DISSERTATION

FRIENDSHIPS FORMED AT THE UNITED STATES AIR FORCE ACADEMY: ALUMNI PERCEPTIONS OF SOCIAL CAPITAL AND RESILIENCE

Submitted by

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ABSTRACT

FRIENDSHIPS FORMED AT THE UNITED STATES AIR FORCE ACADEMY: ALUMNI PERCEPTIONS OF SOCIAL CAPITAL AND RESILIENCE

This study examined friendships among US Air Force Academy cadets from the perspective of Academy alumni. Alumni data reveal the value of cadet friendships where resultant social cohesion is tied to resilience throughout military training as well as to long-term professional relationships. Friendships are the locus of resilience within the Cadet Wing, and alumni experiences reveal that social capital development begins as early as Basic Cadet Training.

The study's theoretical model, adapted from Weidman's (1989) study of college freshmen social interactivity, juxtaposes cadet attributes (demographic characteristics of entering first-year students) against normative pressures inherent in the military/academic training environment (related to social and task cohesion and gender hegemony). The profile of students entering the Academy is typified by exemplary academic, athletic and civic performance, and while the Academy offers social and academic support programs to address retention, the historically high attrition rate strongly suggests a relationally-mediated identity shift is necessary. This identity shift typically begins before or during Basic Cadet Training. Causal-comparative data analysis suggests formation of at least one trusted friendship is a strong determinant in cadets' ability to persist through social-normative pressures. Data reveal further that military-family ties, race, and gender are secondary considerations of friendship building concerning overall influence upon

cadets' ability to endure military and academic stresses than were shared values, goals, and experiences.

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DEDICATION

I dedicate this work to my wife, who supported me throughout this entire journey. This work is part of our story. Further, I express my deepest appreciation for support and encouragement of our children as well as their spouses. And to my parents for giving example of the love and hard work that is essential to living a full and productive life.

This work was inspired by the many Air Force Academy cadets we sponsored over the years. Your experiences at the Academy, the many hours shared in our home, and the stories you shared were the genesis of this research. For this I thank you. This appreciation extends to my many military friends, with whom I served, flew, trained, complained, praised, promoted, enlisted, commissioned, deployed, and socialized and whom I thought of often while researching and writing this dissertation. Without your friendship throughout my military career, this work would not be rich and informed.

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CHAPTER ONE: INTRODUCTION AND BACKGROUND

You are part of an elite institution and I want you to feel it every day when you're trying to help us be excellent and not just settle for what's comfortable. This isn't easy, it's a grind for the cadets. No one single thing we ask them to do is impossible, but we ask them to do everything.

(US Air Force Academy Superintendent Lt Gen Michelle Johnson, addressing the AFA Faculty, August, 2016)

The Problem and Need for this Study

Informal, horizontal social relationships, more casually referred to as friendships, create a sense of identity and belonging. At the same time, these social connections are the conduit of resilience and social capital, "the presence of effective human networks and social cohesion, which are manifested ineffective institutions and processes where people can cooperate for mutual advantage" (Landman, 2004, p. 38). Social capital is the value participants gain as a benefit of trusted relationships among members of a social group and has important implications for military academy students. Strong and weak social ties with intimate and non-intimate associates are essential in providing bonding and creating social capital for individuals and families (Fingerman, 2009, p. 74; Granovetter, 1973). The social capital acquired by cadets and the context in which they build these important bonds are especially crucial because the Academy environment is notoriously stressful, elite, and at least historically, psychologically brutal. There is a gap in research about friendships, the social connections, and resilience developed among young adults enrolled in military service academies, where the academic and military training success of everyone begins and is sustained within the hierarchy of the culture and environment.

Conversations with cadets and graduates over a decade sparked interest in examining the friendships formed by the United States Air Force Academy (hereafter "Academy") cadets. Experiences they shared can be broadly grouped into two categories: cadets who stay and graduate from the Academy and those who self-select to drop out. In a simple context, cadets with more informal social connections appeared more likely to remain at the Academy and graduate than cadets who have few or weak informal social connections with Academy peers. Further, 20 years after graduating, alumni report being "very good friends" with men and women whose friendships began while they were cadets. Moreover, these friendships have long been understood within military culture as valuable to successful promotion through the ranks, selection for choice assignments and political appointments in their future. The community is small; as of 2018, the total number of Air Force Academy graduates since its first graduating class in 1959 is 50,689 individuals. As of May 2018, there were 737 General Officers who graduated from the Academy and 131 on active duty.

Examining how and where the bonds that unite Academy cadets are formed has implications for understanding how to develop and support programs designed to address inclusion and retention of students from diverse backgrounds, as well as retain those who may be marginalized for any reason (Losey, 2015). The Academy reports that dropout rates among minorities, not including international students, are near twice the rate of attrition for nonminority groups (USAFA Report, Department of Behavioral Sciences, 2016a). This warrants a retrospective study of how social capital derived from friendships may be an indicator of cadets' social adjustment and, thereby, positively associated with graduation.

Significance

The Air Force Academy is both a military installation and a university. Established on April 1, 1954, construction of the Academy began on July 11, 1955. The first class of cadets convened at Lowry Air Force Base, Denver, Colorado, with 306 men. Women were admitted to the Academy as cadets for the first time in 1976 and graduated in June 1980. Tables 1 & 2 depict the recent data on gender distribution within the Cadet Wing.

Table 1. US Air Force Academy Demographics by Gender, Class of 2016

	Male	Female
Number	630	182
Percentage	77.6	22.4

The Academy does not release specific information about the reasons why cadets attrite from the institution, but overall attrition rates are made public, as shown in Table 2 regarding the class of 2016. As the data reveals 23%, or nearly one in four, who enter did not finish.

Table 2. US Air Force Academy Attrition Rate, Class of 2016

Number who entered 29 Jun 2012	1,035
Number who graduated 2 Jun 2016	812
Attrition Rate	23%

The Academy is located slightly north of Colorado Springs, Colorado, at an elevation of roughly 6,200 feet that adds to the stress of cadet training. The Academy is ranked #3 in top public schools and accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. The Academy's stated purpose is to "educate, train, and inspire men and women to become officers of character, motivated to lead the United States Air Force in service to our nation." The institution offers 31 academic majors, has over 700 faculty members with an 8 to 1 student-to-faculty ratio, with an average class size of 19 students (U.S. Air Force Academy, 2014). All academic classes are taught from a 40-lesson syllabus, and all

cadets are required to participate in physical fitness courses at the same time they are learning and carrying out the duties involved in officer training.

Competition for acceptance to the Academy is intense and considerably more involved than applying to a civilian college or university. A panel of senior Academy staff reviews every applicant's admission package according to quantitative and qualitative factors. Applicants must meet or exceed academic, physical, and character requirements to be considered. Academic performance is 50% of the total admission consideration. Physical preparation means satisfactorily completing the Candidate Fitness Assessment on agility, strength, speed, and endurance. Physical fitness is imperative to success during the intense boot camp training all applicants must endure to earn their entry as cadets.

Admissions pathways include high school and home-schooled graduates, enlisted men and women, and international students. A cadet returning after a leave of absence (turnbacks) joins a new class at the same point in training or academics where the cadet left. This leave of absence is typically due to an injury incurred during training and does not require re-applying to the Academy.

The admissions committee considers extracurricular activities as an indication of applicants' character, and it is expected that each will demonstrate altruistic community involvement. These activities can include a mix of athletic and other activities including, but not limited to, high school sports, student government, community activities, and work experience. Also factoring into character evaluations are experiences as team captain, in student government, or in school/community activity president/chairman positions. Knowing that all applicants will be at or near the top in all admission selection categories means those selected will be the best from every demographic. Therefore, young adults who were perhaps accustomed to the "shining"

star" status in their community, sports team, or school, are now "average" in comparison to this elite group of applicants.

As strenuous as these admissions benchmarks are, each applicant must then be deemed eligible to receive a nomination from an authorized nominating entity, such as their local Congressional Representative, attesting to the applicant's character and ability. Nominations come from every state and U.S. territories, with each location having a limited number of openings for which applicants may be selected.

Applicants must compose a writing sample and attend a personal interview with an Admissions Liaison Officer. They are required to report any legal issues such as arrests or citations, complete full medical evaluation, and complete a background investigation if accepted. "Accepted" is the operative word. Performance on all admissions factors is essential to establish a competitive standing among applicants. The selection panel assigns each application package a rating that is combined with the medical evaluation and nomination source to derive a composite selection score. Young adults are subject to immense pressure to be selected to attend the Academy and under higher pressure to succeed once they become cadets.

Lastly, individuals may be recruited by the Academy because of their abilities in an intercollegiate sport. These individuals must meet appointment requirements yet have the additional condition of performing within their intercollegiate sport. Athletes receive the same Academy benefits as their non-athlete peers. In the event an athlete is injured while playing a sport and can no longer compete, the cadet-athlete does not lose his/her position at the Academy (U.S. Air Force Academy, 2019).

Selection to the Academy does have a cost. There are social and emotional adjustments and physical and intellectual challenges. These pressures can and do bring cadets to choose to

leave the Academy. Cadets may disenroll at any point up to the end of their third-class (sophomore) year without direct penalty. Cadets who voluntarily leave the Academy after the beginning of their second-class (junior) year must choose either paying back the cost of their education at the Academy or serving a specified time as an enlisted member of the Air Force. Cadets who choose to leave face readjusting to civilian life, applying to civilian schools, and time lost toward achieving a college degree.

Young adults entering a university are transitioning to adulthood. Studies show that first-year students struggle to find their places on campus and to understand the responsibilities that come with the new-found freedom of being away from home. In the military culture, add the social isolation from previous friendships, and it is easy to wonder how Academy cadets do it all. Each class is comprised of a highly select group of people who forge new social relationships and find their sense of belonging within an unprecedentedly competitive peer group.

Building social capital and trust within a peer group takes a much different form than when they were younger, as in high school (Flanagan, 2013). Young adults are generally occupied with trying to differentiate their lateral friendships from relationships with other adults. They build identity through interaction with their peers, a process of differentiation from their family of origin that is important to their development generally, and specifically as they are subsumed by military culture. Young adults place a high priority on the development and nurturing of peer relationships, and social media is increasingly used as a means of connection and community identity. How do these student cadets, isolated from all previous social connections [including social media for current cadets] with one chance to phone home during the first six weeks of intense physical training, build social connections while they are immersed in military training?

This study seeks to examine whether and how cadets' build social connections to endure the rigor of training and their important decision to continue their education and training, an important milestone toward throwing their covers into the air as the Thunderbirds soar over Falcon Stadium on graduation day.

Study Context

The researcher's interest in cadets and their socialization began in 2003 by participating in The Cadet Sponsor Program offered by the Academy (U.S. Air Force Academy, 2018b). As a sponsor family, the researcher and spouse provided a home away from home for cadets to unwind from the pace and stress of living at the Academy. With a daughter who is a graduate of the United States Naval Academy and two daughters who earned their commissions through the Navy Reserve Officer Training Corps program at two different universities, the researcher knew how to support military university students. Over the years, cadets would often adopt the researcher's home as a safe place to hang out, study, do laundry, and enjoy a home-cooked meal. Also, for several years the researcher hosted additional cadets for "Doolie Day Out," which is an 8-hour suspension of their intense basic training in which they are introduced to and spend the day with host families or sport team coaches. Working with cadets during this vulnerable transition phase of early training allowed the researcher to observe how cadets began to adapt to the military culture, make new friends, and handle the inevitable emotional upheaval that arises during the first three weeks of basic training. Connecting with cadets and graduates inspired the researcher to study patterns of social connections essential to their well-being and resilience at the Academy.

Cadets must employ time management, organizational skills, practice self-discipline, and learn how to perform with excellence amid mental, physical, and psychological demands on their

time, intellect, and character. During Basic Cadet Training (BCT), which takes place over six weeks the summer prior to starting their first academic semester, trainees (now referred to as Basic Cadets or Basics) may not have visitors or receive or make phone calls, except for Doolie Day Out and until after parents' weekend in early September. With three weeks off in the summer, two weeks at Christmas, and one week for spring break cadets' life for four years is primarily spent on the Academy grounds, seven days a week, in uniform. The academic schedule involves four 55-minute class periods in the morning and three in the afternoon, a schedule that is nearly twice that of a civilian university student. Intercollegiate sports, intramural sports and other sports practice times, as well as cadet club activities, all of which are expected of each cadet, occur after the final academic class period. The grueling daily schedule could overwhelm anyone and makes the support of friends among cadets especially vital.

Unlike civilian universities, cadets may not have a vehicle on campus during their first two academic years. At the same time, the cadets receive full tuition, room and board, and free medical care while they are enrolled, advantages that inspire some to endure a great deal to stay and finish. Additionally, cadets receive a government-sponsored life insurance program and a small stipend each month. While at the Academy they must wear the cadet military uniform unless they are on leave or during weekend liberty privileges. Basics may not wear civilian clothes until after Recognition. Recognition, a three-day event in the spring semester, is a challenge they must endure before earning the status of "cadet," and receive the "prop and wings" pin worn on their caps. Basics earn other privileges, such as being allowed to wear civilian clothing while off-duty, strap on their backpacks instead of carrying them by hand and walking instead of running to class (U.S. Air Force Academy, 2018). This extended amount of time in uniform is significant; it immerses students fully into a culture uniquely different from

any civilian institution and creates a psycho-social-emotional challenge that cadets attest to confronting through the strength of their trusted relationships.

Over time, the Air Force Academy has fluctuated in size and become more diverse. In 1964, the Cadet Wing, the name used to refer to the entire student body, increased to 4,417 cadets and the Academy is presently authorized at 4,000 cadets comprised of forty 100-member squadrons. Academy cadets represent a geographical cross-section of the general U.S. population. Cadets come from all 50 states, territories, and from other countries. Each squadron has Air Force enlisted and officer leadership provided by individuals permanently assigned to the Academy Air Force Base. An Air Officer Commanding (AOC), typically with the rank of major, and an enlisted Academy Military Trainer (AMT), typically a staff sergeant or technical sergeant, lead each squadron and mentor the cadets through their experience at the Academy (U.S. Air Force Academy, 2018).

The Air Force Personnel Center reports that 60,289 officers serve in the active duty Air Force. This number does not include Guard or Reserve officers or enrolled cadets (U.S. Air Force Personnel Center). There are three possible avenues for obtaining a military officer commission: graduation from one of the military academies, graduation from a civilian university Reserve Officer Training Corps (ROTC) program, or by direct assignment to Officer Candidate School (OCS) programs. Table 3 shows the distribution of Air Force commissioning sources as of March 2016.

Table 3. US Air Force Officer Commissioning Sources

Source	Percentage	Number
Reserve Officer Training Corps	42.6	25,683
Air Force Academy	22.7	13,685
Officer Training School	17.4	10,490
All other sources	17.3	10,429
Total	100	60,289

These programs provide paths to being commissioned as officers upon successful completion of the program requirements. The three programs differ in length and intensity. For example, military academies isolate individuals for six weeks and maintain individuals in close physical proximity (squadrons) for the duration of their four years of college. Among these paths to a military commission, Academy trainees are co-located and in an intense military environment for the longest time. The number of graduates commissioned each year at the Academy is longer than any of the other commissioning programs at four-year undergraduate institutions.

Differing from their Academy counterparts, Reserve Officer Training cadets (ROTC) are college students with an additional requirement to attend military courses and physical training one or more times each week for four years. ROTC students have more personal time, can choose social connections outside of their military unit, and do not experience the total cultural immersion of their Academy counterparts.

By comparison, Air Force ROTC is located on 145 college and university campuses, with more than 1,100 additional schools participating in cross-town agreements that allow their students to attend AFROTC classes at an area host school. The most significant percentage of commissioned Air Force officers come from the shared experience of attending the Academy more than any other institution of learning or commissioning source. The typical college experience of Academy graduates distinguishes this population from the rest of the Air Force officer corps and presents an ideal focus for a study of the link between bonds of friendship and graduation.

Officer Candidate School (OCS) recruits receive military and related academic training during a 9-week period. Although isolated from outside social connections for the duration of the course, these officer candidates do not remain together as a unit following their commissioning.

Academy cadets with family members who are military or who are Academy graduates may have an advantage that increases the ability to adjust to Academy culture. These cadets may possess the tacit knowledge to build strong social connections among their peers through observation of existing social connections held by their parents or another family member who is an Academy alumnus. Additionally, cadets with prior enlisted military experience may understandably find it easier to build connections with their peers given their knowledge of military culture before reporting to the Academy.

Table 4 depicts demographic details for the 2014 and 2018 graduating classes highlighting the large applicant pool compared to the number of admissions and acceptances, and the incidence of former graduate family ties (U.S. Air Force Academy, 2018c).

Table 4. US Air Force Academy Demographics for the 2014 and 2018 Classes

Category	Class of 2014	Class of 2018
Applied	11,627	9,052
Qualified	2,445	2,499
Offered Admission	1,566	1,498
Accepted	1,294	1,188
International Students	17	14
Returning Students	8	4
Sons of Graduates	89	77
Daughters of Graduates	40	27

Table 5 shows the consistent distribution of male and female admissions between the 2014 and 2018 classes (U.S. Air Force Academy, 2018c). Percentage values are stable for gender distribution and qualified applicants between Class of 2014 and 2018. Information for the Class of 2018 was the most current enrollment data available at the Academy.

Table 5. Gender Distribution for Class of 2014 and 2018

	2014		2018	
Gender	Number	Percentage	Number	Percentage
Male	1,001	77.4	942	78.1
Female	293	22.6	264	21.9

Eligible applicants flow from four sources: directs, priors, preps, and international applicants, as shown in Table 6. "Directs" refers to individuals entering directly after high school or home school. "Priors" refers to individuals who have been enlisted members of the Air Force or another branch of service who bring on-the-job experience and knowledge of the military culture. Air Force Unit Commanders nominate highly qualified airmen to attend the Academy or Prep School. Commanders can identify outstanding and deserving airmen with officer potential for this commissioning program (U.S. Air Force Academy Admissions). The third source is referred to as "Preps." These individuals, who were initially not selected for entrance upon applying, are accepted into a preparatory school, an institution co-located on the installation, for one year of focused academic, physical, and military training before re-applying.

The fourth source encompasses individuals from other nations who are enrolled and trained at the Academy and return to their home country after graduation. The Class of 2016 began with 20 international students from countries ranging from Ecuador to Uzbekistan. These

individuals experience establishing social bonds within the Cadet Wing as they must navigate the subtleties of American culture. Table 6 explains the four types of applicants.

Table 6. Types of Eligible US Air Force Academy Applicants

Type	Definition
Directs	Students entering directly from high school or home schooling
Preps	Students entering after one year of academic immersion at a designated preparatory school (more than one)
Priors	Enlisted military members entering after serving more than one year, under the age of 27
International	Students enrolled who are citizens of another nation

The Air Force reports active duty diversity as 72.0% white and 24.4% for all other ethnicities (U.S. Air Force Personnel Center, 2016). In reporting the demographics for the graduates of 2018 (the Academy's most recent available data) shows ethnic composition as White 78%; Asian 7%; African American 8%; Native American 1.3%; and Pacific Islander 1.3%. Combining percentages indicates the minority group as 27.7% of the 2018 graduate population. These percentages are typical of the Air Force demographics. Where the Academy reports all Caucasians as "non-minority" for this study, "white" and "non-white" categories are used.

Applicants are given plenty of notice about the rigors of training and high expectations once admitted. According to the Academy, individuals accepting an appointment are expected to be "armed with physical fitness, mental resolve, enthusiasm for competition and challenge, and an attitude positively directed toward success" (U.S. Air Force Academy Admissions). It further describes the training as "rigorous and well disciplined, designed to test and strengthen your motivation and capabilities . . . candidates who enter because of pressure from peers or parents,

with the attitude to "give it a try" usually have great difficulties." The message to a potential applicant is clear: you become one of us, or you fail in trying. Given the requirements for admission, the defining hurdle at the outset of their Academy experience is the duress imposed by military induction; only later, when classes begin after BCT, do cadets face the stress of simultaneously maintaining academic excellence among a pool of other elite beginners.

Life as a Cadet

Cadets experience difficult situations like any other college student. The Academy's Peak Performance Center provides a full range of counseling and performance enhancement services to meet the developmental, emotional, psychological, and leadership needs. Each cadet squadron has trained cadet Personal Ethics and Education Representatives (PEERS) to assist with concerns and guidance on stress, relationships, eating disorders, and equal opportunity and treatment. Also, the Cadet Sponsor Program provides an avenue to build relationships beyond the formal Academy environment. Another program, the Association of Graduates Bed and Breakfast Program provides in-coming appointees "the opportunity to stay with a local graduate or USAFA family the night before they report to the Academy. . . this allows the appointee to avoid spending their last night before BCT alone in a strange town without any friendly support." Officials from the sponsorship program say, "Rigorous Academy standards can tax even the best of spirits, producing feelings of great stress to make the grade in some cadets, and in others, moments of loneliness, homesickness, and doubt offer an opportunity to reduce anxiety and stress with the support of people who know the rigors of Academy life" (U.S. Air Force Academy Association of Graduates). These clubs and programs reveal the Academy's awareness that support and inclusion are vital to the retention of appointees.

The academic year from August to May is filled with academic studies, professional military training and athletic or fitness training. The days are long: military training begins as early as 6:30 a.m. with mandatory breakfast formation at 7:00 a.m. Classes begin at 7:30 a.m. and break for mandatory lunch when cadets must "fall in" to squadron formation is at 11:23 a.m. The formation of the squadron and marching each day at noon is an additional stressor, rushed, and yet must be in cadence and reflect proper military standards of both uniform and behavior. It is a regular context for bonding as a unit, as each squadron has its own colors, identifying patch and guidon. Noon meal formation means 28 minutes to collect one's meal and eat before returning to academic classes, then more military training or briefings until 3:23 p.m. Athletic practice or other fitness training and intramural sports begin after classes and continue until 6:00 p.m. Military training continues after the evening meal at 7:00 p.m. for another hour, then cadets have until 11:00 p.m. to do homework, ancillary training, and enjoy limited personal time. It is difficult to imagine how they do it but moving with one's unit helps maintain a tempo and continuity of activity the cadets soon regard as normal.

Military training continues Saturdays throughout the semester except during home football games. Cadets are required to attend home football games in uniform. While there, many provide security patrols, participate in first aid response teams, play in the Academy Drum and Bugle Corps, perform as cheerleaders, and work in other supporting roles.

Although each cadet is initially assigned to a squadron, they are required to change squadrons following their third-class (sophomore) year. Thus, two years into their experience they may re-establish social ties. Roommates, who are of the same gender, may be switched each semester, which presents yet another relational challenge. Only Basics are assigned a roommate; upperclassmen choose a roommate. If there are siblings at the Academy at the same time, they

are assigned to different squadrons. The framework for this near-continuous change of environment for forming and retaining social relationships is a shared and demanding schedule and the semiotic ties to one another gained as they build a new identity within the military culture (U.S. Air Force Academy Public Affairs).

Cadets are afforded some leisure activities, including concerts or movies at Arnold Hall, the Academy's student union. At Arnold Hall cadets can buy pizza, watch television, play games or gather to visit casually. When cadets do get an open weekend, a group of friends can get away for snowboarding, skiing, hiking, fly fishing, and other activities offered by the Force Support Squadron Outdoor Recreation office on base. Cadets have a variety of recreational-, sports-, professional-, and artistic- or culturally-focused clubs they can join. Participation in a club or activity is optional but encouraged as these activities provide a context for mutual support. Evidence suggests that the support is broadly-defined. For example, following the repeal in 2011 of "Don't Ask, Don't Tell" legislation, the Academy openly celebrated support of LGBTQ cadets in 2016 and encouraged unity, with the Superintendent stating:

We are all brothers and sisters in this wonderful Air Force family. So, I celebrate with you the great diversity of our Air Force and the proud legacy LGBT Airmen have woven into the fabric of the profession of arms. Thank you for treating cadets, Airmen and families with dignity and respect.

(LG Michelle Johnson, June, 2016, email to the Cadet Wing)

Cadets participate in community service projects, practicing the "service before self" concept, which is at the core of the Air Force's values. The "Core Values" are ubiquitously displayed on posters in both the barracks and classrooms, and they are immediately memorized by Basic Cadets: "Integrity First, Service Before Self, Excellence in All We Do". They must memorize the "Airman's Creed" in Figure 1. Established in 2007 by then Air Force Chief of

Staff General Michael Mosely, the creed is a fierce affirmation that the speakers are committed to be a specific kind of Airman warrior.

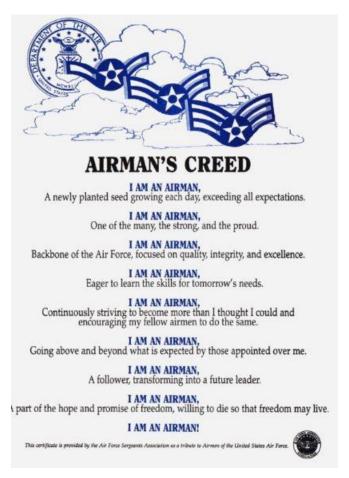


Figure 1. The Airman's Creed

The following sections, Basic Cadet Training, Jacks Valley, and Acceptance Day are presented to contextualize some of the key data collection points in this study.

Basic Cadet Training

Appointees reporting to the Academy generally do not know one another before reporting for in-processing, except for those who attended a preparatory school the previous academic year. Although those individuals are more likely to have existing friendships when reporting for in-processing, they are assigned across the squadrons and must adjust away from, temporarily at least, their familiar social group. Early social encounters, often in the cadet dorms, are the

beginning of relationships that can sustain cadets during transition to Academy life. Writing about social bonding and successful leadership in his book, *Leaders Eat Last*, Simon Sinek (2014) says,

Perhaps the closest example of a modern system that mimics our ancestral kinship societies is the college dorm. The students have their own rooms (which are usually shared), doors are often left open as students socialize between the rooms. The hallway becomes the center of social life and rooms are for homework and sleeping (and sometimes not even that). The bonds of friendship that form in those dorms are vital. That's where college students tend to develop their closest friendships—not in classrooms. (p. 36)

Sinek's words point to two key ingredients of meaningful socialization: environment and proximity to others. At the Academy, the environment—the dorms, classrooms, fields in which military training takes place, and the amount of time they spend there, is entirely controlled and homogeneous for all cadets. Therefore, the differences lie in the individuals who comprise the available social group within cadets' proximity.

As mentioned earlier, all individuals reporting for BCT are categorized and referred to as "Basics." This term replaced the historical term "Doolies" in about 2010 as a friendlier term to describe new cadets not yet accepted into the Cadet Wing. "Doolies" specifically refers to freshmen at the Academy. This is a term adopted by the Academy's first cadet class, the Class of 1959. Doolie is a derivative of the Greek word *doulos*, which means subject. The colloquial term is used to refer to cadets in their freshmen year by most graduates and outsiders, although the cadets themselves do not typically use it (U.S. Air Force Academy, 2013). The intended implication was that individuals in this class were inferior and must prove their worthiness to earn the right to be called cadets. At the Academy, this change of title follows "Recognition" weekend in March when the Basics revisit portions of BCT. At the end of "Recognition," they receive a tangible and visible mark of achievement called "props," a small lapel pin that uses the

propeller of an aircraft as a symbol of being worthy to be called a cadet. Figure 2 shows cadets receiving their shoulder boards, "props" and completing Jacks Valley training.



Figure 2. Cadets After Receiving Shoulder Boards Also Known as "Props" (Photos refer to general experiences, not images of study participants.)

