewees at times of their convenience. Each week NROTC students are required to be at hours of drill. These drill times typically take place in the early hours before campus classes begin. Being familiar with the NROTC and its leaders at the University

of Minnesota would permit me the latitude of seeking discussions with students during these drill hours. Initially, I sought the concurrence of the IRB and the unit's command leaders to undertake this research during the drill hours. In addition, I vetted all participant names through the command leaders to ensure agreement with the choices. Selected NROTC students would be well motivated to speak to a retired senior officer (me) about their persistence decisions in place of arduous time in drill formations and physical fitness regimens. There was no lack in volunteers. The key assessment in this application was determining the appropriate cross-section of class standing and background characteristics of potential interviewees. A copy of the recruitment letter is provided at Appendix D.

**Interview Sample.** Lincoln and Guba (1985) recommend a sampling size (number of interview participants) to be determined at a point of data saturation, or when data redundancy is reached. The sampling size (number of interview participants) is terminated when no new information is forthcoming from new sample units (Merriam, 1988). Twelve (12) NROTC students were selected for interviews using semi-structured interview procedures. All interviews took place on the West Bank of the University of Minnesota Campus in office space at 321 19<sup>th</sup> Avenue South in Minneapolis, MN. Four NROTC sophomores, juniors and seniors were selected for the interview as it is this cadre that has already made the decision to persist to graduation. Using constant comparison of the data reviewed for each additional interview, I continuously checked for data saturation or redundancy prior to interviewing all twelve NROTC students. Saturation was not reached until all interviews of original sample group were conducted. Consequently, all twelve interviews were conducted for this

research. Additional interview information was not required to saturate the data in order to fully address the research questions, and additional interview participants were not added.

**Interview Questions.** The interview questions are derived from the conceptual perspectives provided in Chapter 2. In specific, the flow of Tinto's (1975) theoretical model of student persistence, adapted for NROTC students in Figure 1 (p. 22), suggests that the process of persistence decisions within the college years can be viewed as a longitudinal process of interactions between the individual, the academic and social systems of the NROTC unit (and college). Adding the inputs of the students' pre-college attributes, individual attributes and financial aid considerations, Figure 1 (p. 22) presents a model of how the proposed interview questions were created and mapped onto the conceptual perspectives presented in the literature review. By utilizing this model to establish the interview questions, I was able to surmise the utility of the theories and past research presented in Chapter 2 in understanding the case. In other words, the perspectives on persistence and NROTC students as presented in Chapter 2 represent the conceptual framework from which the interview protocol and question list was designed.

The list of interview questions directed towards the NROTC students is shown at Appendix E, and displayed below in Table 2.

1	I am interested in hearing your story about your experience in the NROTC program here at the University of Minnesota. I would like to hear about your experience beginning with your decision to join the NROTC and where you are in your education now. Can you explain? (Open ended “grand tour” question (Kvale and Brinkman (2009)), p.135).
2	Please think about and begin describing why and how you made the decision to join the NROTC. (Knowledge question (Merriam (2009), p. 96)).
3	What experiences prior to college, best equipped you for requirements of the NROTC program on campus? (Follow-up probing question (Kvale and Brinkman (2009), p.135)).
4	Provide me an understanding of the significance of the scholarship and financial aid money to you in your decision to continue and persist in college. Were the financial benefits a consideration in your decision to join the NROTC? (Follow-up (Kvale and Brinkman (2009), p.135)).
5	What are your personal goals for your NROTC education? Have your goals changed over time? Do you feel you are meeting these goals? Describe your commitment to the ROTC at the University of Minnesota at this time.
6	What have your grades been like since you began at the University? How would you describe your intellectual development during your years in the NROTC and the University? (Opinion and values question (Merriam (2009), p. 96)).
7	Describe your interactions and experiences with your peers in the NROTC or on campus. (Interpretive question (Merriam (2009), p. 98))
8	Can you tell me about your faculty interactions both in the NROTC experiences and in the courses you have taken at the University?
9	Can you describe how your academic experiences have influenced your commitment to your ROTC and academic goals? How have your social experiences on campus influenced your NROTC goals?
10	Can you explain the utility of the military education and training you are exposed to within the NROTC program? What are your impressions of the program? (Follow-up specifying question (Kvale and Brinkman (2009), p.135)).
11	If given the opportunity, how would you change the required educational and military training experience within the NROTC program?
12	What are the most important factors now that influence your decision to finish the ROTC program and your degree at the University of MN, and receive a commission in the US Armed Forces? (Open-ended seeking additional comments on motivations to persistence Kvale and Brinkman (2009), p.135).
13	Describe why you would recommend the NROTC program to other potential college students, and if you would not recommend it, explain why? (This question is designed to validate the interviewee’s responses and provide a sense of closure to the interview itself (Kvale and Brinkman (2009), p.135)).
14	Is there anything we haven’t discussed that you would like to share with me about your experiences at the University of Minnesota, or within the NROTC program? (Open ended opportunity to comment in general as a last question. (Kvale and Brinkman (2009), p.135)).

Table 2. Interview questions

## **Observations**

In addition to interviews, I conducted observations of military education and training exercises to ascertain contextual information of the NROTC student's experiences. Following full approval by the IRB and current NROTC unit Commanders, "in the field" observations of the NROTC unit was accomplished during the weekly drill periods in fall semester 2015. Due to my previous position within NROTC my presence was not seen as out of sorts as most upperclassmen (the target audience) already knew of me and understand I am a part of "the military system". I was completely open and asked the current commanders to announce my presence and intentions as a data collector. I observed all upperclassmen as they carried out their NROTC responsibilities and observed their demeanors, attitudes, verbal and non-verbal responses and actions throughout these drill periods. I used a checklist throughout the process, and a thorough journal was maintained of the observations. These observations added to the rich, thick descriptions of the data I was able to generate, and assisted in addressing the research questions by enabling me to cross reference (triangulate) data from interviews to actual practice during observed periods. For example, physical fitness, communication and leadership abilities described in interviews were cross referenced to what was actually observed on the drill floor in practice. These observations strengthened my interpretations and descriptions of all data received.

## **Documents**

Lastly, after obtaining proper clearance and permission from the current NROTC Unit commanders and the IRB, I extracted data from the written documents, files and logs contained at the NROTC units to contextualize and solidify interview and observed



data acquired. I selected a sample of documents from the data base of upperclassmen NROTC students. These files contained official records of military education and training performance, class grades and rankings and student background information. I am extremely familiar with these files and knew exactly where to look in conducting the research. Document analysis was not my main source of data collection, but provided the information required to facilitate a rich, thick description of the data and findings. Similar to the observation data obtained, the document review assisted in addressing the research questions by enabling me to cross reference (triangulate) data from interviews and observations to actual performance records and documents. For example, reviewable pre-college attributes such as athletic abilities, home of record and high school characteristics were used to cross reference interview and observed data to strengthen findings. Each of the three methods of data collection was utilized when conducting peer review and audit trail accounts for validity and reliability before data analysis was presented.

### **Data Analysis**

For this case study, I examined numerous participants within a single program of study. The approach to data analysis was inductive and comparative in character. The strength of a case study is a thick, rich description of a phenomenon in order to represent it from the participant's perspective (Merriam, 2009; 1988). This description of the participant's perspective enables the case study to be particular, inductive, descriptive and heuristic, seeking to illuminate readers understanding of an issue (Chadderton & Torrance, 2011; Stake, 1995). The data analysis process reflects Merriam's (2009) guidance in her chapter for 'analyzing and reporting qualitative data'. This process is

comprised of category construction (theme), sorting and naming categories, and concluding with making inferences and developing models by assessing how the categories (themes) relate to one another (Merriam, 2009).

Category construction requires a step-by-step data analysis called a *coding process* in order to present the findings or assertions (Janezich, 2010; Merriam, 2009). Category construction begins with reading all interviews and notes, and adding commentary in the white space in attempt to acquire ideas or portions of data that appear to be significant or noteworthy (Merriam, 2009). Merriam (2009) refers to this process as open or initial coding. She further discusses the researcher's personal requirements for coding as being: organized, perseverant, able to deal with ambiguity, flexible and creative, rigorously ethical, and finally as having an extensive vocabulary. Because coding can evolve as analysis progresses, a researcher must remain open and objective (Guba & Lincoln, 1982). Lastly, data analysis began as soon as the data was collected and constant comparison of the data was utilized to determine saturation.

Coding was conducted with an open-ended approach which enabled the accrued data to take any direction. This approach makes this research an inductive process (Kvale & Brinkman, 2009; Cresswell, 2007). Due to the data being collected from multiple sources such as interviews from differing sources, multiple documents and varying observations the data may become cumbersome and be disparate, incompatible or even contradictory (Merriam, 1988). The process of category construction was started at the beginning phase of the analysis while the data was being gathered. Open-coding at this juncture used descriptive words or grouping of words that were of interest to the researcher or found relevant with respect to the research question.

The follow on procedure was to group the open codes and move beyond descriptive coding to a more conceptual or visionary level referred to as axial or analytical coding (Kvale & Brinkman, 2009; Merriam, 1988). After axial or analytical coding the data was placed within categories or themes. The focus at this juncture was on Merriam's (2009) four principles for constructing categories or themes from the data:

- "be as sensitive to the data as possible,
- be exhaustive (enough categories to encompass all relevant data),
- be mutually exclusive (a relevant unit of data can be placed in only one category),
- be conceptually congruent (all categories are at the same conceptual level)" (p. 186).

The amount of categories constructed was dependent on the data, however; the amount was manageable. Finally, the cognitive process or conceptual framework of discovering or manipulating the abstract categories (or themes) into relationships that generated meaning lead to the development of theories about the data relative to the literature review. These theories explained some aspects of practice and allowed the researcher to draw inferences and assertions. These inferences and assertions lead to the development of naturalistic generalizations and allows for the transferability of the research.

All interviews conducted were recorded. The coding process required transcription of the data from voice recordings to written word documents. During the course of my research I utilized a transcription service in order to place the spoken words recorded in the interviews into readable documents. Plainly speaking, coding is processing the data into chunks or groups of meaning, and oftentimes this coding is the

actual language that the participants used during the interview (Janezich, 2010; Miles & Huberman, 1994). There are many words and phrases unique to military vernacular within the NROTC that provided key insight to this data analysis. Lastly, this study used Microsoft tools for capturing these words and phrases, and utilized Microsoft coding software for categorizing data for the in-depth data analysis portion of the research.

### **Conceptual Framework**

The conceptual perspectives of the literature presented in Chapter 2 are the basis of this study's conceptual framework. The strategies behind the creation of my interview questions flowed out of the three perspectives of NROTC student persistence in the literature review as pictorially represented in Figure 1 (p. 22). Additionally, the findings generated from the interviews as well as the observations and document reviews were informed by these three conceptual perspectives. In other words, this conceptual framework provided the means to interpret the data discovered on NROTC student persistence within the case study and allowed for the presentation of findings that were in relationship to the research presented in Chapter 2. The conceptual framework provided the means to make sense of the data.

### **Strategies for Rigor**

The traditional dimensions of reliability and validity used to evaluate the rigor of positivist research are transformed in qualitative research into criteria of trustworthiness that include credibility, confirmability, dependability, and transferability (Merriam, 2009; Lincoln & Guba, 1985; Toma, 2011). Discussions of validity in qualitative research occur in the context of the artfulness of qualitative inquiry and the researcher's

ability to represent multiple interpretations and realities faithfully (Sandelowski, 1993). In other words, does the researcher get the meaning right. Lincoln and Guba (1985) ask; “are the findings credible given the data presented” (p. 213). Stake (2010) explained the practice of triangulation as a means of “getting the meaning straight to be more confident that the evidence is good” (p. 123). Merriam (2009) suggests that the most well-known strategy to shore up the credibility of a study is what is known as triangulation.

To gain the needed confirmability, to increase credence in the interpretation, to demonstrate commonality of an assertion, the researcher can use any of several triangulation protocols (Stake, 1995). Stake (1995) and Merriam (2009) describe three triangulation protocols that were utilized in this case study (p. 113): Data source triangulation, methodological triangulation and member checking. Data source triangulation means comparing and cross checking data collected through observations at different times or in different places, or interview data collected from follow up interviews with the same people (Merriam, 2009). Methodological triangulation describes using multiple methods such as observation, interview, and document review to confirm what a researcher might have found (Stake, 1995). Member checking refers to a process where the actors play a major role triangulating researcher’s observations and interpretations (Stake, 1995). The idea here is that feedback is to be solicited on emerging findings from some of the people interviewed and interacted with.

Lastly, Merriam (2009) suggests that “you have triangulation by using three methods of data collection – interviews, observations, and document research” (p. 216). Data obtained through observations and document reviews was cross-referenced to interview data to facilitate this triangulation. This case study on NROTC student

persistence used these methods and protocols in data collection and analysis.

A careful use of journaling in demonstration of an audit trail provided the detailed accounts of the methods, procedures, and decision points used in carrying out this study. These detailed accounts also facilitated the dependability of the study. Research methods included a ledger of interactions with NROTC students completed daily during the research phase as well as a ledger of observation while conducting the research at the NROTC Units.

Similarly, whenever possible I discussed process, findings and tentative interpretations with military colleagues at the NROTC units and with all members of my dissertation committee and higher education doctoral cohort which allowed for peer review and examination of the basic elements of the study. This peer review of my work addressed directly issues of credibility from all data gathered and analyzed.

My use of observation and document analysis in conjunction with the semi-structured interviews enhanced the constructivist paradigmatic approach to this data analysis and completed the triangulation protocols as described by Stake (1995). Each of these approaches facilitated rich, thick descriptions of the data in order to conceptualize the study enabling readers to determine how situations may match research context. Ultimately, it is the transferability of the assertions and naturalistic generalizations I seek that will enable military and university leaders to evaluate those experiences that cause NROTC students to persist, and how pre-college attributes and financial aid affects the students' persistence decisions.

It was through the use of these strategies: triangulation and rich, thick descriptions that rigor within the science of this qualitative study was observed. It was through the

application of these strategies that the dependability of the research was realized and the rigor distinguishable. It was through contextual application that the assertions and naturalistic generalizations enabled the outcomes of the study to be transferable.

### **Summary**

This chapter described the case study method that was used to investigate the factors that influence NROTC student persistence decisions and the pathways to graduation. The case study format with interview data (twelve participants), observations, and record reviews as prescribed by Stake and Merriam permitted an understanding of those experiences affecting NROTC student persistence decisions. This case study format led to meaningful assertions and naturalistic generalizations as informed by my conceptual framework that will be utilizable by military and university leaders with respect to NROTC programs. The processes of identifying the case, the elements of the research, the methods of data collection and interview protocols guided by the qualitative case study method as discussed by Stake and Merriam were presented in this chapter. Lastly, a discussion on potential ethical issues and researcher bias, and a description as to how the case study method provided the required rigor for the research was presented.

## **Chapter 4**

This chapter describes the findings on student persistence within the case study bounded by the NROTC Unit on the University of Minnesota campus in Minneapolis, Minnesota. The three conceptual perspectives represented in Figure 1 (p. 22) helped generate the strategies leading to the themes emerging related to NROTC student persistence. Additionally, the conceptual framework flowing out of the three perspectives of NROTC student persistence provided the means to interpret responses to the interview questions presented and the means to make sense of study findings. Lastly, the findings generated from the observations and document reviews were informed by these three conceptual perspectives as well, and integrated into the interview data for interpretation. In other words, the conceptual framework derived from these three perspectives provided the means to generate, make sense of the data, and present my findings.

### **Research Procedures**

The data gathering period for this case study research was conducted throughout the fall term of 2015, following IRB approval, concluding in January of the spring term of 2016. The majority of the data obtained was generated on the University of Minnesota campus in Minneapolis, Minnesota. In addition, although to a lesser extent, the University of St Thomas in St Paul, Minnesota. NROTC students at the University of St Thomas are members of the NROTC Unit at the University of Minnesota under a cross-town agreement. However, all formal NROTC Unit activities are conducted at the Armory on the University of Minnesota campus which requires the St Thomas students to be on the University of Minnesota campus at least three days per week. Data collection



included interviews, observation and a record review. The process of these three approaches to generate findings allowed for a triangulation of the data which provides for the rigor within the research findings.

### **Interviews**

NROTC students attending the University of Minnesota and the University of St Thomas were interviewed during the course of the data collection. All interviews required approximately 75-90 minutes and were conducted at a neutral site (not at the Armory) on the University of Minnesota campus. All questions detailed in appendix E were asked of each student interviewed with additional questions inserted into the dialogue when deeper probing into certain responses was required. Twelve NROTC students were interviewed, and transcriptions of the interviews provided the means for the coding process and categorization of the data. Each NROTC student was assigned a pseudonym known only to the researcher to ensure anonymity. A large percentage of the findings within this chapter were developed as a function of data obtained during the interview process.

### **Observations**

Every Tuesday during the semester the NROTC Unit conducts formalized military training referred to as drill periods from 6AM – 8:30AM for all midshipmen. Similarly, twice weekly on Tuesdays and Thursdays the NROTC Professor of Naval Science, or the Commanding Officer, is required to offer Naval Science courses to all midshipmen enrolled in the NROTC Unit each term. These courses are conducted by the NROTC staff instructors, and are college courses earning official college course credits.

Each Naval Science course earns 2 credit hours of course work, and each midshipman is required to take at least one Naval Science course per term. During the data collection time period of this research I was able to observe numerous drill periods and Naval Science classes both formally and informally. During a particular drill period in the fall term of 2015 I was invited to present my proposed research to the entire battalion of midshipmen. Additionally, I was honored to attend and observe the 2015-2016 Battalion Change of Command with complete and open access. Consequently, my access to the NROTC Unit throughout this data collection period was great and the ability to collect observational data was unencumbered.

### **Record Reviews**

Following University of Minnesota IRB and NROTC command approval I was provided the access to conduct full record reviews of all midshipmen records as desired. I focused my reviews primarily on those midshipmen observed and interviewed during the data collection period. Triangulation of data was critical with respect to the traditional dimensions of reliability and validity for qualitative case study method.

### **Triangulation of Data**

Stake (2010) explained the practice of triangulation as a means of “getting the meaning straight to be more confident that the evidence is good” (p. 123). Merriam (2009) suggests that the most well-known strategy to shore up the credibility of a study is what is known as triangulation. Methodological triangulation describes using multiple methods such as observation, interview, and document review to confirm what a researcher might have found (Stake, 1995). Lastly, Merriam (2009) suggests that “you

have triangulation by using three methods of data collection – interviews, observations, and document research” (p. 216). The data obtained during the collection phase of this research through observations and document reviews was cross-referenced to interview data to facilitate the afore-defined triangulation. This case study on NROTC student persistence used these methods and protocols in data collection and analysis, and it is these methods that provide the rigor within the findings contained in this qualitative research.

### **Categories and Sub-Categories**

After all data was gathered, analytical coding placed the data within categories and sub- categories along theme related topics. In accordance with Merriam (2009) the four principles for constructing these categories or themes from the data are as follows:

- be as sensitive to the data,
- be exhaustive,
- be mutually exclusive, and
- be conceptually congruent (p. 186).

The categories and sub-categories were constructed in accordance with Merriam (2009) directives and were developed out of strict interpretation of the data after saturation had been clearly established. Categories were developed across data from all interview responses, observations and records reviewed. Table 3 below depicts the categories and sub-categories constructed to present the research findings.

Research Findings and the Persistence Perspectives			
Categories	Sub-categories		
Environment (Acculturating to the NROTC)	Residence halls		
	The uniform		
	Campus experience (Non-ROTC)		
	Why stay in the NROTC?		
	Developing into the ROTC culture		
	Value of summer training (cruises)		
	Job (military) after 4 years (graduation)		
	On campus bias		
Socialization (The NROTC Fraternity)	Time spent in the NROTC culture		
	Identification in the NROTC culture		
	Role of competition		
	NROTC staff/instructors		
	NROTC, academics and the STEM struggle		
	Concept of friends	NROTC friends	
		Non-NROTC friends	
Involvement (Belonging in NROTC)	The intangibles (real and/or perceived)		
	Aura of the uniform		
	Doing something that matters		
	Understanding the NROTC purpose on campus		
	Intrinsic benefits of the NROTC		
Pre-College Factors (Influence on Persistence Developed Before NROTC)	Military family members		
	Athletic participation		
	Role of faith (religion)		
	Always aware of military as a future		
	Giving back (Patriotism)		
	General high school factors		ACT scores
			High GPA's
		A/P classes	
		Eagle Scouts, band, choir and jobs	
	Single parent homes		
Effects of Financial Support	Provides the ability to afford college		
	Facilitates independence		
	Relief from stress		
	Money alone not a good reason to stay		
	The counteractive influence		
	The stipend (and book fees)		

Table 3. Categories of Findings

## **Research Findings**

The following section describes the findings of the research with respect to the conceptual perspectives of this case study. The findings are presented from interview data anchored in the data obtained from observations and record review, and based on the categories constructed in Table 3. Of the three conceptual perspectives represented, the environment, involvement and socialization perspective with regards to NROTC student persistence represents the most significant portion of the research. As suggested in the literature review this perspective is well written on by the leading scholars in the field of persistence, and is well covered in what I have found as well research. Due to its size, this perspective is broken into three categories for presentation. The findings with respect to the environment category, involvement category and socialization category representing the environment, socialization and involvement perspective will be followed by the pre-college attributes category (perspective) and the financial support category (perspective) findings.

### **Environment (Acculturation to the NROTC)**

Every young man or woman that progresses to a four year college after high school experiences a change in daily surroundings and routine. Those that move to a college campus to live and study during any given year experience a complete shift in living and daily functioning dynamics from what they were used to. The first year is wrought with excitement, anxiety and novelty all around each new college student. The rigors of the first year alone cause many to re-think their decisions to move away from home and stay within this new and foreign college environment. These feelings are no

different for the NROTC student. However, in conjunction with the adaptation to a new college environment replete with its own internal culture, the NROTC student must also begin to acculturate into additional systems within the NROTC environment on campus. Acculturation into this additional NROTC environment requires the student to: live in a separate NROTC dormitory; wear a uniform on campus; participate in frequent early morning physical training; attend weekly military training and wear short hair-cuts, to name a few. Many NROTC students decide to leave the NROTC program, college or both after the first year of college for failure to acculturate to either, or both. These students are free to return for their second year as non-NROTC students or return home without reprisal. Those students that choose to stay into the second year of college under NROTC scholarship begin a more in-depth and rigorous acculturation process into a unique and separate culture that differs greatly from the rest of the student body all around them. These students are the focus of this study.

In accordance with a Naval Service Training Command Operational Directive (2015, January 1), the vast majority of these students that return for the second year under the NROTC scholarship go on to graduate in four years, and serve in the US Navy or Marine Corps. For this cadre of students the acculturation process into the NROTC environment accelerates simultaneously with the academic rigors and social process of the campus life into the last three years of college. However, it is the first year of college that begins this acclimation process and lays the foundation for the NROTC student experience and college student persistence. In the following sub-categories I will present the findings of the acculturation process of the sophomore through senior NROTC students that were interviewed on topics from their entry into college and the NROTC

program through the point in which they are currently enrolled. It is through this environmental acculturation process, beginning in the freshman year that the students acculturate into the NROTC and persist to graduation and into a lifestyle that will be with them for many years to come. This begins with physically moving to the college or university, and moving into the dormitory.

**NROTC Residence Hall.** The NROTC dormitory is the first step on the environmental acculturation process for many NROTC students. This dormitory is strongly desired by NROTC administrators as the living place for reporting midshipmen that are on the national scholarship from entry as a freshman. However, living in the dormitory is not required for reporting NROTC freshman, and those that do not desire this accommodation, oftentimes do not use it. It is in this living environment that most NROTC students meet their first roommates and neighbors, and learn to adapt to the new campus life and experience. One interview participant explained how living in Centennial Hall (the ROTC dormitory) assisted in the acclimation process because of similarity of daily schedules:

Yeah, my roommate was in the Air Force ROTC. I lived in the ROTC Hall, the hall they offered us. It's in Centennial. Living in the ROTC Hall helped a lot for me. We all had to wake up early and do basically the same stuff. Being in the ROTC Hall helped a lot because you were always surrounded by people who were doing the exact same thing as you. (Midshipman Jaguar)

Here the student is suggesting that it was clearly helpful that their roommate and those around the ROTC dorm 'doing basically the same stuff' made the adaptation easier

with respect to NROTC requirements. Additionally, the initial introduction to a new college roommate is a unique college experience for every new student. When this roommate is compatible, or at least living in harmony with one's existing environment, the pathway to enjoying the process is made easier.

Another interview participant, now a senior, relates the advantages of former and current roommates being from within the same environment. In this case the ROTC, in general:

My freshman year I was in the ROTC hall, in Centennial Hall. The first roommate I was selected to live with through their matching program was Army ROTC, and he's still my roommate. We've been roommates all these years. We are best friends have the same mindset. He's in the Army program. Sophomore year I lived with four other Marine NROTC midshipmen, another civilian student, who was formerly in the program, and the Army roommate I just mentioned (off campus). I have never had a non-ROTC roommate. (Midshipman Tiger)

For this participant, the roommate matching program conducted by the residence halls arranged the roommate he would stay with for all four years. The fact that the roommate shared a similar mindset suggests the two students shared the same value structure that facilitated their desire to be within the ROTC program. Additionally, the idea that all future roommates were from within the same environment would suggest that this is an important aspect of the college and NROTC experience for this participant.

Throughout this discussion on environmental acculturation to the NROTC the concept of like mindedness and comfort from others of similar values and with similar



goals will be repeated. The understanding that the initial roommate assignment process is important to the concept of persistence goes back to the freshman year for many of the study participants. Support, understanding, and empathy from those the NROTC students live with are keystones in this analysis. The pursuit of those going in the same direction as early as freshman year has an impact on the acculturation into the NROTC for these students. Their reasons to persist become enhanced by the like mindedness and comfort with those they live and exist with on campus, including the similarity of the uniform they wear when together.