Basic Cadet Training includes physical trials, including marching and inspections, and military instruction about Air Force customs and courtesies, history, the rank structure and concomitant insignia, and wear and care of the cadet uniform. Barred from access to family or friends during Recognition, the Basics are denied the use of personal phones or computers and do not listen to the radio or watch television. In effect, they are forced to bond with one another in a way different from civilian university students.

BCT has two phases: a boot camp-like training period followed by a war-training exercise enacted at Jacks Valley, a location on the north end of the installation. Training begins in the cadet area, which is an isolated section where dorms, classrooms, and administration buildings are located. Access to the cadet area is limited to those who are authorized to enter and interact with cadets. The official Academy website describes this experience for potential

recruits, warning: "Few of your high school friends will ever face such tests. Your commitment to yourself, to those close to you, and ultimately, your nation, will be tested daily." (U.S. Air Force Academy Admissions).

Members of the new class receive instruction from upper-class cadets on military bearing, military customs and courtesies, the Honor Code, and Air Force history; they learn to march, salute, and wear the uniform. Here young men and women are subjected to inspections of their person and rooms, take knowledge tests, participate in fitness and conditioning training, parades, and long days in a stressful environment in which they are shouted at and deliberately stripped of their previous civilian identity. Cadets are voluntarily and intensely indoctrinated to military culture and protocols during the initial phase of BCT. Every spare moment is used to learn military knowledge of their immediate and present chain-of-command, Air Force Core Values, marching, proper military greetings, and the Air Force organization. Figures 3 and 4 depict individuals entering BCT.



Figure 3. Cadets Entering Basic Cadet Training (BCT) (Photos refer to general experiences, not images of study participants.)



Figure 4. The Duress Inherent in Military Training (Photos refer to general experiences, not images of study participants.)

Jacks Valley Training

The second phase of BCT, Jacks Valley, is in a 3,300-acre wooded area on the base; here the Basics learn fundamental skills in small-unit tactics, use of firearms, teamwork, and combat skills. This phase of training pushes physical limits and is intended to build self-confidence and mutual trust as the Basics bivouac [a temporary camp usually without tents or cover, used primarily by soldiers or mountaineers] and cadets learn to stay focused under rough conditions. The hearty sounds of this phase of training are audible to residences within a two-mile radius. Jacks Valley concludes with a formation march back to the cadet area to prepare for the Acceptance Day Parade.

Acceptance Day

Basic Cadet Training concludes with an Acceptance Day Parade after which Basics receive their fourth-class shoulder boards, acknowledging finishing this phase of training. Acceptance Day marks their acceptance into the Cadet Wing. However, feelings of elation are temporary, as academic coursework begins soon. Their completion of BCT serves as a foundation for the coming years of continued military, physical, and academic training as an undergraduate student at the Academy. Throughout BCT, Jacks Valley, and up to the Acceptance

Day parade, students have learned to turn to each other to form social relationships and friendships to survive.

The Cadet Friendship Experience

During the initial weeks of BCT, Basics must turn to each other to form friendships. Individual Basics would not have existing friendships with classmates in their squadron. These peer friendships, or horizontal informal social connections, may be an antecedent to personal and leadership skills needed in the military, whether that experience lasts the length of their service commitment following graduation or for decades. Military academies foster acculturation unlike other officer training programs. Individuals are completely immersed in the culture for four years. Bonded by the stress of training and removal from their civilian social networks, cadets face the same learning challenges found in a traditional college education with the added pressure of learning to thrive and adapt to military culture.

At the outset, indoctrination and orientation remove the individual from social connections held before starting basic training. While these connections may reestablish after basic training, Basics do not have access to this group of friends during BCT and are forced to form connections with one another. Thus, informal social connections begin in their isolation of basic military training. This is in stark contrast to the environment an individual may have had prior to entering the Academy and is distinct from the experience of students on civilian college campuses. Moreover, cadets who attended a preparatory school or who were enlisted previously experienced military training gain more experience during BCT. Basic Cadet Training is different from the work environment they will encounter when they become active duty Air Force officers. Social connections before entering BCT may survive the social isolation period of basic training; however, as new military cultural norms supersede civilian cultural norms,

relationship ties to civilians, except for family ties, are likely to diminish and may eventually disappear.

Military Culture and Social Connections

To understand the social connections formed by cadets in the context of their military training experience, we must examine social relations within the broader military culture. Social hierarchy is a key element of military culture. Military and inter-organization relationships are formal relationships with other groups. This formal structure is necessary for military organizations to carry out assigned missions. Organizations have structure and relationships have meaning. Within and among these formal structures, internal to and across military organizations, are a network of informal social connections. It is these social connections that can either empower or impede the formal, hierarchical leadership structure.

Humans are inherently social and have survived as a species by forming bonds of mutual trust and cooperation. We build bonds of trust in the time we invest in getting to know one another and or by completing a common task. The more familiar we are with each other, the stronger our social bonds (Sinek, 2014). With little time for relaxed socializing activities, cadets are forging informal ties based upon relational intersections *despite* the "team building" intended by military trainers. In other words, cadets are building their social capital by forming bonds of belonging, trust, cooperation, and identification within, or despite, the environment created and fostered by upperclassmen and permanent party and staff, who are the active duty and civilian personnel at the Academy leading and instructing cadets.

Bourdieu (1986) introduced the idea of social capital as the "aggregate of the actual or potential resources linked to the possession of a durable network of more or less institutionalized relationships of acquaintance and recognition" (Huisingh, 2016, p. 19). A sense of identity and

belonging through informal social connections, whether short- or long-term, enable the exchange of social capital. Social capital is the flow of knowledge and resources through networks of connections. Networks of relationships may be temporary associations or friendships spanning time and distance. Individuals within these networks exchange information, knowledge, culture, and credibility associated with the type and strength of a relationship.

Social capital in the Academy culture includes emotional and social comfort, encouragement, success tips, comforting sarcasm and humor, tips and tricks brought by those who were enlisted or come from a military family, and information gained from external sources that help them endure. During the first two academic years, social capital includes how to get around campus, time management, balancing schedule and priorities, classroom behavior, stamina practices, how to read the professors, what is essential to pass a course, and how to avoid negative encounters with specific upperclassmen.

Within the Academy, men and women live, work, train, attend classes, and serve alongside one another. Military resocialization involves creating an environment of shared struggle and suffering, which leads to increased comradery and loyalty among peers (Pershing, 2006). However, in the development of military social capital, women are now becoming fully integrated into the culture. This was not the case in the late 1970s when women were first admitted. Research found women had a difficult time fully integrating into the service academies (De Fleur, 1985; Pershing, 2001; Stevens & Gardner, 1987). Lt General Michelle Johnson, an alum, describes her early experience at the Academy, "My basketball teammates and I were close, but in general there was an interesting dynamic. You didn't want to look like you hung out together, because people were suspicious of it" (Mulrine, 2016, p. 6).

Johnson's description revealed that building social bonds for female cadets was complicated. The value of social bonds overcame the social constraints of being in a hegemonically masculine training environment. In some organic manner, in an unstructured way, social bonding occurs at the Academy. Studies by Siebold (2007) showed that bonding among [military] peers appears to be built through proximity over time, enriched by commonalities among them, derived from success at a common task, and defined by sharing liking and trust (Yagil, 1995). Johnson describes organically forming a sisterhood of social bonding. Mulrine's article reveals the bonding experience related by a fellow alum of General Johnson, Kathi Durst, who was aware that sororities offered the bonds of sisterhood to college students. Durst said, "We did not have that, adding that is a bond that came later" (Mulrine, May 29, 2016).

Social interaction in the military academies was entirely male until 1976 when women were admitted. The Academy remains a predominately hegemonic masculine social culture. That is inherent in the military's mission to train and prepare for combat. The military is a homosocial macro-culture. Social connections are an essential component to the success of military units. Men and women must adjust to the Academy culture while shaping the culture each is seeking to belong. Cadets pass through a series of [masculine] military rituals from BCT through to graduation.

The stress of an unfamiliar environment, being surrounded by new people, and adjusting to the hegemonic culture, means that meeting and getting to know other cadets is rife with difficulty. Peer friendships emerging from within the highly masculine military may shed light upon cadets' unit cohesion throughout undergraduate training, into their military careers, and after serving in the military.

There was a period in the recent history of the Academy when cadets in training were not permitted to leave the base at all. The entirety of cadets' social connections came from within the Cadet Wing. Before the internet and cell phones, cadets communicated with the outside world through written letters and an occasional telephone call. Therefore, the all-male social experience was in person, sometimes physical, occasionally painful, and nearly always bringing members closer together to generate a level of friendship traditionally only experienced by elite military units. One alum describes the context of social isolation and intense social interaction he suffered as a cadet before women were admitted:

Many years ago, when Doolies had to stay on the campus and their social venue was Arnold Hall, when they had to stay at the Academy at Christmas and run the Wing themselves, they were forced into developing social cohesion and integrating that with task cohesion. That is not the case today. Moreover, with the demise of the class system, and the plethora of off-base privileges, there is essentially no forcing function to develop, and intertwine, task and social cohesion.

(DeVere Henderson, 1963 Graduate, personal communication)

While his experience predates the admission of women and the rise in social media, it illustrates the type of masculine socializing imposed upon cadets prior to 1976. Elements of these pre-1976 rituals and traditions remain evident in cadet training today. Arguably, the cadets at the Academy in 2017 are a much different generation than previous generations; nevertheless, their need to socialize, belong, and identify with each other and the Academy is as strong now as it was then. However, as was true earlier, Basics are not allowed to speak unless spoken to. This rigorous, closed environment offers narrow opportunity for any other kind of social bonding.

Cadet Social Connections

To understand the social limitations placed on cadets in military training, and constraints engaged in predominately horizontal social connections, we must examine the institutional context. The environment has an important effect on the pattern of social interaction

(Neckerman, 1992; Packard, 1999). It is essential to explain military enculturation, which is distinguished by stress. Cadets primarily identify with peer groups of other cadets within their squadron (Packard, 1999). The hierarchical military culture within service academies differs from that of civilian campuses. Cadets reside in squadron spaces in two dorms. Men and women live in the same vicinity but only share rooms with someone of the same gender. Since there are fewer women in a squadron than men, the available pool of individuals with whom to form close same-sex friendships is limited for women.

When civilian young adults transition to college, a portion of their previous relationships may continue while some are set aside. For children, relationship patterns begin in the home and extend to youth sports programs, church youth programs or in other such contexts. There is a generationally driven shift in what is considered standard social connectivity. Social media, telephones, computers, and other technologies provide near-instant communication, and students expect being more connected to their peers. Connectedness is not the issue for current collegeage students, socialization is. Technology affects relationship rules and the strength of social connections. For young adults entering the Academy, the privileges of social media and connectedness via technologies are suspended while going through BCT. This practice is traditionally an essential part of military training and indoctrination processes are designed to cleave individuals into a team.

A fundamental component of military training at the Academy is the indoctrination of fourth-class (freshmen) through rituals and traditions passed down through generations of upperclassmen. The combination of traditions and rituals, developed when the Academy was entirely male, combined with its hierarchical structure, beget a stratified culture distinguishing "us" from "them." Within the Academy, there is a distinct "chain of command" where

upperclassmen are responsible for socializing, training, and assigning military performance grades to freshmen (Pershing, 2006). The structure provides for the resocialization of first-year students while simultaneously providing leadership training for the upperclassmen. Social stratification is enforced through a no-fraternization rule imposed upon cadets.

Horizontal relationships are the open social connections allowed among Basics. Basics are not permitted open social connections with upperclassmen until after Recognition, when they are recognized as cadets and full members of the Wing. At that point, Basics are grouped in squadrons and may interact only within the squadron. Peer-to-peer relationships within the squadron are shaped through task cohesion. Male and female cadets are on equal footing for beginning informal social connections in this environment. They experience and endure the same physical, academic, and military training in the prescribed cycles of increasing intensity and duration and learn the same basic military knowledge. Vertical social connections are limited to being trained and led by upperclassmen and permanent staff. Where cadets participate in an intercollegiate sport (football, basketball, etc.) there are opportunities for the barriers to vertical social connections to be relaxed, however when the academic semester begins, cadets may be involved in a sport, club or other cadet activity and have access to individuals from the other squadrons in their class year. When training together for a sport or activity in a club, cadets interact with individuals outside their grade level, which provides an additional avenue for social connections.

Beginning with the first day of BCT, selectees are limited to the company of their immediate peers and, are not permitted to talk while in formation, waiting in line, or any other time, unless spoken to by an upperclassman for the first two days. The only time Basics are permitted to have a conversation is in their dorm room. Immediate peers refer to the group within

the assigned squadron. Cadets on a sports team are confined to peers in the immediate vicinity until the end of BCT. Buote et al. (2007) relates the importance of friendships where individuals who had undergone similar experiences and engaged in similar activities would make good friendship candidates. The researcher argues that new friendships were most strongly related to social adjustment, student attachment to the university, and academic adjustment. At the Academy, cadets live in dormitories, segregated by the assigned squadron spaces, while participating in the shared military training experience.

Friendships range from casual acquaintances to emotionally intimates. Cadets navigate the spectrum of friendships, choosing to get close to those whose values and character perhaps most closely align with their own. Exclusivity is a factor in establishing boundaries of close friendships (Simmel, 1950, p. 369). Such boundaries are negotiated and established within social interaction. Yet with shared training experiences, cadets experience friendships within the context of hegemonic masculinity while attending the Academy. Social connections appear to be contextual, formed and built from a specific need (training conditions) then reassessed when the specific need has passed.

Sinek (2014) offers the example of the college dorm as a model of social interaction essential to forging bonds of trust and cooperation essential to friendships. Could cadets who are able to form social ties under the duress of military training have a higher proclivity for staying at the Academy? Could cadets who foster strong social connections be better suited for retention and success at the Academy than their less socially adept peers? Could peers influence a cadet's choice to remain enrolled? Young adults draw upon their friendship networks, in this case divorced from social media and technology, as resources that enable them to cope with the move to college. These networks enable them to learn their way around, learn unwritten rules and

practices, and become confident and settle in their new environment (Holland, Reynolds, & Weller, 2007, p. 102).

Young people seek peers with similar interests, values, and backgrounds. One cadet relates music as the means for assessing if another cadet shares similar interests, values, and world-view. In an environment where everyone is forced to fit in, music is one means to express individuality. Exploring transitions in young adults' lives highlights how this age group draws upon social networks as a resource for negotiating the passage to college and military life (Holland, et al., 2007, p. 102). In the Academy environment, social cohesion emerges when all cadets are on equal footing and must sort out peer connections in a stressful environment. Research supports that patterns of friendships made in adolescent years repeat throughout adulthood yet does not address the importance of building relationships with peers within the training experience necessary to complete the rigors of military, physical, and academic training to obtain a degree and commission.

In simple context, cadets with more than one informal social connection appear more likely to remain and graduate than cadets who had one or fewer or weak informal social connections. The individual experience will vary, yet the role of social cohesion is vividly present. Reflecting on his 2010 graduation, Lieutenant Dillon Duarte stated on his Facebook page,

I showed up to the Air Force Academy and had absolutely no idea what I was getting myself into. There were many times I was unsure if I would make it, but thanks to my family, great friends, and God, I was able to graduate from this fine institution and shake President Obama's hand to start my career as a United States Air Force Officer. (Dillon Duarte, personal communication, June 6, 2016)

In contrast to Lieutenant Duarte's experience, another cadet, when asked about how many friends he had made during basic training and his freshman year, replied, "None of the friends I have now I made in Basic Training." He [Duarte's classmate] dropped out before the end of his sophomore year despite having been recruited to play football and having played on the team for two seasons. Classmates and faculty alike stand in amazement when someone like this leaves the Academy. The subtle reasons for bonding or not bonding within the group are therefore worthy of examination.

The Honor Code

We will not lie, steal, or cheat, nor tolerate among us anyone who does. Furthermore, I resolve to do my duty and to live honorably, (so help me God).

The Academy's Honor Code is directed at individual behavior (Cadet Honor Oath). Student honor codes shape the culture of a campus. Honor codes guide behavior expectations from what is and is not permitted in the dorms, behavior on campus and at sports events, and to academic performance and integrity. The Honor Code influences the expected behavior and warrants presentation to understand and examine the role of friendships of cadets. Knowledge of the Honor Code permits cadets to internalize its ideology, grants them the authority and responsibility to self-govern, and by doing so to perpetuate the socio-political cohesion of the Cadet Wing.

The Honor Oath, as part of the encompassing Honor Code, is perhaps the first time a new cadet is required to do anything individually and reflects the personal nature and commitment to uphold. The Honor Code is a proud tradition and ideal standard for behavior. The cadets are required to publicly swear to the Honor Oath (above). Commonly referred to as "The Honor Code", it impacts every facet of Academy life and culture. Within the *Air Force Cadet Wing Honor Code Reference Handbook* is a complete description and delineation of character behavior expectations, which posits the Honor Code as the, framework for governmentality (Foucault, 1988).

The Honor Code reflects both a personal and collective commitment Cadet Wing members avow each year during the Acceptance Day Parade. This ritual, a very visible tradition, is witnessed by faculty, staff, and civilians and is considered a distinguishing characteristic of the culture. The Basics' publicly swearing to this oath is one requirement for entry to the Cadet Wing. The oath is foundational in the framework for training in the practice of "officership," the self-policing and adherence to behaviors and choices essential to the high character standards expected. Cadets who comprise the Cadet Honor Committee are voted into this role by their peers, presumably based on their known and trusted integrity built through friendships and demonstrated leadership. All cadets are expected to be guided by the Honor Code and consent to being governed by their peers.

While the intent of the Honor Code is to uphold a standard of behavior and values, it creates circumstances in which the social cohesion for the Wing can become strained. Cadet friendship ties, which have endured demanding challenge of military training and social adjustment become a pivotal issue when a classmate is either directly or indirectly in violation of the code. The perception or rumor of an Honor Code violation can have negative social consequences threatening cadet's sense of belonging and social inclusion in the Wing. The risk of being ostracized looms as separation from the group means social death. Violations of the Code that are confirmed are quickly broadcast and, in contrast to the oath, reveal the vulnerability of social cohesion every cadet is taught to work within, build, and sustain.

Within the past decade, issues of conduct and violations of the Honor Code have permeated local and national media. Trust, cooperation, and cohesion elicit conflicting moral values and social gaps among cadets. Decisions impact the individuals as well as the

organization. For cadets, the ethical dilemma is the choice of being loyal to a friend or the "zero tolerance" of the Honor Code.

A cadet who violates the Honor Code is presumed to be sanctioned with disenrollment. However, this may be suspended, and a cadet put on honor probation (forfeiture of all privileges for a prescribed time). Ultimately, the superintendent decides on disenrollment. Ethics violations are so shameful and corrosive that cadets who are separated for academic or disciplinary reasons are administratively processed and made to vacate their dorm rooms within five working days or less.

In a study about hazing, Pershing (2006, p. 485) discusses the circumstances peers encounter: ". . . the Naval Academy operates using a system of self-regulation whereby peers are expected to monitor one another's behavior." Pershing cites the underlying dilemma in institutions that rely on self-regulation in that peers must be willing to violate informal norms regarding peer loyalty to uphold formal norms or to report misconduct (Akerstrom, 1991; Heck, 1992; Pershing, 2002). The Honor Code engenders a similar dilemma as cadets' levels of trust and cohesion with peers fluctuates.

Media stories report alleged sexual assault and sexual harassment occurring at the Academy. For example, in 2003, four high-ranking Academy officers were relieved of command following an investigation of how reports of sexual assault were handled. In a 2003 Interim Report on the United States Air Force Academy Sexual Assault Survey by the Office of the Inspector General of the Department of Defense, the top two reasons why female cadets did not report incidents were because of fear of ostracism by peers and fear of being punished for other reasons. There are two important factors worth noting about this 2003 report. First, the survey does not provide insight on the social relationships among individuals (or groups) involved in the

incidents or other specific situations listed as "sexual assault." Second, the report reveals that social cohesion, albeit social capital or the loss of it, was part of the reason incidents were not reported (Interim Report on the United States Air Force Academy Sexual Assault Survey, p. 19). The report states:

When asked why they did not report these incidents [unwanted and uninvited sexual attention; sexual teasing, jokes, remarks or questions; sexually suggestive looks, gestures or body language; letters, telephone calls, emails, instant messaging or materials of a sexual nature; leaning over, cornering, pinching or brushing against, unwanted touching; experiencing pressure for sexual favors], victims indicated that embarrassment was a factor in 77 (53.8% of all non-reported incidents), the fear of ostracism by peers in 66 (46.2%), the fear of some form of reprisal in 61 (42.7%), and the belief that nothing would be done about the sexual assault in 58 (40.6%). When all respondents (both sexual assault victims and cadets not indicating sexual assault) were asked "other than embarrassment or shame, what do you think is the number ONE reason why some victims at your academy do not report sexual assaults," the top two reasons given were fear of ostracism by peers (32.8% of respondents), and fear of being punished for other infractions (26.8%).

The dynamics of cadet friendships were left unexamined in the Inspector General's report. The report captured and reported information from the sample; however, it neglected to capture perceptions of male cadets for comparative analysis. The Sexual Assault Survey did not ask how female cadets, the majority whom did not report sexual harassment or assault, built and sustained successful social relationships with their male peers. Examining the report in this context, where 92.6% of the female cadets did not report being subjected to at least one actual or attempted rape; and 81.2% were not victims of at least one instance of sexual assault at their time at the Academy, points to the presence and influence of positive social capital within peer social connections. Further, over 90% of the female cadets reported they felt very safe or safe in every location on campus (Interim Report on the United States Air Force Academy Sexual Assault Survey).

The female cadets participating in the Survey appear to have valued social cohesion so highly they made personal sacrifices [not reporting incidents of harassment or assault] rather

than be ostracized. Where is the information on perception of relationships, social connections, and cohesion for both female and male cadets to enrich the context of the Inspector General's report? These relationships are vital to cadets. Colonel Tamra Rank, class of 1983, puts it this way, "The Academy teaches you how to get along with other people and make the most of those relationships. It's important that men and women can be friends, and the Academy teaches you how to figure that out" (Ross, 2012).

Within the Academy and the surrounding civilian community, breaches of the Honor Code upset the whole, not just part, of the community because they have all sworn to uphold ethical behavior, and it is perceived as a reflection of the entire Academy community. Further, outside the Academy, the Air Force culture is disrupted when the Academy is perceived in this light, and vice versa. Arguably, there are several layers of social capital present in this context; however, this study on social capital and friendships of cadets seeks to learn more about the long-lasting social connections of cadets and their sense of belonging.

Dynamics of social network structures are demonstrated in the report yet absent from published analysis. An individual needs social contact to fulfill their needs of belonging. There are different levels or drives for friendship that vary by individual, which manifest as individual preferences in social activities (Zeggelink, 1995). This need for social contact impacts the social structure of friendship choices, friendship networks, and social capital within the Cadet Wing. Nevertheless, sometimes friendships may involve immoral or unethical choices.

In 2007, 18 cadets were expelled or submitted resignations for a comparatively minor incident for cheating on a weekly knowledge test. People make immoral or unethical choices not because they have faulty reasoning, but due to external factors (DeWees et al., 2014). This speaks to the intersection of two elements, people and environment, equally influencing

individual choices. The "zero defect" culture of the Academy emphasizes perfection—or at least the appearance of perfection, which is problematic. "Zero tolerance" culture can conversely foster an atmosphere of distrust and hypocrisy. Should one cadet report another cadet on an infraction even when addressing the matter face-to-face before reporting the infraction, the reporting cadet faces being ostracized or possible retaliation from her/his peer group. Such was the experience of one cadet whose story is told in Rogue Institution: Vigilante Injustice, Lawlessness, and Disorder at the Air Force Academy (Graney, 2010), "[in 2003] a freshman had been caught riding an elevator at one point, which four degrees were not allowed to do" (p. 89). Upperclassmen in his squadron took it upon themselves to "teach the freshman a lesson." The freshman did not report what happened after being treated for injuries. The doctor who treated the injuries did not report it. And the victim (freshman) was made to make an admission of guilt while under duress from cadet and squadron leaders. Even if the freshman reported it, he would have been brought up on honor charges. Graney (2010, p. 91) adds "If that's not a sufficiently clear-cut case of misuse and complete failure of the honor system, I have a few more [stories]." Likewise, if the cadet does not report the infraction, s/he faces reprimands for not doing so.

The tension between loyalty and cohesion in the face of Honor Code violations came to light in 2013 story in *The Gazette*, a Colorado Springs publication, about the use of Academy cadets within the Air Force Office of Special Investigations (AFOSI) student spying program to catch rule-breaking cadets. Cadets were allegedly instructed by AFOSI agents to break Academy rules, deceive instructors and commanders, and betray their own values as confidential informants to AFOSI to combat drug use and sexual assault at the Academy.

Professor Alexandra Natapoff, Loyola University, states in the *Gazette* article regarding the informant program and its emotional and social cost:

It changes everyone's relationship to the whole institution because it erodes the moral authority of the law. There are rules—unless you snitch. People begin to question the fairness of the system and it sets cadets against their fellow cadets. It can really change their lives, sometimes in ways that can be very harmful.

(Phillips, 2013, December 13)

At risk is the very social capital that comes from building close, trusted relationships with peers. Laurie Johnson, a specialist in honor codes and ethics, was quoted in the Gazette article saying, "Trust is at the heart of any honor code. By introducing spying, I would think the cadets would believe there's no trust" (Phillips, 2013, December 13).

Trust is a fundamental component of friendships and networks. It is the ethos of strong primary group cohesion. Trust among peers, with the capacity for teamwork, is the essence of social capital within social networks. This includes loyalty and cohesion among individuals as well as organization or institution. Group cohesion, with some organizational bonding, is most associated with performance and attitudes toward military service (Salo & Siebold, 2005).

The Honor Code is based on fundamental, positive principles of honesty, respect, fairness, and support. Foundational to the Honor Code are social network connections (including social capital) and close friendships. Trust is an essential element of social capital. Friendships are the site within an organization where homosociality is established and maintained. Cadets' friendships can and ought to be about whom they trust and spend time. Cadets have so little free or personal time that time is best spent with people whose company is pleasing as well as adhering to group norms. In addition, leadership and professional military development of cadets are subject to social network influences. The person within the social network with the most and strongest social ties is the most influential. Therefore, an individual's environmental context (physical, social, and cultural) is important for individual patterns of social interaction (Neckerman, 1992; Packard, 1999). Shaping group membership around the framework of the

Honor Code, friendships may range from casual acquaintances to emotionally intimate partners. Cadets navigate the spectrum of friendships, choosing to get close to those whose values and character most closely align with their own, within the gender social spectrum affected by sense of belonging, hegemonic masculinity and feminism. Exclusivity, recognizing who adheres to the norm and who does not as a means for choosing friends, is a factor in establishing boundaries of membership (Simmel, 1950, p. 369). These boundaries are negotiated and established within social interactions.

At the same time, there are pronounced exceptions to group behavior. For example, amid shared experiences, female cadets experience the bonds of friendship within the context of hegemonic masculinity, and long after graduation, must address the tension between competing aspects of their membership in this elite group.

Further, social connections appear to be contextual, formed and built for a specific need (training conditions, for example) then reassessed when the need has passed. During BCT, Basics are forced to rely upon and relate to one another, though they have never met and do not yet know the rules of membership in Academy society. At what point in the training do social connections form? Do the cadets regard these horizontal social connections as foundational to their successful completion of academics, military duties, and fitness training?

Cadet Friendships

In conversation, former cadets often reveal a clear awareness they had been engaged in gathering social capital and challenged by the terms of gaining membership while they were students. For example, a male cadet strongly voiced the strength and number of close friends he had made as a new cadet during his freshman year. He named the people he considers good friends and how frequently he and his friends communicate each week, whether in person or on

social media. This cadet described how he was placed on academic probation the second semester of his sophomore year. He attributed eventually making the dean's list to the support of his cadet friends.

Given the scarcity of free time, cadets must deliberately choose with whom they will spend that time. A 2006 graduate relates:

We met one weekend early in our fourth-class year. We were on a double date of sorts; it was a few guys and girls out of our squadron who gathered at a home for the weekend. [He] and I got to know each other and spent more time together that weekend than we did with our dates.

We've been best friends ever since.

John, Captain, USAF

Conversations with cadets who are members of the Academy Rodeo Team revealed a pattern of informal social connections. The cadets provided similar, though not identical, descriptions of the value of informal relationships. Within their descriptions of friendships, examples of social capital became evident. Conversations with Academy graduates who are either retired generals or of field grade officer levels revealed similar patterns of long-term social connections and social capital gained through peer friendships that reward them long into the future. They vividly remember when social connections are severed.

For example, a retired Air Force general and Academy graduate recounted meeting one of his peers nearly 25 years after the peer self-selected out of the Academy. This cadet, who was held in high regard as an informal leader within a group of five friends, learned he was not physically qualified to be a pilot, he chose to drop out. This single decision impacted the four friends, one of whom is now the retired general who recalled the psychological impact of their friend's decision on the group. The four cadets seriously considered following their friend out the door. In the end, the four convinced each other to remain and graduate.

Whatever the spectrum of friendships and retention of cadets at the Academy, there is believed to be a connection between the social capital and connections of friendships and the choice of cadets to remain. There are bonds of friendship spanning the decades following the cadets experience which, for better or worse, bind together generations of Academy graduates.

CHAPTER TWO: LITERATURE REVIEW

The literature discussed in this chapter explains the theoretical framework designed to answer the central research question regarding social capital and friendships. The researcher specifically asks, "What is the relationship between entry pathway, gender, ethnicity, and military family exposure and the influence of friendships upon academy students' resilience through training?" While social capital derived from cadet friendships is the focus of this study, an examination of the context in which the friendships began and are sustained is shaped by diverse sociological and structural approaches. Friendships formed at the Air Force Academy may be an indicator of social adjustment and, thereby, positively associated with graduation.

The theoretical construct described frames an understanding of the role of social cohesion and a sense of belonging built and maintained among cadets, something vital to their resilience throughout their program of study. A theoretical approach to examining the Academy's environment is multidimensional, as each factor contributing to the phenomenon simultaneously influences the other. While the theory of social capital as a cultural driver is prominent in this study, other approaches are used to examine social bonds unique to military academies. Carrell, Sacerdote, and West (2013, p. 855) set out to examine whether cadets could be purposely sorted into peer groups in a way that would improve academic performance, concluding that social pressures are so rich and complex that a deeper understanding of peer group formation is needed.

The challenge for this study was discerning a framework for examining the unique social connections and relationships of cadets while at the Air Force Academy. To do so, the researcher reviewed literature and applied concepts related to homosociality (including an overview of hegemonic masculinity and feminism), semiotics (as a means to examine rituals and symbols of

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social membership), and the social dynamics of trust (to extrapolate research findings about students' persistence through civilian educational institutions, which should be treated separately because of the added demands imposed by military culture upon academy students), and transition theory. To talk about trust among military students, it is possible to infer that social capital experienced by members of the Cadet Wing is an outcome of "human interoperability," a term from research related to organizational teams. This was deemed valuable as the study framework because it offers a model for describing successful task coherence, a marked feature of military training, as will be explained.

Human interoperability captures the dynamic of social relationships in the context of the Cadet Wing, as well. Tinto (1975, 1982, 1987, 2006) suggests that college is a social system, and the lack of integration into the social system will lead to students' low commitment to it, which increases the probability individuals leave college and pursue alternative activities. Tinto (1975) found that academic integration into the college system is integral in the students' ultimate decision to persist (Altman, 2016). Such observations extend beyond college campuses. In a Gallup study, civilian and military individuals worked outside of structured relationships to exchange trusted information ("currency" of social capital) through existing social networks among diverse organizations to accomplish a [natural disaster, homeland security] mission (Gallup et al., 2008, p 14). In such situations, because of the role of social capital, additional social connections were forged to enable organizations to work together.

Studying the social dynamics of college students in ROTC, Altman points to Tinto's (1975, 1982, 1987) research, which suggests that supportive groups within college experiences are critical to students' social integration within the college environment. This concept includes friendships and associations (Tinto, 1975). Tinto also found these aspects of the college

experience greatly assist with social integration. Exposure to and integration with peers with similar directions and associations greatly increase the chances of college completion (Altman, 2016). In a discussion on transition theory within a framework of college experience, Hayhurst (2016) cites Anderson, Goodman, and Schlossberg (2012) who defined transition as "a transaction between individuals and their environment" (p. 63) and "any event that results in changed relationships, routines, assumptions, and roles" (p. 39). Similarly, appointees to the Academy must forge social connections to build trusted relationships and cooperate with each other to exchange information and provide support to accomplish the foundational mission of adjusting to military culture and simultaneously enduring the demanding academic studies.

The Academy develops young men and women into military officers through a comprehensive training and education process that is notoriously stressful, competitive, and historically, male-dominated. As such, in examining cadet socialization factors it is important to state overtly that both people and their environment affect social relationships and considering the environment in which cadets are immersed and developed, an individual's capacity for meeting and making friends may contribute to their retention at the Academy. A specific look at friendships may be meaningful in understanding the social aspects of retention, as other researchers have noted (Myrick, Gipson, & Mitchell, 2016). Compared to civilian university students, cadets are considerably isolated from the general population, including from their personal support network of family and friends. Yet studies indicate friendship development for all college students is prominent during their first two semesters. Hays (1984) found that approximately 60% of friendships which began early in the first semester were close friendships by the end of the semester. Shaver, Furman and Buhrmester (1985) found 97% of first-year university students met someone during the first semester whom they felt was their best friend.

The initial period of transitioning into new social networks on campus is of great interest to college administrators, who realize this is when students' identities become distinct from those of families of origin. On multiple levels this is particularly evident for cadets, as they evolve personally through their experiences and become members of an elite subculture within the larger military community.

Close friendships for cadets begin to form as early as the first day of Basic Cadet
Training (BCT), and an understanding of these and other factors in their decisions to continue are
unstudied. It becomes evident that social bonding and the resulting social capital may be an
indication of whether a cadet chooses to remain or drop out, a choice before the end of their
third-class (sophomore) year without penalty. After the beginning of the second-class (junior)
year, cadets sign a contract committing to a minimum of five to eight years of active duty
service, depending on their career field following graduation, something that would have a
considerable impact upon their future. Should a cadet voluntarily disenroll, and in some cases be
disenrolled for academic reasons, after commitment s/he is required to either serve in the enlisted
ranks or repay the Department of Defense for their education up to that point.

Kirke (2009, p. 745), a military anthropologist, lays the groundwork for looking at the broader military culture's role in cohesion by conceptualizing social structures within the context of military culture. In the closed Academy campus environment, cadets only interact socially with their peers during the first six weeks of their BCT experience. During that time, they are extraordinarily busy completing the training curricula. BCT is intentionally designed to stress applicants' endurance through the rigors of boot camp before they begin academic programs. As applicants or recruits, they must earn their positions in this way first, after a very demanding application process. Earning what is considered the right to become a member of this elite group

defined by their ability to keep up with the physical demands of military training. Some "wash out" before they ever get to show what they could do academically.

Friendships and resilience of Academy cadets, including their complete separation from family members, friends and more recently from social media or any other means of communicating with anyone outside of the Academy, are under-represented in academic literature, even in studies specifically of military academy students.

A study by Packard (1999) examined the link between cadets' social connections and leadership at the Air Force Academy. Packard's research applied social cognitive mapping theory to examine social networks and informal leadership within two cadet squadrons (about 200 students) over two semesters. Informal leadership and social ties were more influential for social connections than those who were in structured or formal leadership positions.

Many theories attempt to provide insights to understand behaviors, thoughts, and feelings of university students. These theories typically fall in to one of four major categories: 1) psychological, 2) cognitive, 3) typology, and 4) person-environment interaction (Pascarella & Terenzini, 1991). This study leverages the fourth category. The person-environment theory allows for consideration of context, socialization processes, formal and informal socialization, and the structural and organizational characteristics of an institution (Chickering & Reisser, 1993). Blending person-environment and social interaction theories, overlaid with human interoperability and discourse framing, offers a construct to begin to understand the link among cadets' informal, horizontal social connections, their identification with military culture, and their academic accomplishments.

The transition from high school to post-secondary education is a shift in culture for young adults and a major step in the development of their identity in the early stages of separation from

families of origin and earlier relationships. With approximately 60% of North American young adults furthering their education, this transition is worthy of examination (Pancer, Pratt, Hunsberger, & Alisat, 2005). There are more notable changes for those moving from civilian to military culture when they begin their studies at a military academy. Friends, particularly a close friend, may counteract challenges of transition to university life. Researchers found that adolescents "need the social support offered by a best friend" (Richey & Richey, 1980, p. 537). The social connections forged on a military academy campus have more importance given the dual layer of separation and stress Basics immediately experience upon arrival.

Weidman's (1989) research model for examining the social interactions of freshman college students was modified in the present study to focus on social structures found in militaryacademy campuses. Its model allows for a discussion and interpretation of survey data about cadet friendships and to posit them within larger university studies while accounting for the added challenges to socialization within military-training culture. Weidman's model is followed by similar studies of peer effects by Dey (1997) and Milem (1998). In general, Weidman considers the major influences on student social change in college to be precollege or students' background characteristics, the academic and social normative context of an institution, and the impact of parental and non-college reference groups (Antonio, 2004). This is an important consideration when examining social-relational factors of where study participants were for the 12 months before reporting for BCT and whether the cadet comes from a military family or has one or more parents who are Academy alumni. The academic and social normative context of the military academy as an educational institution is the definitive difference between studies of civilian college students and those in the early days of academy study. Figure 5 shows the Weidman model (Hurrelmann & Engel, 1989, p. 93), within which the collegiate experience is

further sorted by participation in normative contexts (in the present case a hybrid university/military context), the students' socialization processes (in the present study highly controlled by regulations), and integration of normative pressures (accounting for distinctly different homosociality of academic, military, and social contexts at the Academy).

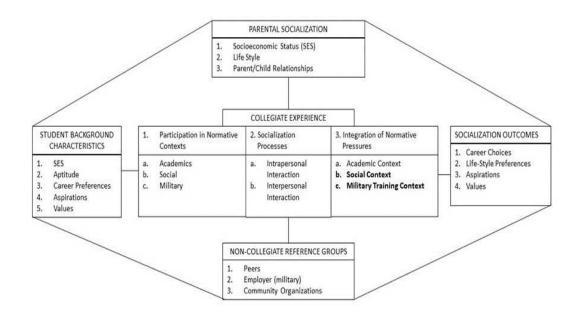


Figure 5. Weidman's Conceptual Model of Undergraduate Socialization

Focused research on cadet friendships from in-processing through post-graduation can provide insights on the importance of similar socialization process for military academy students. Weidman and others have explored undergraduate socialization in the context of race and minority groups on civilian campuses. In addition, there is research available on race relations within the military, the impact of Department of Defense programs on race relations and gender equality, and many articles on the history of race relations within the United States military. This study, however, examines sociological factors in the friendship experiences of cadets without taking socioeconomics into account. Parental socialization, in so far as knowledge of military culture can impact a cadet's experience, is considered military in the immediate or close family

for this study. This revision of Weidman's model stems from the researcher's knowledge and experience of military training as a socioeconomic leveler, where issues of race or class are of distant concern to building collaborative ties and transitioning to the Academy environment.

Borrowing from Weidman's model, this study necessarily emphasizes both the social context and military training context to understand how one influences the other to the benefit of cadets. Each of these normative cultures are affected by each other. In the social context, cadet friendships involve a combination of sociological factors (hegemonic masculinity, feminism, homosociality, sense of belonging, and social coherence); visible indicators of belonging (semiotics, rituals, honor code); emotional and psychological experiences (trust, belonging, social bonding, cooperation, resilience, relations with peers, ostracism, exclusion); and in the military training context, cohesion experiences (task cohesion in shared military training experiences).

Researchers have proposed ways to analyze military social culture. For example, Kirke's (2009) two-tiered view of [military] social structures and Siebold's (2007) over-arching single "social structure" two views of military social culture. Kirke asserts four elements in his model; it includes Siebold's use of formal, informal structures with the addition of loyalty/identity and functional structures. The first element, *formal command structure*, represents the hierarchy of rank and formal arrangement of layers of an organization. This element fosters the enforcement of discipline, distribution of orders, return of reports by juniors, and basis for official responsibilities. These factors are at play within the Cadet Wing and basic training experience.

In the second element, the author discusses *informal structure* consisting of the unwritten "rules" for [a military member's] behavior absent the constraints of the first element, thereby governing off-duty behavior, relaxed military settings, and the accepted group conventions for

the exercise of vertical and horizontal informal relationships. These homosocial factors are of interest in the present study. In his third element, loyalty/identity structures, Kirke's model offers a means to look at the various layers of organizations within the military. Loyalty/identity structure represents the "belonging" associated with military culture. This is evident as cadets are organized from individual element (the smallest) to Cadet Wing (the largest). Each squadron and each grade level (class) has its own identity. This applies to cadet clubs, sports, and other activities. Each cadet is required to participate in at least two social groups, first as a squadron member and then as a cadet in any number of associations. Yet each cadet is first a member of the student body social group, the Air Force Academy Cadet Wing. It is this element in which cadets compete, process the unwritten rules of their group (squadron, team) and absorb and convey the attitudes and emotions/feelings of pride and belonging.

The fourth element of Kirke's model is the *functional structure*, which is determined by the context of the mission. In this element, cadets reorganized for different contexts (academic, athletic or military training, for example) and for the distinct behavior differences, in the presence of the cadet rank structure, of each of these contexts.

For example, this is observable in the difference in expressed behaviors, loyalty, and cohesion of the Wings of Blue (Academy parachute team) and the Robotics Club. Wings of Blue is the Academy's parachute demonstration and competition team begun in 1962. The club was started by cadets without knowledge of or sanction by Academy officials. Cadets compete for acceptance into the club after completing AM-490, basic freefall. Of the 200 or so cadets who try out for Wings of Blue, 25 make the team (U.S. Air Force Academy Wings of Blue). The Robotics Club is one of the Academy's mission clubs and does not have the same level of competition for membership as the Wings of Blue. This is not a reflection of the importance of

either club, but it illustrates the possible differences in how cadets in specific clubs may exhibit behaviors of belonging, loyalty, and cohesion.

Even with both Weidman and Kirke's models for relational context of a group of individuals there are other factors influencing individual cadet socialization, which are necessary to capture in a visual model. Figure 6 depicts these socialization factors within the Academy environment and the relational impact on the initiating, building, and experiencing of friendships individually and as undergraduate students. Each of these factors are discussed in greater detail in this chapter and are the foundation to the study methodology described in chapter three.

Conceptual Model

Implicit in the conceptualization of socialization factors affecting cadet friendships model are resiliency and sense of belonging. Resiliency and sense of belonging emerge from social cohesion, task cohesion, and semiotics within the military training environment. As shown in Figure 6, the conceptual model depicts the intersection of friendship formation and social bonding as individuals fulfill personal needs while meeting demands of military training. Inward arrows depict social forces of hegemonic masculinity and feminism acting upon cadets' social interactions. A third force influencing cadet social interactions is a sense of belonging. Cadets must negotiate through hegemonic masculinity and feminism influences to obtain their sense of belonging. Interacting equally with the three previous social forces are unit cohesion, semiotics, and rituals. Unit cohesion is expressed through a sense of belonging, loyalty to unit members, and placing the unit above self. Semiotics affects social interaction through rank insignia, squadron identification, and enculturation. Rituals, in both the daily routine as well as through room inspections, parades, and other activities within the squadron, affect social interactions as these are points of intersection among individual cadets. Semiotics and rituals sustain individual

as well as group identity. The individual is constantly navigating the interplay of the forces depicted in Figure 6.

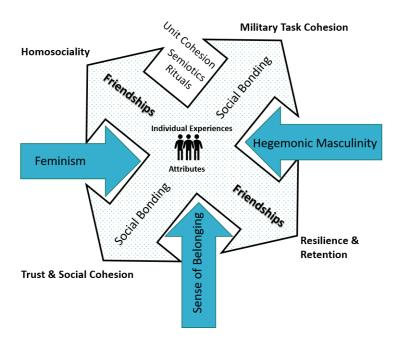


Figure 6. Conceptual Model of Socialization Factors Influencing Cadet Friendships

Friendships are formed within the context of intense physical training and enculturation into military and Academy culture. Of the three factors imposing on friendship formation, hegemonic masculinity and feminism are cultural while sense of belonging is individual. Individuals exchange social capital through knowledge and information when they feel trusted in chosen social circles, and this forms social cohesion. Task cohesion is demonstrated in military task cohesion. Friendships formed in task cohesion may or may not evolve into social cohesion after task completion. Homophily is the tendency of individuals to choose to build social capital with others who share similar interests and values. Resilience and retention depict the choice of individuals to continue education and endure challenges and hardship associated with education and training perhaps because they value friendships of cadets who are also attending the Academy.

Homosociality: Toward Social Normalization

Expanding upon the Weidman and Kirke's models, which provide the necessary boundaries for context of social connections, the model presented in Figure 6 adds a level of interplay accounting for social-relational factors of homophily factors (wanting to be with those most like us); trust and social cohesion (we are a team); military task cohesion (we are going through the same training); and semiotics (we are similar in appearance and circumstance, and must conform to the Academy social norm).

Examining cadet friendships within the larger context of Weidman's research on normative environments and processes is necessary to move toward an understanding of why and how cadets find the support they need to persist through completion of their education and training. Within such social groups, shared and consensual sets of social norms are developed through interpersonal interactions. Individuals then change under the pressure of direct approval (or disapproval) of valued, trusted peers (Antonio, 2004). Research on gender roles within the military most often point to acts of discrimination, harassment, rape, authoritarianism, and negative attitudes toward women [and religion, geographic region, weakness, attitude and so on]. Research focused on these topics fails to address the roles of friendship within and across regardless of the gender social spectrum. There are positive social interactions occurring that merit further study.

The correlation between quality of new friendships and social adjustment is substantive. Quality of new friendships is a positive predictor in four specific types of adjustment (social, academic, personal-emotional, institution attachment). Quality of friendships is more important for university adjustment than quantity of friendships (Buote et al., 2007). Where are these quality friendships formed? Membership on a football team was related to measures of

connectedness as players reported greater connections (Wann & Brasher, 2015). Examining cadet social connections and social capital acquired through participation in sport, club, or activities may indicate a correlation to cohesion and retention at the Academy. Sport participation has been linked to a lower likelihood of dropout, improved grade point averages, and higher rates of college attendance (Eccles, Barber, Stone, & Hunt, 2003; Holt & Neely, 2011; Marsh & Kleitman, 2003). While Holt's and others' research focused on low achieving and working-class males, the premise may be evident in cadet friendships in the shared experience of military and athletic training. However, it is necessary to keep in mind that cadet social relationships form outside of shared experience of sports, religious affiliation or ethnic commonalities.

Social behavior research further reveals "men enrolled at military academies hold more traditional masculine views of men (toughness, masculinity) and women (homemaker, mother) while women enrolled at military academies do not adhere to these views as strongly as their male counterparts" (Kurpius & Lucart, 2000, p. 263). Social behavior research does not yet address the fluid spectrum of male and female behaviors within the gender social spectrum. In the context of recent social changes within the military, research has yet to investigate the role of mixed gender friendships from either feminist or hegemonic masculinity standpoints. Cadets are not likely to be entirely exclusive or inclusive of platonic friendships within their own gender. Further, as more women are filling positions and higher ranks within the military, will there be a shift in practiced social behavior, bonding, and friendship formation? Wiedman's model does not overtly account for gender difference or similarities, trust, and cooperation across genders.

Military members with reliable and trustworthy information, knowledge, and experience extend social capital to others within the organization. Studying patterns of interaction among

individuals in this way emerged from the fields of sociology and anthropology (Tichy & Fombrun, 1979). Griffith (1988, p. 149) argues the research has yet to address small group relations in organizational contexts. When individuals primarily work and interact within a specific and limited group, such as in basic cadet training environment, with few if any opportunities to socialize outside of the squadron, the group is the source for nearly all social relationships. Examining cadets' social ties within the context of group cohesion theory can illuminate the importance of those experiences to cadets' retention and completion of academic programs.

Homosociality: Establishing Friendships

The quality of new friendships formed in the first year of college is a significant predictor of social adjustment, attachment to the school, and academic adjustment. Friends fill many key areas in helping students adjust to the college environment (Richey & Richey, 1980; Tokuno, 1986; Weiss, 1974). Friendships provide avenues for leadership and professional development in bonding and bridging through social encounters. The concept of the role of social relationships in [personal] development has important implications for research and policy (Woolcock & Narayan, 2000). Originally explained in the context of its importance to community participation in school performance by Hanifan (1916), it presented and explained social capital exchanged among individuals encountering neighbors and they with other neighbors, such that there is an accumulation of social capital which may satisfy individual social needs sufficient to the improvement of the living conditions of the community (Woolcock & Narayan, 2000). This phenomenon is present in cadet life at the Air Force Academy. Study partner choices, friendships, and roommate pairs show patterns of endogenous peer group formation (Carrell, et

al., 2013, p. 861). Friendships become the conduit for social capital development among peers while students, which may continue friendships long after graduation.

The few studies focused on friendships of first-year college students indicate significant changes in social connections. Approximately 60% of friendships started at the beginning of the first semester of college became close friendships by the end of the semester (Hays, 1984). Individuals who had undergone similar experiences and engaged in similar activities were good candidates for friendship (Buote, 2007). In the Academy, every cadet goes through similar experiences and activities. Making and keeping friends requires good reality-testing and social skills; "having friends" is a proxy for "being socially skilled" (Hartup, 1996). Situational proximity influences friendships. Given any group of individuals, unknown to each other, in a specific closed setting for a given amount of time, mutual strangers will begin to form social connections (Zeggelink, 1995, p. 83). Using an endogenous peer effects model, Carrell et al. (2013, p. 862) saw peer effects like studies citing large positive and statistically significant endogenous effects where cadets endogenously sorted into friendship subgroups. In appearance, cadet squadrons appear homogenous. A cadet's true peer groups may not include the entire squadron, but rather a smaller and cohesive group within the squadron (Carrell et al., 2013, p. 878). Friendships inherently become more open and intimate in topics discussed over time. The more time cadets spend together, the more intersections for social conversation. Friendships contribute to a sense of belonging and companionship as well. Task performance is facilitated among friends than among non-friends through free airing of differences in a cooperative, taskoriented context (Hartup, 1996). Cadets with similar interests in social clubs, athletics, disciplinary classes, or perhaps worship activities, may be more likely to establish closer ties to the institution than cadets who do not socialize in these ways.

Friendship connections and the social capital generated are continually shifting in the dynamic Academy environment. Except for students coming from preparatory school, candidates reporting for BCT typically do not know any other candidates when they begin in-processing, which is a uniquely stressful experience most individuals would not pursue. For some cadets, friendships begin in preparatory school and continue through the Academy experience. For cadets coming from high school, making friends begins with BCT. During in-processing, Basics are assigned to different squadrons, essentially nullifying, for a period, the social bonds they had developed in any earlier friendships. Basics endure overtly stressful tactics during this period, making the need for friendships greater. Welch and Houser (2010, p. 356) suggest "hope, relationship satisfaction, self-disclosure, and trust have all been found to be related to friendship," a balm to those who are far from home and in the process of enculturation into life at the military academy The in-processing period begins with Basics being thrust into meeting another person and learning simple information such as name and hometown, about which they may be quizzed by a training instructor later, and then progresses over time to greater degrees of connection among candidates. Ultimately, through exchanges of attachment, disclosure, and task coherence under duress, Basics may become nearly able to finish each other's sentences as there is a deliberately high-level of trust and bonding required to make it through this period of training, which ends on Acceptance Day. At this important milestone, Basics become "cadets".

The socialization process for cadets is structured by Academy culture and its demands.

On its own, military culture involves a profound readjustment. At play are multiple sociological interactions such as masculine and feminine, social learning, belonging, aggression and protection, social bonding, exclusion, identification, trust, cooperation, task cohesion, rituals and semiotic inscriptions that reify belonging. The transition to military life has been examined in

several studies (Israelashvili & Wegman-Rozi, 2007; Mayseless & Hai, 1998; Scharf, 2004), and generally reveals positive autonomous relations with parents are associated with better coping and adaptation (Scharf et al., 2011). Figure 7 represents cadet attributes, the socialization process, and influencing normative pressures.

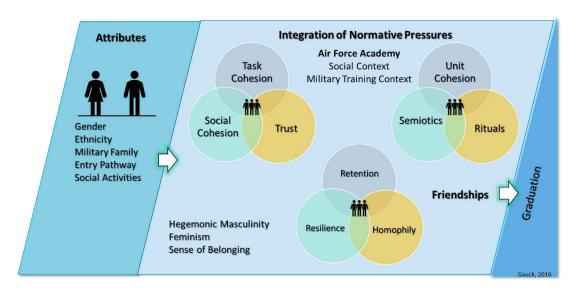


Figure 7. Cadet Attributes and Integration of Normative Pressures

Research has revealed the dynamics involved in students' expectations for and establishment of new friendships and the diverse ways friendships affected their adjustment to a new environment (Buote, 2007). Being open to new friendships led to student development, but the quality of the friendships may affect how students adjust to and perhaps remain enrolled in a military academy. In a study by Flach et al. (2000) with new recruits of the Royal Netherlands Army (RNLA), the author gathered information from disenrolled recruits who described ending their enrollment for several reasons. Homesickness was the most prevalent reason. Respondents stated that "culture shock" over the abrupt transition from civilian to military life contributed to dropping out. Quick et al. (1996, p. 272) proposes that an increase in social support and self-reliance may be key to helping recruits develop independence and coping skills. Air Force cadets

can benefit from training and programs designed to promote self-reliance and coping through socialization.

Homosociality: An Expanded Definition

Homosociality describes and defines social bonds among persons of the same sex (Hammaren & Johansson, 2014). Men strive to build cohesion, togetherness, and intimacy through competition and exclusion. Social relationships within a peer group, including vertical bonding, are based on direct personal interactions in relatively closed networks (Siebold, 2007). Homosocial relations are frequently described in relation to men and shared activities such as games, sports, playing musical instruments, watching movies, and drinking (Hammaren & Johansson, 2014; Messner, 2001). Sedgwick introduces the phrase "male homosocial desire" to explore the continuum between the homosocial and the homoerotic. She argues that in men's relationships with other men in contemporary Western culture, emotional and sexual expression is often suppressed in the interest of maintaining power. The repressed erotic component of male desire accounts for "correspondences and similarities between the most sanctioned forms of male bonding and the most reprobate expressions of homosexuality" (Sedgwick, 1985, p. 22). Given the military training environment, in context, all male cadets are negotiating the homosocial spectrum within the Cadet Wing. By taking a step forward from the description of homosociality, we can describe context and definition of cadets' social bonds regardless of gender.