**The Uniform.** Another major theme emerging from the analysis relates to the requirement to wear the military uniform on campus all day at least one day per week. This includes classes as well as campus events throughout the day. This uniform is more than just noteworthy apparel. It is commonly referred to amongst military members as ‘the cloth of our nation’, and there is significant meaning and background associated with it. The process the NROTC midshipmen go through from freshman (4/C) to senior (1/C) years is a growing and dynamic evolution with respect to feeling comfortable in public in the uniform. However, this evolution is a necessary process to solidify the NROTC student within the culture in which they will be a part of in their futures. This beginning of this evolution is demonstrated by a sophomore (3/C) interview participant in the following statement:

When I am walking around campus I for sure feel people are looking at me. Many times when I am here in my uniform I am doing color guard or football games. When we are walking to the stadium, all in our uniforms carrying the flags, it’s definitely like people will stop and turn and stare at us. If we are walking toward

them they'll move out of the way. It's definitely... what's the word? Odd might be the word I am looking for. I am not used to having people just go out of their way to stare at me, and makes me feel like I am under a microscope. (Midshipman Stingray)

Two other midshipman, who are upperclassmen, discussed their sentiments of being watched while growing accustomed to the uniform:

It's not fun being the only person in a college class that's wearing it [the uniform]. I'm also sure a lot of people are like, 'Wow, look at that wierdo. They're in the military'. (Midshipman Leopard)

When I wear the uniform on campus it is like I have a lot of lightbulbs on me. A lot of people don't know the Navy or Marine Corps... I get a lot of questions in class, but I'm enjoying wearing it, now. (Midshipman Eagle)

Somewhere during the acculturation into the NROTC and adapting to being in the uniform students experience different social realities than those of non-NROTC students when on campus or in class. The students' ability to become comfortable with these perceptions of themselves becomes important in their reasons to persist. Another midshipman (2/C) interviewed tells of the personal feelings of being invisible while being in uniform earlier as a 3/C or 4/C, but now others are more familiar with the uniform:

I would wear my uniform, and now (as a junior 2/C) everybody knows who I am; but when I was a sophomore (3/C) and freshman (4/C) and you first start getting into your major classes, it would take people three or four weeks to realize I was the same person from Tuesday to Thursday, because we wear our uniforms on

Tuesdays, and they wouldn't recognize me on Thursdays. They wouldn't realize I was the same person. So I was like, Wow, they really see you differently when you're in uniform. They don't understand I am the same when out of it.

(Midshipman Jaguar)

This midshipman went on to describe the ability to overcome this feeling of being invisible in uniform by eventually getting to know most of the people in a particular college major. This was just a function of time. Now, as a junior, this midshipman is unaffected by those that are unfamiliar and wears the uniform as a matter of honor.

In the evolution of growing used to the uniform there is a natural adjustment that takes place over the four years. These upperclassmen describe the acculturation process into the uniform as part of being in the NROTC:

I would say you grow into comfortability in the uniform. I think a lot of it at first, freshman year, is like disbelief that you're wearing this, but then you also look at people and you're like, well, they're in sweats and jeans, and you're just wearing this all-Khaki... like a monkey suit, at times – maybe not a monkey suit, but there's something very different than others, and I think you just get used to that [over the 4 years]. (Midshipman Lion)

Yeah, I'm definitely more comfortable wearing my uniform now than I was when I was a freshman. I think it's because I've done it so often. I'm way more comfortable wearing my uniform now than I used to be. (Midshipmen Jaguar)

These descriptions of the adjustment to the uniform is representative of all upperclassmen interviewed and observed during the course of this research. The uniform

is an understood necessity of being part of the NROTC program. Acculturation into the uniform is a natural process each of these midshipman must go through. From its consistency across interview data, I learned that the uniform is a critically significant piece of the persistence equation. All twelve interviewed and all those observed during the data discovery phase demonstrated deep appreciation for the uniform, suggested that it wearing it was significant to them within the NROTC program and that the uniform was a source of great pride to them. In other words, the uniform is a positive contributor to midshipmen's decisions to persistence to graduation.

Lastly, wearing of the uniform has an additional factor worth noting. It provides an identification with the staff military officers the NROTC students aspire to be one day. This identification is an essential part of officer development and the acculturation process. Midshipman 3/C Falcon expressed this very well during the course of the interview:

Going to the Armory and seeing active duty staff [officers] wearing the khaki uniform just like I am wearing... you know, with real rank, and nicer ribbons.... There's a lot of connect there, and I know what I am getting myself into is worth it. (Midshipman Falcon)

Throughout the interviews, observation and record reviews, it has been the uniform that has stood out as an important piece to the persistence puzzle. Although this research is not focused on those that leave the program (e.g. retention/drop-out), it is very clear that the physical identification of the NROTC program is the uniform. The feeling of being ostracized from the rest of the student body can be a limiting factor if the

student's heart is not in the NROTC program. The accounts of those that have persisted within this study demonstrate that effect. Those that choose to stay learn to not only acculturate into the feeling of acceptance in the uniform, but find comfort in it by the end of the senior year and establish an esprit de corps with the other NROTC midshipman in the unit. The midshipman take on a "band of brothers" persona within the unit and the uniform becomes the symbol of commitment to themselves and their peers. It becomes one of the main reasons to stay in the NROTC in an otherwise non-ROTC campus experience.

**Campus experience (non-NROTC).** The college experience, and living on campus provides the NROTC midshipmen the chance to acculturate gradually into the military lifestyle. Although many of the NROTC midshipmen had considered a service academy for college or even enlisting because of an understanding of the military or the desire to serve, the college campus allows them the time to gradually acculturate into the military system. Many of the midshipmen were torn between the pursuit of military desires and experiencing the normal college culture before military service. The NROTC program allows those that wish to be college students to be so, while still pursuing military aspirations. Those that have persisted have found it to be the best mix of military training and the normal college life. A senior 1/C midshipman was able to articulate this idea during an interview:

I think the requirement to wear the uniform once per week is enough. I know a lot of people, the reason they chose ROTC over the Naval Academy, the Citadel or VMI is based on they want to have a little bit of a college experience, too; and I think [the NROTC] gives them that opportunity to have a college experience and

to be able to interact at a college level, too, like not in uniform. It gives them a different learning experience. (Midshipman Lion)

The majority of the midshipman interviewed expressed the NROTC as the correct mix of military involvement for them at this point of their lives. There are some exceptions, but the NROTC format allows an easier transition into the military. This is an additional statement addressing this aspect of the NROTC:

I visited the Naval Academy and the Air Force Academy. I liked the Navy culture a lot better, so I decided to go Navy rather than Air Force. Choosing NROTC over the Naval Academy was, basically I liked the Naval Academy summer seminar a lot, but I decided that I wanted to have a normal college experience as much as possible and the NROTC was the best way to do that. (Midshipman Jaguar)

This interviewee was an exceptionally well-qualified applicant for both the NROTC, and the Naval Academy. Although selected to both, the NROTC enabled this midshipman to acculturate while allowing for the normal college experience. This concept resonated with many interviewed and observed for this study, and certainly is a major consideration into why they have persisted within the NROTC program.

Lastly, within the context of the college experience, not all those that attend NROTC desire the college experience initially. This study found that nearly 40% of NROTC students are focused on the military from a very young age, and joined the NROTC primarily for the military training and access to becoming a military officer. The desire to serve will be explored in later sections, yet even for these military inclined students, the NROTC program on campus offers the ability to acculturate into the college

experience. This paradigm was seen in an interview with a midshipman 3/C that was focused on the military exclusively when joining the ROTC.

I did not question my desire to stay in the NROTC program the first semester of my freshman year. When the spring semester was nearing the end, and it wasn't the NROTC part, I didn't feel very comfortable here. It was more about college really. I wasn't sure of the college life, that was more my decision than the NROTC life. I knew I liked that. I didn't think I was the best midshipman, and grades were tough. I questioned whether I should go and enlist, just get out and enlist. I was just a 4/C. I had to acclimate to it and over time I was able to do that, but I wasn't sure if it was right. (Midshipman Falcon)

It is the campus experience that enables the NROTC students to acculturate not only into the NROTC, but also into the campus experience as it is with any college student. The non-NROTC campus experience is a big part of the NROTC experience in college. NROTC students spend more time in the college culture than in the NROTC culture. Yet, it is the combination of both that leads to the NROTC students' desires and decisions to persist. The difficulty for the NROTC student is that they are required to acculturate into both, and each NROTC student must come to terms with the reasons to stay in both.

**Why stay in NROTC?** Each NROTC student must face this question. The NROTC program requires significant time and effort each week that has little to do with the normal college life. Acculturation into the program requires time management obligations most other non-NROTC students do not have. On top of the extra 20-25 hours

per week in military drill, physical training and classes comes the increased study time to prepare for the NROTC specific classes (see Table 1, Chapter 2). Two NROTC students addressed this issue during the interviews as follows:

There are definitely times you sit there and ask yourself ‘Why am I doing this to myself?’ That’s the question, why am I doing it? --- And then you think of all the reasons that you want to be in the NROTC... [I really want to be an officer]. I mean, for some people you just need one reason to keep going, and that’s all you need. You can have a million reasons to quit, but you could have one reason to keep going, and that’s all you need. You keep praying and wishing you had more time, but you think in your mind, because of those time management skills you’re learning, you’re like, well, where can I make that up? How can I do this? And I plan it out. (Midshipman Lion)

It is emotional and physical hardening. You have to think about mitigating time risks and be more deliberate about how you live your life than the average college student does. When to eat, sleep, and take care of everything you need to take care of. It’s a lot of planning; waking up at 0500 and trying to push through without a nap until 9 or 10 p.m..... It’s a lot to get used to. (Midshipman Tiger)

Every student that attends college faces difficulties due to the pressures of college. The significant increase in time required to study, separation from home and the pressures of grades in general make even the hardest of new college students question their decision to attend institutions of higher education. Add to this the extra time required for the NROTC program and the feelings of being different (e.g. the ‘wierdo’



from midshipman Lion's experiences), and the pressures on the NROTC student to persist can be overwhelming. As suggested by Midshipman Lion, each NROTC student must have at least one reason to keep going, and to persist. Another interview participant relates their reason for persisting within the NROTC program:

I started thinking about the kind of career I wanted when got to school. I am studying computer science engineering, so I was looking at a lot of things. The main path for graduates of this major is usually an entry level programmer kind of position. I really want to study this topic, but this didn't seem to me like something I wanted to do immediately after I got out of school. I had been thinking about the military since my freshman year of high school. I really wanted to do something that made a difference and wasn't something stuck behind a desk or not making an impact on the world. Obviously, in thinking about that [for me], the military came up as an option. (Midshipman Condor)

When facing the question 'why stay?', and put up with the acculturation pressures of both college and the NROTC program, each NROTC student must find their own one (or more) reason(s) to persist. Many express these feelings of 'doing something different', or 'making a difference' when explaining their reasons for persisting. These types of feelings are explored in the involvement category of the environment, socialization and involvement perspective. However, it should be pointed even at this juncture that these feelings are a significant reason most of the NROTC students persist. In many cases they are hard to explain, but definitely a major factor. Managing time associated with the extra requirements and answering the question 'why stay?' in the NROTC are pressures each student must address in their pathways to persistence. Their

development into the NROTC culture and how each student must arrive at the decision to stay is a process each must under-take along this journey.

**Developing into the NROTC culture.** NROTC students are exposed to the extra requirements and the newness of the programs' culture immediately upon entering. For the majority of the students that are on the national 4 year scholarship, the ability to test drive the NROTC for 1 year prior to making the decision to commit is a crucial aspect of the process. Although the decision to persist can be made for many reasons based on the individual students' desires and aspirations, each student interviewed agreed to the advantage of test driving the NROTC program for one year (freshman) before they decided to persist. The following participant's statement on the first year as a grace period represents a shared view throughout the NROTC interviews:

There's not a lot of information out there on what NROTC is like when you're actually in it day-to-day, so it was a bit of a shock to me to come to [NROTC] student orientation and learn that I was going to have to wake up early a lot of days and do PT [physical training] at 6 a.m. I didn't know what to expect. I did take the first year as my test drive year. You can learn about what is entailed in the military in the freshman year of NROTC. I think that they give the first year as a grace year is really great, because I would not have joined NROTC if my first day entailed five years' commitment in the Navy. I don't think there is any chance I would have signed up for that. (Midshipman Hawk)

Each student in the NROTC program faced this decision at the same time. Even those students in the NROTC College Program that may not have the scholarship until

the second year understand that when they decide to stay within the program in the sophomore year and accept the scholarship money they are committed to at least 5 years of naval service. (As a reminder, the NROTC National Scholarship Program awards the scholarship first day freshman year and represents the vast majority of the NROTC students studied within this research. Whereas, the NROTC College Program provides a means for those students not awarded the scholarship directly following high school to attend the NROTC freshman year without the scholarship hoping to meritoriously be awarded it during the freshman or sophomore year. Any student that is not awarded the scholarship money by the end of the sophomore year is not allowed to continue in the NROTC program. College Program scholarship recipients were a part of this research). Having this first year as a test drive for persisting in the NROTC culture is universally seen as an advantage to the NROTC program as a whole. 25% - 35% of NROTC students do leave following this first year after receiving full tuition, yet those that have persisted within this study agree that this mechanism should remain in place to determine if this lifestyle and culture were the direction they truly desired to follow. However, another major factor associated with the NROTC students' development into the NROTC culture during this first year is their association and identification with the NROTC as a cohort, or group as a whole.

Many NROTC students that persist describe the acculturation into the NROTC as the development of a group togetherness. The concept of the NROTC as a family will be explored in the pre-college factor category. However, at this point the group as a whole becomes a meaningful factor in the persistence equation with respect to group association. The NROTC students that truly vest themselves into the unit develop

friendships. How these friendships manifest as peer pressure is discussed by two of the NROTC students as follows:

I would say it's a factor for those that stay... The development of this group or family. It even comes out as sometimes just not letting them down, like you don't want to let them down. I mean you've grown up and developed this group, and they're people that care about you. You don't want to let them down.

(Midshipman Lion)

I thought about dropping, but a big part of it is that I didn't want to be the person that left the group... It was more personal. I liked what I saw of the lifestyle, so I stayed because I didn't want to be the person that dropped. (Midshipman Jaguar)

Peer pressure has an effect on those that persist because they develop into the group and the belonging that exists within the NROTC. So, the development into the NROTC as a whole has a strategic significance on those that acculturate into the unit. From adjusting to the extra time requirements to association with those within the group, this development plays a significant role in the acculturation of students into the NROTC. As each Freshman NROTC student completes the freshman year the development process requires one final step of core training for midshipmen. This acculturation process during the summer prior to returning sophomore year is repeated every summer and represents the culmination of the development into the NROTC as a whole.

**The value of summer training.** Summer training for the NROTC program is colloquially known as 'summer cruises'. Each year all midshipman on scholarship are sent to naval units or vessels around the world as active duty personnel. Typically the

officers aboard these units or vessels are accommodating to the midshipman because most of them were exposed to similar training cruises during their own college careers. Therefore, NROTC students typically receive a positive demonstration of the navy as a whole during these summer training periods. As such, these summer cruises are extremely valuable in showing the midshipmen the U.S. Department of the Navy as it presents world-wide on sea-going vessels, aircraft and shore installations of the U.S. Navy and Marine Corps. Importantly to this research, these summer cruises are the ultimate in acculturation into the NROTC and the military service as a whole. The very first summer cruise is perhaps the most important as it takes place prior to the final commitment upon entering sophomore year, and it is administered to each midshipman over the four major components of the Department of the Navy: ships, airplanes, submarines, and the Marine Corps. In other words, each NROTC freshman gets to sail on a vessel, fly in a naval aircraft, dive on a submarine and carry a rifle in the marine training areas. The value of this core training for midshipmen (CORTRAMID) is represented by NROTC students as follows:

What's definitely motivated me to stay on the officer route is seeing other officers and what they do in their jobs, especially during CORTRAMID and then seeing the enlisted side. I know I can do a great job as an officer after this experience, make a difference, and all that good stuff. That's keeping me going. I'm sold. I already drank the tea. (Midshipman Falcon)

I loved CORTRAMID. It was one of the best months ever, and I loved it. I just liked being immersed in the Navy culture. (Midshipman Jaguar)

I would say going into CORTRAMID I was probably 80% certain [I would persist]. I said, OK, so CORTRAMID is actually going to be out and around enlisted, around officers, seeing what they actually do. That should help me make up my mind one way or the other [to stay NROTC], and it did, so it was fantastic. (Midshipman Condor)

The U.S. Navy devotes time and treasure to CORTRAMID every year for both NROTC and Naval Academy Midshipman at the end of their freshman or plebe years. This training is very positive and provides an immersion into the culture unlike anything else in the NROTC experience. CORTRAMID's value is clearly high for all those that persist. However, all of the midshipman that persisted following CORTRAMID were of the same group that most likely would have persisted without it. Every year 25%-35% of NROTC freshman on scholarship throughout the nation do not return for the sophomore year. These numbers hold true at the University of Minnesota, as well. Many that go to CORTRAMID do not stay into the sophomore year, even though they view it as a positive experience. Although the reasons these NROTC students depart are the subject of a different study on retention, it is of note that CORTRAMID itself was not seen as a game-changer for those that persisted in this study. Most of those that have persisted were positive about the NROTC and campus experience without considering the summer cruises. A future study on the monetary value of CORTRAMID with respect to the persistence equation may be of value to determine if this is actually good money spent by the U.S. Department of the NAVY, but outside the parameters of this study. However, CORTRAMID is a positive piece of the larger persistence puzzle, and it certainly assists with acculturation to the U.S. Navy.

Summer cruises, in general, during each of the NROTC students' years are positive as they provide the midshipman the exposure to their near futures. Sophomore and Junior year cruises provide more detailed and selective exposure to areas NROTC students have personal interest in and specifically choose. NROTC sophomores and juniors are allowed to choose the content of their respective summer cruises to be within the component of the Department of the Navy they are most interested in (e.g. ship, air, sub or Marine Corps). These cruises are discussed by these participant's interview responses:

I think I have a better understanding of what NROTC is meant to do. Especially, after summer cruise, I think, is the main time my goals changed. Because it's really hard to put like, Leadership and Management class in perspective until you're in summer cruise and get to ask a Lieutenant, or Commander of a ship a specific question and get their responses. So I think the cruise really helps solidify a lot of goals. (Midshipman Hawk)

I feel like I have gotten the best summer cruises possible. Between my sophomore and junior year, the cruise probably changed everything about the way I thought about ROTC. (Midshipman Leopard).

The summer cruises have always been a mainstay of positivity about the NROTC program. How the cruises effect the persistence equation with respect to the college experience is less than clear, and potentially not a contributor at all. If the NROTC student feels more positive about the navy, in general, because of the summer cruises then the effect can only be positive on the NROTC experience as a whole. Therefore the

summer cruises have a positive effect on the NROTC program regardless of their limited value to the campus experience and less than consequential effect on the persistence equation. These cruises provide exposure and increased acculturation to the U.S. Navy lifestyle, solidify decisions of those already persisting and provide a peek at what their future job entails.

**The job after college.** The understanding that the NROTC student has a job at the end of college often is not considered an advantage or a significant part of the NROTC experience as a whole. To the contrary, the NROTC students themselves find relief and independence in the fact that they have a ready job available at the end of the four years. In response to the question as to important factors influencing their decision to stay in the NROTC, participants in the interview process offered the following:

I want to fly [navy airplanes], and have job security. I'm so happy I don't have to worry about getting a job right now. (Midshipman Leopard)

One additive for me in signing the paper [committing to the NROTC] is that it was a relief off my shoulders knowing that as long as I do what is expected of me, I will have a job for the first five years after college. (Midshipman Stingray)

Yeah. And I knew I would have a job after college, and I would move away and do my own thing. Yeah. It was a way to be independent from my family.  
(Midshipman Jaguar)

The job at the end of the rainbow has significance to the NROTC student. The job provides security in not worrying about the internship and interview process other non-NROTC college students become concerned with as upperclassmen. In Midshipman



Leopard's statement there was excitement in the expectation of the future job as well. In analysis of this sub-category, the concept of the navy job after college does not have a negative connotation with respect to a dictated time commitment. Of note here is that those interviewed and observed have already accepted the NROTC and rationalized the commitment to the U.S. Navy after college. However, the concept of relief, independence and excitement many of them expressed with respect to having this job after college suggests that this sub-category has a positive effect on the overall persistence decision process of the NROTC student. Not all aspects of the NROTC experience on campus lead to positivity in the persistence equation. Especially when these students have to contend with a perceived bias on campus.

**On campus bias.** Not all of the subcategories associated with the persistence equation for students in the NROTC are supportive. The ROTC on campus has had political undertones associated with it for generations in various locations. As discussed in Chapter 1 the ROTC has been observed as a function of a military class replete with political views that at times can be the opposite of the prevailing campus viewpoint. ROTC has been removed or restricted at various campuses around the country over the years because of political viewpoints the ROTC can represent as a training ground for the military. Many of these political viewpoints still exist today on the University of Minnesota campus, and at the University of St. Thomas (although to a lesser extent at UST as expressed by UST participants). Based on observed past and current patterns the political emotions associated with the ROTC on campuses in previous generations are not as strong today, especially in the context of this study. However, they do still exist. As such, the environment that facilitates the acculturation of the NROTC students in this

study is still affected by on campus bias toward the NROTC. The context of this sub-category can be seen in nearly all of interviewee's responses. Here are several that demonstrate this position:

I took a philosophy class and it was a social justice class, which I didn't really know what I was getting myself into. There was a myriad of majors, all across the board. It was pretty much psychology, sociology and philosophy type majors. We had lots of group conversations. I didn't hide that I was in the NROTC, going into the navy. The class knew. It was a class of 20 to 25; it wasn't that many people. It was myself and one Air Force Cadet against the class sometimes, or at least that's the way it felt. I'd be lying if I said I didn't learn anything. It opened my eyes to some stuff, but as far as that particular political bias on campus goes, I just kind of tolerate it. (Midshipman Falcon)

Politically, within the battalion I'm one of the more, politically speaking, liberal people that there are. So personally, a lot of times I don't have an issue with some of the... I think you could say in general, bias skewed toward the liberal side, the University of Minnesota campus (Midshipman Condor)

I know some classes over here (West Bank) that midshipmen are part of the political science department. They have their very strong opinions, and it being a pretty liberal university, there are some people that just won't wear their uniform in class because they don't want to deal with it. (Midshipman Lion)

I have experienced some negativity with that, some subtle comments, usually in the classroom, not necessarily directed toward me but toward the military while I happen to be wearing the uniform and items like that. (Midshipman Cobra)

Nearly all interview participants indicated the existence of this bias. However, none suggested this bias to be severe or inflamed. None of the participants suggested that it altered their decisions to persist, yet it did cause many to remove uniforms, seek different classes and feel negativity toward them on campus. In general, the addition of this sub-category was only necessitated by the frequency of it being mentioned during the interviews. It would seem passé that this type of political paradigm would still exist and cause negativity in the acculturation process of NROTC students within the campus environment. Yet, after fifteen years of war since the start of the new century, and thousands of U.S. military deaths supporting administrations from both sides of the political spectrum it still does. Thus, it must be reported as a finding.

**Theme summary.** The environment category is the first of the categories representing the environment, socialization and involvement perspective described in the literature review, and explores the acculturation of students into the college and the NROTC environments on campus. This section identified areas the NROTC student is required to adapt to and be comfortable with while becoming a part of the NROTC on campus. The following category will present the findings associated with the Socialization category (perspective) and describe the process in which the NROTC student learns to identify with the NROTC establishment on campus.

### **Socialization (The NROTC Fraternity)**

The Socialization Category of the environment, socialization and involvement perspective will explore the process of student identification with and association within the NROTC program on campus. From the amount of time spent in the culture socially to the NROTC and non-NROTC academic classes, the persisting NROTC student learns to identify with and become part of the NROTC experience on campus. The student experience within the NROTC's tight knit culture, required time commitment and specialized training has been compared to the student experiences of varsity athletes and fraternity members within the campus environment. Some of this is true, but in many ways the NROTC is also very different. With its own socialization and association process on campus the NROTC has unique guidelines and traits that NROTC students are required to absorb. One of the first aspects of the NROTC students need to absorb are the time commitments of the NROTC program. The first sub-category will explore what these time commitments are, and the effect of the time commitments on the persistence equation.

**Time spent in the NROTC.** All college students feel a time squeeze on campus. Classes and study time alone take up vast quantities of a student's time each day. Add to that any clubs, jobs or social expectations, and time management skills become valuable. The NROTC student must add hours on top of these understood student requirements in order to begin the NROTC identification and association process. The following interview participants relate what some of these time requirements are:

I'd say the time demands vary depending on the week. In very busy weeks it could be around 25 – 30 hours easily. But probably during an average week, maybe around 20-ish. This would include classes and study time for those classes.

(Midshipman Condor)

Probably about four days per week you will see most [NROTC students] at the armory. I'm there five days per week. People may not show up for Fridays. But the way our unit works, the majority of the people are there five days. The exclusion may be the Tommies [UST NROTC students who must travel to get to campus]. (Midshipman Lion)

Waking up at 0530 every single day is really hard on its own. Coming to the unit for PT at least three days, if you're on remedial PT four, plus drill day is Five.

(Midshipman Wolf)

The time commitments described by these interviewees is consistent with Table 1 in Chapter 2, and represents the increased requirements on NROTC students. This time together within the NROTC culture, and at the Armory builds bonds and camaraderie as well provide the time required for the military training these students must be exposed to. Time management skills are essential, and these time requirements can be a hurdle for many that attempt the NROTC program. However, those that persist have learned how to manage these time requirements, maintain a social life and still produce the grades needed to graduate. In many ways NROTC students are the same as any other student on campus. However, the NROTC student within this study begins to develop differences due to these time requirements, and identify within a culture of their own on campus.