In a hegemonic masculine environment such as the Academy, when we look closely, women's bonds are created within this dominant masculine environment and are not automatically a challenge to hegemonic masculinity (Hammaren & Johansson, 2014). Men, too, must navigate the hegemonic masculine environment and are expected to behave within accepted group norms. In what may be considered gender mainstreaming, women at the Academy must

behave according to masculine standards in the presence of other women and men to conform to military protocol, rituals, and fitness standards. Bonding must and does occur through friendships formed at the Academy, regardless of gender, as the evidence reveals in women's graduation and later promotion since their full inclusion in 1976. Sociologists infer that personal bonding is a prerequisite to effective performance and that bonds of friendship grow out of military proficiency and performance (King, 2006, p. 494).

Cadets are inundated with auditory and visual stimuli saturating their senses with Air Force and Academy culture. Yet, in this hegemonic masculine environment, tightly knit social niche networks are formed. So tight were these social connections that before the repeal of "Don't Ask; Don't Tell" by [then] President Clinton, a secret network of gay and lesbian cadets would meet and agree on what they would say should someone be in danger of being exposed. They had inscribed inside their class rings "Here's what we'll say." (Lehmkuhl, 2006, p. 340). That cadets connect with like-minded cadets, regardless of the environment, suggests there is not "masculine" nor "feminine," but a homogenizing, in appearance and mindset, of social connections within the Academy culture. In work by Carrell et al. (2013, p. 862) to determine academic performance within the first year of the Classes of 2011 and 2012, cadets were sorted into squadrons by demographic characteristics to ensure diversity with respect to academic ability in squadrons. Yet with the demographic equity, estimated treatment effect for the lowest ability cadets is negative and statistically significant, meaning low ability cadets in the treatment group performed significantly worse than those in the control group. This negative effect was driven by male students with a significant negative treatment effect while female cadets had an insignificant positive treatment effect (Carrell et al., 2013, p. 864). Accepting what the larger group defines as an appropriate standard in social behavior means accepting the behaviors of the

group passed on through customs, traditions, and core values, which are always evolving.

Apparently, this holds true for academic performance.

The boundaries of homosocial groups represent acceptance and affirmation, yet also the chance for rejection (Thurnell-Read, 2012, p. 251). In a theoretical construct, social capital requires some aspect of social structure and facilitating certain actions by actors within the structure (Coleman, 1988; Huisingh, 2016). In keeping with the expanded descriptions of homosociality, we can discuss social capital of cadets as the person-to-person context of human interoperability.

Homosociality is the regulation of individual behavior by peers within a group, frequently used in studies of men and masculinities that explains the maintenance and dynamic of hegemonic masculinity including male friendship, male bonding, and masculine hierarchy (Hammaren & Johansson, 2014). The Cadet Wing constitutes a social group. This larger homogenous group can be differentiated by social niche sub-group combinations (gender, class, location prior to entering, club or sport, squadron, and so on). The sub-group may be friends, a club, sports team, or other gatherings of people with similar interests or values. Each sub-group holds its own level of homosociality that varies from sub-group to sub-group.

In the Academy setting, homosocial bonds are necessary regardless of one's gender. Friendships facilitate and articulate cohesion and the presence of group normative behavior. Men and women experience and express social bonding behavior differently. Competition among friends, specifically male-to-male friends, is imperative to the strength of the social connection.

Closeness of the male-to-male social connection is expressed in humor. Humor provides a safe method for sharing risk and intimacy among friends (Kaplan, 2005). Caldwell's research (1982) on sex differences in the same-sex friendships of college men and women showed women

have greater emphasis on emotional sharing and talking; where men emphasized activities and doing things together. Competition permeates the Academy culture. Squadrons compete against squadrons, cadets compete for leadership positions, members compete within a sports team, cadets compete to join activities held in high regard (Honor Guard, Wings of Blue for example), and compete for career assignments and follow-on base assignments. Further, cadets participate in emotional sharing in the context of complaining about life at the Academy, arduous homework and military training. Could there be common gender-neutral bonding occurring in the Academy's culture of competition and perceived misery?

Hierarchical homosociality is a means of strengthening power and creating close homosocial bonds. With men, this is primarily used to describe the exchange of means and valuable cultural and social capital and framing of relationships—essentially continuing the overarching social construct of how men and women are to behave in society. For example, men compete to determine who is faster, stronger, smarter, and better looking. Women, while holding a greater emphasis on emotional sharing and talking, participate in the hierarchical homosociality because they hold positions of leadership working for, with, and leading their male peers.

Horizontal homosociality, constructed among peers, refers to relations based on emotional closeness, intimacy, and a non-profitable form of friendship (Hammaren & Johansson, 2014).

Women's bonds with female and male cadets are not constructed outside the dominant hegemonic masculine environment but as an integral part within it. Men and women participate in hierarchical and horizontal homosociality by being cadets, members of sports, clubs, or activities. There is a need to study female homosocial bonds and friendships along the male and female spectrum of relationships (Hammaren & Johansson, 2014).

Homosociality is a phenomenon of both genders. "Bromance" and "womance" are vernacular terms used when referring to the close and intimate nonsexual and homosocial relationships among two or more men or women. There is not a term for this construct between a man and a woman, but it seems clear that such a lateral bond of trust sustains both men and women through the rigors of military training. Friendship does not automatically mean intimacy. Time spent improving cadet peer-to-peer relationships of both genders may improve chances of success within a setting that has relevance to cadets' daily lives and may improve use of alternate strategies in leadership (Packard, 1999).

Sociological Factors: Hegemonic Masculinity

Hegemonic masculinity theory examines the ties between social bonding and group normalcy among men. Predominately ethnographic in design, these social science studies explore the interactions among men in traditional social groups established through military experiences, public social locations, fraternities, and the workplace (Hammaren & Johansson, 2014; Kiesling, 2005; Kronsell, 2005; Migliaccio, 2009; Scott, 2014; Thurnell, 2012). The spectrum of gender social interaction is one factor affecting social connections within the military. Hegemonic masculinity offers one lens through which to examine the spectrum of gendered social interactions. Hegemonic masculinities are configurations of everyday gendered social practices in which individuals construct gender identities in relation and opposition to other men and women (Hinojosa, 2010).

The Academy is historically and culturally a hegemonic masculine environment. This environmental focus influences the ways in which masculinities and femininities are recognized, understood, and valued within an organization (Callahan, 2009) through the transfer of perceptions and values through friendship social capital. As an institution dedicated to the

education and preparation of military men and women, the Academy is dominated by masculinities and, like many institutions, employs a ruthless form of "adversative" (Smith & Kimmel, 2005) education imposed on both men and women. Yet neither gender is singularly responsible for the caustic environment since both participate in the social interactions. Hence, under the social constructs of interaction by both genders, one foreseeable outcome is cadets who have the resilience to adapt to the Academy culture and navigate the hegemonic social structure of the institution without becoming isolated or ostracized. Banning presents Mikulincer and Florian's (1998, p. 13) view: the attributes of secure attachments [friendships] as "resiliency factors promoting the development of a positive perspective on life and buffering the impact of psychological stress in the face of negative life events." His study concurs with prior research on homesickness, showing that improved social support can buffer against homesickness (Banning, 2010).

Exclusivity is a factor in establishing boundaries of close friendships (Simmel, 1950, p. 369). Such boundaries are negotiated and established within every social interaction. With shared training experiences, male and female military officers experience friendships and a culture of hegemonic masculinity after graduation from a service academy. A person having more friends is influenced more than someone with few friends, reflecting the importance of additional friends on the amount of influence on one's own attitude (de Klepper et al., 2010, p. 84). Making and keeping friends requires good reality-testing and social skills; "having friends" is a proxy for "being socially skilled" (Hartup, 1996, p. 2). Further, friends, particularly a best friend, may counteract difficulties and stress associated with major life transitions (Buote et al., 2007).

All along the gender social spectrum, cadets are indoctrinated in the unity of hegemonic masculinity "in basic military training where soldiers are taught such things as folding a

washcloth into a perfect two-inch square, to measuring the space between hangers on a closet rod uniformly (Phillips, 2006). This indoctrination and reticent symbolism facilitate a commonality or common appearance, which readily identifies cadets from civilian college students and aims to diminish difference among trainees. Phillips (2006, p. 47) states further that military indoctrination has, at its core, the purpose to delineate the domestic [civilian] from the public and melds the individual [note there is not a distinction of genders] into the whole. Evidence of women's adaptation to military culture's hegemonic masculinity can be seen in their promotion to the highest ranks and the social capital developed through friendship ties increasingly evident in work performance resulting in selection for leadership positions, as General Michelle Johnson's appointment to lead the Academy demonstrates. This counters what has historically been purported as evidence of a "good ol' boys" club. This study posits that social bonding, not gender, may be the more defining factor for resilience and social capital.

Sociological Factors: Feminism

Feminist research addressing hegemonic masculinity speaks to the male dominated environment and behaviors of men in the military. There is a notable absence of feminist research addressing human interoperability and professional friendships of men and women in the military. Kronsell (2005) writes if [feminist] standpoint theory limits looking for knowledge about gender relations only in marginal places, or outside the mainstream, then institutional settings of hegemonic masculinity appear to be of little or no interest to the feminist project. Of greater interest to this study is women (female cadets) who successfully integrate into hegemonic masculine settings without being referred to as a "token" or a "male" or by some other discursive label. Learning how some women successfully navigated male-dominated military culture,

particularly in the context of early Academy training may reveal the importance of platonic relationships relevant to retention and career success.

Phillips (2006, p. 256) refers to the pressure men and women experience in the military in response to the professional-social friendships developed in the context of mentoring. In the 1990s, the author describes how a male officer (mentor) and female officer (mentee) were pressured to stop being friends due solely to the unsubstantiated and untrue rumors circulating that they were having an affair. The command climate of the fighter squadron was so emblazoned with hegemonic masculinity that socializing and interacting beyond the ready room and cockpit were not "acceptable" if pilots were friends and of opposite genders. This conflicted with the general social norm of the squadron that all pilots engage in socializing outside the squadron spaces. This message of "non-acceptance" of professional friendship between two pilots meant the trainee was cut off from being mentored by an established member of the squadron. In the 20 years since the events Phillips examined in her study, a great deal has changed, however, as the legal inclusion of homosexuals and the creation of the Sexual Assault Awareness program within all DOD service components reveals, the need for understanding social capital and friendships remains. This is not to say that improvement is not needed or that offenses do not occur. Instead, it suggests that both men and women are affected by influences of feminist and hegemonic masculine social norms throughout their military careers.

Cohesion Experiences: Military Training

Military training is a significantly different environment for most cadets. The Academy's military training environment is a direct influence on the immediate social environment experienced by cadets. Unlike their civilian counterparts, cadets must participate in cohering training activities and learn how to socialize effectively while engaged in these activities. The

intense schedule, physical challenges, emotional strain, constantly changing schedule, lack of sleep, and scarce free time serve to generate a strained environment by placing limitations on casual social interaction among cadets. Although some may argue established routines are a positive factor in cadet development, cadets are saturated with assigned tasks from learning to wear uniforms to hand-to-hand combat training. Flanagan (2013) points out those students need the opportunity to work together [a given requirement to survive the Academy experience] and must have a voice in sharing their views with fellow students to identify as a group. The controlled schedule of training at the Academy permits little time for civilian style social functions and social interaction in relaxed settings. This robust schedule places environmental and contextual limitations on opportunities for cadets to seek and join a socially-homogenous group.

Table 7 outlines a typical weekday schedule of cadets. This does not consider time for any additional duties, studies, or training. During the academic year, from early August through the last week of May, cadets have classes, study periods, inspections, military training, and athletic participation. Military training takes place on Saturdays; it is referred to as Silver Weekend and occurs throughout the semester, but with occasional non-training Saturdays allowing a measure of free time for most cadets. Sundays are often reserved for personal time. The daily schedule will vary during the summer according to military-training activity involvement.

Table 7. Typical Daily Academy Academic Schedule (www.usafa.af.mil)

Time	Event
5:15 – 6:25 a.m.	Personal Time
6:30 – 6:55 a.m.	Military Training
7:00 – 7:30 a.m.	Breakfast
7:30 – 11:23 a.m.	Academic Classes
11:30 a.m. – 12:30 p.m.	Noon Meal Formation & Lunch
12:30-1:23 p.m.	Commander's Call, Briefings or Additional Training (in lieu of class period)
12:30 -3:23 p.m.	Academic Classes
3:00 – 6:40 p.m.	Intercollegiate Athletics Practice or Intramural Sports
5:00 – 7:00 p.m.	Optional Evening Meal Buffet
5:30 – 7:15 p.m.	Personal Development
7:15 – 7:50 p.m.	Military Training
7:50 – 11:00 p.m.	Academic Study Time
11:00 p.m.	Taps / End of Day

In the context of this full schedule, Packard (1999) speaks of the propensity of cadets to shift relationships with peers to the background and address other factors such as leadership, aggression, and squadron performance, regarding social interaction within their respective squadron. As the academic year progresses, cadets become acclimated to the intensity of the schedule and, when they are permitted, seek to engage in social activities away from the Academy with their selected group of friends. Meanwhile, other cadets find social satisfaction within formal Academy activity programs such as intercollegiate sports, club sports, and clubs, for example. A 2008 graduate relates how he came to know and bond with a man, whom he later deemed his best friend, while on a double date in their fourth-class year. In the end, their need to fulfill a sense of belonging and the achievement of it through key friendships influenced their desire to remain enrolled at the Academy.

Indicators of Belonging: Signs and Symbols

Another challenge to building friendships is associated with the linguistics and semiotics of socialization. Individuals coming without prior military experience, family ties to the military or previous exposure to the military culture have the additional burden of learning the language and symbols (acronyms, military rank insignia, and Academy jargon, for example) within the Academy culture. These individuals have the larger burden of adjusting to the military and adjusting to college life. In contrast, cadets who were enrolled at the preparatory school, were prior enlisted, or both, have integrated within military culture and are dealing with the adjustment to college life at the Academy. Another group making the transition are non-white ethnic groups. While highly sought after for the Academy, they must meet the same rigorous application requirements and may hold perceived cultural obstacles to fully integrating to Academy culture. Yet, each year they graduate from the Academy. In all cases, cadets are influenced by parental socialization, their student background characteristics, and non-collegiate groups that impact individuals' abilities to forge, form, and foster social connections within peer groups. Minority groups, by category, have the highest percentage of disenrollment among all who leave the Academy (USAFA Department of Behavioral Sciences, personal conversation, August, 2016a). Friendships across ethnic boundaries are crucial in retention of minority cadets given existing Cadet Wing demographics.

Social identity, that is, both social identity theory and self-categorization theory, accounts for group processes, intergroup relations, and group mediated phenomena (Hornsey, 2008).

Although this study does not delve deeply into either theory, it is necessary to acknowledge, within the framework of human interoperability and social capital, that both theories are inferred

within the social phenomena of the Cadet Wing, whether examining friendships through the lens of race, gender, or any other attribute or considering experiences prior to entering the Academy.

Within the Academy collegiate experience, cadets, specifically those coming directly from high school, are learning the "understood" social norms of becoming a member of the military at the Academy. This social discourse is illustrated in navigating the differences of gender in relating to military life. Phillips (2006, p. 129) discusses the discourse experienced by women regarding understanding how to simultaneously be a "woman" and a "soldier" within the military culture while striving to conform and retain their identity. This discourse, by logical extension, is experienced by cadets who at once are a member of the Academy culture and one or more of the sub-cultures present. Cadets identifying with varied cultures must adapt to the dominant Academy culture to perform and, in some circumstances, form their own support networks, even if it means going outside perceived social and formal parameters.

There are fundamental rules which govern the formation of social networks. Christakis and Fowler (2009) concluded that to study how social networks function, it was necessary to understand how they are formed and assembled. People are constrained by geography, socioeconomic status, technology and even genetics. Certain social relationships "happen" in each setting with a given set of people in a common setting. Social networks evolve. Cadet social networks evolve. Given the natural tendency for people to seek social connections—that is, to make friends—each cadet has a different number of friends who relate to other friends in other places at the Academy. The entire Cadet Wing population changes over four years as cadets graduate and move on and new classes arrive while individuals leave before graduation. This occurs while social-shaping populations change slowly. Social-shaping populations are, for example, the faculty, permanent party, athletic department and other groups whom interact with

cadets. These groups behave similarly to the government and civilian agencies described in work by Gallup et al. (2008) regarding policy, structural, process, interoperability of data, cultural and cognitive and affective barriers.

When an individual becomes better connected, s/he increases the level of connection within the whole social network. Christakis and Fowler indicate we are continuously shaping and reshaping social networks through *homophily*, the tendency to associate with people who resemble ourselves (are just like us) (Christakis & Fowler, 2009, p. 17-25). Therefore, to once again borrow from Christakis and Fowler, the Cadet Wing has *emergent properties* because the attributes of the Cadet Wing change as interaction and interconnection change with each graduating class and with each incoming class of Basics.

The priority of military drills, micro-managed training, academics, and peer responsibility immediately conveys messages to cadets that rethinking personal and group identity, or comradeship, is necessary. Military sociologists have suggested that comradeship—especially the personal bond among males—is a prerequisite of effective military performance (King, 2006). At the Academy, all cadets are subject to the same standards of military, academic, and professional performance—regardless of gender, race, religion or sexual preference. It is in this context that all cadets form personal bonds.

Within the Academy, men and women live, work, physically train, attend classes, and serve alongside one another. Men and women both use internal symbolic resources to create masculine hierarchies in which they situate themselves as more morally oriented, self-disciplined, physically able, emotionally controlled, martially skilled, or intelligent than non-military personnel (Hinojosa, 2010). Military resocialization involves creating an environment of shared struggle and suffering, which leads to increased comradery and loyalty among peers

(Pershing, 2006). For example, historically, fourth-class cadets are treated with a lack of respect, forced to complete inconsequential activities and follow trivial, nonsensical rules governing their every move. They are required to carry a book bag in one hand (not over the back), run to class, use the farthest stairwells in the academic buildings, and are likely to be "beat down" [additional physical training] if even a minor error is perceived to occur. Although this kind of "hazing" is identified by most civilians as the primary reason they would not don the uniform, it has an ironically cohering impact upon military units.

In a study on men and women's experiences with hazing at an elite military institution, Pershing points out that research on women in the military argues that women had not yet been fully integrated into the service academies (De Fleur, 1985; Pershing, 2001; Pershing, 2006; Stevens & Gardner, 1987). However, Pershing (2006, p. 168) investigated the students' perceptions regarding hazing and did not account for changes in military culture stemming from legal influences; nor did it directly examine the relationships or motivation among men and women regarding hazing of freshmen. The line between military training and hazing is prone to being blurred when the first year at a military academy is perceived as a rite of passage (Graney, 2010; Pershing, 2006). Pershing asserts from study interviews that "women were informally isolated despite being formal members of the [Naval] Academy." Further, the majority of [Naval Academy] men stated that their best friends were midshipmen in their same class/company division and of the same gender. As with racial minorities in the Cadet Wing, it is no wonder some female cadets feel isolated as women comprise no more than 25% of the total class. This strengthens the value of the present study to understand how their social bonding may contribute to successful completion at the Academy.

The first female Academy officers graduated in 1980. Given the time to advance in the officer ranks in a normal career path, not accounting for force reductions in military numbers in the 1990s and mid-2000s and the challenges of women rising through the ranks in the past 36 years, we are now beginning to observe the full integration of women in the military across the entire rank spectrum and career fields. Early research on women in the military does not examine social connections, particularly friendships, in the context of this new level of integration (Callahan, 2009; Cecil, 1996; Phillips, 2006; Silva, 2008).

The military remains a predominately hegemonic masculine social group, but the BCT environment provides the context for study of informal social connections since the acceptance of women. Homosociality is historically inherent in the purpose of the military. A standing army, as a homosocial macro-culture, exists to defend the homeland. It is widely understood that social connections within the military are an essential component to the success of any military unit and to the very survival of all soldiers in war. Men and women must adjust to military culture and this acculturation is particularly pronounced in the Academy training process. All cadets pass through a series of [masculine] military rituals from the beginning of basic training to the end of the first academic year when Basics are fully recognized as cadets, regardless of their race or gender.

Indicators of Belonging: Trust

Social connections require trust among individuals, which is positively related to a sense of shared norms and a feeling of being part of the same community (Flanagan, 2013). The social environment of a squadron, for example, can serve as an impetus to changing behavior and developing new leadership skills or it can serve to stifle a cadet in old behavior patterns (Packard, 1999). Other researchers have studied social trust in military contexts using the

theoretical frame of homosociality and male bonding. Arguably, given the culture of a military academy, female and male cadets must form social bonds in the same environment within the homosocial constraints of being identified as a cadet. While "male bonding" is characterized by trust, homosocial desire, and intimacy, this premise may be extended to include female cadets living, training, and studying in the same environment because of the uniformity of treatment and requirements of attendance.

Friendship relationships involve a degree of personal and professional interaction. This interaction, as trust builds among individuals, begets intimacy in the context of friendship.

Intimacy between and among cadets involves trust. Trust is essential to forming social bonds.

When encapsulated in the Academy culture, individual behaviors and choices are normalized through the building of group identity and sense of belonging.

According to Flanagan (2013), peers, particularly intimate friend relationships, are critical to understanding the phenomenon of trust. Trust is the bond that holds individuals together. Trust and trustworthiness are essential to group cohesion and identification. Friendships are a valuable resource for individual identity construction as well, particularly for young adults. Social networks in which individuals trust one another are contexts in which they create, share, and grow social capital. When this kind of network is perceived as being impenetrable it is referred to as "good of boy" network or points to a "glass ceiling".

Trusted networks are the conduit for social capital. Social capital is embedded in relationships, which require constant effort to develop and persistent willingness to maintain (Huisingh, 2016). Men and women experience group cohesion and identification as cadets yet preserve their personal identity, character, and values. Additionally, each cadet views this process through a lens of personal friendship experiences. Men and women may express their

cohesive relationships differently while simultaneously embracing similar values and benefits of close social ties, social trust, and social capital in both same-sex and opposite-sex relationships.

Social trust is a basis for cooperation and is inherent in friendship (Flanagan, 2013). Buote et al. (2007) argues that friendships are essential in major life transitions of young adults to college life and may counteract the difficulties and stress associated with such changes. Friendships become a conduit for cooperation through social support and are correlated with feelings of well-being, self-worth, and self-esteem exhibited by sharing experiences, giving encouragement, and helping one another. These behaviors are present throughout the transition period of BCT and in the remainder of the cadets' experiences. Cadets who adjust socially, according to research, may be more likely to make the transition to Academy culture successfully. This adjustment presumes individuals are able and willing to cooperate with each other and develop new friendships. There are certainly instances when they may not be.

At the top or close to the top of everything before they arrived at the Academy, these high school superstars may have experienced support of family and friends through the application and acceptance process. However, once these young adults step off the bus at the in-processing point to the cadet area at the Academy, they encounter physical and mental challenges of learning a new culture without the support network that ushered them there. They must cooperate or fail. In the *Air Force Academy Candidate Book*, one cadet puts it this way:

I was in super shape and the physical things didn't bother me. But there are things that happen that you just can't prepare for. Like not being able to call home for three weeks. That was the hardest thing for me, not talking to my parents and not talking to my girlfriend.

(Ross, 2012, p. 117)

Acknowledgement of the importance of social support is evident in the cadet's statement. It points to the challenge of forging new connections in an unfamiliar environment. Young adults need the social support offered by a best friend (Richey & Richey, 1980). In a university setting

they need to replenish their friendship network to endure the transition, where a decrease or loss of friends from the pre-university environment of high school [or prior military service] disrupts existing social networks (Buote et al, 2007). Research about civilian college students indicates a consistent positive correlation between the quality of friendships formed in their first year and adjustment to university life. As Buote et al. points out, the quality of such friendships is a significant positive predictor of overall adjustment in social, academic, personal-emotional, and institutional attachment.

Packard (1999, p. 43) hypothesized that cadets would form groups based on *propinquity* (physical or psychological proximity) and *homophily* (associate or bond with like individuals). The physical proximity of Basics within the squadron accounts for part of the potential formation of social connections. The challenge for cadets, given the intense and compressed training environment, is discovering other individuals with values, likes, and character beyond the perceptions of observable age, gender, race, and role as a cadet. Each is seeking to "fit in" and obtain the security of belonging and establishing credibility within the social strata (Holland et al., 2007, p. 112). Packard (1999) argues it may be more important to monitor a team's interpersonal processes and interactions since cadet peer groups appear to create a consistent (social) environment with potential to directly affect squadron performance. In work by Carrell et al. (2013, p. 866) cadets were sorted for an even distribution by demographic characteristics to ensure diversity in squadrons with respect to academic ability yet academic outcome was negatively related due to endogenous peer effects, which were a logical extension of Packard's argument and is an examination of interpersonal interactions and processes manifested in friendships within the "team" of the Cadet Wing.

Among older adolescents, trust is learned through interactions with peers (primarily), parents, and family (to a somewhat lesser degree than in younger adolescents and children), and 'other' adults. When applied to individuals, Bourdieu asserts a person's social capital may be assessed in terms of the number of connections an individual can mobilize in his network and the volume of economic, cultural, or symbolic capital held by the connections available for the actor's use (Huisingh, 2016). Packard's research suggests an understanding of relationships and an ability to work with people are considerations that may be important to individual and organizational success. The Academy, from basic training through graduation, imparts an ideal environment to observe how previous and existing trustworthy relationships are upended and must be reformed and shaped by everyone with a new group of social peers. Cadets who can put into action the necessary and ever developing social skills, foster cooperation and trust, and build appropriate social connections may have a stronger aptitude for adjusting to life and a career as an Air Force officer. The rules for social behavior learned within the Cadet Wing are expected in active duty.

Indicators of Belonging: Resilience

College life presents stressors and difficulties through a range of problems attributed to factors including poor academic performance (Buote et al., 2007). Friends may counteract the difficulties and stress associated with life transitions, as friends are a source of social support (Tokuno, 1986). While the importance of resiliency is undisputed within the military, there is little research addressing initial experiences used to develop resiliency in pre-commission programs (Fischer, 2014). Individuals with solid social connections are, overall, better equipped to handle transitions as friends may provide support not satisfied by family members. A study by Barbas (2009) with 251 second year students at Edith Cowan University (Perth, Western

Australia) states that social support, self-esteem, and coping significantly and independently predicted resilience in second year students. Fischer (2014) examined resilience and its connection to or evolution from physical training in an Army ROTC unit at a civilian university. Military physical training sessions helped prepare soldiers and cadets for the physical rigors of military operations and combat. These rigors often include cognitive, social, and physical skills that are implemented under high stress (Fischer, 2014; Ward et al., 2008).

Evidence points to "being liked" by others is supportive of good developmental outcomes and, conversely, "being disliked" as a risk factor for undergraduates (Parker & Asher, 1987). Within a military academy environment, family is not readily available to provide support; therefore, individuals must give and receive support from newly formed friendships. According the U.S. Army, soldiers who are resilient have "mental, physical, emotional, and behavioral ability to face and cope with adversity, adapt to change, recover, learn and grow from setbacks" (Fischer, 2014; U.S. Army, 2013b, p. 1). Fischer states resiliency is most often viewed as an outcome to training expressed as a leadership characteristic, identified as a process resulting in adaptation between the individual and the environment (2014). Without the social support networks, which were present before beginning Basic Cadet Training, building resiliency is imperative for some cadets to reach graduation.

Undergraduates will seek peers most like themselves. Social resiliency is most commonly addressed in resiliency research literature, referring to the capacity to sustain and engage in healthy relationships as well as recover and endure from social isolation and other life stressors (Cacioppo, Reis, & Zautra, 2011; Fischer, 2014). Within the Academy, cadets are experiencing the same physical, psychological, and social adjustments to its culture. An adolescent who associate with a group participating in similar behaviors may experience adjustment issues in one

or more areas. Buote's study (2009), which focused on establishing friendships, revealed factors important to the friendship process: those who share the same interests, values, sense of humor, sexual orientation, musical tastes, and hobbies as well as shared experiences and activities were determined to be good friendship candidates (Buote et al., 2009, p. 680). Men and women experience social relationships differently. Research suggests men and women engage in social relationships differently and appear to differ in the support they seek from those relationships (Barbas, 2009; Day & Livingstone, 2003). Lewis (1978) suggests men are more competitive where women are more relational. "Most males are not very emotionally intimate with other males. Men may have more friendships than women, but those friendships are not close or [emotionally] intimate" (p. 109)

In a military academy, cadet friendships are likely to reveal strong connections predominately within a squadron of peers who are in the same grade level. Individuals who perceive they have higher social support are more likely to have higher self-confidence, better [friendship] skills and are more likely to master new situations and challenges (Barbas, 2009; Cutrona, Cole, Colangelo, Assouline, & Russel, 1994). Further, most social interactions seem likely to occur within a squadron given the students' close physical proximity. Social norms are developed in smaller groups (i.e., squadron) regarding cohesion and friendship bonds with emphasized acts of altruism (Fischer, 2014). With respect to altruism, humans form relatively long-term non-kin relationships that include significant amounts of cooperation and occasional forms of self-sacrificial behavior. Such friendships constitute an important part of human sociality (Kurzban, Burton-Chellew, & West, 2015, p. 578).

To a lesser degree, connections across grade levels may be present, but not as strong as those within the same grade level. This is due in part to the Academy's social construct that

frames each grade level as upper-class cadets are forbidden from socializing with freshmen cadets until after Recognition day near the end of the academic year. Upperclassmen, as part of their leadership training experiences, are directly responsible for training underclassmen in an imposed hierarchy that discourages socialization and emphasizes compliance. Meant to provide good order and discipline among the ranks of cadets and to mimic the rank hierarchy of the active duty Air Force, this governance dampens informal social connections across grade levels. Sports and social clubs offer opportunities for social connections between one or more grade levels. Academy graduates relate, through numerous conversations with the researcher, over 15 years that many upperclassmen know few, if any, underclassman, by the time they graduate. Yet underclassmen have vivid connections emerging from training events in which upperclassmen were their military leaders.

Indicators of Belonging: Rituals

Training is an inherently competitive environment as cadets are evaluated on performance in military, academics, and physical areas. Cadets are trained in hand-to-hand combat, military drill, and physical fitness. Socialization occurs during training. Military academies aim to strip away individual personal identification characteristics during training process and rebuild self-image based on organizational assumptions (de Klepper et al., 2010, p. 83). Social influence may be dominant in friendship selection. Specifically, peers are more likely to be successful in trustworthy relationships, like friendship, where situations influence the acceptance of peer control efforts. An individual will see him- or herself as more like other members of the social group, will internalize group norms, and values then act in the group's interests (de Klepper et al., 2010; van Knippenberg, 2000). Identity fusion theory, a relatively unexplored form of group alignment, entails the sense of "oneness" or belonging—how the

individual feels with a group (Swann, Jetten, Gomez, Whitehouse, & Bastian, 2012, p. 442). Similarity begins with simple rituals incorporated throughout the training experience. It begins with basic cadets being issued uniforms and receiving military regulation haircuts [men] and a requirement for women to keep their hair above their collars, whether by cutting or pinning. Additionally, Basics are required to wear ball caps issued to indicate they are not yet part of the Cadet Wing. Cadets accepted into the Cadet Wing wear uniform covers. Outward similarity in appearance begins to impress upon the new cadets that they mirror each other, are uniform in purpose, and are becoming part of the culture. However, they have not yet formally earned their place within the Cadet Wing. This milestone occurs after BCT at the Acceptance Day parade. Rituals communicate identity fusion as people experience a visceral feeling of oneness where group membership is a crucial part of who an individual is and how they perceive their personal self as part of the group (Swann et al., 2012, p. 443).

Social identification, expressed as rituals, becomes the basis for friendship selection leading to clusters of friends within the same military specialty (de Klepper et al., 2010, p. 88). In contrast, Pershing (2001) states that women learned their gender set them apart from "bonding" or forming close relationships with men. Female graduates of the United States Naval Academy indicated they were either excluded from or on the periphery of male friendship groups (Pershing, 2001, p. 484). Women were most often limited to a smaller pool from whom to choose to be close friends and roommates.

The larger pool for forming friendships clearly belongs to the male cadets because they are the highest percentage of students. Male bonding is characterized by homosocial desire and intimacy where men, through their relationships and social connections with other men, construct power blocs and protect male territory and privilege (Hammaren & Johansson, 2014). Women in

the military face a different dilemma; they must prove they have "culturally-defined" masculine qualities [of leadership and social connections] through self-control and stoicism, while negotiating femininity and stable gender identity (Silva, 2008).

Expectations of friendships involve certain virtues of loyalty, reliability, empathy, cooperation, honesty, and authenticity as standards. Late adolescence is particularly vulnerable time for social trust (Flanagan, 2013). The percentage of male and female cadets in the Academy may impact the number of opposite-sex friendships between men and women. This may also be affected by romantic relationships between cadets.

Coming to the Academy is a new way of life. The capacity for meeting and making friends may influence initial success and retention at the military academy. "Friend" may mean anything from an "intimate confidante" to a "tennis partner" when considering individual interpretations of relating expectations of friendship (Apter & Josselson, 1999). Cadets have no choice but to build relationships and learn to work together in a closed environment.

Experiences in training and academics are stressful. Friendships are necessary to make it through and can reveal an individual's character. A cadet's willingness to make a personal sacrifice for a classmate is regarded as a desirable character trait, while self-serving acts are looked upon as weaknesses. Pershing argues that peer friendships are central to survival [at the Academy] and making it to graduation. She reports "not only are service academies lauded as the standard for military professionalism, they are considered one of the most direct routes for achieving upward social mobility within the military structure" (Pershing, 2006, p. 471).

The resultant experience of friendship is manifested through a new and unique sense of belonging. The researcher's work in educational leadership and informal conversations with graduates suggests that closest friendship ties were vital to a new sense of belonging within

military culture and their endurance through four years of education and training in this context.

Acceptance Day is the first ritual milestone in the transition to joining the Cadet Wing.

Indicators of Belonging: Ostracism and Exclusion

Humans have an ingrained, inherent desire to belong. This need is so strong that researches by psychologists using Magnetic Resonance Imaging of the brain have discovered that social rejection activates the same brain regions as physical pain (Eisenberger, Lieberman, & Williams, 2003, p. 291). Therefore, the sensation is similar for why we do not like to be picked last in physical education class and why young people choose to belong to gangs. Pershing's work on hazing (2006) describes an environment where selective groups of midshipmen were made to feel isolated despite being formal members of the Naval Academy. Pershing points to female midshipmen as the group experiencing social isolation, primarily in the development of friendships. They were considered "plebes" first and female second. However, after the freshmen year, female midshipmen stated their gender set them apart from forming close relationships with male peers. Perhaps the differences are not gender specific but attributed to personality, social adeptness, need to belong, and building social trust.

In her study of discourse of women in the military, Phillips (2006) presents and dissects women's narrative experiences with sexual harassment, sexual assault, and daily functioning within their units from the Civil War through the present. "Women in the military are functioning professionally in a male dominate culture, apart from their civilian counterparts, yet seeking to be engendered within both "soldier" and "woman" social groups" (p. 185).

Women are not alone in the struggle to belong; men, gay and straight, in the military also struggle to fit in. The military has traveled the path from once separating soldiers, sailors, airmen, and marines solely for sexual orientation to where there are now organized support

groups and clubs present on military bases. However, social norms and individual sense of belonging and identifying with the military may not be as apparent as gender or sexual orientation. It may lie in an individual's capability to form friendships and build social capital.

Returning for a moment to the social struggles of women, and women at the Academy, we can see where Phillip's discussion points to a broader sense of identity and inclusion. Women and men relate to "God, family, country" as lauded priorities for conduct. Women and men emerge from military training, equally enduring the strain of physical and mental training, with their sense of belonging and inclusion. The Academy training environment is ostensibly fair and impartial for all. So, what is the difference between cadets who stay and cadets who leave? This study attempts to show that it is friendships and social capital. Buote et al. (2007, p. 672) found a substantial correlation equal .51 (N = 701) between the quality of new friendships and social adjustment of first-year college students. The quality of these new friendships was a significant positive predictor, according to Buote, of overall university adjustment. Friendship quality was more important than quantity of friendships. These friendships were serving an important function of adjustment to college life; data indicated that new friends increase the likelihood of being introduced to other potential friends thereby expanding the social network and social capital.

When Buote et al. writes of friendship quality, he conveys respondents' messages about similar interests, desirable personality traits, intelligence, proximity, time together, trust, intimacy, social behaviors, personal challenges, shared experiences, and feelings of happiness; not shared gender. So strong is this sense of belonging and friendship at the Academy that cadets have pointed to friendships as a factor to continuing to graduation or making the choice to disenroll. Simply stated, friendships and individual choices affect friends in some manner. These

qualities reflect a strong level of social cohesion. By making this connection, a discussion of cadet friendships includes friendship quality, one of the components of the data collected in this study.

Social isolation and rejection are necessary for cohesion (Williams, 2007). There is a continuum of "seeking to belong" along the feminine and the masculine social spectrum that affects social connections. Culturally defined personality traits, physical attributes, abilities, and occupational preferences all contribute to one's gender identity in unique and individualized combinations (Stets et al., 2000, p. 10) The researcher argues that although gender identity may play a role in an individual's acceptance or rejection by a group; it is the individual's ability to find, forge, and foster friendships that delineate the "sense of belonging" within the Academy. Sinek describes the feeling of belonging as a "circle of safety" where members of a group focus their energy and time to guard against outside dangers (2014, p. 19-25). Inherent with belonging to a group is the assumption there are others who do not belong. The ingredients for acceptance or exclusion begin to appear in BCT where recruits begin to identify "weak links".

Schemo relates the experience of a female Basic during the second phase of training in Jacks Valley, which illustrates how exclusion evolves: [She] doesn't count many buddies among her fellow Basics in Demons A Flight. Instead, she seems to have a knack for alienating her peers, sometimes openly putting them down, sometimes pronouncing her opinions like edicts. The Basic further snapped at one of the cadre (upperclassmen training instructors) when ordered to repeat an obstacle on the assault course. This defiance immediately resulted in her peers being punished while she watched. That night, her cot was placed in the corner of the tent by the other female Basics, which afterward treated her as an alien creature, ganging up on her for the infraction for which all were punished. It was male Basics who came to her rescue, defending her

from her female peers. The female cadet later stated, "I haven't got any friends here. I'm not going to have any friends here" (Schemo, 2010, p. 132).

Emotional and Psychological Experiences: Cohesion

Cohesion in the context of military sociology references the intimate bonds produced in informed rituals. King states that social cohesion is formed exclusively through informal interactions (2006, p. 494). Intimate relations and masculine rituals emphasize interpersonal trust and teamwork built through military experiences, including arduous training and drill (King, 2006, p. 504). Group cohesion fosters a sense of mutual secrecy and collusion within groups manifested in a sense of group identity (Thurnell-Read, 2012, p. 260). Trust has extrinsic value in helping reduce the risks and transaction costs of relationships. Trust in social relations begins slowly, with little personal risk, until those involved can prove their trustworthiness and strengthen the relationship through proper conduct, reputation, and competence (Nooteboom, 2007). Trust creates the bonds necessary to strengthen relations among leaders and followers, military members and their families, their branch of service, and the American people (Lewis, 2013, p. 13).

Group cohesion developed through stressful training involving cooperation and teamwork may increase individual commitment to group cohesion (Aronson & Mills, 1959). The consequential outcome of stressful training is not always positive. In 2003, Academy leadership commissioned the Fowler panel to study the circumstances that led to the sexual assault scandal, noting the real purpose of BCT was to create cohesiveness among team members of different socioeconomic statuses, [Academy hierarchy of undergraduate] classes, races, and genders (Fowler, 2003). Yet, the panel noted that the USAFA cadets believed BCT was designed to break their will to remold them into a military image. The difference in perception from 'creating

cohesion' and 'breaking one's will' may indicate that within the group the socialization process experience is markedly different from observations of it, no matter who is observing. This denotes a difference between espoused theory and theory in practice use (Argyris & Schon, 1974) in this case regarding the purpose of BCT; it is likely the tacit theory is what influences the development of the organizational culture (Callahan, 2009). Academy culture was different in 2003, just as it was in 1975, when the Four Class system was described as producing painful psychological and sometimes physical damage to many cadets (Graney, 2010, p. 40).

Trust and teamwork are underlying lessons intensely taught in training activities from inprocessing through graduation at the Academy. Cadets must come together in task cohesion to
succeed. By coming together for a specific challenge involving physical training, erecting tents,
marching, and other activities, cadets engage in shared experiences that tire them and force them
to need one another. Further, friendships are initiated and forged during Basic Cadet Training
because of the isolation from home and relationships. The consequence of being inside or outside
of this group identity is profound. Hartup (1996) presents the importance of building lives
around friends through mutual attraction, loyalty, intimacy, fun, and trust manifested in
emotional support, and the identity of one's friends accounts for developmental outcomes. In
their choice to apply and accept admission into the Academy, cadets inherently agree to identify
with the culture of the Air Force, in forging new friendships. Those who can make this
adjustment "belong" while those who cannot, do not.

Social trust strengthens groups because it is the basis for cooperation. Obligations that arise from trust are not enforceable by law, but through pressures that arise from communal relationships (Flanagan, 2013). There is reciprocity between trust and trustworthiness in social connections. Young adults find commonality within ideologies, traditions, shared commitments,

and community while seeking ideas and sharing beliefs, values, and worldviews. Friendships are defined by mutual trust and interdependence in the horizontal pairing between peers. Reliability is one of the social bases of interpersonal trust (Flanagan, 2013). Within a social group, trust, interdependence, and accepted group behavior are indications of cohesion, who is part of the group and who is not.

As McBreen writes, cohesion is a property of groups who share face-to-face relationships (2009, p. 5). The proximity of cadets is intended to build relationships to one another to the extent that they become a seamless team. The language used during training emphasizes usage of the words "teamwork" and "family". Moreover, the overt goal is to minimize distinctions of individuality and to enculturate cadets into military society. If a cadet does not align or re-identify during early training, it is valuable to understand the nature of this misalignment. Disenrollment stems not only from failure to meet standards but can result from a conclusion a cadet makes to withdraw because he or she fails to identify with other members of the Wing.

Cohesion Experiences: Retention

Retention is a desirable outcome of successful social interaction and integration for military academies and civilian universities alike. In military academies, significant investment is made in young adults in the time covered between their initial application and the start of their first academic semester. For civilian universities, retention affects monies received from tuition as well as state government revenue based on numbers of students enrolled. The better a student perceives their "fit" within the institution the more likely they are to reach graduation.

Social connections involve interaction. Friendship relations, relations where individuals socially interact with and like each other, involve a need for mutual understanding. This is

expressed in similarities between two people (Byrne, 1971; Granovetter, 1973; Huston & Levinger, 1978; Krackhardt, 1992; Zeggelink, 1995). Self-selection to apply for and accept a nomination and appointment to a military academy suggests similarities present among young adults before meeting at BCT. Research on military socialization showed that similarity among students is partly due to self-selection by joining the military in the first place (Bachman, 2000). While perhaps similar in common goals and objectives (join the Air Force, defend the Constitution, and earn their college degree), young men and women are far from being socially homogenous at the beginning of BCT.

Semiotics

The military academy is a traditional and an authoritarian institution (Eckhardt, 1991). The context in which [social] interaction occurs shapes resultant behavior (Deaux & Major, 1987, p. 369), meaning people construct and conduct interactions with others because of the environment when they interact. Social learning theory addresses the complexities of human interaction in social behavior, stressing that people shape their environment as well as the environment shaping the people (Altemeyer, 1988, pp. 54-55). The military academy environment is markedly different than civilian universities regarding the environment and social connections. Social learning theory emphasizes the use of cognitive symbols to represent events, persons, and objects in social interaction. Enculturation of cadets is comprehensive throughout the cognitive, psychological, social, ethnic, and aesthetic realms.

The military is filled with rituals and symbols that members interpret to place one another within the rank hierarchy and workplace. Employing semiotics, the study of signs and symbols and how they are used, to examine belonging and identification, and ultimately, exclusion, in social connections among cadets is valuable. As each new class arrives for in-

processing, they are issued uniform attire, including a specific color baseball cap as a striking visual indicator they are not yet members of the Academy. Visually, there is little distinguishing an individual save the name tape on the front of the uniform. The markers of individual identity are deliberately suppressed at this early stage of training since the military's purpose is to reinscribe the individual into its collective.

In the Academy's cadet area, students are surrounded by Air Force symbols, icons, and statuary. Among the semiotic displays in which cadets are immersed, statues mark significant historical military and specific Air Force milestones as well as notable alumni. Portraits laud heroic Academy graduates, retired aircraft are on static display, and squadron markings are ubiquitous in the dormitory hallways. Images of important cadet events and training are broadcast throughout each day and flyovers of Air Force aircraft during noon meal formation serve to constantly remind cadets about where they are, why they are there, and what is expected of them. These semiotic messages tell new cadets who they are becoming, and who they will be if they endure through the rigors of training.

Cadets encounter in their daily activities those [masculine] institutional norms embedded in rituals, routines, procedures, symbols and speech (Due Billing, & Alvesson, 1997; Gherardi, 1995; Kronsell, 2005). There may be struggles by both genders regarding the semiotics of the military, yet cadets take considerable pride in the rituals, routines, procedures, symbols and speech of being a cadet. Identification with and wearing of symbols, including the uniform, are a form of homosocial expression.

Recognition is a milestone ritual for Basics. Successful completion of Recognition earns the Basics their place in the Cadet Wing. The number of props and wings a Basic receives indicate acceptance as a full member of the Cadet Wing. The Prop and Wings became the

insignia of upper-class cadets at the Air Force Academy beginning with the first class, 1959. The insignia is given to fourth-class cadets following the Recognition Ceremony.

Receiving the props and wings from upperclassmen after Recognition is a "stamp of approval" for Basics. This is the first decoration of their military career and an emotional achievement for the Basics. They can now be officially referred to as cadets, showing their distinct personalities and interacting with upperclassmen in a normal social context. There are, however, some social scars from mistakes made during BCT for some newly recognized cadets to overcome, but they arrive somehow stronger in resolve and more determined to complete their education and training; they will face additional challenges on the path to graduation and final commissioning.

Each phase of education and training at the Academy is marked with semiotic ritual. As Chapter 1 explained the phases of BCT, Acceptance Day Parade, and Recognition are replete with protocol about transitions from one phase to the next. The symbols and rituals mark the progress of early training. Cadets begin involvement in minor leadership roles within the squadron at the beginning of the third-class year. The visible difference is their new shoulder boards, which reflect the change in class rank. Additional insignia worn on the collar indicate cadet job rank assignments. As the second-class (junior) year begins, cadets make the commitment to serve in the Air Force and may have a vehicle on campus. The end of the second-class year is marked with the Ring Dance, a formal dinner and presentation of the coveted class ring, held each May in Mitchell Hall [the cadet dining facility]. Following graduation of the preceding class, the new first-class cadets are responsible for the operation and function of the Cadet Wing, guiding underclassmen in leadership positions through indoctrinating the new class of Basics and will experience additional rituals of learning their career assignments, follow-on

base assignments, and "100s Night." Hundreds Night is when 100 days remain to graduation. First Class cadets vacate the Academy for a weekend of socializing and fun, leaving their rooms vulnerable to "redecorating" by their squadron's fourth-class cadets, another ritual. The rooms are elaborately decorated in a theme that represents the personality and reputation of the first-class cadet. Often such escapades involve sand, water, concrete, and a plethora of other materials intended to convey cohesion of the group. If a first-class cadet is respected by underclassmen this ritual is pronounced and humorous, if shunned (ostracized, excluded) he or she may return to find the room in pristine, inspection-ready condition.

Social Capital: Trust and Social Cohesion

Trusted members are included in groups and expected to act within social norms for the group. Individuals who are not trusted are not included while individuals who do not act within social norms are pushed out. Individuals who do not become socially enculturated to military life at the Academy may choose to disenroll, saying, "It just wasn't for me." It is important to understand what they mean by "it" and what they mean by "me" since identity within the culture, and the social capital that comes with full membership, are vital to staying in and, for cadets, of completing their academic programs. If cadets do not identify with the culture, it may be that they have simply not built social connections to it.

Research about the theory of social capital presents the phenomenon as either individual or collective where Coleman (1988) establishes a foundation of exploring the discourse of social capital theory. Huisingh (2016, pp. 19-20) takes Bourdieu's (1986) concept one step further, asserting that social capital is relational for individuals as well as organizations. The benefit of social capital is the reason members build and maintain a social network (Hexmoor, 2010). Put simply, "It's not what you know, it's who you know and who knows you." Social capital is the

currency of social connections and relationships and is a defining feature of military culture. In war, these connections can save lives. In peacetime, military culture requires members to maintain a reputation for professionalism and trustworthiness. Ask any military member about professionalism and trustworthiness and there will be many stories, good and bad, about a personal experience or an account of someone they know. Perhaps the most publicly visible example of professionalism and trust are the premier flight demonstration teams, Thunderbirds (Air Force) and Blue Angels (Navy), who perform for the public throughout the year and at their respective service academy's graduation ceremonies. The men and women, pilots and equipment maintainers, in both squadrons are consummate professionals and must trust one another completely to prepare for and perform precision maneuvers. What affects one person affects them all. The ear-piercing scream of a flyover rattles spectators to their core, and military members smile with pride knowing the flights reflect who they believe themselves to be.

Evidential links between social capital in social-psychological (trust and commitment) and activity (involvement in clubs) reveal social capital and health connections (Pettit et al., 2011). Social capital breadth (extensiveness of friendship network) and depth (committed and supportive relationships) forecast patterns of adaptation highlighting the value of social capital during transition in early adulthood (Pettit et al., 2011). Social capital is bonding and bridging. Bonding social capital is within groups containing similar individuals such as a community group (American Legion, church, college alumni) while bridging social capital is connections across diverse groups (Academy Parent's Clubs, Gold Star Mothers, social activists' movements) (Lewis, 2013, p 12). Social capital makes resources available to members of the network through mutual trust and reciprocity in the relationships.

Academy graduates comprise 22.7% of the Air Force officer ranks (U.S. Air Force). While not a majority, this group is the largest from any single commissioning source when categorized as an undergraduate university. Therefore, the shared undergraduate experience of Academy life provides a common experience for officers to forge social connections after graduation.

Social connections become relationships as individuals interact over time and these become the context for building social capital. Social capital involves the professional reputation of individuals involved in social exchanges filling a dual role of providing initial orientation [getting to know one another] and motivation for action [completing the assigned task] (Ben-Shalom et al., 2005, p. 65). These relationships are reciprocal to varying degrees but are ultimately the means for exchanging social capital. Social capital is positive when it helps people grow, thrive, learn, and achieve their goals in an organization (Baker & Dutton, 2007). Relationships and the social capital build group cohesion, a vital component of military training environments. Social capital influences a wide range of personal well-being and social adaptiveness, organization, community, and national objectives; yet, there is a marked absence of research available regarding social capital among cadets.

Social capital refers to the resources that flow through networks of relationships (Adler & Kwon, 2002; Coleman, 1988). It involves connections and relationships where people impart influence through relationships within an informal social network. Informal social connections begin as temporary associations that may or may not lead to friendship relationships. Members comprising an informal social group voluntarily determine their horizontal informal social connections where they build social capital.

Who do you call upon when you need help with something? Who calls on you to help with academics, personal, financial, or other matters? Do you accept the recommendation of a restaurant or movie? Do you share a recommendation, insight on an experience, or recommend a friend for a job opening? If you relate to any of these, you have experienced social capital to some degree. A person's social connections with family, friends, and other people constitute their social capital assets. In military culture, social capital can directly influence promotion, assignments, awards, recognition, and higher performance ratings and is exchanged as a distinctive and institutionalized mark of the culture; without it, individuals simply cannot sustain their presence within the culture.

Information exchange among people is a form of social capital. Cooperation within organizations depends on personal relationships. These relationships involve repeated exchange of information. Within military units, relationships are often very close as unit members spend a large amount of time together and are interdependent (Adams & Webb, 2002). Military organizations typically substitute security procedures for personal trust in the exchange of information (Gallup et al., 2008). Information, news, experiences, and knowledge are the resources exchanged through relationships. Trust plays an influential role in the exchange of information. When people trust one another, they are more responsive to shared information. Human interoperability literature revealed the importance of information exchange among people within and among organizations.

Human Interoperability: Bringing it All Together

One view for examining the military is that it is a complex social industry, a network of units interconnected directly or indirectly through the hierarchy for the mission of national defense. Units within it, which have sub-designations of wing, group, squadron, flight and squad,

are relatively stable social groups with established patterns of interaction within the culture. A formal structure is, as to organization versus membership, present within and among all military units with each unit having a designated person as the commanding officer or leader and its own unique numbers, symbols, and other semiotic symbols. Along with the formal structure there are informal social patterns of individuals' behavior that adhere to the larger community through visible and semiotic displays of membership, like the standards of uniform wear, the display and response to rank between enlisted members and officers, and the unity of mission to "fly, fight and win" among other markers of membership.

The Academy is a complex unit consisting of the Cadet Wing containing 40 subidentifying 100-member squadrons and the faculty and staff who teach and guide the cadets. The
Academy employs a matrix of structures, procedures, relationships, symbols, practices, cultures,
competencies, and traditions to perform its duty of training young men and women to become
Air Force officers. Internally it must cooperate and function across all levels—cadets, permanent
party, staff, coaches, and instructors—to accomplish training, education, and character
development. It must cooperate and function externally across all levels—community, Air Force,
athletics, sponsor families, alumni—to accomplish resource acquisition, recruitment, public
relations, and public support. For all this complexity, cadets are the sole purpose for the
existence of the Air Force Academy. In addition to all that cadets must accomplish while
attending the Academy, they must learn how to function, perform, and operate within and
outside the Cadet Wing; for example, proper conduct is expected on the larger Air Force base
hosting the Academy within Colorado Springs, in public relations within the civilian community,
and with alumni and others who standby to support them.

Human interoperability encompasses factors affecting organizational and individual performance, specifically within and among organizations which are often very different. Gallup et al. (2008) speaks of human interoperability as a systematic means to improve responsiveness, efficiency, and effectiveness of organizations that must cooperate or dynamically integrate their organization internally and with other organizations. The Cadet Wing is an organization within the Academy. It must function internally as well as interact and function with other organizations (faculty, staff, military leadership, and community) with the Academy. Cadets operate with a formal leadership structure and an equally important informal social leadership network.