**Identification in the NROTC culture.** The NROTC student is similar in many regards to any student on campus in how they identify with groups. Due to the time spent together NROTC students build an identity and association with the people they are around most frequently. In many ways it is similar to any group of people that begin heading in the same direction with the same goals. There are similarities to a parallel discussion on fraternal organizations in this regard. Each NROTC student must go through this process of identification and association with the unit, and the people in it in order to persist to graduation. The statements of these interview participants underscore the identification and association the students begin to feel within the NROTC:

My sophomore year, because a lot of my non-ROTC friends did, I joined the engineering fraternity on campus, Kappa Eta Kappa, and that is a bunch of people with the same goals, and hanging out together. As engineer students, I feel they we're going through a lot of the same stuff that I am... but these people aren't going through what I am, they have it so much easier... Once I started to identify myself more with the NROTC: [I came to understand that] 'This is what I do.' I've got a lot of friends in the NROTC now. It's definitely changed a little bit.  
(Midshipman Hawk)

We have a lot more on our plate to accomplish in the four years that we're at the university, especially at St Thomas, we have all those general classes to take like theology, philosophy, structures of language; plus all the NROTC classes, weekly drill and weekend requirements. I definitely am [different] compared to a regular student. (Midshipman Eagle)

We have our own distinct culture, it's different... I'm incredibly comfortable there [Armory]...It's kind of an island in the middle of campus, where I go for like-minded people. (Midshipman Falcon)

NROTC is sometimes compared to a fraternity because of the intrinsic and regulatory requirements placed on students to be a part of the unit. Students take an active part in a group setting shared in common where students feel comfortable and socialize together. The similarities in this regard are valid because identification with the group becomes social when the NROTC students become comfortable together in the Armory. However, the time required in classes, drill, and PT is far and above what is required for these social attachments, and therein lies the differences between a fraternal organization and the NROTC. The NROTC is the present and future reality in their social environment on campus and futures in the US Military. It is the thing they all share in common in college. Yet, the NROTC is also a bond for the future considering the job and lifestyle each student will become a part of. This association begins on the college campus when the NROTC student chooses to persist, and is the foundation of the identification in the NROTC as a college experience both social and compatible based on a common current environment and future goals. Within this current environment NROTC students are part of a team, and within this team a competitive atmosphere is developed. The midshipmen compete amongst themselves for class ranking and top battalion position similar to starting roles at premier positions on an athletic team. However, the battalion as a whole is a cohesive unit that competes in drill against NROTC units around the country. The role of team and teamwork is an integral part of the NROTC unit and is explored in the next sub-category.

**The role of teamwork.** Competition is built into the NROTC program as a means of assessing or judging achievement in academics, military drill and physical training (PT). There is an order of ranking within the cadre of the midshipmen that determines who will become the battalion commander, executive officer, and the rank order of the company officers. This fosters a competitive spirit, sprit de corps and generates teamwork within the NROTC unit similar to that of varsity athletic teams. As in the previous sub-category with the discussion on fraternities, the structure of NROTC provides for a supportable parallel discussion with respect to college varsity athletics. The participants interviewed below address this concept of teamwork and the time commitments associated with the NROTC program as they relate and compare to teamwork and time commitments associated with athletic teams:

I'd probably say our time commitments are the same as that of a varsity athlete in college, not high school. But I think we have more stress than a varsity athlete as far as our overall performance, because I think they focus more on their sport, whereas we focus on grades and NROTC performance [military training] and physical performance. We have the military, student and physical side of it; we have the whole person aspects. You have to perform in every way. The time commitment is probably the same, but what you actually put into it, I think we put much more into it. (Midshipman Jaguar)

I think athletics are a really big part of it [NROTC], definitely. Even going back when I played football in school...And athletics, not just as far as being an athlete to be in shape for the PT, but there is a lot of leadership going on in a



football team, a lot of teamwork, a lot of those lessons you learn in athletics. I think that is a big part of it in the [NROTC] unit. (Midshipman Shark).

There are multiple similarities between the NROTC and college varsity athletics. There is duality in the way in which teamwork is developed and maintained. The concept of routine is commonly shared in student time required at practice or drill. Day in, day out practicing the same concepts, appointing leaders and following directions are remarkably the same. Of interest here is the comment from Midshipman Jaguar that the NROTC is deeper and more time consuming as it incorporates the whole person concept. In summary, the NROTC and college varsity athletics are remarkably similar. The concept of team first is priority and development of participants (players and midshipman) is paramount to the success of the organization. This team development concept can positively or negatively affect the persistence decisions of the NROTC students (or the players on any varsity team) depending on how it is accomplished. As a parallel discussion, this varsity athletics and NROTC team development is a good comparison within the context of this study. This was an interesting finding within the research as it does appear fairly conclusive that both act similarly in their respective organizations. Of final note in this sub-category is the role of the coach or the NROTC staff that is in charge of the development of the team and responsible for how the team works together. The officers on the staff may be the most critical aspect of the NROTC unit as they truly are developing their successors in military service.

**NROTC staff/instructors.** Within any organization the leaders play the most important role in development of the people and conduct of the outcomes. The NROTC leaders are all active duty U.S. Navy and Marine Corps officers, and enlisted personnel.

These leaders are the professors and advisors for the naval science college curriculum, and they also provide the administrative and military oversight of the NROTC unit on campus. The staff officers wear the same uniforms as the midshipman and are responsible for establishing the military culture of the NROTC unit while they are assigned to the university. In the context of this study, the way in which the staff officers interact with the NROTC students is significant. The students' interaction with, and overall perception of the staff officers has a positive influence on their persistence decisions. The interaction with the NROTC staff/instructors is discussed within these statements from interview participants:

In the battalion we have a much closer relationship with our lieutenants [staff/instructors] because of how much time we spend at the Armory doing NROTC things. For a lot of aspects I think we're more comfortable going to them with questions. We have our academic meetings and that kind of stuff, so you have a little bit more one-on-one interaction with them, as opposed to my last CSE course that I just took, having a large lecture hall of 300 people... And for things specific to CSE, if I'm seeking guidance I'll go to my CSE professor, but otherwise, normally I'd probably go to the NROTC to talk through things first.

(Midshipman Condor)

I think [the relationship with staff/instructors] is more personal, because we have our counselling meetings with our lieutenants, so what I would talk about with them is more about life, and what I would talk about with me major faculty is just pretty much straight academic. (Midshipman Jaguar)

The identity and association NROTC students have with staff/instructors is a product of the frequent contact they have together each week. This concept will be explored in detail in Chapter 5 as this area represents a topic well written on by all of the classic scholars in the field of persistence. In my analysis, within Chapter 4, this immediate and frequent contact with the NROTC staff/instructors is critical within the persistence equation. NROTC students feel a kinship with their instructors as well as a belief in them as mentors in academics and future military endeavors. Midshipman Jaguar even expressed the ability to speak about life matters with the NROTC staff/instructors in her response. It is sufficient to say that this is one of the more positive aspects of the NROTC program in general as it relates directly to the students' academic success and student persistence.

**NROTC, academics and the STEM struggle.** Academic success is paramount to a student's ranking and general achievement in the NROTC program. College major classes that count toward graduation and the NROTC classes taken within the Naval Science (NAVSCI) curriculum are calculated into the students overall GPA. Typically, the NAVSCI courses do not transfer to the college major in effort to fulfill college credit required for graduation. Therefore, the 32 extra credits the NROTC student must take within the NROTC 4 year structure are seen as extra classes to be taken each term that have no bearing on their college graduation. These NAVSCI courses are seen as critical to the NROTC structure as they provide military training and another avenue facilitating the acculturation into the U.S. Navy as discussed in the previous category. Students can view this extra coursework differently as the added classroom and study time can be

observed as overbearing and excessive, especially for those in the engineering science majors. One of the interview participants offered the following on this topic:

I think the credit load of the classes [32 NAVSCI credits], I want to say I don't know if they are all useful, just because I haven't seen the application of them in the fleet [active U.S. Navy]; but if they were to be streamlined, it would be a lot easier to graduate in four years as an engineer... without taking summer classes, and engineering major is not a four year thing. (Midshipman Hawk)

During the NROTC National Scholarship selection process the navy places a very high priority on science, technology, engineering and math (STEM) aptitude. Those high school students that desire STEM and have demonstrated aptitude for the sciences in high school courses and standardized tests are given priority in admission. STEM and other college majors from colleges around the country are broken into a tiered system as outlined in Figure 4 for all NROTC applicants. This tiered system is designed by the U.S Navy and published on the NROTC world-wide website (Navy, 2016). High school students that select tier 1 as their top choice in majors of interest followed closely in priority by those that choose majors in tier 2 are given priority in selection. Very limited selections are made from major choices within tier 3.

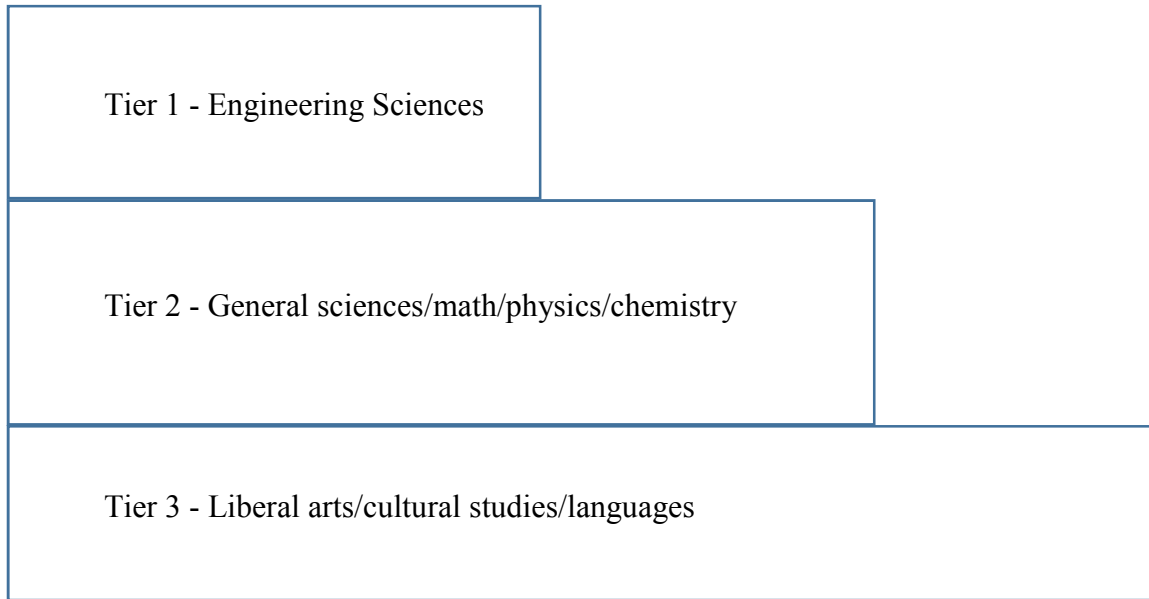


Figure 4. U.S. Navy's tier structure of NROTC academic majors (from official website)

Although the NROTC places a high priority on STEM it becomes extremely difficult to stay in these majors, particular in Tier 1, because of the time commitment for all requirements of the NROTC. For many of those that persist the motivation to graduate in a Tier 1 major fades, and continues to be a struggle for those that drop into Tier 2 because the degree becomes a means to the end, with the end being a commission in the U.S. Navy or Marine Corps. Dropping into Tier 3 is strongly discouraged and sparingly approved, but often sought or desired by those that do persist because the grades become more important to class standing and what major those grades are in of less importance. As the commission becomes the end-state the students see less value in the tier 1, and even tier 2 majors due to their degree of difficulty. The following participant statements demonstrate this position:

I changed from engineering and started taking political science classes and other classes for my liberal education requirements [in my new political science major]. I got all A's that semester, my physical training went up, my ROTC proficiency went up. I realize the degree and commission go hand in hand, but the commission is more important. (Midshipman Tiger)

Coming in, I was very, very set on having the computer science engineering degree and graduating specifically with that degree, and then going on to the Navy... But now, knowing what I will be doing in the Navy, I think that's switched a little bit from my first year... Even if I somehow I needed to switch [majors], I wouldn't mind.

I actually started out in mechanical engineering, but I was like, I already have a job, I'm going into the military, I don't even know if I want to be an engineer, so why would I go through the pain of majoring in it. (Midshipman Leopard)

These responses were common throughout the interviews, observation and record reviews. "Engineering and Tier 1 academics get too hard", "the grades are too tough" and "having the sure job takes away the Tier 1 desire" are additional comments heard during the research. The NROTC typically is accommodating for any student struggling that requests to drop from the Tier 1 to the Tier 2 as these majors are STEM in discipline. Dropping to Tier 3 is less approved or accepted for Navy option NROTC students, however for those that are otherwise students in good standing within the NROTC, dropping to the Tier 3 does happen as a last resort to accommodate their eventual

graduation. The Marine option students have much more flexibility on moving into any tier as long as they persist to graduation.

Finally, if a notable amount of the 25% - 35% of NROTC students that attrite following freshman year due to an inability to complete the desired tier major were inclined to stay and complete higher tiered majors if the NROTC had more favorable time commitment structure, a future study could address this issue. As for the socialization category and perspective at hand, academics has an influence on NROTC student persistence. That influence is cultivated by the strong student identification with the NROTC staff/instructors and the positive student association observed with the academic experience in college, regardless of college major considerations. Another major socialization factor in the college experience for NROTC students involves the people they meet and the friendships they develop. How NROTC students associate and identify with peers strongly influences their persistence decisions.

**Concept of Friends.** During the course of student matriculation into a four-year college they typically learn to identify with new friends and associate with new peer groups that are likewise within the same college or campus experience. This holds true for NROTC students as well as they learn to adapt to two differing, yet similar groups of students. Both of these groups have an effect on their decisions to persist, and require exploration.

***Non-ROTC friends.*** The finding within this sub-category section suggest a strong difference in the identification and association with non-ROTC friends as compared to ROTC friends. Much of this is due to the requirements of the NROTC program and the

restrictions these requirements place upon those that have made the decision to persist. Of note in this sub-category section is the change in the relationships NROTC students have with non-ROTC friends as they transition from sophomore (3/C) students to senior (1/C) students. The tendency observed is that NROTC students, in general, learn to strike a balance with non-NROTC friends in earlier years and gradually separate from non-NROTC friendships later on. Some of these participants' views speak to the validity of this finding:

When I decided to be in the NROTC you have to sign the 'I will not drink underage; smoke marijuana or do drugs or anything [pledge]'. The only real temptation is being around my friends while they are intoxicated. This year I'm trying very hard to keep a balance of hanging out with both of my groups [ROTC and non-ROTC friends]. (Midshipman Stingray)

So, I was mainly friends with NROTC folks, and I had three or four friends – outside the NROTC, and they definitely pulled me in a different direction than the NROTC. (Midshipman Jaguar)

I have been jealous...of all my friends doing regular student things...I would say; especially going out, spending time on weekends; drinking alcohol and so forth. (Midshipman Tiger)

Actually, the reason I didn't live with them again sophomore year was because they always had friends over on weeknights until midnight, when I had to go to bed a 9 or 10. (Midshipman Leopard)



As students grow in their identity and association with the NROTC, they cannot be out late, participate in the party scene and act like everyone else on campus. They have restrictions, and being caught in violation has severe repercussions on their status in the NROTC unit. One underage drinking violation can cost them the national scholarship or expulsion from NROTC if the situation warrants. Two violations generally means expulsion from the program. The college campus culture tends to be less than supportive of this lifestyle. Not to say all non-NROTC associations involve these negativities, but when the alternative is to associate with a group of people going the same direction, and have the same restrictions, the gradual choice of friends and group associations leans towards homogeneity with students within the NROTC. The closeness of the students within the NROTC fosters a feeling of family, and over time the students within the unit grow stronger together. This natural identification with like-minded students makes the transition easier and facilitates persistence decisions amongst the NROTC unit as a group of peers.

*NROTC friends.* Through a natural succession found in comfort among people with similar values, ideas and goals NROTC students gravitate to each other for companionship. As identification with the NROTC unit and culture grows from sophomore to senior year, NROTC students seek the company of the others within this group. The effect this gradual association with the group is illustrated in the comments from these interview participant:

My freshman year was with my civilian friends, for sure. Sophomore year, more of a mix. This year, even more – I think there is more of a trend. I'm getting closer to NROTC friends as I get older, I'd say. I think the more time you spend

with someone – I spend a lot of time with all of the NROTC friends..., you just get to know them better. (Midshipman Hawk)

Your class [NROTC] can grow very strong together. They're the reason I got the scholarship and stayed... because you surround yourself with a lot of positive people that are really trying to accomplish becoming these future officers.

(Midshipman Lion)

The Armory, It's kind of an island in the middle of campus, where I go for like-minded people. (Midshipman Falcon)

One thing I've noticed a lot over the years is that my friends that aren't NROTC, when I study with them or whatever, they have a very different life than I do.

They're curious about my life, but they really don't understand, what it's like to be a mid [midshipman]. They know I have to get up early, and stuff like that, but they'll be like... Why can't you just skip a day?... And it's like, 'You can't just skip in NROTC', and they don't understand because they just skip their classes when they want to sleep in. (Midshipman Leopard)

During my numerous observations of NROTC students in the Armory and on campus, I noticed this natural transition to identification of peers within the battalion more-so than what I heard in the interviews. These findings are firmly triangulated and represent a significant factor in the NROTC student persistence equation. Association with their fellow cadre of NROTC students, and identification of themselves within the NROTC unit and culture is common to all observed, reviewed and interviewed in this case study.

**Theme summary.** The socialization category is the second category representing the environment, socialization and involvement perspective described in the literature review, and explores the ways in which NROTC students learn to socialize into the NROTC unit in the college experience. This category discussed the association and identification of NROTC students with the NROTC personnel, culture and unit as it relates to their persistence in the program. The following category will present the findings associated with the Involvement category (perspective) and describe the ways in which NROTC students perceive themselves as NROTC students in the college experience.

### **Involvement (Belonging in NROTC)**

In the Involvement category I will attempt to describe the perceptions NROTC students have of themselves within the NROTC experience, and how these feelings effect their persistence decisions and why they involve themselves in the NROTC while in college. The findings in this category suggest that ‘what’ NROTC students feel about their appearance, presence, and futures while in college is important in explaining why they stay in the NROTC. The concept of the scholarship money will be explored in the next category, but my analysis suggests that money does not play the most significant role in the persistence decision. How the midshipmen feel about their appearance and what they are doing in NROTC on campus, with an eye on where they are going in the future plays a more significant role in why they persist. Many of these perceptions are intangible, and not openly describable. However, they do exist, and will be addressed in this category. Students involve themselves in the NROTC culture most deeply because of them.

**The intangibles (real and/or perceived).** Pride, sense of purpose and service are concepts that highlight this sub-category. Hard to describe, and different for every person, these intangibles represent factors discussed in interviews, observed and discovered in record reviews for each NROTC student encountered in this study. These findings represent the feelings of the NROTC students. Those ideas that keep them motivated and going forward in the NROTC culture with all of its requirements and restrictions, as difficult as they are at times. In their own words, interview participants discuss these intangibles as follows:

I have a sense of joy...knowing that I'm involved in this thing that's not just myself, not just for the small purpose of making money or making a name for myself since honestly...you're going to be around people more powerful, rich and influential than yourself... It's being a part of that, just being a part of something bigger. (Midshipman Stingray)

I need that sense of purpose, pride, and I find that in the NROTC and, hopefully; in the Navy in a few years. (Midshipman Shark)

I want to serve my country. I think it's definitely the most interesting thing I can do in my early twenties. Like I said, I don't think an entry level engineering job is cut out for me, and I don't think you're going to find that kind of camaraderie and leadership in the private sector versus the military... So, 'why I persist in the NROTC?' probably main point is because I want to commission. (Midshipman Hawk)

It think part of it is that it's something so few people experience, and I want to do it, because I think it is interesting. I want to serve my country, but it's more of I want to be involved in the Navy... just something I want to do. (Midshipman Jaguar)

These are a just few of the statements that describe these intangibles experienced by the NROTC students while they are in college. Heartfelt, candid and even thick and rich in qualitatively describing these reasons to persist, the findings within this sub-category tell a story. The story is different for each student, yet generally similar enough to suggest that these intangibles represent a significant influence on each student. The story suggests there is an air of positivity in the direction they have chosen, regardless of the sacrifices made within the college atmosphere to get there. These students know what they are involved in their NROTC experience, and have their own perspective on their futures because of these intangibles. They seem comfortable in their persistence decisions because of them. In every interview these intangibles represent a personal acceptance in being involved in the NROTC experience. This acceptance is obvious because they wear the uniform on campus every week, and there is no hiding who they are. In the NROTC students' perspective the uniform is another positive piece of the NROTC experience because it projects who they are to everyone that sees them.

**The aura of the uniform.** In the first category of findings in this chapter the military uniform NROTC students wear was described in the context of environmental acculturation, and how midshipman adjusted to wearing it was discussed as a function of the students' decisions to persist. In the context of this category the uniform will be

discussed as it pertains to NROTC students' involvement in the unit, and what the students' perceptions of themselves are that facilitate their decisions to persist.

When an NROTC student wears the uniform on campus, there is no doubt which organization the student is involved in. There is no anonymity on drill day for the NROTC student. Consequently, each NROTC student must formulate their own perceptions of what they have involved themselves in when amongst peers in classes and on campus. This is necessary because each student faces questions as to why they are involved in the NROTC, and those that perceive the uniform as a positive symbol of their involvement tend to persist at a high level. This 'cloth of our nation' is a representational symbol of what the NROTC student is involved in, and the following interview participants' responses on this topic demonstrate this point:

I think there is an innate pride that goes with it. 'That's the aura of the uniform', you have pride when you wear it, and that's why you take good care of it and all those things that go along with wearing the uniform. And I think it gives off a sense of who you are as a person. Without anybody ever having to talk to you, they already know something about you. The fact that you're in the military, they already know a little bit about what type of person and what type of character you have, and so I think when you walk around campus like that, then, yeah, it sets you apart from all the others. (Midshipman Jaguar)

When I look at myself in uniform, I think about being a future officer, there's a sense of 'I made it'. Not everyone can do this, so in that sense, I am better if I can

reach that goal. Very small underlying sense of that...Oh gosh...but it's like being part of something bigger. (Midshipman Stingray)

It feels good to have people looking at you. The girls: oh my gosh, this person in uniform!...I always feel awkward when people come up and say "thank you", for your service when in uniform. It is prideful, and a good thing. Probably it's the legacy that has been left for us. (Midshipman Eagle)

Once again, this is just a select few of the interview responses that could have been used to describe the NROTC students' perceptions of the uniform. Midshipman Jaguar's response especially illustrated the power of the uniform in communicating a set of values that sustains NROTC students. For the NROTC student the involvement in the unit is both public and personal because of the uniform. It is their personal perceptions of how they look, feel and fit in their NROTC involvement that allows them to privately persist. It is clear that they all know they are noticed. The NROTC students' ability to analyze their involvement in the NROTC as positive in the uniform is an attribute that facilitates them greatly in staying. The uniform represents something bigger to them, and enhances the perception that they are engaged in something that matters. The NROTC student feels they are involved in something special for many reasons, including the uniform, and that does matter.

**Doing something that matters.** Findings of this research suggest NROTC students perceive their involvement in the NROTC experience in college as doing something that matters. Phrases such as 'doing something bigger', 'making an impact' and 'not an average life' have been heard throughout the interviews and the observed in

drill discussions and ad hoc conversations with NROTC students. However, there is no perception of student involvement in the NROTC discussed more frequently than the belief that they are involved in ‘something that matters’. Once again, defining ‘something that matters’ is different to every person. How students generate the perception is unique to each individual, but explainable in how they discuss it. The following statements from interview participants are presented as descriptors of these perceptions:

I don’t know if I would say it’s leadership, but I wanted to definitely do something that mattered, rather than just be a college student that went and got a degree, and then goes and gets a random job...it seems like a very regular path, to finish high school, then you go and get a degree, then you just get a job in some business....and then your life is average. It seemed very boring to me, so I just wasn’t interested in that. (Midshipman Jaguar)

It comes back to the fact that I wanted to do something that makes an impact. That’s a very vague statement. I wanted to do something that really made a difference and that I could work with a team of people that I know are all motivated to make a difference with things, gain experience, and look for something that wasn’t just sitting behind a desk typing programs into a computer all day. The Navy for me is the most viable way to go about that. (Midshipman Condor)

I know I’ll be doing something that matters; that helps people. I’ll be working with incredible individuals. I want to help. I want to feel better [about myself] as



much as I can, whether that's as an individual or serving the country.

(Midshipman Falcon)

'Doing something different' is certainly a perception that all of these midshipman have about their NROTC involvement and experience. Seeking something that is not average or boring is also a common theme throughout the interviews and observations. Each NROTC student has their own mechanism of describing their involvement in the NROTC experience. These are their perceptions of current involvement, and future direction in the NROTC. They serve them well when needed. More importantly, the NROTC student's comfort with the perceptions of their active involvement in the unit reflects favorably on their persistence decisions. These perceptions also assist them in understanding the purpose of the NROTC and their role on campus. This is another piece of the persistence equation for each NROTC student.

**Understanding the NROTC purpose on campus.** NROTC student involvement on campus has a specific purpose. All students understand that the NROTC exists, yet not all students understand what the NROTC is or why the NROTC students are on campus. How the NROTC students' perceive their involvement in the NROTC and why they are on campus assists them in feeling at ease in the college environment. How this falls into place for NROTC students is discussed by the interview participants as follows:

We work hard at the NROTC, we have a lot of pressures...but I feel quite a bit of relief from them [normal student pressures]. Especially later in our college careers, internships, and job recommendations and so forth are not as important to me. It's my job to educate here [in college and the NROTC] and

commission...become an active member of the U.S. Military. (Midshipman Cobra)

I feel better in the sense that I know what I am doing, I know why I am here and I don't think a lot of people can say that; at least on a college campus, where people are changing majors frequently; and don't know what their job is going to be.