People in organizations rely on structure, technology and procedures to share information for command and control, situational awareness, and decision-making within the hierarchical organization structure to achieve their mission. Simultaneously, people in organizations rely on an informal social network to exchange ideas, obtain and share information, and perpetuate accepted group norms of conduct, expectations, and performance. Interactions may be casual and short-term or may occur repeatedly and lead to long-term working relationships or friendships. The purpose of encapsulating cadet friendships under human interoperability is to provide a framework for assimilating the diverse theories and concepts involved in cadet friendships.

Human interoperability provides the broad construct for examining related and contributing factors influencing the context of cadet friendships. These factors are inter-related and inter-dependent. Considering the environment in which cadets are immersed and developed, their capacity for establishing friendships in the early days of training may have a strong positive correlation to their retention in the Academy and throughout their careers, however long they may be.

Originally coined by the systems engineering, human interoperability refers to the interrelationship between social systems networks providing [information] interoperability across diverse organizational domains to sustain reliable, effective, and trusted human networks (Handley, 2013). Human interoperability includes three components: (1) human infrastructures regarding relationships people establish for work – person-to-person, person-to-organization, and person-to-systems, (2) policies and processes that control the quantity and quality of work within an organization, and (3) sharing information (Gallup et al., 2008). Person-to-person and person-to-group human infrastructures reflect the human interaction components. Gallup's work revealed an increase in information exchange and trust where participating units were familiar with each other over situations where they were not. Whenever humans interact, there is an exchange of information. Information is a "currency" of human interaction and social capital of a network. Within the Academy, all three components of human interoperability come into play.

This human interoperability framework provides a vehicle for organizing cadet social interactions where the exchange of trusted, reliable, and relevant information occurs within a person-to-person, person-to-organization, and person-to-system as social capital. Human interoperability allows one to move easily and freely, apart from sociological and psychological factors of interaction, through socialization factors that influence cadet friendships.

As an institution, the Academy relies on its system of technologies (email and SharePoint, for example) to disseminate and exchange information. Cadets use Facebook to communicate with peers as they report that cell phone reception in the dorms is inadequate quality or non-existent. While cadets make use of technology to connect, they rely heavily on interpersonal interaction for sharing knowledge about schedules, helpful hints for dealing with coursework, instructors, and others with whom they come in contact. Cadets rely on procedures,

known as instructions and orders, to conduct prescribed interactions (military protocol, required paperwork for example) and necessary business while relying on an informal social process of "word of mouth" exchanges not all that different from a child's game of "telephone."

A formal organization diagram depicts the assigned hierarchical structure of an organization, social network analysis depicts pathways of human interaction may be flexible regardless of formal organization diagrams. Overtly, people interact through formal organization relationships (prescribed policies) and in informal relationships (social interaction patterns). This is the difference between "going through channels" and "putting in a good word." Packard (1999) discusses the relationships between formal and informal leadership within cadet squadrons, proposing squadron commanders observe who in the squadron is exerting influence not just who is in a designated leadership position, as it is likely that perception of leadership, not position, plays a role in long-term effectiveness of cadets. It is the ability to relate to other cadets that is influential in understanding the role of social relationships in cadet retention.

To further illustrate this, in *Skies to Conquer*, Schemo (2010) relates the experience of Cadet Harrison in selecting his cadre for running basic training within the squadron for the incoming appointees. Harrison seeks underclassmen who he feels can best relate to the experiences he remembers as a Basic.

The cadre he [Harrison] most admired as Basics were not the ones who shouted over the terrified faces of the new kids, playing God and steamrolling the sense out of them. The ones he tried to emulate were tough and able to get a job done, but 'they knew when it was time to check up on their people and see how they're doing—aside from the numbers, aside from how well they make a bed—to see how they were each doing as a person.

Harrison believes it is important to have at least one [perhaps more] female cadet on his cadre staff because he observed first-hand the differences between how female cadets handle the stress of training compared to how the male cadets handled stress. In exercising his future leadership, Harrison is following the formal process for assembling his team while concurrently modeling the informal social network in selecting his cadre staff and through providing encouraging comments to Basics he observes struggling through training.

Baker and Dutton (2007) would regard Harrison's actions as "positive social capital" because it helps those in an organization grow and achieve their goals in a positive way, expanding their emotional and psychological energies and resources. It is this interaction where reciprocity and investment in a social connection produces social value. This action imparts trust and improved connectivity and cooperation, improves cohesion, and exerts positive social influence on peers—all important components of cadet friendships.

The social-psychological focus of individual and group dynamics is well studied by the US Army. Griffith (1988, p. 162) reveals the importance of strong relationships when discussing group cohesion, tying cooperation and teamwork at the small-group level to expectations of affective cohesion and individual commitment. This is essential to friendly social relationships and falls within the human interoperability framework.

Foucault's notion of "technologies of the self" (Martin, Gutman, & Hutton, 1988) enables research to view social connections through three concurrent lenses: (1) [cadets'] intentional and voluntary actions by which they would set themselves apart (by coming to the Academy); (2) setting themselves rules of conduct (The Honor Code; Air Force Core Values); and (3) venturing out to improve themselves (academics, military training) (Crane et al., 2008, p. 304). Thus, we can objectively observe the broader implications of social capital within the homosocial

Academy environment while accounting for the evolution of Academy culture over the seven decades since its founding. Codes of conduct within a culture, according to Faubion (2001, p. 83), offer illumination of self-governance, organizational ethics, and ethical actions across the opposing forces of compliance and integrity. Honor Code reports of cheating, hazing, and sexual assault are examples of the opposing forces of compliance and integrity within the Cadet Wing.

Chapter Summary

Throughout this chapter, it has been explained that the Weidman model was revised to address factors influencing cadets' relationships: (1) student background characteristics, (2) parental socialization, (3) collegiate experience, (4) non-collegiate reference groups, and (5) socialization outcomes. Each of these are further framed by studies that support its use in framing a new understanding of student resilience in the Academy's culture and environment.

Kirke's model for military social structure included four elements: formal command structure, informal structure, loyalty/identity structure, and functional structure, which allow deeper investigation within Weidman's model for studying the collegiate experience. A third model presented attempts to illustrate the equally interactive influence within homosocial groups of homosociality, social cohesion and trust, military task cohesion, and semiotics.

This chapter presented a justification for using an "informed" approach to examine factors influencing the creation of social capital within Academy culture. This standpoint for data interpretation permits an understanding of the role of social cohesion and the sense of belonging and resilience built and maintained among cadets, and a theoretical look at the Academy's environment. Thus, while the theory of social capital was presented as a cultural driver, other approaches were presented to examine social bonds experienced within military academies.

Lastly, since no existing studies directly address cadet friendships and their link to resilience, this project and its survey instrument were designed to gather alumni perceptions of their cadet friendships. To analyze this data, an informed approach was used because of the author's direct proximity to the culture in which cadet socialization takes place. Furthermore, the study draws upon shared experiences regarding friendships among former Academy graduates with whom the researcher interacted prior to the study's design.

CHAPTER THREE: METHODOLOGY

This chapter describes the research methods designed to examine social capital in friendships formed by cadets from the standpoint of alumni respondents. The chapter includes a discussion of the relationship between the conceptual model and design of the survey instrument.

This study is designed to understand the role that friendship played in the undergraduate experiences of Academy graduates. Alumni-based surveys are popular because they are built on easily understood indicators of success (Cabrera et al., 2005; Pace, 1979). Cabrera (2005) cites research indicating that student success after graduation is more closely associated with what college students did at the institution rather than having graduated from the institution.

Purpose of Study

This study examines friendships formed by cadets during basic training and their undergraduate years at the United States Air Force Academy. Although individual experiences vary, cadet friendships experiences and expectations of alumni from their own recollections of specific milestones while a cadet. Respondents completed training and academics necessary to graduate. Friendships shaped in this challenging environment remain unexamined in research literature. The study design deliberately examines this phenomenon as shared experience bonds members of the military together. Specifically, to examine the context of cadet social connections (friendships) through the recollections of alumni and how these may have impacted decisions and capabilities to complete education and training. This study provides an opportunity to quantify the influence of independent variables of gender, ethnicity, entry pathway, and military family in friendships upon the dependent variable of graduation of cadets, and to study

potential patterns among these social bonds within the context of cadet resilience emerging from training and education, which may be of value to future applicants, military leaders, educators, and other researchers. As such, in examining cadet socialization factors it is important to state overtly that both people and their environment affect social relationships, and considering the environment in which cadets are immersed and developed, individuals' capacity for meeting and making friends may contribute to their endurance at the Academy, so questions in the survey instrument were designed to include information about a cadet's recollections within the environment, such as clubs, sports, gender, and ethnicity.

Research Question

The conceptual model presented in chapter two was designed to illustrate the researcher's concept of socialization factors affecting friendships and to frame a response to the following research question:

What are alumni perspectives of friendships formed in social and military training contexts of the Air Force Academy?

The researcher's experiences within military culture and conversation with academies' graduates and attendees, prompted this study of the impact of friendship formation among Academy graduates and the link to completion of the program. Every friendship has a starting point, a place and time two people meet. What may be perceived as "wasted time" by Basic Cadet Training cadre (upperclassmen training instructors), may be opportunities for a Basic to begin the acquaintance process leading to social bonding, close social ties to the Academy, lifelong friendships, stronger sense of belonging, and higher rates of retention and graduation from the Academy. These friendships may last a lifetime, with a sense of closeness transcending the years and the distance among friends. One graduate expressed Academy friendships this way: "Some of them never leave, but some of them leave and never return to the fold because they're

really dirt bags and always were." This graduate's unapologetic sorting of cadets into two types reveals that friendship ties binding cadets to one another and the institution are perceived as a filter for separating people he regards as worthy or unworthy of membership in this unique social context. For some of them, he asserts, a bond "never took" (Personal communication with Academic Success Center personnel, USAFA graduate, May 2017).

Population

The sample for this study originates from the total of all graduates since the institution was founded 1959. In that period, a total of 50,689, including the 2018 class of 984 cadets, graduated from the US Air Force Academy, as cited by a representative of the Association of Graduates (AOG), the institution's alumni association (Personal Communication with AOG Representative, Colorado Springs, CO, May 25 and 26, 2017). This number is the entire alumni population. However, it does not consider losses from both the general and AOG membership counts due to age, international graduates, deaths, lack of access due to overseas or secure duty assignments, deliberate disconnection from fellow alumni and the institution or other causes was not a basis of exclusion. Further, this count of graduates includes international graduates nor the Class of 2018. Of the four pathways for entry into the Academy, based on experience prior to entering the Academy, direct, prior, prep school, and international, the international category is limited to no more than 60 cadets in any given year (U.S. Air Force Academy Admissions). This study will focus on graduates who entered the Academy via the pathways of direct, prep, or prior only.

The AOG's May 2017 report of election results for its new board of directors' states that 28,186 member ballots were distributed (with a 19.82% return rate) (McClain, 2017, p. 8). From this number and the total number of graduates since the institution's founding, a reasonable

participation rate was calculated. While the preponderance of alumni accessible to the researcher are from classes 2003 through 2017, it was determined that the survey could reach alumni earlier then 2003 through use of a snowball sampling. This method was chosen as the best means to reach and invite alumni participation, particularly given their response to AOG membership polling and comparatively low representation in AOG database, which was not accessible to the researcher.

Given that neither the total graduate nor total AOG member counts are reliable, a mean was derived for use as a representative number of active USAFA alumni, as follows:

28,186 AOG members + 18,734 Non-AOG members 46,920 Total graduates

Mean calculation:

$$28,186 + 18,734 = 46,920/2 = 23,460$$

Sample Size

According to Patten, the recommended response rate for a population this size is .007 of its total (~381 of 50,000) (Patten, 2010, p. 187). As a result, the desired number of responses for this study was held at 164, as appropriately representative of the average active alumni population if distributed over all years (Personal communication with Director of Membership, Association of Graduates, U.S. Air Force Academy, May 24, 2017).

$$381/50,000 = .007$$

thus

$$23,460 \times .007 = 164.22$$

The sampling design involved sending the initial contact and consent email to accessible alumni. This began with graduates from 2003 to 2017. A social media message inviting alumni

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to participate in the survey was distributed to 100 Academy alumni known to the researcher, who were then asked to extend the survey invitation to their alumni friends for snowball sampling.

The invitation to participate encourages alumni to share the invitation to other alumni regardless of year of graduation.

Invitations were also sent to alumni known by the researcher outside of social media who were asked to share the survey with three or more of their alumni friends to include alumni from before 2003. A group page was created on Facebook specifically for alumni to invite other alumni to connect with the researcher and participate in the study. This provided the researcher with a first-person contact to distribute a link to the survey and offered a more convenient means for participants to invite others to the group rather than having to forward the link. No identifying information or connections were present between the participants and their potential participation in the survey. Although response rates of [university] alumni might be lower than typical study participation, research indicates the results may be just as representative (Lambert, & Miller, 2014, p. 172).

Final Survey Instrument

From Weidman's model "The Social World of Higher Education," two factors within Integration of Normative Pressures, *social context* and *military training context*, are singled out in the previous chapter as the focus of this study. These two factors are within the broader context of collegiate experience and the foundation for the patterns of questions in the survey instrument. The conceptual model and survey instrument designed for this study attempt to address these important social elements of adjustment. The survey was designed for use with Air Force Academy alumni. Participants were asked 75 questions about their experiences at the Academy and friendships made after reporting for Basic Cadet Training. Questions and

responses reflect the Academy's social and military training context. The full survey is shown in Appendix A. The survey instrument (Appendix A) consists of 11 sections, each with its own subtitle, designed to address the socialization factors' conceptual model and phases of cadet training and socializing. The list and description of each section is as follows:

- 1. Introduction
- 2. Profile questions
- 3. In-processing
- 4. Doolie Day Out
- 5. Jacks Valley
- 6. Acceptance Day
- 7. Cadet Wing Culture
- 8. Social Activities
- 9. Impact of Friendships
- 10. Voluntary Withdrawal and return
- 11. Conclusion

Survey Section 1: Introduction. The survey introduction explains the purpose of the study, participant guidelines, and introduces the primary researcher and investigators. There are three questions with forced choice answers to indicate graduation year, years on active duty, and total years served in the military.

Survey Section 2: Profile. In the profile section, eight questions gather information about the participant without requesting specific identifiable information. Questions seek responses on biological gender, ethnicity, location before attending the Academy, family in the military, family who graduated from a military academy, influence of military family on making

friends, and purpose for entering the Academy. There are choice options for response on experiences, connecting with classmates, isolation, relationships, and yes/undecided/no responses. The responses in this section are necessary to group participants for comparison during data analysis. One question, "What was your primary reason for attending the Academy?" has seven response choices including an "other" in which participants may enter their own reason if it does not match one of the choice options. This question's purpose is to provide context for discussion of the respondent group in chapter four.

Survey Section 3: In-Processing. The in-processing section, consisting of nine questions, gathers the participants' views on expectations of meeting classmates, their military training experience, sense of belonging, adjustment to military culture, establishing new friendships, perceived influence of these friendships, connection with classmates, isolation, and perceived importance of friendships during early training. Responses to questions include a Likert-style spectrum of choices for "most closely resembles your overall experience or first impression," yes/no responses, and selection of responses for value of friendship and identity.

A series of "yes/no" questions elicit the importance of friendships to adjusting the culture, need to connect, importance of fitting in, and importance of making friends during this training period. These questions are part of the "sense of belonging" aspect of the survey. This section captures recalled feelings and expectations during the respondents' most drastic change in cultural and social context: entering Basic Cadet Training the summer before starting the fourth-class year.

Survey Section 4: Doolie Day Out. The three questions are specific to friendships and their experience on that day. Responses are Likert-like with choices written especially for this

experience. Response options were gathered from the researcher's experience hosting Basics for Doolie Day Out over a ten-year period and feedback from participants in a pilot survey.

This is the first break in the rigorous and mentally stressful Basic Cadet Training. These questions capture the transition to military training at a time when Basics can briefly reconnect with the outside [social support] world. One question, "How did you emotionally deal with the intense training during BCT?" offers response choices indicating preference for social connection at this critical stage. A response of "I was homesick" indicates a closer tie to previously existing social connections where a response of "I wanted to spend time with my cadet friends" indicates a stronger sense of connection with friendships forming at the Academy.

Survey Section 5: Jacks Valley. Four questions solicit responses about the outdoor training experience, relationship with classmates, and friendship experience during an intensely physical and emotional phase of basic training. Questions and responses in this section were adjusted through feedback from alumni participating in a pilot survey.

For Basics who demonstrated resilience and chose to remain, this phase of training is the most physically demanding of the six weeks. In this phase military task cohesion moves to the forefront and sense of belonging looms over individual choices. As discussed in chapter two, this training phase is where experiences with isolation and ostracism are most likely to occur. The questions solicit answers from alumni participants about their sense of belonging with response choices from "I thought I would not make it through" to "This training taught me what it's like to be in a real close-knit military unit." Although outdoor training experiences vary, every Basic chooses whether s/he has the resilience to persevere through this phase. The question "What statement best describes your relationship with your classmates during outdoor training?" offers response selections from "The stress of that experience strained or damaged my friendships" to

"The experience strengthened my friendships with classmates" giving insight to influential factors of unit cohesion and social bonding occurring during this phase.

Survey Section 6: Acceptance Day. Marking the end of basic training and the start of the academic year for first-year cadets, the five questions ask participants to provide responses regarding self-acceptance, fortitude, friendship experiences, identification as a cadet, and importance of the Academy specific symbols to their personal identity.

This is the first official ritual bestowing a sense of identity and sense of belonging on the Basics who completed BCT. Considered a milestone, there is at least one such event each year, Acceptance Day is the first checkpoint for sense of belonging and identity. This section is the first time in the survey when alumni are asked to indicate what level of social capital was shared. Participants were asked to indicate "yes" or "no" to a list of items in Question 6.3 indicating social connection. Responses were shared similar values; shared similar goals; friends from prep school; had not yet found a close friend; just acquaintances; and "focus solely on my own goals." While this may seem initially complex, response combinations lend insight to the degree of independence or inter-dependence of recalled experiences during or surrounding this semiotic ritual.

Survey Section 7: Cadet Wing Culture. Six questions ask about the general nature and influence of conversations among cadet friends regarding life at the Academy, influence of formal or informal leadership within the squadron, if friendships are important to graduating, and perception of training of Basics as an upper-class cadet.

Question 7.1 leads this section asking about the context of cadet conversations about life at the Academy. It is followed by two more questions on the influence of cadet conversations on friendships and sense of belonging. As discussed in chapter two, Packard (1999) presents a link

between social connections and leadership at the Academy. Conversations among cadets, whether about music, movies, classes, or lamenting about misery of life at the Academy, indicate the degree of social capital expressed through trust.

Question 7.4 asks alumni to indicate which type of leader, informal or formal, is recalled as having the most influence on their cadet experience. The question includes responses for "both" and "neither" as well. Question 7.5 then asks if cadet friendships are important to graduating from the Academy. The response to this question indicates friendship value of alumni toward their graduation.

In contrast to previous question, question 7.6 approaches military training context from the perspective of the cadet as an upperclassman conducting training of Basics. Response options capture respondents' view of the purpose of the military training environment.

Survey Section 8: Social Activities. There are six questions directed at learning more about the participant's involvement in sanctioned sports, clubs, and activities. These questions have responses for choice of involvement in sports, clubs, and activities. Presented as a Likert-style spectrum, response choices list club and sports groups as well as friendship value statements and have yes/no response options on selected questions.

Questions seek responses to determine if alumni were members of a social group expressed as an intercollegiate sport, club sport, club or other activity. Membership can be interpreted as cadets deriving a sense of belonging and homophily. Involvement in a group provides avenues for friendships. Separation of survey respondents by involvement will allow a comparison of entry pathways, gender, and ethnicity by way of involvement in such activities.

Survey Section 9: Impact of Friendships. In this section, the 26 questions are about influences of homophily, rituals, symbols, influence of friendships, factors which may draw

cadet friends together, change of squadron, importance of friendship on adjusting academically, physically, and emotionally, view of training on cadets, perception of gender similarities/differences regarding potential achievement, projected friendship longevity on the friendship choices, and preferences of friendships as alumni. Responses are multiple choice with yes/no; Likert-style of "none" to "extremely important" and a Likert-style description choice from "important" to "don't care." Several questions include responses that are "help" or "hinder" while others are yes/no responses. In several questions, the response choices are multiple choice specific to the question.

The largest section of the survey captures the importance and influence of cadet friendships. Question 9.2 asks "Who had the most influence on your decision to stay enrolled at the Academy?" while question 9.3 asks "How much influence do you believe the friends you made at the Academy had upon your decision to stay enrolled at the Academy?" Both questions assist in the analysis of groups of cadets described later in this chapter. There is a series of questions regarding the importance of friendships in adjusting to the Academy in academics, physical training, and emotional/psychological categories. These questions assist in exploring the exchange of information, knowledge, and support facets of social capital exchanged through friendship.

Additionally, many alumni experienced changing squadrons at some point during the undergraduate experience, two questions ask about the transition of friendship when physical location changes and identity with a new squadron occurs (9.6 and 9.7). Changing squadrons introduces a new environment for forming friendships. Responses will give an indication of strength of friendship ties, whether with cadets in a new squadron or with cadets of a previous squadron who were assigned to different squadrons.

There are questions that address hegemonic masculinity and feminism, albeit indirectly, on friendships and graduation. Questions 9.14 through 9.17 elicit perceptions regarding the influence military training environment and social context upon graduation when considering only biological gender. Question 9.18 asks whether having a boyfriend or girlfriend helps or hinders the journey to graduation.

Questions 9.20 through 9.26 focus on the role and value of cadet friendship experiences on present friendship experiences of alumni. Addressing social bonding and sense of belonging, these questions capture the presence of homophily in current friendships of alumni.

Survey Section 10: Voluntary withdrawal and return. This section asks three questions about the influence of friendships on returning to the Academy after a period of withdrawal. If participants answer "yes" to voluntary withdrawal, the remaining two questions are presented. If participants answer "no" to the first question, the survey redirects participants to the last section of the survey.

Withdrawal and re-entry to the Academy, while infrequent, does occur. Question 10.2 and 10.3 are asked of survey participants only if a "yes" response is given to question 10.1 about withdrawal. The two questions elicit alumni response on the influence of friendships in the choice to return to the Academy and graduate.

Survey Section 11: Conclusion. The final question of the survey asks participants if a pivotal memory became present while completing the survey. Participants were asked to type their response in a textbox. Completing this question was optional. This section is qualitative and solicits alumni to share a pivotal memory from cadet friendship experience not covered in the previous survey sections.

The survey began with a brief introduction of the research and a brief biographical sketch of the researcher. Appendix B shows the user interface respondents saw for each question. As depicted in Appendix B, the survey was designed for computer or mobile device and shows the Qualtrics user interface depicting the heading sections of the survey. In this excerpt of the survey, questions and responses are from the in-processing section.

Design of Study

There are limitations to conducting a study with alumni. The first limitation is whether the competency (in this case, friendship) being studied occurred at the Air Force Academy and the second being the possible halo effect—where one positive experience may lead the alumni to indicate more experiences as positive (Cabrera, 2005). Whatever their present situation, every Academy graduate endured the application process and their equivalent of Basic Cadet Training toward eventual graduation. This chapter describes the research process to ascertain environment and social constructs where friendships and graduation are the outcome.

With the common path toward graduation, these alumni, who were once young adults entering the Academy, arrived on campus with differing social-relational experiences during the 12 months prior to in-processing. There are four groups. The first is entry pathway. Grouping respondents by this pre-academy experience is necessary for discerning whether entry pathway influences friendships. As discussed in chapter two, individuals arriving shortly after graduating from high school (or home school) are making a stressful and simultaneous adjustment to both college and Academy military culture. Individuals arriving from prior enlistment contracts or from military or civilian prep school, having already completed an adjustment to military training, are making the adjustment to college life at the Academy. Cadets who attended a preparatory school or were enlisted are generally one to three years older than cadets reporting

directly from high school. Cadets who have attended a military preparatory school would have navigated the transition from high school to college and are somewhat acclimated to a military environment, as are prior-enlisted cadets. Individuals who did not attend a military prep school but attended a civilian university before reporting to the Academy are in the category of prep school as these individuals made the social adjustment to college life yet may not have made the adjustment to military life. Previous military and college social connection, social bonding, and social capital experience may be evident in responses of this sample and will be discussed in Chapter 4. Cadets coming directly from high school may have knowledge of military culture if their family or extended family member is or was in the military and even more so if one or more parents or extended family member is an alumnus of the Academy; questions related to this phenomenon are included in the survey.

Factors which may contribute to successful graduation may include: 1) social-relational experiences [where individuals were for the 12 months prior to BCT]; and 2) military family connections. One additional factor which occurs after entering the Academy and may contribute to the outcome is 3) involvement in sports, clubs or activities. For the analysis, participants are grouped by biological gender, ethnicity (white and non-white), presence of military and/or Academy experience in immediate or close family, participation in sport, club or activity, and according to social-relational experiences, where they were prior to reporting for Basic Cadet Training (BCT) for data analysis. The social-relational factors, whether they attended a preparatory school; high school; were prior enlisted; or were involved in a sport, club or activity may influence differences in friendships formed by cadets. These characteristics made it possible to examine group similarities and differences in friendships and social capital. When grouping participants for entry pathway, the number of sub-groups jumps to 24 when gender is used as the

primary group segregation threshold. Questions about the influence of informal leaders and hierarchical relationships within the students' class year are addressed in the present study's survey, as well. The focus of this study is an examination of these kinds of informal social connections and how they manifest in friendships, how they beget social capital within such a unique culture, and what impact the alumni who were surveyed deem them to have.

A non-experimental research approach using a descriptive-comparative approach was selected to investigate independent-attribute variables associated with friendships formed while a cadet at the Academy. This attempts to understand influences where at least one independent variable is present with two or more groups. The independent-attribute variables are gender, ethnicity, entry pathway, military in family, and engagement in sport, club or activity.

Operationalization of Independent Variables

The survey captured a snapshot from alumni of friendship experiences during attendance at the Academy to investigate independent-attribute variables associated with military experience prior to entering the Academy. There may be a connection between being prior enlisted or having military in the immediate or close family which increases propinquity. In this study propinquity is the physical proximity of military family members, a kinship between people with prior military experience, or a similarity in nature for military experience before entering the Academy (i.e., Junior Reserve Officer Candidate programs, Civil Air Patrol, military high school). Cadets who report to the Academy directly from high school or home school who do not have prior military experience and/or do not have an immediate or close family member with military experience may report greater challenges when making friends in the Academy's military environment. Cadets, who were prior enlisted, attended a preparatory school or have

immediate or close family members with military experience may exhibit higher tacit ability in building friendships within the Academy's military environment.

The research examines results by comparing groups of alumni by location prior to entering the Academy and previous military experience whether that experience was direct or indirect. Independent-attribute variables were grouped according to one of three entry pathways. The entry pathways are based on location of life experiences prior to entering the Academy. These are: direct, prior, and prep school. For this study, international graduates are not included as this group is small (60 undergraduates in all four grade levels at any one time) and is not an accessible portion of the population. Additional independent attribute variable sub-groups include cadets involved in a sport, club or activity, and whether there are family members with military experience. Examining the responses within and across categories affords an investigation of social capital via friendship indicators of trust, cohesion, and influence of gender to observe patterns, if present. Figure 8 depicts the batching method used to group the sample ahead of data collection and analysis. Participants were divided by biological gender (M = male; F = female). Next, participants were divided by whether they had military in their immediate or close family (Mf = military family; NMf = no military family) where this includes one or more immediate or close family members who are graduates of any of the military academies. In the third step for grouping participants, two groups self-reported for ethnicity were applied (W = white; NW = non-white) where those in the non-white category include all non-white groups reported by the Academy (Asian, African-American, Pacific Islander, Native American, and Hispanic). Therefore, should a participant who is bi-racial complete the survey, that participant chose the ethnic category s/he would most closely identify with. Entry pathways mark the fourth iteration of grouping the participants. Groups are identified as direct, prep school, and prior

enlisted (D = direct, Pp = prep school, Pr = Prior enlisted). There will be a portion of the sample who may be prior enlisted members who attended a prep school.