(Midshipman Falcon)

Over the course of the four years the NROTC students learn to understand their purpose on campus. Their perception transitions from seeing themselves as college students that wear a uniform once a week to military officers in training. With few exceptions, by the end of the four years, NROTC students place the commission over the college degree in order of importance, and see the college degree as a 'means to an end'. Students' perceptions of their purpose on campus and their involvement in the NROTC evolves to this position. As graduation day nears, and the concept of the commission becomes reality the NROTC students' understand their purpose is to become military officers. This gradual transition in perception facilitates the NROTC students' desire and ability to persist. Frankly, this is the inevitable perception of their purpose on campus. They must eventually arrive at it. There are, however; benefits the NROTC students accrue from their involvement in the NROTC experience. These benefits are also personal in nature and different for every NROTC student, but have a profound influence on their reasons to stay.

**Intrinsic benefits of the NROTC.** This sub-category discusses the existence of intrinsic benefits the NROTC students accrue from their involvement in the NROTC

program. These benefits are only realized or felt by the individual NROTC student.

Whatever benefit they may enjoy is generally theirs alone. These benefits are perceived by the individual based on the aspects of the NROTC program that are important to them personally. I share this as part of the research findings because these benefits are real to the NROTC student. They reflect directly and positively on their persistence in the NROTC and are presented here through the responses of these interview participants:

What we're doing [NROTC] isn't something that everyone can do. It's like all those people that walk up to me when I'm in uniform, and are like, 'I could never do that'. It's an internal thought that makes me feel good about what I'm doing [NROTC]...It brings comfort. (Midshipman Leopard)

I believe it [the NROTC] is a place God has put me for very specific reasons. I may not know all of them right now; in fact, I'm positive I don't, but I do believe I am here for His specific purposes. I feel very much that this is where I belong... It's a fulfillment. (Midshipman Tiger)

The Navy for me is the most viable way for me to go about making a difference in life, and the way I think I can give back the most at the same time. It's a commitment to myself in doing something that I think is going to further me as a person, and also wanting to give back at the same time and not having just a selfish career. (Midshipman Condor)

Each of these responses is unique to the individual NROTC student. To them, these are important benefits of their personal involvement in the NROTC program, and how they perceive the benefits they accrue are germane to them alone. The most

important reason to present this sub-category is to demonstrate that the NROTC program means different things to different people. These perceived benefits are interesting, influential and real to the NROTC students experiencing them. Each of these intrinsic benefits has bearing on why these NROTC students stay in the NROTC program. Every student interviewed and observed expressed some form of personal benefit they accrued while involved in the NROTC experience.

**Theme summary.** The Involvement category is the last of the categories representing the environment, socialization and involvement perspective described in the literature review, and explores the involvement of students in the NROTC environment on campus. This section identified areas the NROTC students perceive as privilege for being part of the NROTC on campus. The uniform, ‘doing something that matters’ and the perceived benefits of the students’ involvement in the NROTC experience on campus are explored. Most importantly for the context of this research, each of the sub-category findings are qualified with respect to their effect on the NROTC students persistence decisions. The following category will present the findings associated with the pre-college attributes category (perspective) from the literature review, and describe the process in which the NROTC student learns to qualify admission to the NROTC program within the college experience.

### **Pre-college Attributes (Influence on Persistence Developed Before NROTC)**

Every young man or woman that progresses to a four-year college after high school brings their own unique background characteristics and skill sets to the campus environment. These unique traits, or factors are developed before the student matriculates

into college. The findings in this category present the pre-existing factors the NROTC students within this case study possessed prior to entering into the NROTC environment. These findings are relevant as they are quoted, observed or discovered directly from the participating NROTC students who have already made the decision to persist in the NROTC. These factors were characteristics of the participating students at matriculation and had a direct effect on their socialization and integration process in the NROTC and in college, and are therefore significant as enablers in the persistence equation.

Pre-college attributes that enabled the NROTC students to persist range from early life exposure to military ideas to impressionable activities in high school that would later facilitate persistence in the NROTC lifestyle and culture. These factors are part of the personal background of the students within this study. None of these factors is more notable in regards to the students that have persisted than the influence of their families.

**Military family members.** Qualitative research is not a method in which a researcher presents findings as absolutes based on empirical data. However, the closest possibility of an unmitigated finding in this case study is that eleven of the twelve participants had an exposure to an immediate family member with prior military service. The classic scholars within the field of persistence write frequently on the influence of family as a significant and leading contributor to traditional (non-NROTC) student persistence. This is certainly true for NROTC students as well, and will be explored in Chapter 5. Within the context of this chapter nearly all NROTC students in the study had an immediate family member with prior military service. These family members had been a very strong influence on their decisions to join the NROTC prior to college and then to persist. If influential grandparents, aunts and uncles with prior military service are

considered, all of the students participating would possess this pre-existing factor. These NROTC students' comments on exposure to influential family with military backgrounds provide insight:

My dad was in the Air Force...I had a lot of military influence, a ton of uncles and grandparents, but no one really pushed me towards it. I heard such amazing stories all the time about it... I actually didn't even know about NROTC. It was an uncle's friend that heard I wanted to be in the military. He was an Air Force officer... he was like, 'have you heard of the ROTC?' (Midshipman Falcon)

A lot of my family influenced me to go Navy....Not my parents. They were not in the Navy, but I have an uncle in the Navy and several cousins and second cousins. (Midshipman Jaguar)

The list gets long. My dad was enlisted Navy, four years [active duty]... Then he did 18 years in the reserves. Both grandfathers were in the Army. I have two uncles on my mom's side who were Army officers, two uncles who were Army enlisted, and one cousin, probably my closest cousin growing up, who is Marine enlisted. He was infantry, back, shortly after 9/11. (Midshipman Tiger)

Not all of the NROTC student participants had multiple family members with military prior experience. Some of the NROTC students interviewed had but one family member with a military background, and in one case it was the influence of a neighbor with military experience that had the most influence on the NROTC student. However, even in this case the student had a family member with a military background to identify with. Family influence emerged as the most important theme related to persistence of

NROTC students. After family member influence, involvement in athletics prior to college is similarly a pre-existing factor that positively effects NROTC student persistence.

**Athletic participation.** Physical training is a major part of the military preparation for all NROTC programs. Physical training (PT) is completed at least three times per week for all NROTC students going into the Navy, and five days per week for those going into the Marine Corps. Running, sit-ups and push-ups and nearly all other forms of PT are an integral part of NROTC. Furthermore, every three to six months the NROTC students are required to test their PT skills against the clock and the other midshipmen in the NROTC unit battalion. These PT scores are utilized in a calculus that ranks the NROTC students amongst themselves as a means creating a hierarchy for battalion leadership roles. As a pre-existing factor, being a part of athletic teams, and varsity athletic team in high school in specific has a significant positive effect on the NROTC students and their ability to persist. Similar to the previous sub-category discussion on family exposure all NROTC students interviewed and observed had been part of athletic teams or competitive sports in high school, and with the vast majority having participated in high school varsity athletics. These NROTC students' statements suggest the value of participating in athletics prior to attending college:

Athletics, definitely. I think athletics really helped me in NROTC... By the end of high school, yes, cross-country and wrestling. I dabbled in track... and football a little bit... But being in real good shape, when I showed up to NROTC after wrestling season really helped me like it a lot more, I think, because I was in good enough shape to keep up. That's never been a real burden for me, PT, which it is

for a lot of people; but I was in good enough shape, which was good. But athletics and the leadership from athletics helped me. (Midshipman Hawk)

I think just the physical aspect and the training and commitment part has come from, I ran cross-country in high school... And just the day in and day out of going to practices... You had to have a strong mentality to keep going because the races were so long. Athletics was a very big part... that equipped [me] for the requirements of the NROTC program. (Midshipman Lion)

Athletics prepares the NROTC students for the physical rigors of the NROTC program, but equally important is the preparation athletics provides in fostering the competitive spirit NROTC students need to succeed in the program. Midshipman are ordered a ranked within the battalion throughout their time in the NROTC. This ranking determines the NROTC battalion billets held as well as positions in the graduating class. Midshipmen's scores on physical fitness tests are a significant entry into the ranking system of the battalion. Being physically prepared for the rigors of the NROTC program allows the student to persevere through the day in and day out grind of the mandatory PT within the unit. Without question possessing the ability to keep up physically with a competitive mindset assists in the NROTC students in acculturating and developing into the NROTC unit on campus. This is easily qualified after being told by every participant in the interview process that they had participated in athletics prior to entering college.

This interview data was verified in the record reviews and sustained in the observation as well. Athletic backgrounds assist students with their NROTC persistence decisions. Not all NROTC students interviewed stated that pre-college athletics was a



major contributor in their decision to persist, but the fact that they all had participated in athletics before college suggests that it is. As a final note, the leadership aspect of participation in varsity athletics is also suggested as a positive contributor in the persistence equation. Varsity team captains, managers and directors are exposed to many of the same leadership rigors experienced in the NROTC. After athletic participation and exposure to family members with military backgrounds as pre-existing factors, the role of faith is examined as it pertains to the persistence decisions of NROTC students.

**Role of faith (religion).** Faith or religion has a role in the persistence decisions of NROTC students, but this role is not clear and perhaps not as compelling as other themes that emerged in this study. This pre-college factor is neither a positive or negative with respect to persistence even though each student interviewed or observed professed to having been faithful, or exposed to religion at some point in their lives. Notably, all NROTC students interviewed openly admitted to being a member of an organized religion, yet very few responded that faith was a significant factor in their NROTC decision process. Even when prompted to the question of faith in their lives, very few added noteworthy responses. The participants' statements below are representative of the findings in this sub-category:

My parents are very interested in the faith. We go to [a specific church] in the Twin Cities area, and right from a very young age we were starting as greeters in the church. Then, when old enough became an altar server.... And Eucharist minister in high school, so I did all that.... I was more faithful in high school than in college. I try to hang onto my faith, but... It was very instrumental in my formative years. (Midshipman Stingray)

I'm a Christian. I don't think that played much of a role in it [NROTC decisions].  
I was part of a bible study in high school, though. (Midshipman Hawk)

These statements are representative of the findings within this sub-category as a whole. Faith is present in all of their lives, but the level of its significance in the individual persistence decisions as described by these NROTC students is modest at best. The pre-existing factors of faith or religion do not appear to be a strong indicator of motivation to persist. The fact that all of the NROTC students participating in this research claimed that they are faithful, or a part of organized religion suggests there is some connection to their decisions to stay. However, there is no clarity to that connection other than it exists in the backgrounds of all participating students that have persisted. In that there were no NROTC students interviewed or reviewed claiming the absence of faith or religion in their lives prior to college it can be suggested that this pre-college factor is present in students that persist. A subtle positive, but certainly not conclusive as an indicator because not one student elaborated on faith or religion as motivator in their persistence decision. Another more conclusive, but less defined pre-college factor discussed by NROTC students is more of an understanding that the military was going to part of their futures.

**Always aware of military as a future.** An interesting theme that was discovered during the interview process was the understanding that nine of twelve of these NROTC students 'always knew' they were interested in the military. Although no consistent age can be sighted, participants suggested timing for this claim as far back as any recollection of 'what they were going to do when they grew up' as a common theme. I heard ages from four to twelve in response to this query. The contribution of military family

members towards persistence was discussed as a high positive in an earlier sub-category, and quite possibly a genesis of this frequent response. However, the passion students displayed when rendering this response makes this sub-category at least noteworthy. It was as though the military was *fait accompli* for many of them. In fact, several of the participants had sought enlistment prior to NROTC application. These participants' interview responses suggest this 'always aware' notion:

I appreciate that people recognize the uniform, even if they have no idea what branch it belongs to...It's a uniform people have seen, seen in the movies... and history classes. It's almost impossible to part of the American culture, and not pick it out. That's a big part of my information [for NROTC decisions]; it's 'what I have always known I want to do'. (Midshipman Tiger)

When I was way younger, maybe 4 or 5, I had visited [a Navy base with my uncle]. I was so young, but there were pictures of me in the plane with him... and I always enjoyed it [Navy], and I liked being around it; so I think that just got me acclimated to being used to being around the Navy, and 'I always liked it'.

Military family members have a positive influence on NROTC student persistence decisions. However, this concept of 'always knowing' is a new influence on the NROTC student as a pre-existing notion prior to college that may develop from other areas. Fascination with the uniform and military lifestyle from movies, parades and magazines can develop separately from family influences. Several of the students interviewed were planning on enlisting if not accepted to the NROTC program. The motivations for those that choose to enlist out of high school is material for a separate study, however; the

identification with the military at a young age, and the influence this identification has on decisions to join and persist in the NROTC cannot be discounted.

Much of the NROTC students' knowledge of the military can be attributable to military family members. News media, movies and other pop-culture venues also play a role in the positive identification with the uniform and the military lifestyle which can facilitate the concept of 'always being aware'. The analysis of the interview responses suggest this is so, and it has a positive influence on their decisions to join and then to persist in the NROTC. The natural succession to this is the concept of patriotism. But what really defines patriotism, especially to NROTC students and their decisions to persist?

**Giving back (the new patriotism).** Love of and devotion to one's country, and concern for its defense is the classic definition of patriotism. These are common words for adults with personal significance, but what does this mean to a 17 or 18 year old high school student heading off to college to join the NROTC? In the context of this study, the concept of patriotism must also be related to why NROTC students persists. The responses to this question by the interview participants suggest the internalized feeling of patriotism is manifest in a concept of 'giving back'. The words that define patriotism are misleading with respect to what the new NROTC student feels about devotion to the country. During the course of the interviews, the word patriotism was rarely provided as a response to questions about reasons NROTC students decide to persist. Frankly, the NROTC students did not mention the word patriotism at all until it was asked of them. On the other hand, 'giving back' was quoted routinely as a justification for persistence in the NROTC and the desire for future service in the military.

The concept of patriotism is complex. Especially for young NROTC students. Most of the NROTC student participants were in pre-kindergarten years when the seminal event that was 9/11 occurred. More current military operations in Iraq and Afghanistan are mostly political in construct, and do not resonate as defense of the nation to NROTC students. Likewise, these Iraq and Afghanistan operations have little to do with love and devotion to one's country. When asked, interview participants responded as follows with what patriotism and 'service to the nation' meant to them when considering persistence:

I think it reflects my commitment and my appreciation to America. I think that's one of the best ways that I can reflect it. Especially knowing individuals who have come from other countries; that simply, by no fault of their own, didn't have opportunities that I have as an American... In a way, not 'giving back' and showing my appreciation for that, to me would feel very selfish, I suppose. That plays an aspect too, outside of motivation [to persist], just wanting to 'give back' and recognize all of the privileges that I have. (Midshipman Condor)

Yes. I feel that outside serving my community, everyone has a duty to 'give back' to the nation in some way. If that's being a teacher to help mold the future or any public servant, civil servant, or being a military member. For me, I believe that I can 'give back' the most as a military member. (Midshipman Stingray)

It is always very important to me to serve the community, and how your actions can have a bigger impact than just you. The country and the family for sure, but... we are very, very fortunate; we are blessed, we should be grateful for everything

we have and we should do our best to think about others [with less]. That is part of what drew me to the military (Midshipman Tiger)

This is what patriotism and service to the nation means to these NROTC students. Love and devotion to one's country is qualified as the ability to 'give back' to community and others as a member of the NROTC and the military. The feelings of being fortunate to be an American allows these students to persist in the NROTC to become members of the military. Concern over the defense of the nation is reflected in the feeling of being privileged to be an American, and to provide a service to the country in order to 'give back'.

Although these NROTC students may not yet fully comprehend all ramifications of armed conflict, they do know that it is a consequence of this chosen way to give back, and are willing to persist anyway. It is the privilege of representing something bigger, the absence of self and an appreciation for what they have as Americans that demonstrates the reality of patriotism and the desire to persist for students in the NROTC. Regardless of not mentioning patriotism during the interviews as a motivator to persist, or defining what they feel in classic terminology they have found a way to describe love of and devotion to one's country themselves. As a pre-college factor the concept of giving back, or patriotism, is a significant indicator of persistence if it can be identified in the high school student. There are other pre-college attributes developed in high school that have an effect on NROTC student persistence that need to be explored in this category, as well.

**General high school factors.** These pre-college attributes were part of the development of NROTC students during their high school years, and have an influence on their persistence decisions. The analysis in this sub-category will be less based on interview quotations, and based more directly on answers to data specific questions, observations and most significantly on data obtained from record reviews. Although the analysis of these factors is generated less from interview responses, the rich, thick descriptions will be facilitated by data from the record reviews as triangulated with interview and observational data.

**ACT scores.** College admissions are still greatly influenced by individual high school student ACT (or other standardized test) scores. There are justifiable reasons for assessing student applicability based on higher ACT scores as statistics suggest higher completion rates are correlated to these higher scores. The same would be true for NROTC students, especially with respect to the math comprehension section of their scores. The NROTC requirement of three calculus and two physics courses justify the priority given to higher math comprehension scores for those students going into the US Navy. However, it must be pointed out that ACT scores cannot be the only means of assessing qualified NROTC applicants. Several of the NROTC students within this study did not have statistically high ACT composite or math comprehension scores. Most of these students were awarded the NROTC scholarship through the NROTC College Program because they did not qualify for the National NROTC Scholarship after high school. The NROTC College Program awards the scholarship to students that demonstrate the ability to successfully complete college coursework and NROTC drill prior to the completion of the sophomore year. Once the College Program awardee

accepts the NROTC scholarship they simultaneously accrue the commitment to naval service.

Regardless of ACT score, my analysis suggests that the desire to exist within the NROTC culture and become part of the military trumps any qualification assessed through a high ACT score. A student's self-efficacy, or belief in their own ability to succeed influences goal attainment in a greater capacity than nearly any quantifiable measure, especially the ACT score. Self-efficacy will be addressed in Chapter 5 with respect to the scholarly work of Vincent Tinto and others in the field of persistence, but for this sub-category the concept of self-efficacy suggests that ACT scores themselves do not present the whole picture. ACT scores represent one measure of potential future student persistence. Many of the NROTC student participants did obtain statistically higher ACT scores while in high school. Therefore, higher ACT scores do have a positive general effect on NROTC students' persistence and are a good indicator of four year college completion.

**High GPA's.** The effect of higher high school GPA's is minimal on NROTC persistence in college. After interviews and record reviews of NROTC students during the course of this research, it was discovered that all NROTC students had 3.40 or higher high school GPA's. Most were above 3.75. High school GPA's go well above the 4.00 scale previously understood as the maximum standard for GPA's because of AP course grade adjustments in high school. During the record reviews I found that several high school GPA's above 4.25 were recorded and obtained by midshipmen after AP course adjustments. This section of general high school factors sub-category is being presented only because it continues to be a recorded and evaluated part of the NROTC application



process. However, the fact that all NROTC students have higher high school GPA's, contributed little with respect to their persistence decisions it is believed that this area has little influence on the persistence equation. Frankly, it is the A/P classes they have taken in high school that seem to influence the NROTC students more directly than GPA achieved. The A/P classes prepped them for college courses and had a more direct effect on their persistence decisions.

*A/P courses.* Record review data correlated with interview data demonstrate that nearly all of the NROTC student participants took A/P classes while in high school. National Scholarship and NROTC College Program students alike. A higher percentage exists of NROTC student participants that took A/P classes than exists for those that received high ACT scores. The A/P courses, although not as difficult as college courses do have a positive influence on NROTC persistence as each student interviewed suggested that these courses prepared them for the rigor of college courses. One midshipman commented on A/P courses as follows:

Throughout high school I was really interested in math science... I took a lot of higher math in high school... I took A/P calculus (two terms), physics and econ micro/macro... I had the credits to not take the first two terms of calculus [in college]. (Midshipman Hawk)

A/P courses actually prepare college students for the rigors of college. Nearly all of the NROTC student participants took A/P courses in high school and discussed these classes during the interview process. Those that did not take A/P courses were primarily limited due to the lack of offerings in their respective high schools. A/P courses have a

positive influence on NROTC students' persistence, perhaps an even greater influence than ACT scores.

***Eagle Scouts, band, choir and high school jobs.*** Other than varsity athletics, some of the NROTC student participants were also involved in Eagle Scouts, band, choir or had high school jobs. Involvement in these organizations or positions instilled a sense of commitment into the NROTC students and even provided them with exposure to leadership scenarios. It is the exposure to leadership opportunities that interview participants discussed as valuable to them with respect to these organizations that effected their persistence decisions within the ROTC program. Although only a very few of the participants were involved in these organizations, their existence in the backgrounds of the NROTC students suggest they are a somewhat positive influence on the persistence decisions due to an accrued sense of commitment and exposure to leadership opportunities they provide.

***Single parent homes.*** This section of the sub-category is included only because of the relatively high number of NROTC student participants that claimed to be from single parent, or divorced parent homes during high school. Numerous scholarly texts within the field of persistence have suggested that this has a negative influence on college student persistence. This, too, will be addressed in chapter 5. However, in regards to NROTC student persistence, what emerged from the interviews would suggest that there is a positive aspect to students being from a single parent home in high school. The basis for this finding is noted in the following:

Yeah, because then [high school] I lived only with my single parent. My single parent had to work a lot, so during this time I was taking care of my younger siblings. I think that did help develop those leadership and responsibility skills that you need [to persist]... Just growing up and having to make sure they did their homework, ate dinner and went to bed on time and went to school on time, I think that slowly just starts developing those traits of responsibility. (Midshipman Jaguar)

My analysis yields no indicators of negativity associated with single or divorced parent homes for students in high school as it relates to NROTC students persistence decisions. What was detected is the frequency with which this exists for students in their high school years. What was noted was that all of the student participants from single parent homes persisted regardless of this in their backgrounds. What can be suggested is that single parent homes have become so common-place that there is no negativity towards it detected within NROTC student persistence decisions at all. Interview discussions about it actually reflected positivity within the persistence equation.

This sub-category on general high school factors presented attributes of NROTC students developed during their high school years that had an influence on their persistence decisions. The analysis was less based on interview quotations, but triangulated well with observations and record review data to provide the rich, thick descriptions required be meaningful in presentation. These descriptions were presented as they effected NROTC students' persistence decisions, and conclude the findings within the pre-college attributes category.

**Theme summary.** The pre-college attributes category explored the unique traits, or factors developed before students matriculate into college. These factors had a direct effect on their socialization and integration process in the NROTC and in college, and are therefore significant as enablers in the persistence equation. These findings are relevant as they are quoted, observed or discovered directly from the participating NROTC students who have already made the decision to persist in the NROTC. Ranging from early life exposure to military ideas to impressionable activities in high school these findings provide insights into the role that pre-college attributes play related to persistence in the NROTC lifestyle and culture. These factors address many of the effects of the personal background of the NROTC students except financial concerns. The NROTC students' financial considerations have an influence on their persistence decisions, and the role of the NROTC scholarships is significant in this decision process.

### **Effects of Financial Support**

At the University of Minnesota the NROTC financial support consists of full college tuition, a stipend of \$750 per academic year for textbooks and a graduated stipend for cost of living expenses ranging from \$250.00 to \$400.00 per month over the four years. At the University of St. Thomas the financial support is full tuition plus room and board with the same stipend as University of Minnesota students. The University of St Thomas pays the room and board because none of the NROTC students receive scholarship money from the St. Thomas, and the U.S. Navy pays St. Thomas full tuition for each NROTC students enrolled. With this financial support comes the added requirements of the NROTC program while in college and a five year minimum commitment to the US Navy or Marine Corps upon graduation. How this support effects

the NROTC student is significant in regards to their decisions to stay in the program and to take on these requirements.

The decisions NROTC students make on the pathway to persistence are influenced by many factors. It is the effects of the financial support on these persistence decisions that carry the gravitas of the commitment to the NROTC and the military. In other words, the scholarship money is the hook, or the mechanism that binds the student to the NROTC and military service at the end of college. The financial aid is also the lure to bring the potential NROTC student to the college to enroll in the NROTC program. Analysis on how the financial aid brings the students to the NROTC program, and then assists the NROTC student in the acculturation and socialization process on campus will be the basis of the findings in this category.

**Provides the ability to afford college.** Many families of NROTC students cannot afford to send their children to college, and these students would not be able to attend college without the NROTC scholarship. Six of the twelve interviewed suggested the funding enabled them to attend college that otherwise would have kept them from attending. Four of the twelve interviewed were prepared to enlist in the military, but were afforded the ability to attend college and become officers because of the NROTC scholarship. The scholarship money represents a huge factor in their decisions to attend college, and eventually persist to graduation. These factors were widely discussed by the NROTC student participants, and are represented by the following statements:

Financial aid was a big factor in why I came freshman year, for sure. I wanted to get free college, and they advertise it all over the website -- free college first year,

no commitment – and I was like, that’s a pretty sweet deal... My family would have had a hard time paying for college. I’d have to find a way to generate a lot of money on my own, which is really hard with the cost of education. I’d say it definitely was a factor in me staying [persisting]. (Midshipman Hawk)

I probably wouldn’t have been able to afford college if it wasn’t for the NROTC or just would have had to take out massive student loans. If I didn’t get the scholarship, I probably would have gone enlisted. (Midshipman Falcon)

My family would not have had the ability to send me to college at all, unless I would go on what scholarship I could get from other things like grades, Scouts and so forth as well as student loans. I was [already] enlisted... [Becoming an officer] is what led me to consider the scholarship in the first place, and the scholarship was what sent me to college, in my opinion. (Midshipman Tiger)

These types of responses were frequent during the interview process. The scholarship money was a major consideration in attending college in the first place for six of the twelve NROTC students. The influence of the scholarship money then changes as the NROTC student transitions to the decision to persist. As previously discussed many drop the NROTC after the freshman year, so there is more to consider during the decision process to persist than just the scholarship money. Most of these factors have been discussed in previous categories. Yet as the NROTC students transition to the persistence decision after the first year they evaluate the money as their ability to stay in this group they have begun to acculturate into. All of the previous discussions on the friendships, perceived privileges, and socialization concerns now factor into the decision. The

scholarship money takes on different perspectives that allow the NROTC student to stay in the program. One of these different perspectives is the independence the scholarship money affords the student.