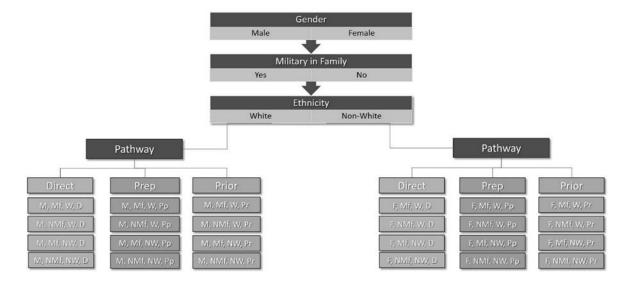


Figure 8. Population Groups by Biological Gender, Military Family, Ethnicity, and Entry Pathway

Preparing for possible small numbers in the sub-groups, the sub-groups may be combined for biological gender, military in family and/or ethnicity for analysis. Figure 9 shows these combinations along with the first level of variable combinations. The level two groups may be segregated by entry pathway, ethnicity or biological gender accordingly.

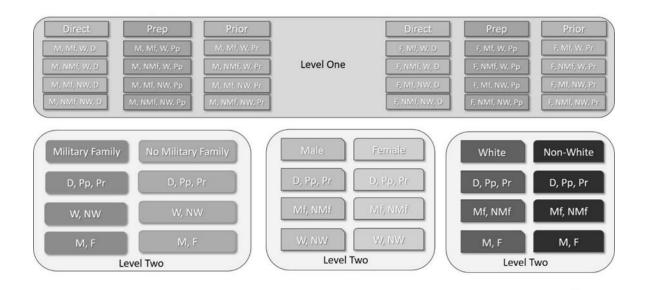


Figure 9. Population Groups by Level

It is expected that participants will fit more than one category of variable. This allows for "and" combinations of independent attributes where data may be grouped first by gender, so all males and all females may be compared. Then gender "and" ethnicity so that white and non-white male participants can be compared while white and non-white females can be compared. Table 8 displays the intersections of independent variables for comparison as described while holding constant for entry pathway. Two rows at the bottom of the table include "and" categories of sport, club or activity just above military in family. Therefore, a participant could be male, direct, white, *and* have participated in sport, club or activity, *and* have military in the family.

Table 8. Independent Attribute Variables

Independent-Attribute Variables								
Category	Male	Female	White	Non-White	Gender/Ethnicity combined			
Direct	yes	yes	yes	yes	yes			
Prep	yes	yes	yes	yes	yes			
Prior	yes	yes	yes	yes	yes			
Sport, Club, Activity	yes	yes	yes	yes	yes			
Military Family	yes	yes	yes	yes	yes			

With this framework for independent-attribute variables, specific sub-groups can be examined and compared. The same groups can be compared for presence of social interaction through sport, club or activity as well as presence of military family. Of the two, participation in sport club or activity is a choice made while an undergraduate. It is not a pre-existing social-relational construct. Having military and/or an Academy graduate in the family is a pre-existing social construct but is not directly associated with gender, ethnicity, or entry pathway. Using the conceptual model of socialization factors influencing friendships, responses in each of the eleven survey sections were correlated to the four model segments: homosociality, trust and social cohesion, military task cohesion, and semiotics.

Homosociality was indicated through responses to the question "After completing at least one year of academics as a cadet did you identify more with your cadet friends or with the friends you knew before coming to the Academy?" The response choices were "I identified with cadet friends" and "I identified with friends I had before I became a cadet." A second question of "Were your close cadet friends also members of the same sports or clubs you belong to?" used a "yes" or "no" response to capture homosociality as cadets on the same sports team, club sport or activity are more likely to share similar interests (sports or activity) and because of increased time together for interaction, more likely to become close friends. Hammaren and Johansson (2014) describe homosociality as the regulation of individual behavior by peers within a group. In the context of the Cadet Wing as a social group, with which a cadet identifies, there are subgroups (sport, club or activity) where cadets with similar interests (another expression of homophily) gather and build friendships.

Trust and social cohesion questions included "What about your Academy experience drew you and your closest friends together most?" where the participants indicated "yes" or "no" to each of these choices:

- We helped each other study for knowledge tests and/or classes.
- We had fun together.
- We shared similar Academy experiences.
- We had similar goals and values.
- We leaned on each other emotionally.
- We trusted each other.

Another set of questions in this group asked participants to indicate the level of importance of cadet friendships in adjustment to academics, physical training, and emotional/psychological areas. Responses ranged from "extremely important" (1) to "not important at all" (5).

In the military task cohesion group, participants were asked to rate "How important were the friendships you developed during BCT to your ability to endure that training?" from "extremely important" (1) to "not important at all" (5). Participants were asked to indicate "Did friendships with your classmates play a role in your completion of the required outdoor training (i.e., outdoor training, run to the rock, Jacks Valley)?" by selecting "yes," "undecided" or "no".

Participants indicated their sense of belonging and sense of identity through responses to the semiotics question "While a cadet, how important were the symbols worn on your uniform (e.g., props & wings, your rank, or squadron patch)?" with choosing value statements of "not at all important; necessary, but they didn't define how I saw myself; important because they

defined and announced my identity; and very important for telling others I had rank and positional authority."

Through use of the independent-attribute variables, responses were compared to determine female or minority graduates' views regarding the importance of friendships to their graduation from the Academy. This allowed investigating social-relational factors upon female and minority cadet friendships as well as white males in graduating. The independent-attribute variables used to examine influence on friendships are limited as to conclusions about the differences between groups and associations among variables (Gliner et al., 2011, p. 35).

Data Collection

Qualtrics (<u>www.qualtrics.com</u>) was used to construct the survey, collect responses, and collate data. Participants were asked to provide limited profile information (year of graduation, years served in the military, gender, white/non-white, and location prior to entering the Academy). Participants were asked about their training experience, social awareness, context in which the friendships were formed, and their perceptions of the impact of friendships upon their willingness to continue training and graduate.

The link to the survey, whether through social media or email, directed alumni to the survey on Qualtrics.com. The survey was made available to respondents for 73 days. The study invitation was sent to graduates from 2003 to 2017 (n = 100). The concentration of participants between 2003 and 2017 may limit inferences describing the whole graduate population in chapter four. Further, the number of available participants prior to 2003 may be limited through use of social media to distribute invitations to earlier graduates as they are less likely to engage in use of social media.

Qualtrics allowed for completing the survey online, on a smartphone, or other electronic device. While the type of device may have an impact on survey-taking characteristics, including open-ended responses, offering the survey on both computer and hand-held electronic devices gives options for more recent graduate respondents as this group is more likely to use smartphones (Lambert, 2015). Gathering data on cadet friendships may provide insights about how cadets are navigating social connections within the hierarchical hegemonic masculine environment.

Invitations to participate began with an announcement message (See Appendix C) which contained an anonymous link to the Qualtrics.com page containing the survey. Participants were asked to share the announcement message and link with friends and co-workers who were Academy graduates. No personally identifiable information was collected. Participants were sent a reminder (Appendix D). After the data collection window closed, Qualtrics sent participants a note announcing the window closed and thanking them for their participation in the study.

Development of Survey

A validated survey about friendships within any of the military academies has not been previously published. A new instrument was needed to address friendships conceived and fostered as undergraduate students at a military academy. Military academies are distinct among post-secondary education institutions in structure and purpose. The survey instrument was developed to gather responses in categories of sense of belonging, influence of friendships, social group involvement, and influence of friendships during cadet experience.

The survey was originally designed for use with undergraduate cadets, but after several unsuccessful requests through proper channels to the Air Force Academy over an 18-month period for support and access to current cadets, the study and survey were refocused for use with

an alumni sample. The survey's design drew relational content questions from surveys created by Furman and Buhrmester in 1994 and 2009, which were designed to study relationship bonds with each of several members of their social network (e.g., mother, father, sibling, friend, romantic partner, teacher.). The design of this survey stems from Furman and Buhrmester (2009) "Your Close Relationships" instrument, which was intended to assess attachment, care giving, and affiliation among respondents. That survey included adapted portions from the authors' 1994 "Network of Relationships" study. Adapted with permission (Appendix G) from the authors the queries within the closest same-sex and closest opposite-sex friend sections in this study's pilot survey stemmed from modifications to the authors' "Your Close Relationships" instrument. Three versions of the "Your Close Relationships" survey have been developed to date. The original version of "Your Close Relationships" drew on work completed by Robert Weiss (1974) and Harry Stack Sullivan (1953) on conceptualization of social needs and social provisions. The Furman and Buhrmester (2010) survey is widely used for making cross-cultural comparisons in social roles played by different members of a social network in satisfying different social needs.

The Furman and Buhrmester instrument was originally for close male/female friends, family, and close friends of the opposite gender. Portions of their survey were adapted to address closest same-sex friendships and closest opposite-sex friendships. Where the "Your Close Relationships" instrument assessed relationships with parents, which is outside the scope of this study, adaptions were made and presented in paper form during an initial pilot study to six cadets to complete and provide feedback. Feedback from the cadets revealed that some further revisions were necessary. However, a portion of the instrument directly applied to closest friends' relationships and was retained for that portion of the alumni survey.

The adapted section for use with cadets intended to gather data regarding companionship, intimate disclosure, conflict, and relationship satisfaction. These questions were selected and modified for cadet experiences as components of social connections developed by cadets that may reveal social capital. An academic consultant associated with the Academy's Academic Success Center assisted in the design of specific questions and responses contained in the cadet "Friendship Survey".

The "Friendship Survey" pilot study involved 16 cadets who took the survey voluntarily and provided feedback to establish reliability and validity for the survey. Cadets were asked specifically to provide feedback on the content and response options to validate choice options. Feedback provided clarification that a question about an individual's location prior to reporting for BCT should be added and revealed the need to inquire about friends who held multiple categories such as closest opposite- or same-sex friend, boyfriend/girlfriend, and/or closest friend on sports/club team.

Pilot study responses allowed the researcher to evaluate response quality and manipulate pilot study data reports ahead of launching the survey to examine reliability and validity of the survey in context with the planned sample. Examination of responses pointed to a need for grouping question by independent-attribute variables for comparison across gender, white/non-white, and entry pathway.

Alumni Survey Pilot

Due to unforeseen obstacles for access to the intended population of undergraduate cadets, the study shifted to solicit participants from Academy alumni. The undergraduate cadet survey was revised to reflect that potential respondents had completed their Academy experiences regardless of graduation year. Questions were revised to elicit a recall of friendship

experiences and expectations from an alumni perspective. Two sections of the survey were dropped: closest same- and opposite-sex friends. This step removed in-depth close relationship questions adapted from the Furman and Buhrmester instrument. These two sections were specific to the undergraduate experience for currently-enrolled cadets.

The revised [alumni] survey was peer reviewed by Colorado State University doctoral candidates and a representative of the Air Force Academy's Academic Success Center, further adjustments were made to survey questions and responses for clarity. The alumni survey was pilot tested with four Academy alumni to again evaluate reliability and validity for alumni population. The four individuals graduated in 1963, 1994, 2004, and 2016. Each participant completed an online version of the survey and provided comments for improving questions and responses. Alumni provided additional content recommendations from their friendship experiences while at the Academy and modifications to questions and responses were adjusted to account for variations in training experiences.

Data Analysis Procedures

From the survey instrument, data were collated into nominal independent-attribute variable categories of biological gender; ethnicity category; entry pathway (direct from high school, prior enlisted, and preparatory school); involvement in sport, club or activity; and military family. The data gathered was designed to understand the social bonds created during military training, in squadrons, and in sports or other cadet clubs and activities. Reports were generated for each independent-attribute variable and grouped for social-relational category. To examine the relationship among sub-groups of gender and ethnicity for each social-relational group, an independent variable combinations table was constructed to aid in conducting descriptive analysis.

Although invitations to participate were distributed to known individuals through social media, there were no links between the invitation and survey link and respondents to protect participant identity. The researcher did not have access to nor collect identifiable attributes such as individual email address, full name, orientation, or religion. Questions were identified by question number within the Qualtrics database. Data were reviewed, and incomplete surveys were not included in final data analysis. The theoretical framework used to examine the role of social capital was derived from the literature described in chapter two. Participant groups' results were examined for similarities and/or differences in gender, ethnicity, entry pathway as well as involvement in sport, club or activity using a between-groups design with four independent variables. Preconceived ideas about sample groups are not necessarily problematic as they provide a degree of theoretical sensitivity to subtleties in the data, useful when thinking about related categories, properties, and dimensions of the data (Hinojosa, 2010; Strauss & Corbin, 1997).

Publications in social science by Glaser and Strauss (1967), Strauss (1987) and Strauss and Corbin (1997) have established that grounded theory is suitable to explain a phenomenon. Although it is more commonly applied to qualitative data interpretation conducted by social scientists, it is increasingly practiced by researchers in a variety of diverse disciplines (Strauss & Corbin, 1997). Its use allows the researcher to impose an "interested" reading of the research data based on his or her considerable experience within a discipline. A survey about military cadets' friendships has not been previously published. The researcher needed to develop and pilot a viable survey specifically designed to examine Academy cadets' friendship bonds. Given the researcher's experience and understanding of military culture and social proximity to the alumni who were surveyed, grounded theory is therefore the framework through which the

literature and quantitative data gathered will be read. Within the context of reading and explaining the alumni perceptions of their own socialization gathered through the survey instrument, the implications of human interoperability (Gallup et al., 2008, p 3) become sociologically and educationally important.

In Gallup's work of human interoperability, different organizations were observed during a training exercise on homeland security. In the study, individuals had connections across different organizations and could work together effectively to accomplish the mission (Gallup et al., 2008, p. 11). Where social connections were absent, organizations struggled or were ineffective in accomplishing their mission. Embedded in these connections were the influences of trust, cooperation, and influence in a socially complex environment. This human interoperability approach to examining social networking is useful to understand the culture of the Cadet Wing.

Ethical Issues

Issues of ethics were carefully considered throughout this study and vetted through the Colorado State University Institutional Review Board prior to distribution of the survey. The survey was designed for non-personally identifiable information about friendships among Academy alumni. No sensitive information regarding individual identity was gathered. With no personally sensitive information requested for participation in the study, the risk was no greater than any which would be expected in normal everyday conversation.

The researcher and Colorado State University took every reasonable measure to ensure participants were informed of the purpose of the research and their participation was voluntary. Appendix A is the IRB-approved consent notice was included in each piece of correspondence and the survey received by participants prior to and during data collection.

Academy alumni received a link to the survey and self-verified their status by providing graduation year and number of years of active duty service. Without credible personal identification and verification of identity, there may exist a possibility for a non-Academy graduate to have obtained the survey link and completed a survey. However, unless this was a deliberate attempt to contaminate the study's data collection, it is more probable not to have happened.

Chapter Summary

This single-collection study was designed to quantitatively examine data from the perspective of alumni about cadet friendships when they were undergraduates at a military academy. The study design considered the limited access to the population, the diversity of the sample, and influence of friendships. The design sought to analyze data through multiple theoretical premises while remaining non-prejudicial. To maintain a general level of trustworthiness and honesty throughout, the researcher detailed research process steps as well as considerations of the role of the researcher and supporting parties' views of the friendship experiences. Appropriate safeguards were considered and employed to protect study participants in accordance with accepted research procedures.

CHAPTER FOUR: FINDINGS

This study examines the impact of cadet friendships upon student resilience through recollections of Air Force Academy alumni, inquiring how their friendships may have influenced their decision and resolve to complete Academy education and training. Initial social encounters develop into close friendships in this particularly challenging environment. The academic, military, and physical training requirements are the loci of cadet social development, and opportunities for friendship bonding may have positive implications for cadets' ability to remain resilient through intense training challenges.

Survey data provides an opportunity to examine through a comparative analysis the influence of independent variables of gender, ethnicity, entry pathway, and military family ties upon the development of these friendships, and to understand patterns of socialization and friendship formation throughout training. The Academy's Cadet Wing environment (roughly 4,000 students spread across 40 squadrons) is one in which the success of everyone begins and is sustained within the hierarchy of military culture. Examining socialization patterns in the Wing can reveal the value of friendship bonds for cadets, who remain largely isolated from external support for much of their experience.

Following a description of the survey participants, this chapter presents outcome of the alumni survey in the same order as the survey's sections, which follow the chronology of milestones in the students' early training period, as explained below.

Profile of Alumni

Alumni were contacted using an invitation and consent message (Appendix A) delivered through *Facebook Messenger*. Alumni were identified and contacted initially through the *Facebook* friends list of the researcher then through each initial recipient's friends list.

Distribution of the contact message via this method reached at least 703 alumni from January 2, 2018 through March 15, 2018. Alumni received a follow-up reminder message via *Facebook Messenger* (Appendix D). Three alumni received the invitation and consent message directly through email but with no follow up message. These individuals were aware of the research and elected to receive an invitation to share it with classmates. All participants voluntarily completed the survey, which was stripped of any means of determining whether they were responding to the initial message, the reminder message, or an email.

Survey returns showed response patterns of gender and ethnicity parallel to the most recently reported Academy graduation statistics: Seventy-seven alumni started the survey and 75 individuals completed part of the survey, providing a 10.7% response rate of the contacted group, and 65 alumni completed the entire survey. Therefore, where applicable, percentages and numbers discussed in this chapter reflect the number of alumni who answered the survey question being presented. In terms of profile, 86.3% (n = 65) of respondents were male and 13.7% (n = 10) were female. Alumni self-identified 93.2% (n = 70) as "white" and 6.9% (n = 5) as "non-white," as shown in Table 9.

Table 9. Demographic Representation of Alumni Survey Participants

			Military	No Military	
Gender	White	Non-White	in Family	in Family	Total
Male	63	2	32	33	65
Female	7	3	5	5	10
Total	70	5	37	38	75

Table 10 depicts participating alumni by decade. The largest group of graduated during the period 2004 to 2017 (n = 48). Graduates from the 1990s and 1980s were equal in number (n = 7). While the 1970s was the smallest group (n = 3), the second largest group was from the 1960s, specifically 1963 (n = 10). This is attributed to one 1963 graduate who reached out to his classmates after receiving the invitation to participate in the survey. That individual's access to his classmates is an indication of the social bonding that takes place at the Academy. The span of graduation years ranged from 1963 (n = 10) through 2017 (n = 5). The greatest number of responses by graduates of a single year was 1963 (n = 10), then 2008 (n = 9). The median respondent year was 2007. Thirteen of the surveyed alumni were from years before women were admitted to the Academy in 1976, while 62 were from years after women were admitted.

Table 10. Study Participants by Decade of Graduation

Decade of Graduation	Participants
1960s	10
1970s	3
1980s	7
1990s	7
2000s	24
2010s	24
Total	75

Military service lengths following graduation represented a wide range, from 0.5 to 34 years with an average time in 12.1 years total military service (active and reserve) and a median of 8 years. Alumni presently on active duty comprised 48% (n = 36) with 52% (n = 39) not on active duty, which includes retired, completed service, or discharged veterans. The average time of active duty military service among all respondents was 2.25 years, with the longest time 26.5 years.

Alumni survey participants reported having entered the Academy via possible pathways: (1) 72.6% (n = 53) indicated entrance from high school; (2) 16.4% (n = 12) indicated entering via a preparatory school; (3) 4.1% (n = 3) indicated a combined origination from prior-enlisted service and preparatory school; and (4) 4.1% (n = 3) indicated they entered the Air Force Academy from another college or university. Entering as a home-schooled student or as an enlisted member of the Air Force garnered one response each or (5) 1.4% of the total.

For demographic comparison, the Academy graduated 948 cadets on May 23, 2018, of which 14% (n = 142) entered the Academy after preparatory school and 5% (n = 45) were previously enlisted airman. The remaining 797 cadets (81%) of the graduating class, entered directly out of high school. There were 948 men and women commissioned in 2018, including 13 international cadets. As shown in Table 11, a side-by-side comparison of alumni survey participants' profiles was nearly parallel to the 2018 graduating class, according to data most recently released by the Academy. The delta comparison shows the +/- of the Class of 2018 in comparison to study participants. While the Class of 2018 shows a lower percentage of males (-8.3%) by comparison, there were more female participants (+8.3%) in the study. As with the Academy, the study's profile over represents Caucasians and under represents minorities.

Underrepresentation of minorities among survey participants may be attributed to the sampling process. Contact messages were sent to friends and friends of friends of the researcher where those alumni may have shared the link with their friends. This may reflect social connections of first and second level availability on *Facebook* of those who chose to participate in the survey. The Class of 2022, which entered the Academy in June 2018, represents the most diverse freshman class in Academy history with 27% enrolled minorities (*Missoulian*, 2012). In

other categories, alumni demographics are aligned with those of 2018 graduates, reflecting consistency of alumni with the current cadet population's ethnicity and gender.

Table 11. Delta Comparison of Study Participant Profiles and 2018 Air Force Academy Graduating Class (USAFA, Public Affairs, 2018)

	Study Participants	Class of 2018	
	n (%)	n (%)	Delta %
Total Started	75	1,206	
Male	63 (86.3)	772 (78.0)	-8.3
Female	10 (13.7)	212 (22.0)	+8.3
	5 (6.85)	273 (28.0)	+21.15
Non-White			
White	68 (93.2)	711 (72.3)	-20.85
	53 (72.6)	797 (81.0)	+8.4
Direct			
Preparatory School	12 (16.4)	142 (14.4)	-2
Prior Enlisted	3 (4.1)	45 (4.6)	+0.49
2nd gen. AFA Graduates (a) 16 (21.9)	58 (5.9)	
Attrition Rate		18%	
Total Completed	75	984	

(a) 6 cadets with both parents as Academy alumni

A series of survey questions pertained to the role of family in influencing cadet friendship experiences. Alumni were evenly divided regarding military family influence. Graduates reported 49.3% (n = 36) with family members who served in the military while 50.7% (n = 37) reported no immediate or close family member (e.g., parent, sibling, grandparent, uncle, aunt, cousin) in the military. Some 21.9% (n = 16) reported having an immediate or close family member who graduated from the Air Force Academy. When combined, graduates with family military experience or an immediate family member in the military total 81.1% (n = 52). Further, four alumni (5.5%) reported having an immediate or close family member who graduated from the United States Military Academy at West Point. The impact of this widespread association with prior military service members will be discussed in chapter five.

When alumni responded to a question about why they chose to enter the Air Force Academy, their responses were distributed among seven options depicted in Figure 10. Ten alumni indicated "other" and added specificity with responses of sports and education or a combination of both. One replied, "Play football at a really good academic school," where another was "recruited to play basketball; had never heard of USAFA." Although sports and education were most frequently mentioned, one alum stated he wanted "to be an astronaut" then added "did not happen for me."

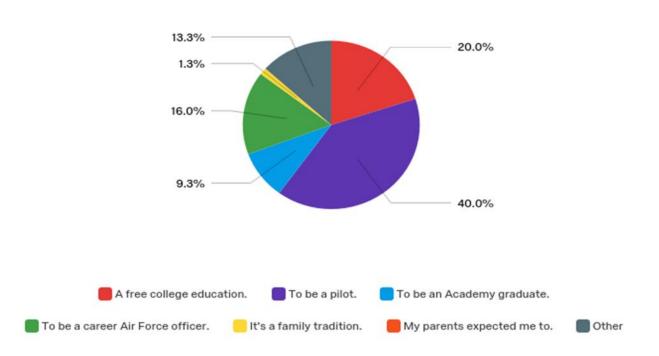


Figure 10. Primary Reason for Attending the Academy

Basic Cadet Training

The survey format followed the chronology of the training milestones early in the undergraduate experience, specifically Basic Cadet Training (BCT). These milestones included In-Processing Day, two phases of BCT (pre- and post-bivouacking in Jacks Valley), Doolie Day

Out, Acceptance Day, and the first year of academic study, as shown in Table 12. Each milestone was examined to understand the importance of socialization during these periods.

Table 12. Key Training Milestones Structuring the Alumni Survey

Milestone	Duration
In-Processing	First day
Basic Cadet Training (BCT)	3 weeks
(pre-bivouac)	
Doolie Day Out	1-day, ending week 3
Basic Cadet Training	2 weeks
(Jacks Valley bivouac)	
Acceptance Day	1-day, ending week 6
Academic Year	9 months
Recognition	Spring Semester

In Processing and First Phase of BCT

Once cadets go through in-processing, the first three weeks of BCT are spent learning to wear the uniform; the discipline of Air Force protocol, customs and courtesies, and how to march, and this period was captured in the survey. In-Processing marks the day BCT began, a time when 49.3% (n = 36) of alumni responded "yes" to feeling it was important to begin making friends; where 38.4% (n = 28) replied "no" and fewer, 12.3% (n = 9) responded "undecided". The abrupt consequence of their decision to enter the Academy and experience meeting others who have done the same is made real on In-Processing Day, a time when a need for support is first made obvious to them. Some cadets, however, arrive knowing what to expect because a close friend or family member may have shared their experiences, as may be the case where parents were Air Force Academy or another service academy alumnus.

Fifty-one alumni (69.9%) responded "no" and 13 (17.8%) responded "yes", when asked if an immediate or close family member with military service shaped the friendships they made as a cadet. One in eight (12.3%: n = 9) responded "undecided". When asked if an immediate or

close family member graduated from a military academy, 21.9% (n = 16) identified the Air Force Academy and 5.5% (n = 4) identified West Point. Yet, according to alumni, having an immediate or close family member did not shape friendships made as cadets: 69.9% (n = 51) said no, while 17.2% (n = 13) said "yes", and 12.3% (n = 9) were undecided.

One question in this section of the survey inquired about alumni perceptions regarding making new friends, with a follow-on question about friendship experience in general. Alumni perceptions of friendship proclivity revealed 48% (n = 36) were looking forward to making new friends. While alumni recalled being "apprehensive about meeting my classmates" 25.3% (n = 19), only three alumni recalled expecting "to have a difficult time making friends." The data revealed slightly more apprehension about making friends from alumni who did not have military in the family. Further, alumni who "expected to have a difficult time making friends" indicated no military experience of close or immediate family. Table 13 provides a comparison between military family or friend exposure and expectations of making friends during the first phase of BCT.

Table 13. Comparison of Military Exposure and Expectations About Meeting New Friends

	Military in Family	No Military in Family	
Expectations	n	n	Total
I was looking forward to making new friends.	20	16	36
I was apprehensive about meeting my classmates.	8	11	19
I knew other people in my class, but we were not in the same squadron.	5	6	11
I knew other people in my class who would also be on the same sports team.	4	2	6
I expected to have a difficult time making friends	-	3	3

Alumni responses revealed a pattern in nominal friendship development during BCT.

Table 14 shows evolving levels of sociality where the largest portion of alumni reported getting

"to know my roommate and a few classmates" during the early days of training. Alumni who had close or immediate family members with military experience (n = 25) were similar in number to alumni who had no military family (n = 24) perhaps indicating military family does not strongly influence individual sociality when comparing how many each group was able to get to know. In another comparison, three alumni with no military in the family reported not getting to know anyone during the first two weeks, while alumni with military family experience did not select this response option.