**Facilitates Independence.** The feeling of independence the NROTC scholarship money provides carries over from college entrance considerations to providing the ability to support one's self once in college. The ability to attend college without loans, debts and job requirements allows NROTC students to persist in the campus and NROTC environment without encumbrances. The NROTC students' independence from family, and parental funding is also a strong consideration when facing the persistence decision. Each student is effected differently in this area, however; the influence of the scholarship is significant for those that persist. The following interview participants' responses suggest the value of the scholarship as it relates to the feeling of independence for the NROTC students:

Yes, I felt almost at the start of last year that my parents paying for college was like a crutch and gradually I got over that, but I realized that me getting the scholarship myself [from the NROTC College Program] sets me up independently, but it also takes more pressure off my parents. That's just a way of giving back to them since they've already done so much for me. (Midshipman Stingray)

Another factor, I suppose...was the financial aspect that it would pay for my college; that I wouldn't have to get that many loans. I don't rely on my parents financially at all. When I was in high school, I don't think I really realized the

impact of that; but once I got to college, that was definitely a big factor...so I think it was a big part of me just saying, 'nope, I'm going to do this [persist]; because it was a way to be independent, because I had the scholarship, so I didn't have to rely on them financially at all...it was a way to be independent from my family. (Midshipman Jaguar)

Not all students feel the need or desire to be independent from their families. Any sense of freedom accrued from this independence is from an individual's own perspective. The concept of independence is the feeling of being free from the burden of family pressure as well as taking the pressure off of the family. This perspective of 'giving back' has been explored previously in this chapter, and is regarded as a positive in the persistence equation of NROTC students. The feeling of being free from family pressures by persisting with the scholarship in the NROTC must also be considered a positive influence on persistence regardless if it is manifest in the feeling of 'getting away', or 'standing alone'. Either way this facilitates independence for the NROTC student in the persistence decision. As it was mentioned frequently, the concept of independence has an influence on the NROTC student's persistence decision, and that influence must be positive based on the emotions evoked in reference to it during interviews and observations. The scholarship also relieves pressure from the concepts of stress, and the need to work for the NROTC student when facing the persistence decision.

**Relief from stress.** Stress-related issues on all college students making persistence decisions are discussed thoroughly in the classic research on college student persistence. Classic research suggests that the influence of stress can and does have a negative effect on the persistence equation. Add to these understood college stressors of



time, money and academics the additional requirements of the NROTC, and this influence on student persistence can be even greater. The NROTC scholarship can weigh against the student considering dropping, or weigh positively for the student considering persisting. How the NROTC scholarship is perceived by those that choose to persist with respect to the typical college student stressors is demonstrated in the following participants' responses:

A big part of the tuition thing is having my tuition paid for by NROTC just gives me a lot of 'peace of mind', knowing that I'm going to be at school next semester and that my success is really in my control, which is something I really like about being in NROTC; whereas if I wasn't in NROTC, I could be doing great in school and in all my activities and just not be able to pay for next semester. (Midshipman Hawk)

Of course the financial benefits were a consideration, especially as I knew that my family was not able to put any money into my college education. Having that [scholarship] took stress off and allowed me to focus much more on academics and school than I would have otherwise. And, also, outside of the financial benefits, the promise of the career afterwards, as well was a large motivator [to persist]. But like I said, I was at one point during my senior year seriously looking at enlisting because I didn't really have a way to afford college (Midshipman Condor)

I want to say it is a problem for me, not this year, but when I was not on scholarship, I had a job during the school year. I worked about ten hours per

week. Between that, NROTC, working out [PT], homework and school, I was pretty busy and was feeling the pressure of time to get my studies in, work out, kind of relax, but in the meantime, not lose my mind. (Midshipman Eagle)

As discussed in chapter 2, research suggests that stress has a negative effect on college student persistence, especially the stresses of compressed time, money, and academics. The NROTC scholarship relieves many of these stressors for those that can accept the other requirements included with the NROTC commitment. Relief from these stressors can also make the other NROTC requirements less bothersome, or more tolerable for the students sitting on the fence with the persistence decision. These findings also suggest that NROTC students that find these stressors a negative influence in their college experience that the NROTC scholarship provides 'peace of mind' in regards to their persistence in the program. Especially if the stress related influence is highly negative. Likewise, the scholarship and stipend relieves the requirement to work outside of the academic environment by placing less pressure on student finances, and eliminating the tuition payment. The effects of financial support on the NROTC students' persistence decisions is generally favorable to all NROTC students. Although the scholarship money may not be enough to retain all students that start the NROTC program, it is seen as a positive by those that stay. Conversely, the scholarship should not be the only consideration when making the persistence decision, and for most NROTC students it is not.

**Money alone not a good reason to stay.** During the course of the interview process, participants were asked who they would not recommend the NROTC program to. The consistent answer received was in reference to those that would use the NROTC

finances as motivation to stay with the program. This research is fairly conclusive on the acculturation and socialization process as having a significant influence on the persistence decision for NROTC students. In addition, this acculturation and socialization process is navigable for all that are exposed to, and enrolled in the NROTC program on campus to assist in the decision to persist. The friendships and bonds that are generated are learned, and even students that may not be inclined toward the military upon NROTC entry can acculturate to the environment, and persist in the NROTC program. Therefore, entering the NROTC program because of the scholarship and financial considerations is considered fair game by all, and a perfectly acceptable reason to enroll. When it is time for the persistence decision, most agree that financial consideration alone are not a reason to persist. The following participants' answers to the question of 'who they would not recommend the NROTC to' provide the background to this finding:

If you're not willing to work, if you're not willing to put time in; you're going to lose sleep. If you have no determination or self-discipline, but you can mold [develop] all that stuff, if you are unwilling to learn and change [into the NROTC]... You've got to have the desire and drive [for NROTC]. That's why the money thing, if you're just in it for the scholarship, I'll turn you away.

(Midshipman Falcon)

I would not recommend it for people that are solely in it for surface-level and want to have their school paid for. There are always people that do come in with that... Show a drive and compassion, I think for service to the country [are more important]. (Midshipman Lion)

The NROTC scholarship and stipend money has an influence on the students' persistence decisions. In general, this influence is positive. What the interview participants' are suggesting is that the commitment to the NROTC is far deeper than a monetary decision alone. Students must want to be a part of the NROTC culture and environment, and as seen in previous categories socialize and befriend the other members of the NROTC unit to become part of a cohesive team. These processes are required for student persistence, and those that are not inclined towards these processes are not recommended to persist in the program. If a student is considering enrollment in the NROTC program based on financial decision only, they must have the capability of acquiring the drive to acculturate into the system before deciding to persist. Oftentimes, freshman students do not find this capability and drop the NROTC after the first year. If the NROTC college student is devoid of this capability, and is considering persisting after the first year based on finances alone, they have not found a good reason to stay. The role of financial support on student persistence has another dimension to be analyzed. This dimension suggests a counteractive element exists with respect to the financial support in the persistence decision that could be seen as a negative in nature.

**The counteractive influence.** Not all motivations are positive in nature. Sometimes the ramifications associated with the NROTC commitment influence the NROTC student to persist regardless of negative feelings or perceptions about their NROTC experience. The commitment NROTC students incur following entry into the second year is binding to the US Government. If the student persists into the second year and develops negative feelings and perceptions about the NROTC or the military, the financial support already accepted acts as the tie that binds. Once the scholarship is

accepted and the student enters into the commitment with the NROTC, that student must stay in the NROTC for the remainder of the four years and serve for at least five years in the US Navy or Marine Corps. Of course, if the student develops severe animosity with the NROTC they can quit and complete the required enlistment time (2-3 years), or with the concurrence of the Secretary of the Navy pay all of the scholarship money back, with interest. These payback requests are typically granted. The following participant's response demonstrates the counteractive influence of the NROTC scholarship on the decision to persist:

When I went from my freshman year to my sophomore year, I had just gone to CORTRAMID (summer training), so I was super motivated and like, I love the Navy! This is awesome! I want to do this for the rest of my life; it's going to be great. So then I stayed [persisted]. Then my sophomore year was terrible. I had such a rough year. I got bad grades. I hated NROTC. I think if I could have quit, my sophomore year, without having to pay back, I probably would have; but I couldn't afford to pay back tuition... That's what kept me in sophomore year, maybe some of junior year, too'... And now I'm up and down...I'm really scared about my future...Just, so many years in the Navy is a long time, and what if I hate it? I don't know...but I'm staying. But I for sure would have quit if it hadn't been for the money. (Midshipman Leopard)

The action within this response opposes and mitigates the midshipman's feelings about the NROTC by the contrary action of staying in. This counteractive action results from the financial support mechanism. Regardless of the way the effects of the financial support are perceived, they are a positive influence on persistence decisions for NROTC

students. The financial support also includes a book fee and stipend that influence the persistence decision because these funds allow the NROTC student a cost of living allowance, and paid books. These are all important aspects of the commitment that generate the feeling of being ‘locked-in.

**The stipend (and book fees).** Each NROTC students receives a stipend of graduated value and book fee for the four years. A payment schedule for this financial support is outlined in chapter 2. The role of this support on the NROTC students’ persistence decisions is not as highly positive as the tuition scholarship, but it is influential none the less. This stipend and book fee reduce expenses, limits the need to work, and provides the NROTC student a basic cost of living allowance. How the stipend facilitates the NROTC student with costs, and their decisions to persist are reflected in the following participants’ responses:

At the University of Minnesota my room and board is not paid. The way I get it now, the stipend pays for around half of my cost of living. Roughly, give or take; probably more on the low side of half, normally. That’s never been a factor for me, just because numbers wise; it’s far smaller than the tuition. (Midshipman Hawk)

It [stipend money] helps. I worked during the summer, so all that money I made went into savings. I use that stipend money for multi-expenses, bills, and then, also my rent...It’s helpful. (Midshipman Eagle)

The stipend and book fee the NROTC students receive provides them some monetary relief for their time in college. The amount is perceived to be modest, and none

of the student participants considered it significant in their personal decisions to persist. However, the money gives NROTC students breathing room, limits their need to work which allows them to spend more time within the campus and NROTC environment. Maintaining a job while in school takes time away from the acculturation process and restricts the NROTC students from study time, PT and sleep. Analysis of the NROTC stipend and book fee suggests this funding is not a game-changer for midshipmen in their persistence decisions, but financial support does free up the student to pursue more valuable practices on campus, and is therefore a positive contributor to persistence decisions over all.

**Theme summary.** The contribution of financial support is at the foundation of the commitment to the NROTC program and the US Navy and Marine Corps. The scholarship is the hook, it is the tie that binds the student to the program and the program to the student. There are many reasons that students stay in the NROTC program, and leave it as well. Most of these reasons are manifest in the feelings, personal bonding and acculturation (or lack thereof) into the NROTC from the environment, socialization and involvement perspective. However, it is the scholarship money that anchors the deal. It is perceived as remuneration for the extra commitment of time and effort NROTC requires while in college. In fact, this perception is also the reality of the commitment because it is a form of payment for services to be rendered. The unique role of the financial support is to make college affordable, facilitate independence and relieve stress on the NROTC student. Although the scholarship, stipend and book fee support cannot be the only reason the NROTC student persist, it is an influential one. Lastly, except when the NROTC

student experiences the counteractive effect of the financial support, it is largely considered a completely positive influence in the persistence decision process.

### **Summary**

The categories of findings presented in this chapter follow the perspectives of NROTC student persistence outlined within the literature review. The environment, socialization and involvement perspective is broken out into its three major components (categories) to present analysis of findings. The environmental category describes the way in which NROTC students must acculturate not only into the college campus environment, but also into the NROTC environment. The environmental NROTC concerns require acculturation into: living in a separate NROTC dormitory; uniform wear on campus; frequent early morning physical training; weekly military training and short hair-cuts to name a few. The students that choose to persist in college and the NROTC begin a more in depth acculturation process than the rest of the student body all around them. How the NROTC students acculturate into this environment deeply effects their decisions to persist.

The second category is the second piece of the environmental, socialization and involvement perspective and focused on the socialization aspect of the NROTC student persistence. The Socialization category explored the process of student identification with and association within the NROTC program on campus. The student experience within the NROTC's tight knit culture, time commitments and specialized training has been compared to student experiences as fraternity members and varsity athletes within the campus environment. With its own socialization and association process on campus the



NROTC has unique guidelines and traits that NROTC students are required to absorb when making their individual persistence decision.

The Involvement category describes the perceptions NROTC students have of themselves within the NROTC experience, why they involve themselves in the NROTC while in college and how these feelings effect their persistence decisions. The findings suggest ‘what’ NROTC students feel about their appearance, presence and futures while in college is important in why they stay in the NROTC. How the midshipmen feel about their appearance and what they are doing in NROTC on campus, with an eye on where they are going in their futures play a more significant role why they persist. Many of these perceptions are intangible, and difficult to cognitively describe. However, they do exist, and NROTC students involve themselves into the culture because of them.

The findings in the Pre-college Attributes category present the pre-existing factors the NROTC students within this case study possessed prior to entering into the NROTC environment. These factors range from early life exposure to military ideas to impressionable activities in high school, and were characteristics of the participating students at matriculation. They had a direct effect on the students’ socialization and integration processes in the NROTC and in college. These findings are relevant as they are quoted, observed or discovered directly from the participating NROTC students who have already made the decision to persist in the NROTC, and are therefore significant as enablers in the persistence equation.

Lastly, it is the effects of the financial support on NROTC student persistence decisions that carry the gravitas of the commitment. The scholarship money is the hook,

or the mechanism that binds the student to the NROTC and military service at the end of college. The financial aid is also the lure to bring the potential NROTC student to the college to enroll in the NROTC program. Analysis on how the financial aid brings the students to the NROTC program, and then assists the NROTC student in the acculturation and socialization process on campus was the basis of the findings in this category.

All the categories presented in Chapter 4 address the perspectives of NROTC persistence as outlined in the literature review, and provide analysis on how these perspectives effect the college student persistence. Discussion, analysis and conclusions on the Navy ROTC experience and college student persistence will be provided in Chapter 5.

## Chapter 5

### Discussion, Analysis and Conclusion

This chapter discusses and analyzes the research findings guided by the categories from chapter 4 identified from the study. The categories listed in Figure 5 address the major perspectives of NROTC college student persistence from the literature review. How these perspectives of persistence inform the research question is the basis of the conceptual framework that guides this study and its findings. The central research question guiding the study is: *How does the NROTC experience influence student persistence and the pathway to graduation?* The findings from interviews, observation and record review data are discussed in this chapter as they relate to past research on college student persistence. This chapter also provides a discussion on the study's implications for policy and practices within the NROTC, and potential future research that would be helpful in advancing the scholarly literature on NROTC college student persistence. Lastly, discussions are offered within each category analyzed on the unique contributions of this study within the existing research on college student persistence from the NROTC perspectives.

Environment (Acculturating to the NROTC)
Socialization (The NROTC Fraternity)
Involvement (Belonging in NROTC)
Pre-College Attributes (Influence on Persistence Developed Before NROTC)
Effects of Financial Support

Figure 5. Categories (or themes) of findings

### **Vantage Point for the Study**

The techniques or procedures utilized to gather and analyze data were informed by the case study method of qualitative research. Merriam (2008) defines a case study as “an in-depth description and analysis of a bounded system (p. 40).” Cresswell (2007) states that “case study research is a qualitative approach in which the investigator explores a bounded system, or a case over time, through detailed, in depth data collection involving multiple sources of information (e.g. interviews, observations and document/report review), and reports a case description and case-based themes” (p. 73). For this case study the bounded system was defined as the University of Minnesota NROTC Unit on the Twin Cities Campus in Minneapolis, Minnesota. The participants’ interview responses are validated by numerous observations of the NROTC unit at the University of Minnesota during data gathering, followed by a record review of NROTC participant documents to facilitate triangulation of data. The findings were presented in case based themes or categories as detailed in Chapter 4 (Table 3, p. 80) in a constant comparative format. All qualitative analysis is inductive and comparative in the service of developing common themes or categories that cut across the data (Merriam, 2009). The vantage point of this research was from an inductive (Heuristic) methodology under a constant comparative format within a case study method.

### **Purpose of the Study**

Investigation of this topic suggested a dearth of research exists in assessment of military and veteran students, including NROTC students on campuses across the nation, especially in the application of research as it applies to college students today (Sander, 2013). The purpose of this study is to examine persistence in higher education for

students enrolled in an NROTC program. The perspectives developed within the study provided the framework in which the data gathered were analyzed to present findings that shed light on why NROTC students persist to graduation. As previously discussed, there is a dearth of existing research in assessment of military and veteran students on campuses across the nation. The main purpose of the study, and this chapter, is to add to the scholarly research on the topic of college student persistence, especially as it relates to college students within the NROTC.

### **Findings and the Literature**

The themes, or categories presented in chapter 4 represent findings as guided by the perspectives presented in the literature review. The first grouping of scholars addressed the issue of persistence by analyzing campus experience through the environment, involvement, and socialization perspective of students once in college. The integration of existing research on this perspective with my findings enables this scholarly literature to inform on NROTC student persistence decisions, and represents an essential part of this chapter. The remaining grouping of scholars' research from the literature review on the influence of pre-college attributes and NROTC scholarship money on student persistence decisions is also presented through the lens of the findings of this study. How my findings and themes on NROTC persistence are guided by the perspectives of the literature review as presented in chapter 4 are integrated with, and informed by the literature represent my unique contributions to research on college student persistence.

**Environmental Theme.** Tinto (1975), (1982), (1987), and (2006) as well as Pascarella and Terenzini (1981), (2005) present findings that are markedly consistent

across the decades of research on the necessity of academic and social integration into the environment, or college system as integral in the college students ultimate decision to persist. Astin (1993), (1998) suggested that student persistence is tied to involvement and adaptation to the college environment during their four years in college. These findings are fundamental in NROTC students' persistence decisions as well.

***Dual NROTC and college environment.*** The conceptual framework of this study adapts Tinto's (1975) model for NROTC to demonstrate the environment, or college system as all-inclusive of the social, involvement and academic systems NROTC students must acculturate into to navigate the decision to persist as shown in Figure 1 (p. 22). These concepts are the bedrock of all college student persistence discussions. The difference the NROTC students present within the model is the dual requirement of acculturation into the newness of the college environment and the NROTC environment. It is the campus experience that enables the NROTC students to acculturate into both. Astin (1993) states that *environment* within his I-E-O model refers to the various programs, policies, faculty, peers and experiences to which the student is exposed during college. Astin's (1993) research related to college environment was animated in the perspective of Midshipman Falcon who said:

“We have our own distinct culture, it's different... I'm incredibly comfortable there [Armory]...It's kind of an island in the middle of campus, where I go for like-minded people.”

Midshipman Falcon's perspective also reflected Astin's (1993) research stating:

“I feel better in the sense that I know what I am doing [in NROTC], I know why I am here and I don’t think a lot of people can say that; at least on a college campus...”

The NROTC program brings its own set of policies, faculty, peers and experiences that operate in conjunction with, but in many cases independently of the college or university requirements in the same areas. However, these requirements are mutually inclusive for the NROTC student. Their existence within the NROTC cannot be accomplished without acculturation into college making them inextricably tied together in the persistence decisions of the NROTC students.

My findings completely agree with the unanimous consensus within the literature on the significance of the college environment to NROTC students’ ultimate persistence decisions. On the other hand, my research adds the element of duality to environmental considerations with respect to the NROTC student. The college experiences and NROTC experiences walk hand-in-hand on one campus. Both experiences of equal importance. NROTC students spend more time in the college culture than in the NROTC culture. Yet, it is the combination of both that leads to the NROTC students’ desires and decisions to persist. The difficulty for the NROTC student is that they are required to acculturate into both, and each NROTC student must come to terms with the reasons to stay in both. New environmental experiences begin right away for the NROTC student as they matriculate from high school and become assigned to the NROTC residence hall.

***Residence halls.*** The residence hall is the first step on the environmental acculturation process for most all traditional college students across the nation. The same is true for NROTC students. The residence hall is strongly desired by both college and

NROTC administrators as the living place for reporting freshman. Astin (1993) suggests that one of the effects that is directly attributable to living in a campus residence hall is the positive effect it has on attainment of the bachelor's degree (persistence) (p. 367). It is in this living environment that most NROTC students meet their first roommates and neighbors, and learn to adapt to the new campus life and experience. Chickering and Reisser (1993) state that "residence hall arrangements can affect development of competence, purpose, enhance the existence of shared intellectual interests, and the degree to which the unit becomes a meaningful culture for its members" (p. 400). Astin's (1993) and Chickering's and Reisser's (1993) research related to residence halls was spirited in the perspective of Midshipman Jaguar who said:

"Yeah, my roommate was in the Air Force ROTC. I lived in the ROTC Hall, the hall they offered us. It's in Centennial. Living in the ROTC Hall helped a lot for me. We all had to wake up early and do basically the same stuff. Being in the ROTC Hall helped a lot because you were always surrounded by people who were doing the exact same thing as you."

With respect to this research, the hall assignment includes both the college and the NROTC considerations. When the roommate assigned within the residence hall experience is compatible, or at least living in harmony with one's existing environment, the pathway to enjoying the process is made easier.

My research suggest that when considering environmental acculturation to the NROTC the concept of like mindedness and comfort from others of similar values and with similar goals has a positive influence on NROTC student persistence. The pursuit of those going in the same direction as early as freshman year has a positive impact on



acculturation into the NROTC for these students. Pascarella and Terenzini (2005) suggest that the residence hall environment can foster similar cultural identities in students, especially when direction and goals are similar (p. 421). Chickering and Reisser (1993) suggest that college staff members can work with student cultural variables to improve “fit” by placing students carefully (p. 402). Chickering’s and Reisser’s (1993) and Pascarella’s and Terenzini’s (2005) research related to residence hall matching is brought to life in the perspective of Midshipman Tiger who said:

“My freshman year I was in the ROTC hall, in Centennial Hall. The first roommate I was selected to live with through their matching program was Army ROTC, and he’s still my roommate. We’ve been roommates all these years. We are best friends have the same mindset... I have never had a non-ROTC roommate.”

The findings of my research concur with the literature on the positive influence residence halls can have on NROTC college student persistence. Similarly, as a practice of roommate matching already exists on college campuses it is even more critical for NROTC administrators be vigilant in this area. Placing NROTC students together in residence halls facilitates comfort in college students going in the same direction living together. My findings would add to the existing literature by suggesting that NROTC roommates tend to stay together not only in their common living environment, but also in their common NROTC campus environment throughout their college experience. This occurrence facilitates a group cohesion beginning from day one, and assists NROTC students in their persistence decisions. Cohesion can also be facilitated by the visual identification of like apparel. The NROTC uniform is tailor made for this purpose.

***Significance of the uniform.*** Astin (1993) suggests that peer groups having the greatest impact will be those with whom students most strongly identify (p. 402). The goals and requirements of that group become meaningful to the student. Clothing may be used in consciously performing individual embodied identity in a group (Cregan, 2012). Cregan (2012) also states that “uniforms subjugate individual identity in the conscious solidification of a group identity” (p. 31). Astin’s (1993) and Cregan’s (2012) research related to group identity through common clothing can be realized in the perspective of Midshipman Falcon when claiming:

“Going to the Armory and seeing [peers and] active duty staff [officers] wearing the khaki uniform just like I am wearing... you know, with real rank, and nicer ribbons.... There’s a lot of connect there, and I know what I am getting myself into is worth it.”

NROTC student identification with the NROTC group as a whole is paramount to the acculturation of the student into the unit. The uniform facilitates this evolution, and is a necessary process to solidify the NROTC student within the culture in which they will be a part of in their futures in the military.

***Parallel Greek Discussion on uniform wear.*** The findings from my research suggests that the uniform is a critically significant piece of the persistence equation for the NROTC student due to its visual recognition to a certain group. In group dynamics, the visual identification with belonging to a group assists the member with acculturation into it (Cregan, 2012). In a parallel comparison, Astin (1993) and Chickering and Reisser

(2005) suggest that fraternity members that wear the three Greek letters as visual identifiers are assisted in their acculturation into the fraternity because of the common identification that accompanies the three letters. The three Greek letters brings the wearer into the realm of the fraternity visually, and the sense of belonging brings the peer pressures associated with membership. Tinto (1975), (1987), (2006), Astin (1993) and Pascarella and Terenzini (2005) all suggest that membership in fraternal organizations increase the students' involvement and socialization on campus and thus this visual identification with the group reflects positively on their persistence decisions. The research of Cregan (2012), Tinto (1975), (1987), (2006), Astin (1993) and Pascarella and Terenzini (2005) related to Greek recognition of identical apparel and its relationship to group identity can be pictured in the perspective of Midshipman Jaguar reporting:

“I would wear my uniform, and now (as a junior 2/C) everybody knows who I am [in the NROTC]; but when I was a sophomore (3/C) and freshman (4/C) and you first start getting into your major classes, it would take people three or four weeks to realize I was the same person from Tuesday to Thursday, because we wear our uniforms on Tuesdays, and they wouldn't recognize me on Thursdays. They wouldn't realize I was the same person. So I was like, Wow, they really see you differently when you're in uniform.”

Belonging to the fraternity creates expectation of success for the students because the organization expects them to graduate, and peer pressure becomes significant to them. The same is true for NROTC students. However, the visual identification is magnified for NROTC students as the military uniform, and the identification with it is far more

obvious to an observer than three letters on a t-shirt. There is no measure for the magnitude of this feeling of group identity. Cregan's (2012) research related to visual identity with belonging to a group was elucidated in the perspective of midshipman Eagle who said:

“When I wear the uniform on campus it is like I have a lot of lightbulbs on me. A lot of people don't know the Navy or Marine Corps”

However, the findings of this research also point out midshipmen can feel 'ostracized' and 'obvious' on campus. The participants' feelings of “everybody staring at them frequently on campus”, and “always standing out” are commonly felt amongst the NROTC cadre. Persistence within the NROTC brings the immediate identification of being in the group because of the uniform, and with it comes the expectations of being noticed.

My research findings add to existing literature on college student persistence by supporting assessments on the positivity of group influence in the acculturation of NROTC members into the campus environment. This positive acculturation has a direct and positive influence on NROTC student persistence decisions. My research would also support the literature within the parallel discussion of fraternal organizations and their group identification based upon commonly worn apparel. Although the military uniform performs the same in organization identification for NROTC students as fraternity members I would submit that, albeit it immeasurable, the effects are more powerful and commitments more deeply felt in regards to visual identification with the military uniform. This uniform is referred to as the 'cloth of the nation', and as such it has a deeper representational component. Participants' discussions on standing out and feeling

special in the uniform combined with their oft mentioned discussions on feeling a part of ‘something special, or ‘something that matters’ is noteworthy in this review.

My findings suggest that the uniform stands out both literally and figuratively as a major piece of the NROTC student persistence puzzle, and my contribution is the magnitude and significance of the visual representation the uniform represents as an identifier with NROTC as a group on campus within the college experience. Those that choose to stay learn to not only acculturate into the feeling of acceptance in the uniform, but find comfort and ‘esprit de corps’ in it by graduation. It becomes one of the main reasons to stay in the NROTC in an otherwise non-ROTC campus experience. With this esprit de corps one feels in the uniform comes the additional pressures of the NROTC experience on campus. This, too, has an influence on NROTC persistence.

***Cauldron of time and pressure.*** The research findings suggest development into the NROTC program requires an immersion in the cauldron of time, physical and academic pressures. All students that enter college are subjected to this cauldron, yet the NROTC students face the dual set of environmental requirements of the college and the NROTC. The additional NROTC requirements of physical fitness training and academics most directly affect the aspect of time. Astin (1993) suggests that “measures showing negative influences on retention and persistence are associated with time-stress” (P. 195). Tinto (1973), and Pascarella and Terenzini (1991), (2006) suggest throughout their respective scholarly research that compression of time on new and veteran college students can have a negative impact on college students with respect to their persistence decisions. The research of Astin (1993), Tinto (1973), and Pascarella and Terenzini (1991), (2006) related to the negativity on the compression of time for college students

persistence decisions was brought to life in the perspective of Midshipman Condor who said:

“I’d say the time demands vary depending on the week. In very busy weeks it could be around 25 – 30 hours easily. But probably during an average week, maybe around 20-ish. This would include classes and study time for those classes.”

The body of research on this topic is also reflected in Midshipman Wolf’s comments:

“Waking up at 0530 every single day is really hard on its own. Coming to the unit for PT at least three days, if you’re on remedial PT four, plus drill day is five.”

The NROTC program requires significant time and effort each week that has little to do with traditional college life. Acculturation into the program requires time management obligations most other non-NROTC students do not have. On top of the extra 20-25 hours per week in military drill, physical training and classes comes the increased study time to prepare for the NROTC specific classes. The pressures on the NROTC student to persist can be overwhelming.

The existing scholarly research on the effects of time stresses is consistent in presenting it as a negative influence within the college student persistence equation. Astin (1993) devotes several sections to this point in his research. This case study agrees with these assessments as the significant increase in time required to study, separation from home and the pressures of grades in general makes many college students question their decision to attend, and stay in institutions of higher education. Add to this the extra time required for the NROTC program and the feelings of being different, and the influence of

these pressures can indeed be negative. The research of Tinto (1973), Pascarella and Terenzini (1991), (2006) and Astin (1993) asserting that compression of time on new and veteran college students can have a negative impact on college students with respect to their persistence decisions is illustrated by Midshipman Lion who said:

“There are definitely times you sit there and ask yourself ‘Why am I doing this to myself?’ That’s the question, why am I doing it? ... You keep praying and wishing you had more time, but you think in your mind, because of those time management skills you’re learning, you’re like, well, where can I make that up? How can I do this?”

However, Once NROTC students make the decision to continue into their sophomore years the time management skills they develop begin to serve a different purpose. Although stressful, the compression of time begins to take on a strategic significance for the midshipmen. The rigors of active duty naval service mandate a commissioned officer be accomplished at time management. So, the extra classes that do not count toward the degree, the PT sessions three or four mornings a week and the required drill hours are part of a master plan to mold the NROTC student into a commissioned officer.

Chickering and Reisser (1993) present ‘developing purpose’ as the sixth vector of the Seven Vector Theory, and within this vector they describe a point where the student begins to manage the stress and find purpose in it. “Developing purpose entails an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and persist despite obstacles” (Chickering & Reisser, 1993, p. 50).

Chickering’s and Reisser’s (1993) research related to a student’s elevation through the

negative aspects of stress into the development of a sense of purpose is illustrated by Midshipman Tiger stating:

“It is emotional and physical hardening. You have to think about mitigating time risks and be more deliberate about how you live your life than the average college student does. When to eat, sleep, and take care of everything you need to take care of. It’s a lot of planning; waking up at 0500 and trying to push through without a nap until 9 or 10 p.m. . . . It’s a lot to get used to.”

All post-college jobs require students to acquire time management skills.

However, for the Naval or Marine Corps officer the development of these time management skills is more critical to their futures in the military than the college degree itself. One of this study’s contributions to the broader persistence literature is that the compression of time has a slightly positive aspect to it in the decision to stay within the college environment for the NROTC student. Although seen as a stressor, the compression of time is actually the most important strategic purpose of the college experience for the NROTC student. Once the NROTC student gets past the retention point (defined as going into the sophomore year), these stressors become critical to the training received within the college experience.

**Socialization Theme.** Due to the paucity of existing research in assessment of military and veteran students, including NROTC students on campuses across the nation, this research utilizes parallel discussions or comparisons from existing research to make assessments on NROTC students and their persistence decisions (Sander, 2013).

Specifically, parallel discussions on fraternity and athletic team experiences on campuses are used to fill the void of existing research on NROTC persistence in a comparative role.



The role of fraternal organizations and athletic team experiences as it relates to persistence are well documented throughout the existing research, and are valuable to interpret the NROTC student persistence.

Fraternal organizations in general pose some similarities and provide a basis for parallel discussions on student persistence in college. A previous section in this chapter provided analysis on the parallel comparison of the military uniform and the three Greek letters worn on apparel with respect to member identification within a specific fraternity on campus. Another parallel discussion exists in the like-minded perspectives of fraternity members as the concept relates to NROTC members.

*Parallel Greek discussion on like-mindedness.* NROTC has similarities with fraternal organizations with respect to the intrinsic and regulatory requirements placed on students to be a part of the group. Students take an active part in a group setting shared in common where students feel comfortable and socialize together. Peltier, Rita, and Myrna (1999), and Astin (1993) suggest that members of Greek organizations developed a closeness that many described in terms that reflected a family. They indicated that this bonding was one of the most important outcomes of belonging to the organization, and go on to suggest that these organizations provide a sense of identity and a fixed point of reference for those seeking to recapture some sense of connection with college as both a place and experience. “This social bonding or integration ‘in fraternities’ was seen by some to have a direct impact on persistence in college” (Peltier, Rita, & Myrna, 1999, p. 369). The research of Peltier, Rita, & Myrna, (1999) related to social bonding or integration within Greek organizations was pictured in the statement of midshipman Hawk who said:

“My sophomore year, because a lot of my non-ROTC friends did, I joined the engineering fraternity on campus, Kappa Eta Kappa, and that is a bunch of people with the same goals, and hanging out together. As engineer students, I feel they we’re going through a lot of the same stuff that I am... Once I started to identify myself more with the NROTC: [I came to understand that] ‘This is what I do.’ I’ve got a lot of friends in the NROTC now. It’s definitely changed a little bit.”

People who lived in fraternities and sororities reported that they met many people through these living and socialization environments which sustained them throughout the college experience, and were influential on their reasons to stay (Tinto & Goodsell, 1993). The research of Tinto and Goodsell (1993) related to Greek student bonding and identification was animated in the declaration of Midshipman Wolf who said:

“This year, even more – I think there is more of a trend. I’m getting closer to NROTC friends as I get older, I’d say. I think the more time you spend with someone – I spend a lot of time with all of the NROTC friends..., you just get to know them better.”

The positive influence of the residence halls on NROTC student persistence decisions has already been assessed. The parallel discussion of the identification and bonding that takes place in fraternal organization can also be assessed as a comparison to the same dynamics that take place in the NROTC. My study’s contribution to past research on this topic is to describe how this parallel discussion of fraternity identification, bonding and like-mindedness can inform on student persistence decisions within the NROTC.

Tinto and Goodsell (1993) state that students who belonged to Greek organizations, and “lived in Greek houses reported spending lots of time with the people with whom they lived, or socialized” (p. 16). NROTC students take an active part in a group setting shared in common where students feel comfortable and socialize together. Tinto’s and Goodsell’s (1993) research related to members of Greek organizations socializing together due to time spent together was spirited in the perspective of Midshipman Falcon who said:

“[The ROTC Armory] is kind of an island in the middle of campus, where I go for like-minded people... these are the people [I spend my time] with.”

Midshipman Lion further illuminated the research of Tinto and Goodsell (1993), and connected it to persistence explaining

“Your class [NROTC] can grow very strong together. [We’re] together a lot. They’re the reason I got the scholarship and stayed...”

Through many in common experiences, including uniform wear, NROTC specific classes and numerous hours of drill in the Armory the midshipmen identify with each other and the NROTC as a whole. The process in which the midshipmen are brought together on a daily basis has similarities to that of fraternal organizations. Certainly the activities that occur during the fraternity and NROTC members’ respective interactions could be said to be vastly different. However; the concepts of social interaction, personal identification and commitment to the same ideals is greatly similar, and all of this interaction leads to a bonding that the body of research within the field of college student persistence agrees is a positive influence. Fraternity members ‘increased socialization,

college interaction, and involvement within the campus environment is uniformly considered a positive indicator of persistence within the literature (Chickering & Reisser, 1993; Tinto, 1975; Tinto & Goodsell, 1993; Pascarella & Terenzini, 2005; Peltier, Rita, & Myrna, 1999). Therefore, NROTC members' increased socialization, college interaction, and involvement within the campus environment can also be considered a positive indicator of persistence, regardless of the characterization of activities held in common. In fact, the bonding that takes place within the NROTC experience serves the student during college and will serve them in their future careers in the military as well. Peltier, Rita, & Myrna, (1999) and the body of literature that addresses fraternity members' increased socialization, college interaction, personal identification and commitment to the same ideals as positive indicator of persistence is best illuminated by Midshipman Lion's declaration:

“Strong together... You surround yourself with a lot of positive people that are really trying to accomplish becoming these future officers.”

This parallel discussion of fraternity bonding does inform the research question of this study. In specific, the parallel discussion of fraternity bonding informs on similar patterns of bonding within the NROTC. The existence of this bonding and its positive influence on NROTC student persistence decisions is informed and validated by this parallel discussion.

***Limitations of the Greek parallel.*** Not all aspects of fraternal organizations meets this parallel discussion criteria. Astin (1993) reported a negative association with college grade point average with being a member of a social fraternity or sorority, and reported

that students who belonged to Greek letter organizations spent more hours per week partying, had a higher rate of alcohol consumption, and spent more time in intramural sports. Midshipman Stingray challenges the findings of Astin (1993) on fraternity GPA's, partying and alcohol consumption as a parallel discussion with respect to NROTC students by saying:

“When I decided to be in the NROTC you have to sign the ‘I will not drink underage; smoke marijuana or do drugs or anything [pledge]’ the only real temptation is being around my friends while they are intoxicated.”

Midshipman Leopard's also refutes Astin (1993) for NROTC students by stating:

“The reason I didn't live with them (non-NROTC friends) again sophomore year was because they always had friends over on weeknights until midnight, when I had to go to bed at 9 or 10.”

Peltier, Rita, and Myrna (1999) also reported a negative association with college grade point average with being a member of a social fraternity or sorority. All NROTC students are required to maintain a 2.50 GPA or better, or they cannot remain on scholarship. Additionally, my record review confirmed that the average GPA for the NROTC battalion was over 3.00.

The characteristics of lower GPA's, partying and alcohol consumption associated with fraternal organizations do not have direct parallel discussions with characteristics of the NROTC, or the research question. These qualities are typically seen as negative influences on persistence in college (Astin 1993, 1998; Pascarella & Terenzini, 2005).

This research has found that NROTC students have higher GPA's, little time for intramural sports and spend very little time partying, at least with alcohol. The bottom line is that not all aspects of fraternal organizations inform on NROTC persistence in parallel discussions. This study points out aspects of scholarly research on fraternal organizations that do inform as parallel discussion on NROTC and persistence related decisions, as well as those that do not. These parallel discussions are part of my contribution to connecting the body of literature to the NROTC. Another parallel discussion from the literature that informs NROTC student persistence surrounds commonalities with varsity athletics.

*Parallel discussion on varsity athletics.* There are multiple similarities between the NROTC and college varsity athletics. There is duality in both campus organizations in the way in which teamwork is developed and maintained. The concept of routine is commonly shared in student time required at practice or drill. Day in, day out practicing the same concepts, appointing leaders and following directions are remarkably the same. The findings within this research assert that a parallel discussion exists between NROTC experiences and varsity athletic experiences on campus that informs college student persistence decisions. Drawing the comparison between NROTC and varsity athletics is important to this study as the body of literature is replete with scholarly research regarding the influence of varsity athletics on college student persistence.

Pascarella and Terenzini (2005) suggest that evidence from a national cohort found that participation in intercollegiate athletics had statistically significant net effects on first to senior year increases in students' motivation to earn a college degree, and that intercollegiate athletic participation increased the probability of graduation over a nine

year period (study) for men and woman. Astin (1993) claims that participation in intercollegiate sports also shows positive correlations with self-rated health, leadership and satisfaction with student life that all lead to satisfaction with the college experience and degree completion. Tinto (1987) proposes that intercollegiate sports such as football and basketball are often viewed as catalysts for student interaction, thus facilitating social involvement and ultimately enhancing student commitment which has a positive overall effect on retention and graduation rates. The research of Pascarella and Terenzini (2005), Astin (1993) and Tinto (1987) on the influence of varsity athletics on college student persistence is brought forth in Midshipman Jaguar's statement:

“I'd probably say our time commitments are the same as that of a varsity athlete in college...., you have to perform in every way...., and the commitment is probably the same.”

The literature is consistent on the positive effects intercollegiate athletics have on college student persistence. The research of Pascarella and Terenzini (2005), Astin (1993) and Tinto (1987) is further illustrated by Midshipman Shark's claim:

“Athletics, not just as far as being an athlete to be in shape for the PT, but there is a lot of leadership going on in a football team, a lot of teamwork, a lot of those lessons you learn in athletics. I think that is a big part of it in the [NROTC] unit.”

As a parallel discussion on the commitment to varsity athletics and NROTC is a relevant comparison within the context of this study. This was an interesting finding within the research as it does appear fairly conclusive that both campus experiences have organizational frameworks that are similarly constructed. The existence of this parallel

discussion between the NROTC and varsity athletics facilitates this study in anchoring the findings to the existing literature. The positive influence of varsity athletics on graduation decisions is well documented in the body of research. Therefore, student persistence decisions are positively influenced by participation in the NROTC in a way similar to student athletes, and this finding is informed and validated by this parallel discussion. A last finding within the socialization theme is the influence of NROTC instructors on the student persistence equation. This discussion is informed by the research, but does not require a parallel discussion.

***Importance of NROTC instructors.*** Within the NROTC unit the staff instructors play the most important role in development of the students and have a substantial influence on their persistence decisions. The NROTC leaders are all active duty U.S. Navy and Marine Corps officers, and enlisted personnel. These leaders are the faculty professors and advisors for the naval science college curriculum, and they also provide the administrative and military oversight of the NROTC unit on campus. The body of research is considerable on the influence of faculty on college student persistence decisions, and the influence NROTC faculty has on midshipmen can be extracted directly from the literature.

Most of the participants commented openly about the close relationships they had with their NROTC instructors. Tinto (1975), (1987) and (2005) research suggests that his findings highlight the critical importance to student development of frequent interaction between faculty and students, and that student-faculty contact within any institutional environment can have important positive implications for student development, leading to retention and graduation. Midshipmen have frequent interaction with NROTC



instructors. The research of Tinto (1975), (1987) and (2006) on criticality of faculty-student interaction on college student persistence can be pictured in Midshipman Condor's declaration:

“In the battalion we have a much closer relationship with our lieutenants [staff/instructors] because of how much time we spend at the Armory doing NROTC things.”

Midshipman Condor sheds additional light on Tinto (1975), (1987) and (2006) research and the relationship with the NROTC instructors when claiming:

“For a lot of aspects I think we're more comfortable going to them [NROTC instructors] with questions... We have our academic meetings and that kind of stuff, so you have a little bit more one-on-one interaction with them.”

NROTC students speak highly of the contact with their instructors, and find great value in it.

NROTC students feel a kinship with their instructors as well as a belief in them as mentors in academics and future military endeavors. This finding was harmonious with all NROTC student participants. Chickering and Reisser (1993), and Tinto (2006) discuss the importance of student-faculty relationships as being both intellectual and interpersonal learning, and suggest the interactions from faculty should be elevated to that of a mentor's role. NROTC students cherish the relationships they develop with their instructors. This NROTC student-faculty relationship propounded on by Chickering and Reisser (1993), and Tinto (2006) is best visualized by Midshipman Jaguar stating:

“I think [the relationship with staff/instructors] is more personal, because we have our counselling meetings with our lieutenants, so what I would talk about with them is more about life.”

This is the essence of the student-faculty relationship the literature is describing as most beneficial to student development. The body of literature is very clear that this is the sought after type of student-faculty relationship within academe that best facilitates college student persistence (Chickering & Reisser, 1993). In the context of this study NROTC student persistence decisions are enhanced and facilitated by the close relationships they have with their instructors. In summary, the literature is fully supportive of this finding on NROTC student-faculty relationships, and informs NROTC student persistence thoroughly.

**Involvement Theme.** The findings under the involvement theme suggest that ‘what’ NROTC students feel about their presence while in college is important in explaining why they stay in the NROTC. How the midshipmen feel about their role and purpose in what they are doing in NROTC on campus, with an eye on where they are going in the future plays a major role in why they persist. Many of these perceptions are intangible because they represent feelings. However, feelings can be strong and the body of literature seems to agree they have an impact on why students stay in college. This section will tie the literature to these concepts of purpose on campus and discuss how the literature informs the topic of NROTC student persistence.

**Concept of purpose.** The body of literature reviewed for this study is replete with scholarly research on the concept of purpose as having great influence on college student

development and their ultimate persistence decisions. However, Chickering and Reisser (1993) developed a model describing it in detail. The sixth vector of their Seven Vector Model, Developing Purpose, provides a framework for thinking systematically about student development patterns. This Seven Vector Model in general, and the Developing Purpose Vector in specific have enabled higher education practitioners to view their students, their courses, and their programs more clearly and to use them as 'beacons of change' (Chickering & Reisser, 1993). Chickering and Reisser (1993) suggest that developing purpose entails an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and to persist despite obstacles. The research of Chickering and Reisser (1993) related to student development of purpose leading to persistence in college was illustrated in the perspective of Midshipman Stingray who said:

"I have a sense of joy...knowing that I'm involved in this thing that's not just myself, not just for the small purpose of making money or making a name for myself since honestly... It's being a part of that, just being a part of something bigger."

Additionally, Midshipman Shark addressed the development of purpose when stating:

"I need that sense of purpose, pride, and I find that in the NROTC and, hopefully; in the Navy in a few years."

The development of purpose was identified throughout this research as important to the battalion of midshipmen. The need to belong to something bigger, to be a part of something important or something that gives back was heard and observed on many

instances during the data gathering phase. The literature identifies the concept of purpose as having great influence on college student development and their ultimate persistence decisions. The body of research as presented within the context of research participants' nuanced perspectives would suggest this is also true for NROTC students. The literature also describes the establishment of goals or plans as valuable in the development of purpose facilitating how, and what NROTC students feel about their presence while in college.

***Goals and plans.*** Pascarella and Terenzini (2005) propound that developing plans that integrate priorities in vocational goals, aspirations, and interpersonal interests assist in developing purpose and values needed to help guide persistence decision making. Tinto (1987) proposes that the development of goals plays a significant role in student departure and college student degree completion decisions. The suggestion from the literature here is that goals facilitate campus involvement and identification with a personal direction. This personal direction is an important factor in the student's development of purpose on campus. This feeling of being purposeful on campus is influential on student's desires to stay in college and persist to degree completion (Pascarella & Terenzini, 2005). Pascarella's and Terenzini's (2005), and Tinto's (1987) research related to goals and plans in developing student purpose is reflected in the perspective of Midshipman Hawk who said:

“I think I have a better understanding of what NROTC is meant to do. Especially, after summer cruise, I think, is the main time my goals changed. Because it's really hard to put like, Leadership and Management class in perspective until you're in summer cruise and get to ask a Lieutenant, or Commander of a ship a

specific question and get their responses. So I think the cruise really helps solidify a lot of goals.”

This research participant’s goals adjusted and became more clearly defined. The body of research puts forward this evolution as conducive to the student’s development of purpose, and involvement and campus. Similarly, Pascarella’s and Terenzini’s (2005), and Tinto’s (1987) research related to goals and plans in developing student purpose is captured in Midshipman Lion perspective when he stated:

“There are definitely times you sit there and ask yourself ‘Why am I doing this to myself?’ That’s the question, why am I doing it? --- And then you think of all the reasons that you want to be in the NROTC... [I really want to be an officer]. I mean, for some people you just need one reason [goal] to keep going, and that’s all you need. You can have a million reasons to quit, but you could have one reason to keep going, and that’s all you need.”

How the midshipmen feel about their role and purpose in what they are doing in NROTC on campus, with an eye on where they are going in the future plays a major role in why they persist. This development of purpose enhances the NROTC student’s ability to be involved on campus, and to feel comfortable in the fabric of the college experience. The student’s ability to develop plans and goals to enhance their purpose on campus likewise increases their involvement and identity within the campus community (Tinto, 2006; Pascarella & Terenzini, 2005). The body of literature advocates student development of purpose and establishment of plans and goals as enhancements to the student’s involvement on campus. This increased involvement on campus has a positive

influence on student persistence (Tinto, 2006; Pascarella & Terenzini, 2005). The body of literature observed through the lens of the participants' statements and the findings of this research suggest these influences are uniformly applicable to NROTC students and their ultimate persistence decisions, and inform the topic fully.

***Environmental, socialization and involvement themes summary.*** The first three themes addressed the issue of persistence by providing analysis of the findings synthesized with NROTC students' campus experiences through the environment, involvement and socialization perspectives from the literature review. These three themes are represented in the majority of the body of college persistence literature and provide the deepest look into the reasons why college students persist. The findings and analysis of this research demonstrate a link from the prior scholarship on college student persistence as nuanced within the NROTC framework, which includes the environmental, socialization and involvement perspectives, on college student persistence. The next two themes will address the influence of pre-college attributes and NROTC scholarship money on student persistence decisions as presented through the lens of the findings of this study.

**Pre-College Attributes Theme.** Every young man or woman that progresses to a four year college after high school brings their own unique background characteristics and skill sets to the campus environment. These unique traits, or factors are developed before the student matriculates into college. Findings from this theme integrated with the body of literature are presented as they relate to NROTC student persistence.

***Family background.*** When considering four year bachelor's degree completion, a list of the significant variables of the "Input" portion of Astin's (1993) model includes the student's family background, socio-economic status, and religion. Tierney (1992b) argued that pre-college attributes affecting students, in general, such as culture, family and social-religious background are significant characteristics that affect their respective persistence decisions. Hurtado et al., (2002) suggest that individual, family, and personal experiences have an effect on educational outcomes of college students. Within the array of background characteristics the effects of family on the college student persistence equation are universally discussed as influential within the body of research. Rittenhouse & Kwinn, (2005) claim that NROTC students come to college with a variety of backgrounds and pre-college attributes similar to other college students within the college experience. The literature is relevant and informs on NROTC student persistence as NROTC students are traditional college students as well as members of a military officer training program. The findings of this research with respect to the influence of family on NROTC student persistence is appreciable.

A noteworthy finding in this case study is that all of the participants had an exposure to a family member with prior military service. Within the context of this chapter most NROTC students in the study had an immediate family member with prior military service. These family members had been a very strong influence on their decisions to join the NROTC prior to college and then to persist. The research of Astin (1993), Tierney (1992b) and Hurtado et al., (2002) on the positive influence of family on college students is brought into focus through Midshipman Falcon's words expressing:

“My dad was in the Air Force...I had a lot of military influence, a ton of uncles and grandparents, but no one really pushed me towards it. I heard such amazing stories all the time about it.”

The literature points out that exposure to family members that attended college is significant to college student completion (Pascarella & Terenzini, 2005). It can be drawn from NROTC college students that participation in the NROTC is also influenced by family members with past military experience. Pascarella's & Terenzini's (2005) research on the significance of college students' exposure to family members is illustrated when Midshipman Jaguar points out:

“A lot of my family influenced me to go Navy.”

And Midshipman Tiger's stating:

“The list gets long. My dad was enlisted Navy, four years [active duty]... Both grandfathers were in the Army. I have two uncles on my mom's side who were Army officers, two uncles who were Army enlisted, and one cousin.”

Tinto (1975), (2006), Pascarella and Terenzini (2005), Tierney (1992b) and Hurtado et al. (2002) claim that students that have parents that are college graduates have an increase in college success and completion rates compared to students that do not have this family exposure. It is the exposure to college based discussions and expectations within the family experiences that leads to this positive influence (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). Nearly every participant in this study presented exposure and family discussion surrounding military experience prior to college. This



finding integrated with the body of literature suggesting family exposure to college as a leading indicator of persistence suggests a positive influence on family exposure to military exists, as well for NROTC students' persistence. A finding from this study that may disagree with a family consideration within the body of research surrounds the concept of the single parent home.

***Single/divorced parent homes.*** The body of research shows that, on average, children of divorced parents are disadvantaged compared to children of married-parent families in the area of educational achievement (Heatherington, 2002). Heatherington (2002) goes on to point out that children of divorce are more than twice as likely to have serious social, emotional, or psychological problems as children of intact families. McLanahan and Sandefur (1994) found that children who did not live with both biological parents were roughly twice as likely to be poor, to have behavioral problems, and have difficulties in educational systems. The risk of leaving educational systems is substantially lower in a two-parent biological family than in a single-parent family or step-family (McLanahan & Sandefur). Tinto (1975), and Chickering and Reisser (1993) suggest the stability of the conventional two-parent family as a positive influence on student success in college.

The body of research suggests that a negative influence on single and divorced parent homes exists with respect to college student success and persistence. This study found no examples of negativity within the participant's responses and record reviews of this topic. Just over 30% of the study participants were from single or divorced parent homes. In regards to NROTC student persistence, what emerged from the interviews would suggest that there is a positive aspect to students being from a single or divorced

parent home in high school. The non-finding associated with the research of McLanahan & Sandefur (1994), Tinto (1975), Chickering and Reisser (1993) and Heatherington (2002) on the negativity associated with college student completion and single/divorced parent homes is effusive in Midshipman Jaguar's statement claiming:

“I lived only with my single parent. My single parent had to work a lot, so during this time I was taking care of my younger siblings. I think that did help develop those leadership and responsibility skills that you need [to persist].”

Additionally, this finding reflected in the body of research is illustrated in Midshipman Hawk's claim of a greater independence in his college experience because of his divorced parent background when saying:

“I think I would definitely mention that my parents were divorced in high school. I think I am much more independent than I would be if my parents weren't divorced.”

The findings of this study reveal that over 30% of the NROTC students that have persisted are from single/divorced parent homes. All claim it to be an advantage to them. Understanding, of course, these students were subjected to these family situations without a choice, and had to make the best of it. None of them reported it as being a negative influence on their success or decisions to stay. Frankly, they claim it made them stronger. This finding presents a challenge to previous literature related to the effects of single family homes regarding NROTC students and persistence. This finding may be especially important given that military veteran divorce rates are known to be higher than those of the civilian sector (Pollard et al. 2008). This will be discussed in the Unique

Contributions of the Research section of this chapter as it may reflect in military veteran's offspring's perceptions of divorce compared to other aspects of society. Perhaps because divorce is more pervasive within the fabric of military veteran culture, the offspring of veterans may be less vulnerable to its negative effects, or this family situation instills a sense of 'grit' and independence that make them more suitable to handle the challenges of NROTC. Another potential non-finding within this research when synthesized with the literature is the role of faith in college student persistence.

**Religion.** The role of faith, or religion within the framework of the body of literature presents mixed analysis from the scholars in the field of persistence. However, it is addressed and the findings within this research can add to the body accordingly. Astin (1993) claims positive input variables entering his regression analysis of retention/persistence models include being a Roman Catholic, or Jewish. He states that "In other words, those entering freshman that are most likely to complete a bachelor's degree within four years have high grades in high school and high scores on the SAT/ACT, come from higher socio-economic levels, are either Roman Catholic or Jewish, are woman, are non-hedonistic and are disinclined toward science" (Astin, 1993, p. 193). On the other hand, Pascarella and Terenzini (2005) suggest that evidence is mounting that students' commitments to religious values before or during the college years have little bearing on their respective success outcomes from college. These conclusions present mixed findings on the role of faith on student persistence decisions. Perhaps the roles are changing over time as well as the research of Pascarella and Terenzini is a bit more recent. The findings within my research suggest ambivalence toward the role of faith with respect to NROTC student persistence. Results of my

research suggest a non-finding on the influence of religion as maintained within the research of Astin (1993), and is best illustrated by the statement of midshipman Stingray when articulating:

“I was more faithful in high school than in college. I try to hang onto my faith, but... It was very instrumental in my formative years.”

The pre-existing factors of faith or religion do not appear to be a strong indicator of motivation to persist. The fact that all of the NROTC students participating in this research claimed that they are (or were) faithful, or a part of organized religion suggests there is some connection to their decisions to stay. However, there is no clarity to that connection because none of the participating students discussed the role of faith as an influence on their decisions to persist. The research of Pascarella’s and Terenzini’s (2005) on the role of faith having little bearing on students’ success outcomes in college is brought to life in in Midshipman Hawk’s assertion:

“I’m a Christian. I don’t think that played much of a role in it [NROTC decisions]. I was part of a bible study in high school, though.”

This finding is presented because the literature and my framework address the role of faith in college student success and persistence decisions. Although the literature presents mixed analysis of the issue, my findings add an arguably convincing addition to the role of faith as having little bearing on persistence decisions. On the other hand, the concept of patriotism has evolved in the conscious of NROTC students and has an influence on their persistence decisions requiring further discussion.

***Giving back: the new patriotism.*** The concept of patriotism is complex. Especially for young NROTC students. Most of the NROTC student participants were of pre-kindergarten age when the seminal event that was 9/11 occurred. The words that define patriotism are misleading with respect to what the current NROTC student feel about devotion to the country. During the course of the interviews, the word patriotism was rarely provided as a response to questions about reasons NROTC students decide to persist. It is the privilege of representing something bigger, the absence of self and an appreciation for what they have as Americans that demonstrates the reality of patriotism and the desire to persist for students in the NROTC. It is the concept of ‘giving back’ that is most quoted and referred to as a reason to persist and serve in the military.

The literature is replete with analysis on the concept of college students, and their desire to ‘give back’ as motivation to complete their degree and serve in the military. Tierney (1992b) identifies persistence factors demonstrated in the desire to ‘give back’ playing a critical role in the lives of the participants in his study on Native American college students. Tierney’s studies are discussed in Chapter 2 in a parallel representation of dedicated college students persisting in college in order to give back to their communities within a given culture. Tierney (1992b) suggests the concept of ‘giving back’ to the community as the most powerful motivator for members of his study to commit to persistence. Coleman (2008) posits that student engagement and persistence in college includes a felt sense of obligation to give back to the community, through commitment to service activities (Coleman, 2008). Although not directly referring to military service, the concept of giving back through service related involvement can be similarly observed as service to the military. Astin (1993) discusses the concept of giving

back as a critical aspect of Involvement in his I-E-O model and significant in student persistence decisions. The research of Tierney (1992b), Coleman (2008) and Astin (1993) related to the concept of 'giving back' as a positive influence on persistence was spirited in Midshipman Condor's remarks:

"The Navy for me is the most viable way for me to go about making a difference in life, and the way I think I can give back the most at the same time. It's a commitment to myself in doing something that I think is going to further me as a person, and also wanting to give back at the same time and not having just a selfish career."

The literature explains the concept of giving back as part of student personal growth and commitment to organizational involvement on campus. The integration of the literature with my findings represent how the framework of the study informs NROTC student's persistence decisions.

The NROTC students' desires to give back are a cultivation of their personal experiences from their pre-college experiences, such as family background in military service, mixed with their acculturation into the NROTC system on campus and what it represents to them and their futures. The findings of this research suggest that NROTC students feel privileged about their involvement in the unit and their feelings of doing 'something that matters' as they give back to the community as discussed in the literature, or to country as it pertains to the NROTC. The research of Tierney (1992b), Coleman (2008) and Astin (1993) on the positive influence of the perception of 'service

to community' on persistence decisions is best illustrated in Midshipman Tiger's remarks when expounding:

"It is always very important to me to serve the community, and how your actions can have a bigger impact than just you. The country and the family for sure, but... we are very, very fortunate; we are blessed, we should be grateful for everything we have and we should do our best to think about others [with less]. That is part of what drew me to the military."

The research of Tierney (1992b) on the positive influence of the perception of 'doing something that matters' on persistence decisions is best illustrated in Midshipman Falcon's words:

"I know I'll be doing something that matters; that helps people. I'll be working with incredible individuals. I want to help. I want to feel better [about myself] as much as I can, whether that's as an individual or serving the country."

Midshipman Tiger's statement reflects the perceived privilege of being able to serve his community with a bigger impact. Referring to Coleman's (2008) discussion on engagement and persistence in college including a felt sense of obligation to give back to the community is seen in Midshipman Tiger's words. Midshipman Falcon's words vet the concept of 'doing something that matters'.

The Involvement aspect of Astin's (1993) I-E-O model suggests that being drawn to this service related activity typically has personal meaning. Astin's (1993) research on

the concept of personal meaning as it relates to its influence on college student persistence is galvanized in Midshipman Stingray statement:

“I feel that outside serving my community, everyone has a duty to ‘give back’ to the nation in some way. If that’s being a teacher to help mold the future or any public servant, civil servant, or being a military member. For me, I believe that I can ‘give back’ the most as a military member.”

Patriotism, as classically defined means “Love of and devotion to one's country, and concern for its defense.” However, the student in this sample did not have this at the basis of their understanding of the word. It is more about giving back and providing service to community/country. Perhaps this is because of their youth, a reflection of the Millennial Generation, or perhaps the word patriotism has taken a more ideological tone or interpretation since September 11, 2001. The term patriotism has been utilized extensively over the last fifteen years in sometimes partisan political rhetoric, and the concept of patriotism may seem more partisan now than before 9/11. Regardless of the reasons, NROTC students are drawn to serve as classic feelings of patriotism, or just feelings of giving back, the NROTC students’ persistence decisions in college are influenced by an understanding of service to community/country. The body of literature is helpful in informing on the concept of ‘giving back’ as influential on NROTC college students’ persistence decisions.

***Pre-college factor theme summary.*** Research on the pre-college factor theme presented is relevant as it pertains to those factors NROTC college students possess prior to entry into a four-year institution that have an effect on their ultimate decision to



persist. College students' integration and socialization into the college environment is a significant factor leading to student persistence (Astin, 1993; Chickering & Reisser, 1993; Terenzini & Pascarella, 1980). The pre-existing factors college students possess at matriculation affect their socialization and integration, and are therefore influential in the persistence equation (Pascarella & Terenzini, 1980; Tinto, 1975). NROTC students are, more broadly, college students, and thus these pre-existing factors are important to examine as it relates to persistence. The integration of the body of literature through the nuanced findings within this study well inform NROTC student persistence research, and add to the body of literature on college student persistence as a whole. The last theme to be discussed in this chapter is the financial support theme with the findings observed through the lens of the existing research within this framework.

**Financial Support Theme.** The scholars within the body research related to college student persistence suggest a relationship exists between financial aid and college student persistence decisions (Bettinger, 2004; Cabrera et al., 1992; Dowd, 2004; Jensen, 1981). My research enables the body of literature to inform on this relationship of financial aid in persistence decisions among NROTC students in this section.

***NROTC Scholarship.*** Jensen (1981) concluded that student financial aid is positively related to persistence, and that scholarship or grant aid is more positively related to persistence than are loans. Cabrera et al., (1992) claim that their research results “specifically underline the indirect nature of financial aid in the persistence process in that it affects the student's academic integration, socialization processes, as well as his or her resolve to persist in college” (p. 589). Tinto (1975), (2006) and Pascarella and Terenzini, (2005) suggest financial aid has a positive effect on college

student persistence. The body of literature is consistent on the effects of scholarship money as a positive influence on traditional college student persistence.

The U.S. Navy and the NROTC spend significant amounts of money each year on scholarships, stipend and fees associated with college costs (NSTC-1533/135, (Rev. 09-13)). The NROTC financial support brings students into the NROTC, then keeps them in after the sophomore year commitment. All NROTC students receive financial aid (Rittenhouse & Kwinn, 2005; U.S.C.10, 1956). Bettinger (2004) suggests that many families cannot afford to send their children to college, and these students would not be able to attend or persist in college without financial aid or grants (e.g., Pell). Bettinger's (2004) research related to financial aid and grants was animated in the perspective of Midshipman Falcon who said:

"I probably wouldn't have been able to afford [and persist] in college if it wasn't for the NROTC or just would have had to take out massive student loans. If I didn't get the scholarship, I probably would have gone enlisted."

Midshipman Tiger's perspective is similarly reflected in Bettinger (2004) when he states:

"My family would not have had the ability to send me to college at all, unless I would go on what scholarship I could get...and the scholarship was what sent me to college, in my opinion."

The financial support is a positive influence on students as they matriculate into college and the NROTC. Of importance to this study is how the influence of the financial support transitions from the decision to join to the decision to persist in the NROTC after

the first year. The financial support facilitates the NROTC student's ability to socialize, involve and acculturate into the battalion by freeing the student from the requirement to work and other money related stressors. The financial support also serves as the 'tie that binds' the NROTC student to the program once the student enters the sophomore year. Either way, the financial support has positive influence on NROTC student persistence. The financial support facilitates their ability to persist in college, and anchors their decisions to stay. The body of literature integrated with the findings of this study enable the literature to inform on the positive influence financial support has on this NROTC persistence decision.

*Socio-economic-status.* This discussion on financial aid raises interesting questions on the general socio-economic status (SES) of the cadre of students that join the NROTC. Astin (1993) suggests that entering freshman that are most likely to complete a bachelor's degree within four years come from higher socio-economic levels. The findings within my study demonstrate that NROTC students span the entire SES spectrum. Participants claim to be from lower middle class to upper class in SES. The findings also suggest that it is the NROTC scholarship that enables many to attend and persist in college, not parental or family funds. This is particularly true for low SES students. However, SES has little influence on persistence within the NROTC because the NROTC scholarship levels the playing field for all students. The full scholarship has a way of making all students equal in financial status, and one's own desires and abilities propel the persistence equation. Students' desires and abilities to succeed in the military can come from all SES backgrounds as discovered by several of the participants' pre-dispositions to enlist had it not been for the NROTC scholarship enabling college and a

commission. Lastly, the SES discussion on persistence is the same at the University of St. Thomas as it is for the University of Minnesota due to the full tuition plus room and board afforded to NROTC students attending the University of St. Thomas. The NROTC scholarship levels the playing field and enables students from all SES backgrounds to persist equally.

Astin (1993) and the body of literature that addresses higher SES as an indicator of those most likely to complete (persist to) a bachelor's degree is a non-finding with respect to NROTC student persistence, and is best illuminated by Midshipman Hawk's declaration:

“My family would have had a hard time paying for college. I'd have to find a way to generate a lot of money on my own, which is really hard with the cost of education. I'd say it [the scholarship money] definitely was a factor in me staying [persisting].”

NROTC financial support negates the associated costs of college in general providing the ability for all SES levels to attend and persist. How the financial support influences persistence by establishing independence and reducing stress is also addressed in the body of literature.

***Independence.*** Tinto (1975), (2006) and Bean (1982) suggest in their persistence models that the effects of financial support are manifest in the increased ability for the students to socialize and become involved on campus. Chickering and Reisser (1993) discuss the financial support as an instrument of independence in their Autonomy toward Interdependence within the Seven Vector model. This finding suggests the feeling of

independence students have without responsibility to parents, families or loan payments increases the probability of degree completion. Chickering's and Reisser's (1993) research related to the independence students acquire due to financial support was illustrated in the perspective of Midshipman Stingray who said:

"I felt almost at the start of last year that my parents paying for college was like a crutch and gradually I got over that, but I realized that me getting the scholarship myself [from the NROTC College Program] sets me up independently."

The research of Chickering and Reisser (2003) related to the independence is also brought to life in the words of Midshipman Jaguar expressing:

"It was the financial aspect that it would pay for my college; that I wouldn't have to get that many loans. I don't rely on my parents financially at all...so I think it was a big part of me just saying, 'nope, I'm going to do this [persist]; because it was a way to be independent...it was a way to be independent from my family."

The concept of independence is the feeling of being free from the burden of family pressure as well as taking the pressure off of the family. The feeling of being free from family and loan pressures by persisting with the scholarship in the NROTC must also be considered a positive influence on persistence. The concept of independence has an influence on the NROTC student's persistence decision, and that influence is positive based on the emotions evoked in reference to it during interviews and observations.

***Relief from stress.*** Dowd (2004) suggested that student financial aid enables social integration, which has a positive effect by enabling better academic performance.

Dowd (2004) and Cabrera et al. (1992) claim that financial aid may reduce the stress of working hours off campus and allow students to become more academically and socially integrated into college activities. Tinto (1975) claims that increased academic and social involvement on campus has a positive influence on college student persistence decisions. The Dowd (2004) and Cabrera et al. (1992) research related to college student relief from stress due to financial support was brought forth in the perspective of Midshipman Hawk who said:

“A big part of the tuition thing is having my tuition paid for by NROTC just gives me a lot of ‘peace of mind’, knowing that I’m going to be at school next semester and that my success is really in my control.”

The research of Dowd (2004) and Cabrera et al. (1992) related to relief from stress due to financial support is also stimulated in Midshipman Eagle statement:

“When I was not on scholarship, I had a job during the school year. I worked about ten hours per week. Between that, NROTC, working out [PT], homework and school, I was pretty busy and was feeling the pressure [stress] of time.”

Scholarship and stipend support relieves the requirement to work outside of the academic environment by placing less pressure on student finances, and eliminating the tuition payment. The effects of financial support on the NROTC students’ persistence decisions is generally favorable to all NROTC students in the sample.

***Financial support theme summary.*** The impact of stress is discussed thoroughly in the body of research on college student persistence. The body of research suggests that

stress can and does have a negative effect on the persistence equation. The NROTC scholarship relieves many of these stressors for those that can accept the other requirements included with the NROTC commitment. The scholarship and stipend relieves the requirement to work outside of the academic environment by placing less pressure on student finances, and eliminating the tuition payment. The body of literature suggests the relief of this stress allowing students to spend more time in the campus environment integrating and identifying with the college experience is a positive influence on persistence decisions. The body of literature observed through the lens of the NROTC participants' statements and the findings of this research suggest these influences are uniformly applicable to NROTC students and their ultimate persistence decisions, and inform on the topic fully.

### **Revised Conceptual Framework**

In Figure 6, a new theoretical model of student persistence, adapted for NROTC students is revised from Figure 1 in Chapter 2 (p. 22) to present the themes that emerged in the current study. Figure 6 includes the environmental, involvement and socialization themes, the pre-college attributes and the financial aid themes. The difference the NROTC students present within the model is the dual requirement of acculturation into the newness of the college environment and the NROTC environment. Findings within this study are clear that a dual track exists for NROTC students in adaptation and acculturation with the college experience.

Figure 6 suggests that the process of persistence decisions within the college years can be viewed as a longitudinal process of interactions between the individual, the

academic and the environmental-social-involvement systems of the college and the NROTC unit. It is the goals and institutional commitments within this model that are both important predictors and reflections of the person's experiences in the college environment (Tinto, 1975). The findings of this research add the NROTC environment in conjunction with Tinto's (1975) theoretical model to create a new theoretical model for NROTC student persistence. It is during the period of this model in which a person's experience in those systems continually modify his/her goal and institutional commitments in ways which lead to persistence to graduation and commission.

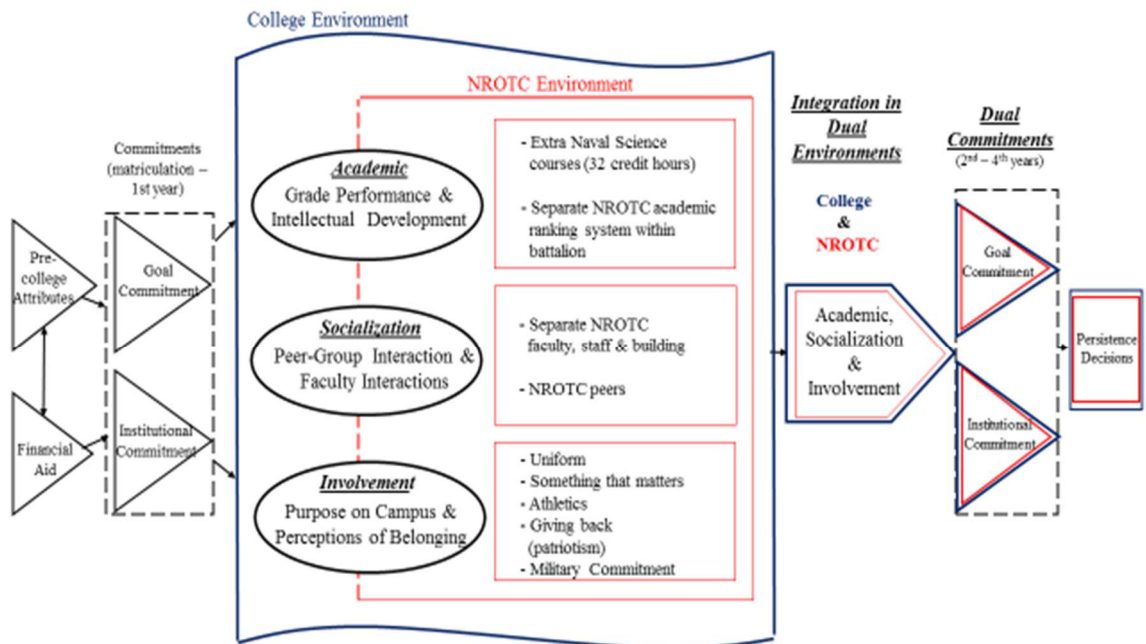


Figure 6. Theoretical model adapted for NROTC student persistence decision criteria

### Unique Contribution of the Research

**Overview.** My study brings to light the cultural demands and perceptions the NROTC student encounters within the context of the body of literature. Findings suggest



that where NROTC students live, socialize, and become involved in the campus environment presents similarly to other traditional non-NROTC students. Although differences between NROTC students and non-NROTC students exist when findings are viewed through the body of literature, the existing literature ably informs on this cadre of college students, and my findings support that conclusion. Some of the differences include: the commitment to the military; religion; SES; on-campus bias; family influence; NROTC faculty relationships; perceptions in uniform and the definite job at the end of college. Each of these differences is discussed within findings and each contributes in a unique way.

Findings within this study on what influences NROTC students' perceptions of themselves while on campus as well as their decisions to persist adds to the existing literature. Additionally, the NROTC students' inability to be transparent on campus on occasion, especially in uniform, elicits perceptions of bias that influences persistence decisions. Analysis and findings on these areas is offered within the study, and also present unique contributions of this research.

**Dual Campus Environments.** There is a dearth of scholarly research about military and veteran students, including NROTC students on campuses, and even more limited research focused on the persistence of these students within higher education (Rittenhouse & Kwinn, 2005; Sander, 2013). This research will add to the existing body of research on college student persistence by specifically addressing influences on NROTC college student persistence. As noted throughout this case study NROTC students are traditional college students, and the literature applies to them completely within the context of the college academic, social and involvement environments.

However, as pointed out in the findings and depicted in Tinto's (1975) revised theoretical model as depicted in Figure 6 (p. 195), NROTC students have a second NROTC environment to acculturate into in addition to the college environment. Identifying and defining the two environmental systems NROTC students acculturate into on the pathway to persistence is a unique contribution. The findings and analysis presented in this case study begins to address the absence of research on this cadre of college students by providing scholarly research on how they acculturate into the NROTC and college environment, and what influences NROTC students' persistence decisions.

**Parallel discussions.** This research offers several parallel discussions from structures, or organizations within the college environment that are well written on with respect to college student persistence. Existing research on fraternal organizations and how students are perceived, and identify within the Greek structure is analyzed within my research with respect to its similarities to NROTC students' perceptions and identification on campus. Additionally, existing research on college students' participation in varsity athletics is offered in comparative qualitative analysis as the role of competition, team building, and development presents similarly to the structure of the NROTC. How Journal of American Medical Associations (JAMA) studies address the effects of loan forgiveness on medical students' persistence decisions due to compensatory service in needed areas can be helpful in informing ones' understanding of the persistence decisions of NROTC students as a parallel experience, and are useful with respect to the research topic. Tierney's (1992b) findings on Native American research is relevant to this study in a parallel observation of pre-college attributes of culture, social and family background as they apply to NROTC students and their ultimate persistence

decisions. Lastly, although Pell Grants are not exactly the same as NROTC scholarships, parallel discussions can be made with respect to the financial aid NROTC students receive from the conclusions within Bettinger's (2004) research. Each of these pieces of research is offered within this case study as a parallel discussion on the topic of persistence as it applies to NROTC students. These parallel discussions are useful as they assist in the development of my literature review and research findings. These parallel discussions are practical because much published research exists within these areas and they offer developed and established scholarly analysis on topics of college student persistence with similarities to the NROTC.

**Role of family.** The pre-college attributes perspective offers a unique look at how these topics influence NROTC student persistence. The strategic role military family members have on the NROTC students' persistence decisions is a noteworthy contribution on pre-college factor influencers. The existing literature is clear on the positive influence family with college experience has on college student persistence decisions. However, the positive influence family with prior military experience has on NROTC student persistence is strikingly apparent in my research. All study participants had family members with prior or current military service, and the preponderance of participants had immediate family members that had served. This finding is unique as I can find no other scholarly research making this military family link as a leading indicator of future family members serving in the military or persistence within the NROTC.

Of note in this section is the research of Eikenberry and Kennedy (2013) that reports that less than 0.5% of the US population was serving in the U.S Military in 2013.

This statistic lies in stark contrast to the nearly 13% of the population that had served in the years after WWII through the Vietnam era (Eikenberry & Kennedy, 2013). My findings would suggest that NROTC students that persist in large numbers are derived from a very small, and shrinking segment of the U.S. population.

**Role of faith.** Another contribution is the non-finding of the role of faith on NROTC student persistence decisions. Portions of the body of literature suggest that religion, and students that practice within certain organized religions has a positive influence on persistence. My study suggests no such connection.

**Patriotism, or something else?** NROTC students' pre-college perception of 'giving back' to community, or doing something meaningful as a means of understanding the service to the NROTC and the military sheds a light on how students qualify their decisions to persist. None of the participants utilized the word "patriotism" or words within its definition of 'love of and devotion to one's country, and concern for its defense' to qualify their service. Perhaps the reason is that the last major national seminal event was fifteen years ago (9/11) and these students are generally just twenty years old, or the term patriotism has become too partisan in tone. For whichever reason my findings do not suggest patriotism, as classically defined, is a reason students claim to persist in the NROTC.

**Financial support.** It is the effects of the financial support perspective on NROTC student persistence decisions that carry the gravitas of the commitment to the NROTC and the military. All traditional college students are influenced in their persistence decisions by financial support. How the financial support makes college affordable, reduces stress, and increases independence is a positive influence for all

students, and well supported in the body of literature. However, for the NROTC student the scholarship money is also the hook, or the mechanism that binds the student to the NROTC and military service at the end of college. Analysis on how the financial support assists the NROTC student in the acculturation and socialization process on campus, and then influences the student to persist, both positively and counteractively, and commission in the U.S. Military is the basis of my contribution to the financial support perspective of college student persistence. More importantly, how I tie my findings on NROTC student's persistence decisions to the existing body of persistence research in the area of financial support adds to the scholarly research on college student persistence, in general.

### **Implications for Policy and Practice**

The findings from the study have implications for administering the NROTC on campus with respect to influencing NROTC student persistence for the US Navy NROTC program administrators, and the university administrators on campus. The following strategies and policy considerations intend to provide discussion points for university and U.S. Navy administrators to address while facilitating and educating NROTC students on campus.

**Residence halls.** Environmental acculturation to the NROTC on campus is extremely important to all NROTC students when making persistence decisions. The concept of comfort with others of similar values, requirements and goals should be fostered wherever possible. The pursuit of those going in the same direction as early as freshman year has an impact on the acculturation into the NROTC for these students. Currently, assignment to the ROTC residence hall (Centennial Hall) is not a mandatory

requirement for entering freshman. Although it is strongly advised, not all NROTC students live their freshman year in the ROTC residence hall. NROTC staff could enforce this as a requirement enabling all to benefit from the relationships developed. At the University of St. Thomas, the college pays for the hall assignment, but these assignments are not regulated in specific areas for NROTC students. Policy changes enabling NROTC students to live in the same area on both campuses would be beneficial to their persistence decisions. Lastly, the University of St. Thomas funds housing for all NROTC students. Although the costs may be too prohibitive for the University of Minnesota to do the same, it would seem an easy policy change to discount the residence hall fees for all NROTC students for the first year. This would make the required assignment to the residence halls freshman year more feasible for the commuters, and others not in the halls on cost considerations. This discussion would include those enrolling in the NROTC College Program (not yet on scholarship).

**Summer training.** The summer cruises (training) the Navy requires of midshipmen every year are tremendous for acculturating midshipman into Navy culture. This helps endear them to the service. However, these summer cruises do not serve the NROTC for students making persistence decisions in college. This discussion requires more research which will be expanded upon in the future studies section of this chapter, but for the money required to complete each of these summer training assignments, the US Navy could provide additional scholarships to further solidifying a stream of future officers. CORTRAMID has little influence on freshman decisions to return sophomore year. The persistence decisions are already weighted by the time CORTRAMID takes place. As a reminder, this study is on NROTC student persistence, not Navy

acculturation. One my point to the benefits to summer cruises for the purpose of Navy acculturation, however; they have little effect on NROTC student persistence decisions.

**On campus bias.** The NROTC began being politically controversial on college campuses in the 1960s. The partisan observations of the NROTC can be deep seeded and entrenched within a campus environment. The U.S. Navy must continue to train officers on campuses or eliminate the requirement to have a bachelor's degree for all entering officers. The U.S. Naval Academy does not have the bandwidth or national diversity internally to facilitate all officer training. Therefore, a policy consideration for academe would be to educate faculty and staff on exactly what the NROTC is. In my years observing the NROTC staff at the University of Minnesota, and conducting this research NROTC leaders have never been asked to brief faculty or staff on what the NROTC is all about. The findings of this study suggest that the midshipmen represent all vectors of the political compass, but feel the negativity on campus regardless of how they align politically. Especially, when in uniform. The bias the midshipman feel is avoidable, or at least could be minimized through education. A yearly leadership dialogue, attended by the University president or provost with faculty and NROTC leaders or students would be a useful educational tool. I would also suggest the university broaden the way it talks about "diversity" to include/celebrate those called to military service. Many organizations already include military within the broader discussion of community diversity within their administrative procedures. This practice would provide faculty and fellow students a better understanding of NROTC students. These would be easy practices to implement with no associated costs.

**STEM incentives.** Although the NROTC places a high priority on STEM fields of study it becomes extremely difficult to stay in these majors for students, particular in Tier 1, because of the time commitment for all requirements of the NROTC. Again, Tier 1 refers to engineering science majors in the college major tier structure from the official NROTC website which is illustrated on Figure 4 in Chapter 4 (p. 110). For many of those that persist the motivation to graduate in a Tier 1 major fades, and continues to be a struggle for those that drop into Tier 2. Oftentimes the degree even becomes a means to the end, with the end being a commission in the U.S. Navy or Marine Corps. However, the NROTC students' GPA is a strong consideration in the class ranking within the battalion. A simple policy change for the NROTC to institute could award the Tier 1 majors a significant bump in GPA status when compared against other midshipmen in Tier 2 or Tier 3 majors. The current system compares GPA's across the battalion fairly evenly when adjudicating class rank. There truly is not much incentive to stay within Tier 1 majors within the NROTC. A future study with this concept as a retention issue will be discussed as well in the next section.

**Naval Science courses and college credit.** As discussed in chapter 4, Naval Science (NAVSCI) courses do not fulfill college credit required for graduation at the University of Minnesota. Therefore, the 32 extra credits the NROTC student must take within the NROTC four-year structure are extra classes to be taken each term that have no bearing on their college graduation. These NAVSCI courses are critical to the NROTC structure as they provide military training and another avenue facilitating the acculturation into the U.S. Navy. These courses are also writing and data intensive to make them competitive within the university academic structure as electives within any



major. With the time constraints already high for NROTC students, these credits can and should be counted as electives in STEM majors at the University of Minnesota. The University of St. Thomas does count these credit hours towards degree completion, yet the University of Minnesota does not. This difference may be best explained by the Research 1 status of the University of Minnesota and the sanctity of the degree requirements as understood or perceived by faculty with respect to accreditation granting authorities. However, policy adjustment should be pursued toward implementation of acceptance of these courses taught at the Armory as credit hours acceptable toward degree completion, particularly in the elective sequence.

**Self-efficacy and the college program.** My findings suggest that the desire to exist within the NROTC culture and become part of the military outweighs other qualifying standards such as high ACT score, elevated high school grades, affiliations and pre-college awards currently used to provide the NROTC National Scholarship to incoming students. A student's self-efficacy, or belief in their own ability to succeed influences goal attainment in a greater capacity than nearly any quantifiable measure used to award the National Scholarship. The NROTC College Program is set up specifically for this purpose, yet is grossly underfunded and underutilized. The NROTC College Program is designed to give those students that do not receive the National Scholarship or decide to serve as an officer during their freshman year in college a path to a scholarship and a commission. Several of the participants in this study were NROTC College Program scholarship awardees. Commanding Officers and Executive Officers at NROTC units across the nation have these students within their battalion every year. However, many very promising young midshipmen are denied the path to the commission because

the NROTC College Program is underfunded. My most highly recommended policy adjustment for the Naval Education and Training Command is to give NROTC units the funding to access more of these students that truly want to become officers. Furthermore, increasing this funding would enable the NROTC command to recruit students they feel possess this self-efficacy, and could succeed within the NROTC and the U.S. Naval Service. Commanders remain the best adjudicators of talent and ability. This policy change is needed, and has been needed for a long time.

### **Implications for Future Research**

Throughout the course of this study other areas of the NROTC and the college experience were discovered as topics of interest for potential future research. These areas seemed intriguing to me as I focused primarily on the topic of persistence within the NROTC, but would find further study in them fascinating and informative. As previously discussed, there is a dearth of scholarly research on veterans and military on campus, including the NROTC, and these topics could further add to the limited body of research on the NROTC experience and the college environment. In particular the differing experiences and perceptions of men versus woman NROTC students on college campuses would be a noteworthy study.

**Retention in the NROTC.** This study focused exclusively on sophomores through senior NROTC students providing analysis and findings on persistence. All participants had already made the decision to persist. A separate study focusing exclusively on retention from freshman to sophomore year would be of value as little scholarly research exists in this area as well. Those NROTC students that do not persist choose to dropout for other reasons than the perspectives presented in this study. It would

be erroneous to assume that those that dropout choose to do so for reasons directly, or indirectly associated with reasons NROTC students choose to persist. There are a completely different set of data related to this topic, and would be of interest for a future study.

**Social-economic-status in NROTC.** The body of research is consistent on suggesting college students from higher SES levels have a greater propensity to persist to a bachelor's degree. My findings suggest that the NROTC is a more mixed SES conversation. Clearly the influence of the financial support enables many to attend college that would not otherwise be able to afford it. Additionally, my findings suggest a good cross-section of NROTC students had the immediate desire to enlist in the armed forces right out of high school. Many return to college after an initial enlistment as well. This study did not take a deep dive into SES of NROTC students, or provide analysis on how lower SES students fare when compared to higher SES students within the NROTC battalion. The array of findings in this study assessing the influences on NROTC students in regards to their persistence decisions could be analyzed across SES backgrounds and provide thick, rich and under-researched data for the body of literature on the topic of SES in college student retention and persistence.

**Value of NROTC summer training.** The U.S. Navy devotes time and treasure to CORTRAMID every year for NROTC students at the end of their freshman year. This training is very positive and provides an immersion into the culture unlike anything else in the NROTC experience. However, Jenson (2011) suggests that every year 25-35% of NROTC freshman on NROTC National Scholarship do not return for the sophomore year. These numbers hold true at the University of Minnesota, as well (Jenson, 2011).

Many that go to CORTRAMID do not stay into the sophomore year, even though they view it as a positive experience. Although the reasons these NROTC students depart are the subject of a different study on retention, it is of note that CORTRAMID itself was not seen as a game-changer for those that persisted in this study. Without diminishing the value of this summer training, my findings suggest those that stayed and persisted, probably would have stayed without it due to their positive experience in the NROTC on campus. A future retention study on the value of the summer training, especially CORTRAMID, could add new data for the Navy on student retention characteristics. The potential money saved by not sending freshman that are not going to persist regardless of CORTRAMID might provide a savings re-assignable to NROTC College Program scholarships for students that would be inclined to persist.

**Tier 1 struggle.** During the NROTC National Scholarship selection process the Navy places a very high priority on science, technology, engineering and math (STEM) aptitude. Those high school students that desire STEM and have demonstrated aptitude for the sciences in high school courses and standardized tests are given priority in admission. High school students that select Tier 1 as their top choice in majors of interest followed closely in priority by those that choose majors in Tier 2 are given priority in National Scholarship selection. Even the NROTC website suggests STEM is a priority for the U.S. Navy (Navy, 2016).

Findings from my study suggest that the degree becomes less meaningful as the NROTC students persist to graduation and the commission in the U.S. Navy or Marine Corps. Perhaps the status quo allows and facilitates students to become officers in four years. However, many NROTC students abandon the STEM majors, especially Tier 1

majors, as the college and NROTC workload grows during the college experience. Of the 25-35% of NROTC freshman students that do not persist, some may be inclined to stay if time and NROTC coordination could be adjusted to accommodate the degree they desire (Jenson, 2011). With the money spent by the U.S. Navy and lost each year on this first to second year dropout rate, a study on retention focused on those that drop due to a perceived inability to complete the degree of choice while persisting in the NROTC would be of interest. Secondly, if the U.S. Navy is desirous of retaining students in the NROTC, and commissioning STEM majors as officers this study could develop courses of action to facilitate both Tier 1 degree completion and the pathway to a commission in the Navy or Marine Corps.

**Self-efficacy and NROTC scholarships.** A student's self-efficacy, or belief in their own ability to succeed influences goal attainment in a greater capacity than nearly any quantifiable measure, including GPA, ACT score, SES, athletic prowess, family background or faith. The success of the NROTC College Program participants within this study suggest desire and perseverance positively influence NROTC persistence in students with lower college entrance score backgrounds. Tinto (2015) suggests that a student's personal belief in their ability to succeed is a critical aspect of their motivation to persist. Additionally, self-efficacy is malleable and capable of being understood within institutions of higher education (Tinto, 2015). A future study on quantifying or measuring self-efficacy may provide a greater way to assess future NROTC persistence in NROTC scholarship applicants.

## Conclusion

This case study was conducted to present findings and analysis on the NROTC experience and the influences on the persistence decisions of NROTC students within the college environment. Although the body of literature on college student persistence is extensive little has been written about military and veteran students, including NROTC students on campuses, and even more limited research focused on the persistence of these students within higher education (Sander, 2013). NROTC students are traditional college students, and their persistence decisions present similarly to the larger body of scholarship on student persistence in college. This study contributes to the literature because it focuses on the unique NROTC context through three major persistence perspectives within the established body of literature. However, subtle differences do exist on the influencers of the persistence decisions of NROTC students and non-NROTC students in their campus experiences, and this study presents findings and analysis on them as well.

Tinto's (1975) revised theoretical model adapted through the findings of this research for NROTC depicted in Figure 6 (p. 195) demonstrates the existence of two distinct yet mutually inclusive environments NROTC students must exist within. The college environment is the same for NROTC students as it is for all traditional college students. It is the NROTC environment replete with its own separate set of requirements that exists within the college environment that presents a difference for NROTC students. Parallel discussions on how environmental adaptation is accomplished on campus for college varsity athletes and members of fraternal organizations provide useful perspectives to understand the NROTC experience. This analysis is helpful in connecting

the body of literature to the NROTC environmental discussion as there is little direct scholarly research to consult with when constructing analysis and drawing inferences. The findings of this research present and define this separate NROTC environment. It is within this separate NROTC environment that we learn of the complexities and distinctions of the NROTC students persistence decisions, and we begin to understand those aspects of the college experience that influence their persistence decisions.

Some of the other differences between the findings of this research and the body of literature on college student persistence include: the NROTC student's commitment to the military; influence of religion; SES; on-campus bias; family influence, and relevance of high SAT/ACT scores. For instance Astin (1993) states that "In other words, those entering freshman that are most likely to complete a bachelor's degree within four years have high grades in high school and high scores on the SAT/ACT, come from higher socio-economic levels, are either Roman Catholic or Jewish, are woman, are non-hedonistic and are disinclined toward science" (p. 193). The findings of this research suggest that NROTC students that persist present SAT/ACT scores as less relevant, come from all SES levels, are not heavily influenced by religion, tend to be equal between male and female and are inclined toward STEM fields of study. It should be pointed out that these are the only areas influencing NROTC student persistence that are different than the collective body of literature on persistence for all traditional college students. Although NROTC students have differing sets of requirements within their unique and separate environment on campus, they remain influenced by the same criteria as all college students when assessing the experiences that influence their decisions to persist within the college environment.

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## Appendix A

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

A. How does the NROTC experience influence student persistence and the pathway to graduation?

### Supplemental Questions

a. What role do campus environment, involvement and socialization play as it relates to persistence among NROTC students?

b. How do pre-college attributes impact the pathway to graduation among NROTC students?

c. What are the influences of scholarships or financial aid on college student decisions to persistence within the NROTC?

Each of these questions attempts to identify those issues that affect the NROTC student's persistence decisions and receive a commission as an officer in the U.S. Navy and Marine Corps. These questions will form the basis of the case study method to the data analysis within this research. Questions will be added based on the insight from the interviews.

## Appendix B

### CONSENT FORM

#### The Effect of NROTC on College Students Today

You are invited to participate in a research study that examines the college experiences that motivates the NROTC student to persist to graduation. You were selected as a possible participant because you are enrolled in the NROTC program at the University of Minnesota, and are an upperclassman in good standing within your NROTC unit. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Charles J. Altman from the University of Minnesota Department of Organizational Leadership, Policy and Development. This research study will be completed in partial consideration for a doctorate degree in higher education.

#### Study Purpose

The purpose of this study is to identify the factors that influence NROTC student's persistence decisions, and provide pathways of understanding on how these factors affect NROTC students' ultimate graduation from college. This research will analyze the effects of the college experience and the NROTC environment, and how their pre-college attributes and financial aid considerations affect these decisions.

#### Study Procedures

If you agree to participate in this study, we would ask you to do the following:

1. Agree to a one hour (approximately) interview with the researcher focused on your experiences and involvement in the NROTC program at the University of Minnesota.
2. It is believed that the single interview will be satisfactory for the requirements of this study. However, if additional information is required the researcher will contact you directly to schedule for additional time to ask follow-up questions.
3. The time for the interview will be scheduled with you directly during your drill period the week of xx xxx, 2015. Permission to conduct this interview, if you so choose to participate, will be been pre-approved through your commanding officer and have no effect on the any other portion of your drill period or status.

#### Risks of Study Participation

Rest assured, your grade or standing within the NROTC unit will **not** be affected by your participation or non-participation in this study. This study aims to learn about the factors that

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influence the NROTC student to persist to graduation in college. Your participation in this study, exclusively from interview questions and observation—is completely voluntary.

### **Benefits of Study Participation**

There are potential benefits to your participation in this study. There is a dearth of research in the area of NROTC student experiences and motivations to persist on campuses nationally. My research is designed to assist university and military leaders to better understand the dynamics of persistence with respect to students within the NROTC program.

### **Study Costs/Compensation**

There are no costs associated with the study. Similarly, there is no monetary compensation for you as in interviewee. However, it is the desire of the researcher to qualify the results of this study to applicable university and military leaders to enable them to further enhance the NROTC program for current and future NROTC students on campus.

### **Confidentiality**

The records of this study will be kept private. I will not include any information that will make it possible to identify you as a subject in any publications or presentations. This study has been (will be) approved by the University of Minnesota Institutional Review Board (IRB) and measures taken to ensure privacy of participant data will meet federal standards. In other word, all discussion information and data obtained during the interviews will be held completely confidential, and none of the research findings will be attributable to any individual student what-so-ever. Furthermore, any recorded information taken during the course of the interview will be erased or destroyed at the conclusion of this research.

### **Voluntary Nature of the Study**

Participation in this study is voluntary. Your decision whether or not to participate in this study will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to withdraw at any time without affecting those relationships. If you choose to withdraw during the program, you should notify Charles Altman, through email at [altma047@umn.edu](mailto:altma047@umn.edu).

### **Contacts and Questions**

The researcher conducting this study is Charles J. Altman. You may ask any questions you have now, or if you have questions later, **you are encouraged to** contact him at 612-626-7147 or Dr. David Weerts (OLPD-doctorate advisor) at 625-432-4147, 312 Wulling Hall, University of Minnesota, 55455. The IRB Point of contact is: XXX Y. ZZZZZ (fill in when known)

You will be given a copy of this form to keep for your records.

**Statement of Consent**

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature of Subject \_\_\_\_\_

Date \_\_\_\_\_

Signature of Person Obtaining Consent \_\_\_\_\_

Date \_\_\_\_\_

\*\*\*\*\*

Examples of questions to ask interviewees about their consent:

1. Now that you have read this form, do you feel ready to make a decision about participation, or would you like more time, more information or possibly both?
2. At this point, based on your knowledge of the study and the contents of this consent form, are you leaning towards participating or not participating? Can you explain why you've said that?
3. Do you feel as though your decision to participate is one that you are making freely? Do you feel pressure in any way to comply?
4. Was this form easy to comprehend, and do you feel comfortable with participation in the study after reading it?

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## Appendix C

### **Pre-Interview Script**

I am conducting this dissertation research study to identify the factors that influence NROTC student's persistence decisions, and provide pathways of understanding on how these factors affect NROTC students' ultimate graduation from college. In specific, this study would like to gain insight into how the NROTC environment affects this decision to persist and what pre-college attributes NROTC students possess that lead to their ultimate persistence to graduation. Lastly, the effect of financial aid on the ultimate decision to persist will be reviewed. Do you have any questions about the informed consent form you filled out? It is important for you to understand that all discussion information and data obtained during this interview will be held completely confidential, and none of the research findings will be attributable to you what-so-ever. The recording is being done for transcription and data analysis purposes only. Please understand that all recordings or tapes of personal interviews will be erased or destroyed upon completion of the study. It is important that you are comfortable with the process.

Do you have any reservations or anxieties about your participation in this research study? If so, please explain.

If you do not wish to answer any question, for any reason, we can delete it from the discussion at any time. Do you have any questions before we get started?

## Appendix D

### **NROTC Student Recruitment Letter**

My name is Charles Altman. I am a doctoral student in the Organizational Leadership, Policy and Development (OLPD) department at the University of Minnesota. I am conducting a dissertation research study in order to assess how the NROTC experience in college affects a student's persistence to graduation in college. This research will analyze those aspects of the college experience that satisfy the NROTC student and how the four years of required leadership training affect the decision to persist in college.

This topic is of interest to me as I am a retired senior naval officer, and previous executive officer of the Navy-Marine Corps ROTC Unit at the University of Minnesota. I spent a very lengthy first career in service to the nation and I wish to assist in further understanding of military related issues on campus. In addition, it is my passion to assist veterans and military members in my post military professional life. There is a dearth of research in the area of NROTC students on campus nationally, and my contribution will enable colleges and universities to better understand the dynamics of persistence with respect to students within the NROTC program. I will be asking participants to share their personal experiences with the NROTC program, and conduct analysis on the data obtained from the various interviews conducted. In the end, it is my strong desire to provide qualitative results to University and NROTC leaders that will facilitate their better understanding of those factors that motivate the NROTC student to persist to graduation.

As a secondary part of this research I will gather data on the required military

training and coursework each NROTC student receives and provide analysis on how this affects the student's decision to persist. Each NROTC student is subjected to military courses and military drill each semester while in the NROTC program. This training and education not only prepares them for the positions within the military they will face after graduation it is also one of the significant differences within the college years these students experience as compared to their non-NROTC classmates. I believe that a more thorough understanding of the effects of this required military training and its effects on the NROTC student's motivation to persist can be of great value to both military and university leaders. Lastly, participants will be queried about pre-college attributes and financial assistance that may be significant to their ultimate decision to persist. All findings will assist in analyses of those factors that affect the NROTC student's decisions to persist.

Participation in this study will require taking part in a one hour face to face interview with me. I will conduct all interviews in the University of Minnesota Armory at a mutual time of convenience in the classroom spaces for the NROTC Units. This study has been (will be) approved by the University of Minnesota Institutional Review Board (IRB) and measures taken to ensure privacy of participant data will meet federal standards. In other words, all discussion information and data obtained during the interviews will be held completely confidential, and none of the research findings will be attributable to any individual student what-so-ever. There will be no remuneration for the student's time and all activities involved in this case study will be under the purview of the OLPD department.

If you have any questions, you may call me at 612-626-7147 or contact me via

email at [altma047@umn.edu](mailto:altma047@umn.edu). I will be contacting you at the Armory within the next week to answer any questions you may have prior to the interview. I will arrange a specific time after we speak next week to facilitate the formal part of the interview process.

Very Respectfully,  
Charles Altman,  
Commander, USN (Ret)

## Appendix E

**Interview Questions** (cross-referenced to supplemental questions provided at Appendix A. All questions cross referenced to the main research question A. contained in Appendix A.)

1. Opening Question (Grand Tour Question): I am interested in hearing your story about your experience in the NROTC program here at the University of Minnesota. I would like to hear about your experience beginning with your decision to join the NROTC and where you are in your education now. Can you explain? (Kvale and Brinkman (2009), p.135) Cross Ref a.
2. Please think about and begin describing why and how you made the decision to join the NROTC. Cross Ref a.
3. What experiences in high school, or before, best equipped you for requirements of the NROTC program on campus? (Follow-up probing question (Kvale and Brinkman (2009), p.135) Cross Ref a.
4. Provide me an understanding of the significance of the scholarship and financial aid money to you in your decision to continue and persist in college. Were the financial benefits a consideration in your decision to join the NROTC? (Follow-up (Kvale and Brinkman (2009), p.135), Cross Ref a. and b.
5. What are your personal goals for your NROTC education? Have your goals changed over time? Do you feel you are meeting these goals at this time? Describe your commitment to the ROTC at the University of Minnesota at this time. Cross Ref b.

6. What have your grades been like since you began at the University? How would you describe your intellectual development during your years in the NROTC and the University? Cross Ref b.

7. Describe your interactions and experiences with your peers in the NROTC.  
Cross ref c.

8. Can you tell me about your faculty interactions both in the NROTC experiences and in the courses you have taken at the University? (Follow-up direct question (Kvale and Brinkman, p.135)). Cross Ref a.

9. Can you describe how your academic experiences have influenced your commitment to your ROTC and academic goals? How have your social experiences on campus influenced your NROTC goals? (Follow-up specifying question (Kvale and Brinkman (2009), p.135)). Cross Ref a.

10. Can you explain the utility of the military education and training you are exposed to within the NROTC program? What are your impressions of the program? (Follow-up specifying question (Kvale and Brinkman (2009), p.135)). Cross Ref a.

11. If given the opportunity, how would you change the required educational and military training experience within the NROTC program? Cross Ref a.



### Closing Questions

12. What are the most important factors now that influence your decision to finish the ROTC program and your degree at the University of MN, and receive a commission in the US Armed Forces? (Open-ended seeking additional comments on motivations to persistence Kvale and Brinkman (2009), p.135).

13. Describe why you would recommend the NROTC program to other potential college students, and if you would not recommend it, explain why? (This question is designed to validate the interviewee's responses and provide a sense of closure to the interview itself Kvale and Brinkman (2009), p.135).

14. Is there anything we haven't discussed that you would like to share with me about your experiences at the University of Minnesota, or within the NROTC program? (Open ended opportunity to comment in general as a last question. Kvale and Brinkman (2009), p.135).