Table 14. Military Exposure and Friendship Development During the First Three Weeks of BCT

	Military in Family	No Military in Family	
Experiences	n	n	Total
I got to know my roommate and a few classmates.	25	24	49
The only person I had time to get to know was my roommate.	9	6	15
I already knew my friends from prep school.	2	4	6
I didn't really get to know anyone during the first two weeks.	-	3	3
I got to know cadets on my sports team.	1	1	2

"Looking forward to meeting new friends" was reported by 47.9% (n = 35) of alumni, while 24.7% (n = 18), or roughly one in four, replied feeling apprehensive about meeting classmates. There were 15.1% (n = 11) alumni who knew other people in their respective class but were not in the same squadron. Finally, 8.2% (n = 6) and 4.1% (n = 3) chose "I knew other people in my class who would also be on the same sports team" and "I expected to have a difficult time making friends," respectively. Figure 11 shows the distribution of alumni perceptions about meeting classmates after in-processing and during the first three weeks of BCT. Nearly half recalled looking forward to meeting new friends during this period.

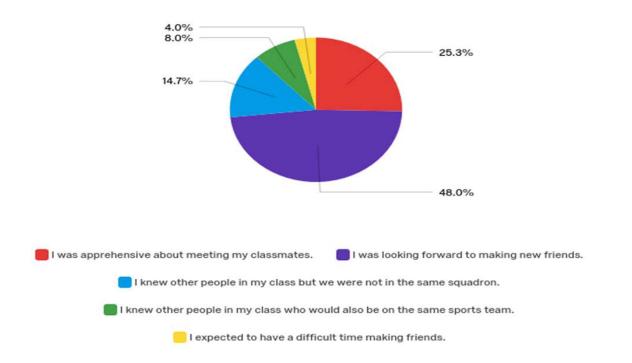


Figure 11. Experiences of Meeting Classmates During First Two Weeks of Training

The first phase of Basic Cadet Training focuses on the transition from civilian to military life. Military customs and courtesies, rank and insignia recognition, room inspections, drill proficiency, parades and overall Air Force knowledge are the focus of the first three weeks of training. Cadets compete in physical team events such as distance races, tug-of-war, and strength conditioning. In survey questions about the Academy's culture and their adjustment to training, alumni predominately stated "I had challenging moments but with help from my classmates I made it through", (45.2%; n = 34). Further, responses were nearly equally split among "I had challenging moments but would do this on my own" at 17.8% (n = 13) and 19.2% (n = 14) came "with prior military background or knowledge." Two of the three previous choices indicated cooperation, reliance or dependence upon others during this training phase suggesting a predisposed perception or apprehension about sociality skills when meeting and making friends. Regarding the difficulty of adjustment, 16.4% (n = 12) respondents would have liked to be more

prepared physically, mentally or emotionally for the training. And one alum (1.4%) chose fear of washing out.

The overall importance of beginning to make friends early in BCT was acknowledged by 49.3% (n = 36) alumni. Alumni were further asked about the adjustment to military culture during the first three weeks of BCT, then sorted based on family military experience. Responses to this question are in Table 15. Here alumni were nearly evenly divided in responses regarding military experience in their close or immediate family, where 18 alumni without military experience in the family and 16 alumni with military experience in the family reported having "challenging moments but with help from my classmates I made it through [the first phase BCT]," where 9 alumni without military family exposure reported having "challenging moments but I was determined to do this on my own," compared to four alumni with family military experience.

With 75 alumni responding to "During the first two weeks of Basic Cadet Training (BCT), how would you describe your adjustment to military culture (e.g., learning to wear the uniform, basic military commands, physical training)?" the category with highest response rate were males (n = 29) who experienced challenging moments *and* made it through with help from classmates, perhaps signaling early homophily and propinquity for friendships in the largest group. Female alumni responses (n = 5) show a similar response pattern, however, diverge from their male counterparts in nearly half of female respondents (n = 4 of 10) would have preferred to be better prepared for the first phase of training. Equally interesting in Table 15 is the number of male alumni (n = 13) who stated they would "get through this on my own" where no female alum selected this response. Whether this indicates the presence or absence of self-confidence or a gender difference in attitudes about social connections is inconclusive.

Alumni with military family had some idea what to expect during BCT but preferred to be better prepared in one or more areas of physical, mental, or emotional facets. Not one alum with family military experience expressed fear of washing out. Determination to "do this on my own" was proclaimed in higher frequency among alumni without family military experience. This suggests that having military family lends, to some degree, familiarity with the training process, expectations of the environment, or familiarity with military culture.

Survey data about cadet friendships permits a discussion about social adjustments and social intelligence within larger university studies of civilian students while accounting for the added challenges to socialization within military-training environment. Perhaps individuals with solid social connections are, overall, better equipped to handle transitions as friends may provide support not satisfied by family members. Alumni responses to questions about adjustment to the culture of the Academy reveal that 80.8% (n = 59) agree that forming friendships helps.

Although not all felt the same as 10.9% (n = 8) replied "no" and 8.2% (n = 6) "undecided." The value of friendships in helping a cadet adjust to the culture is not the same as feeling the need to connect with classmates. Thus the [Academy] environment has an important influence on the pattern of social interaction (Neckerman, 1992; Packard, 1999). Fewer, 54.8% (n = 40) responded with a "yes" when asked whether they recalled feeling a need to connect with classmates right away. There were 37% (n = 27) who did not feel this way and replied with "no", while 8.2% (n = 6) were undecided.

Table 15. Military Exposure and Adjustment to Military Culture in Early BCT

	1. 4°11'4	No			
Adjustment Experience	Military in Family	Military in Family	Male	Female	
Trajustinone Emperionee	N	n	n	n	Total
I had challenging moments but with help from my classmates I made it through.	16	18	29	5	34
I came with prior military background or knowledge and was aware of what to expect.	7	7	13	1	14
I had challenging moments, but I was determined to do this on my own.	4	9	13	-	13
I knew some about what to expect, but I wish I would have been more prepared (physically, mentally or emotionally).	10	3	9	4	13
I feared I would wash out.	-	1	1	-	1

Continuing those friendships after BCT was important to 82.2% (n = 60) of alumni, not important to 15.1% (n = 11), with two, or 2.7%, stating they were undecided. Over 60% rated the importance of friendships developed during BCT to the ability to endure the training as "very important" (n = 29) or "extremely important" (n = 14) where 24.7% (n = 18) valued friendships as only "moderately important." Almost 15% chose the value of friendships to endurance of training as "slightly important" (6.9%; n = 5) or "not important at all" (9.6%; n = 7). In parallel to this question, alumni were asked if feelings of isolation, rejection, or being ostracized were experienced during BCT. While 86.3% (n = 63) replied "no" to experiencing such feelings, there

were alumni who replied "maybe" 8.2% (n = 6) and 5.5% (n = 4) who replied "yes" to feeling isolated, rejected, or ostracized at some point during BCT.

Isolation differs from rejection or ostracization in the first few days of training. The first military training rule new cadets (Basics) learn in BCT is to only speak when spoken to thus fostering temporary feelings of isolation. When in military formation and at "attention" military members are not permitted to speak. Basics are surrounded by new classmates where formality of training prohibits social interaction with any peer except one's roommate when inside their room. In this context, shown in Table 16, 91% of males (n = 59) and 97% of alumni (n = 63) overall did not recall feelings of isolation, rejection or ostracism. However, four alumni did experience these feelings. Men and women exhibit similar pattern of responses.

Table 16. Alumni Experiences of Isolation, Rejection or Ostracization in Early Training

	Military in	No Military				
Response	Family	in Family	Male	Female	White	Non-White
	n	n	n	n	n	n
Yes	2	2	2	2	2	2
Maybe	-	6	4	2	5	1
No	35	30	59	6	63	2

Doolie Day Out

Doolie Day Out, a reward following Week 3 of BCT, is a needed break from the Academy's culture and training environment. Cadets typically spend the day with a host (sponsor) family or with members of their tier 1 sports team. By Doolie Day Out, which occurs approximately half-way through BCT, 50.70% (n = 36) of alumni stated they had developed a "friendship with one or more cadets" and 21.1% (n = 15) had developed "strong friendship with one or more cadets." While 28.2% (n = 20) indicated by this time "getting acquainted with other cadets," one graduate indicated "not making friends with other cadets" as a choice.

Although it lasts for only eight hours, the Doolie Day Out milestone is an opportunity for cadets to relax and call family or other significant persons. At this juncture, alumni show the first indication of a transition in friendships from pre-training bonds to their cadet peer group. Spending time on Doolie Day Out with a sports team or coaches was reported by 10.3% (n = 8), while the same number of alumni indicated the day was spent with their own family. A larger number, 44.9% (n = 35) spent the day with a sponsor family. Figure 12 reveals more details about Doolie Day Out and how the day was spent.

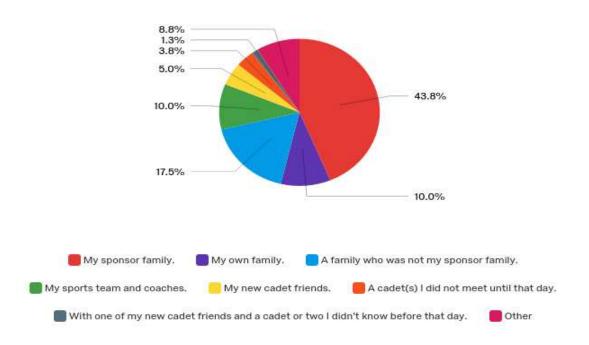


Figure 12. Where Alumni Reported Spending Doolie Day Out

The "other" category asked with whom the day was spent. Replies were "prep school girlfriend and sponsor family" and "we were given a picnic; we celebrated each other."

Indicative of changes in Academy training practices over decades, four graduates wrote "there was no doolie day out [sic];" "not sure what DDO is No such animal in 1959!"; and "did not have Doolie Day out"; and "I don't remember a 'Doolie Day."

How a cadet feels about him or herself on Doolie Day Out may reflect the person's resilience to the intensity of training and emotions experienced during this phase, as the survey queried. Separated from family and prior friends at the beginning of BCT, alumni reported making new social connections among their cadet peers, fostering the beginning of a sense of belonging. When more than one cadet spends time with a sponsor family on Doolie Day Out, those cadets are typically from different squadrons, affording social interaction with classmates in different squadrons. Dealing with feelings of emotional separation at this milestone is reflected in Figure 13 where a range of replies, interpreted here as social indicators, is shown.

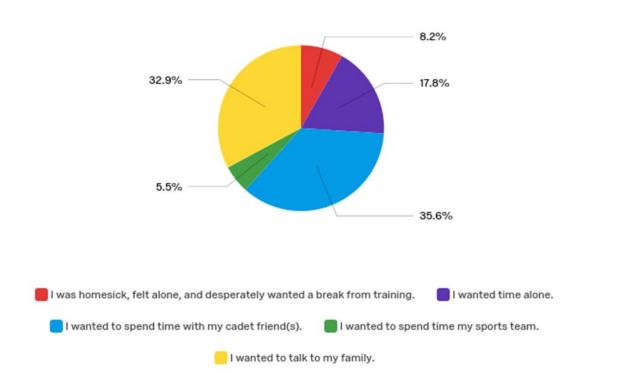


Figure 13. Doolie Day Out Milestone Socialization Indicators

The two response choices are nearly equal – "I wanted to spend time with my cadet friend(s)" and "I wanted to talk to my family." These two choices exceeded all others while "I wanted to spend time alone" was third in frequency as the choice of 13 alumni. It appears cadets

were equally drawn toward spending time with new friends and spending time with previous social connections such as family. It is notable, however, that halfway through BCT more than a third of them chose to spend this important break in training with their new cadet friends suggesting the transition of social identity and bonding is underway.

Outdoor Training Experience

The second phase of BCT expands military and physical training for cadets. Presently referred to as "Jacks Valley," this outdoor training phase has evolved over the history of the Academy. Small-unit fighting tactics and firearms training are introduced in addition to hand-to-hand combat skills and obstacle courses. The cadets are housed in large tents. A group of questions addressed this experience in the latter half of BCT where cadets are beyond the Academy's cadet area and physical training is more intense. In response to "Did friendships with your classmate play a role in your completion of required outdoor training?" 71.8% (n = 53) responded "yes" where 19.7% (n = 14) responded "no" and 8.5% (n = 6) "undecided." Shown in Table 17, alumni responses were sorted based on military experience present with close or immediate family members, gender, and ethnicity. Alumni were nearly evenly divided in the military family category with one response difference. Alumni show similar patterns of responses regardless of gender and ethnicity, perhaps pointing to an absence of segregation or bias in friendships in this phase of training.

Table 17. Influence of Family Military Experience and Friendships in Completing Jacks Valley Milestone

Did friendships with your classmates play a role in your completion of the required outdoor training (i.e., outdoor training, run to the rock, Jacks Valley)?

	Military	No				
	in	Military				Non-
Response	Family	in Family	Male	Female	White	White
	n	n	n	n	n	n
Yes	27	26	44	9	49	4
No	3	11	13	1	13	1
Undecided	6	-	6	-	6	-

Alumni stated friendships did play a role in completing outdoor training; feelings expressed about friendships during this heightened phase of training suggest they have reached a concomitant sense of belonging. Alumni were asked to select a phrase that "most closely describes your outdoor training experience" and gave the responses shown in Table 18. Outdoor training developed increased levels of trust among cadets as they mutually faced exposure to changing weather conditions and greater physical and psychological demands, revealing feelings of connectedness among peers. Alumni responses were compared based on the presence of close or immediate family member with military experience to uncover whether any prior knowledge would replace the need for friendship ties at this milestone. Twenty-seven alumni in all stated "this training taught me to trust and rely on my classmates." Alumni without military family experience more frequently chose "I began to fit in with my classmates" and "this training taught me to be strong and independent" than alumni with military family experience. Female alumni indicated positive social experiences during the outdoor phase of training. No female alum indicated "feeling strong and independent." Further, interpretation of female alumni responses showed they were confident about making it through the training and were at the Academy to make friends. Responses may be indicative of homosociality in gender and ethnicity.

Table 18. Jacks Valley Milestone Friendship Experience

Description of outdoor training friendship experience	Military in Family	No Military in Family	Male	Female	TOTAL
	n	n	n	n	
This training taught me to trust and rely on my classmates	16	11	24	3	27
This training taught me what it's like to be in a real close-knit military unit	13	10	19	4	23
I began to fit in with my classmates during this training phase	3	9	9	3	12
This training taught me to be strong and independent	1	5	6	-	6
I wasn't at the Academy to make friends	2	1	3	-	3
I thought I would not make it through	1	1	2	-	2
Total					67

Resiliency and sense of belonging appear to have emerged from Jacks Valley activities that fostered social and task cohesion. Two response choices reflecting "trust" and "cohesion" were most frequently selected where "fitting in with classmates during this training phase" was the third most selected. Independence, while selected less frequently, was chosen by male alumni over the other choices, indicating a sense of growing self-confidence in one's ability and accomplishment within their groups. Alumni responses to this question may point to an individual's social resilience as individual confidence while forging close relationships in the outdoor training environment grew.

During this phase of training, cadets' friendships continued to form. Table 19 shows an increase in the number of friendships during Jacks Valley. When asked "which statement most closely describes your friendship experience" at that point, an increase in the number of friends was reported as cadets became more comfortable with one another throughout an increasing number of interactions between training evolutions. This may be due to a change in the environment. In tents, eight to ten cadets of the same squadron are housed together. This affords more social interaction with a larger number of people in the same tent. Now with more cadets in the same "room," conversations give rise to becoming better acquainted, advancing social closeness, and fostering friendship formation. During this phase of training, most alumni (56%) reported getting to know many classmates. Alumni (18%) reported building close friendships with one or two classmates and one alum had not made a friend by this time in training. A further investigation of the data shows close social bonding with many classmates reported by 42 alumni, of which three were female. Males without family military experience reported getting to know one or two classmates three times more than alumni with family military experience, pointing to the socialization aspect accompanying task cohesion of intense military and physical training. Interestingly, one alum, a male without military experience in the family, indicated he had not yet made friends with anyone by this point in the training experience. Male and female alumni show similar patterns of friendship development in this phase of training. The minority alumni indicate a smaller social circle than white alumni.

Table 19. Post Jacks Valley Friendship Progression

Description of friendship experience	Military in Family	No Military in Family	Male	Female	White	Non- White
	n	n	n	n	n	n
I got to know many of my classmates	23	19	39	3	42	-
I started to build a close friendship with one or two classmates	6	7	9	4	11	2
I made one or more close friends	5	4	7	2	6	3
I had not made friends with anyone yet	-	1	1	-	1	-

Within military culture individuals work within and outside of hierarchical relationships to exchange trusted information (the currency of social capital) through existing social networks to accomplish a purpose (Gallup et al., 2008, p. 14). Similarly, in outdoor training situations, because of growing social connections and social capital built through trust, cadets become increasingly equipped to accomplish their training mission. Cadets build further trust when they begin exchanging social currency during BCT as they "figure out the system" through building friendships in which vital information about how to succeed at a given task may be exchanged. If these exchanges do not take place, the likelihood of success diminishes significantly, particularly since the training experienced is specifically designed to build unified teams.

Alumni indicated that an increase in scope and depth of friendship was common during the outdoor phase of training. While the type of outdoor training varied across the decades of alumni, the shared factor in closeness and bonding among peers, as depicted in Table 20, exhibits similar influence upon friendships. Closeness and bonding further reflect response choices to "which statement best describes your relationship with your classmates during outdoor training?" Also shown in Table 20, 49.3% (n = 37) chose "the experience strengthened my friendships with classmates." One alum indicated the experience strained or damaged friendships, and 8.5% (n =

6) indicated "I made it through on my own." The stated need for friendships during this phase of training ranged to some degree from "needed help" to "strengthened," the latter was the choice of 90.4% (n = 66). These friendship boundaries were negotiated and established within stress-filled, common daily interactions throughout outdoor training. This suggests the purpose of their tasks was accomplished from an institutional perspective but the cadets collectively discerned that friendships were the means to stay within the social group amid institutional demands; data further shows that prior military exposure was not related to their success. This suggests males dominate in building social capital with peers in this phase of training as 52 male alumni reported building and strengthening friendships. By comparison, half of the female alumni reported needing help and encouragement. Yet, nearly half of female alumni and 83% of male alumni indicate they were able to build and strengthen close friendships in the outdoor training phase.

Table 20. Classmate Relationships During Outdoor Training

Response	Military in Family	No Military in Family	Male	Female
	n	n	n	n
The experience strengthened my friendships with classmates	17	20	35	2
The experience helped me build close friendships	11	8	17	2
I needed help and encouragement from my classmates	6	4	5	5
I made it through on my own	2	4	5	1
The stress of that experience strained or damaged my friendships	-	1	1	-

Acceptance Day

Acceptance Day marks the completion of BCT and the beginning of the cadets' academic experience. Formalized semiotically by marching into the Cadet Wing's public space, they ceremoniously receive fourth-class shoulder boards for their uniforms. This is one of several significant milestones in the journey toward graduation. At this point in training, the newly acknowledged fourth-class cadets take the Academy's Honor Code Oath, pledging to live by its principles not to "lie, steal, or cheat, nor tolerate among us anyone who does" and to resolve live honorably".

Team building events during the outdoor training phase present mental, emotional, and physical challenges that require cooperation with others. Air Force basic training teaches both "followership" and leadership as foundational to its members, so cadets must engage in cooperative activities, provide and receive encouragement, and begin building group cohesion to succeed in their tasks. When they do, it is an indication of social cohesion as well. Alumni were asked about this aspect of training and to reflect on what they relied on most during those challenges. Figure 14 represents their responses.

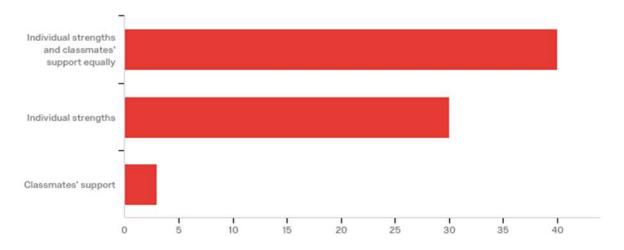


Figure 14. Individual Strengths and Classmate Support

A larger number 54.7% (n = 40) indicated classmates' support and individual strengths equally contributed to accomplishing this milestone in training, while 4.2% (n = 3) indicated support of classmates was relied on solely to complete training at the Academy. This means a total of 58.9% recognize the connectedness of friendships as contributing to the individual reaching Acceptance Day. This compares to 41.1% (n = 30) responding "individual strength" was the reason they made it to Acceptance Day. The data were pivoted to examine alumni response by presence of military family and it was evident it had no impact upon a cadet's ability to endure through outdoor training.

Given the intensity of outdoor training and what alumni considered the role of friendships through the experience, it was worth asking whether those friendships had endured beyond that period. Of 73 alumni responding to this question, Table 21 shows female alumni formed social bonds while two male alumni reported not forming any friendships by Acceptance Day.

Nonetheless, these two male alumni did graduate. This may point to individual socialization preferences or an intense focus on getting through this phase of training that meant putting socializing below accomplishment. A majority of white and non-white alumni formed friendships which continue to this day.

Table 21. Cadet Friendship Progression by Acceptance Day

Response	White	Non-White	Male	Female
	n	n	n	n
I formed friendships that continue to this day	24	4	25	3
I formed close friendships that continued through my Academy experience	21	-	19	2
I formed a few friendships during BCT, but they were temporary	10	1	9	2
I formed key friendships during BCT	11	-	8	3
I didn't form friendships during BCT	2	-	2	-

"Key friendships," "close friendships" and "friendships that continue to this day" were selected by 82.2% (n = 60) underscoring the perceived value of social connections and social capital by alumni when reflecting on training up to and including Acceptance Day. Even where friendships were temporary, 15.1% (n = 11) indicate that although short-term, the role of friendships fostered resilience in BCT. Only 2.8% (n = 2) report not forming any friendships during BCT. Reviewing responses by military family, gender, and ethnicity variables permit comparisons as displayed in Table 22. Four non-white alumni formed friendships that continue to this day and one formed a temporary friendship. Eight female alumni formed "key," "close" or "friendships that continue" while two formed temporary friendships. Two white males with no military family experience reported not forming friendships during BCT. Overall, less than 1% (0.04%) of alumni indicated no lasting friendship by the conclusion of BCT.

Table 22. BCT Friendship Experience on Acceptance Day by Military Family, Gender, and Ethnicity

Response	Military in Family	No Military In Family	White	Non-White	Male	Female
			n	n	n	n
I formed friendships that continue to this day	14	14	24	4	25	3
I formed close friendships that continued through my Academy experience	10	11	21	-	19	2
I formed a few friendships during BCT, but they were temporary	5	6	10	1	9	2
I formed key friendships during BCT	7	4	11	-	8	3
I didn't form friendships during BCT	-	2	2	-	2	_

Alumni were asked a follow-on question about shared values, goals, and level of friendships formed by Acceptance Day. It is not enough to claim to have friends, the depth of a friendship is paramount to its longevity. Sharing values and goals in addition to mutual interests, fosters "relatability" in the friendship dyad. Alumni responses reveal similar values and goals were most noticeable in forming friendships. Alumni could choose multiple responses for a question about their friendships on Acceptance Day. When examined individually, alumni chose "acquaintances" equally as often as "values" and "goals," lending context to the degree of social intimacy recalled by alumni on Acceptance Day, meaning alumni recall having nearly equal numbers of acquaintances as well as close friends at this milestone. In Table 23, 26.8% (n = 19) of male alumni recalled not yet finding a person to "call a close friend." Likewise, 31% (n = 21) white alumni reported not yet finding a close friend yet no minority alum indicated this. Minority alumni are possibly demonstrating more robust social bonding than their white peers, albeit the

social circle appears smaller. Perhaps showing independence, 21.1% (n = 15), alumni were "focused solely on [my] own goals."

In contrast, 91.6% (n = 65) indicate shared values and goals were important, perhaps even when these friends were considered as "acquaintances." Shown in Table 23, these responses may represent individual development of friendships as personality, openness, and inclination for social interaction (introvert vs. extrovert) which impact the rate at which people make friends. Where there was a shared experience of attending one of the preparatory schools, 19.7% (n = 14) continued close friendships formed there.

Table 23. Alumni Recalled Friendships on Acceptance Day Grouped by Military Family, Gender, and Ethnicity

Pagnanga	Military in Family	No Military in Family	Male	Female n	White n	Non- White
Response I had friends who shared similar values	35	32	57	10	62	5
I had friends who shared similar goals	34	33	57	10	63	4
I had close friends from prep school	6	8	10	4	9	5
I had not yet found a person I would call a close friend	9	12	19	2	21	-
I had acquaintances	34	33	57	10	62	5
I was focused on my own goals	5	10	13	2	12	3

Alumni were asked to select "yes" or "no" for each of the six response choices. Seventy-three alumni responded to this question where 91.8% (n = 67) selected "yes" to sharing similar values, goals, and having acquaintances supporting the role of friendships in the Academy experience.

By this juncture in BCT, alumni without military family experience out number alumni with military family experience when expressing self-serving and self-focus on one's goals. This is shown in the response numbers to "I was focused solely on my own goals." Alumni from both sub-groups were nearly equal on factors of values, goals, and having acquaintance level social connections. This data outcome was not altered by any other profile category.

Academy Training Experiences

The training experience is equally challenging and motivating for each new cadet class, yet the overarching Academy experiences change over time. Graduates in the 1960s and 1970s experienced training and conditions different than graduates in the 2000s and 2010s. The Cold War and Vietnam War eras, coupled with the culture of hyper-masculinity in the all-male Cadet Wing, provided a social system ripe for hazing disguised as physical training. Even with 42 years of women at the Academy, the Wing's hegemonic masculine rituals, class hierarchy, and, yes, hazing persists according to an *Air Force Times* article (Losey, 2018). Nearly two decades of an all-male student body (1959 –1976) collided with social changes within the military and physical training environment when women were admitted. Five decades after the Academy's founding, the "War on Terror", continuing conflicts in the Middle East, and political tensions with China and North Korea underscore the value of military training of present-day cadets. Although social changes in American culture continue to shape the cadet experience, alumni continue to believe

physical training is "necessary to build strength, discipline, and stamina" as well as being "necessary to build trust and cohesion" among cadets.

According to Weidman's model, explained in an earlier chapter, integration of normative pressures on military academy campuses involves three primary contexts for student bonding: academic, social, and military training. The Air Force Academy trains men and women to become officers as they earn a Bachelor of Science degree by successfully executing in these three contextual frames. The Air Force Academy is both a university and military installation, and the socialization of cadets within its campus is distinctly different for students because of the latter.

Alumni 47. 9% (n = 34) point to strength, discipline, and stamina as most important aspects of physical training at the Air Force Academy. By a difference of two graduates, 45.1% (n = 32) they point to building trust and unit cohesion as tangible benefits of physical training. Physical training is used to identify cadets who lack resolve, according to the alumni responses shown in Table 24. Alumni (4.2%; n = 3) stated that physical and military training are a method to detect "those who did not belong," regardless of cadet demographic category (i.e., gender, ethnicity, religious affiliation, orientation). Conversely, 2.8% (n = 2) of alumni considered the training "equal and impartial" giving slight indication that physical training is unbiased.

While there may be extenuating reasons for a cadet to exit the program, motivation and desire are essential ingredients to cadet resilience, meaning the tough physical and mental conditions weed out those lacking the essential ingredients [physically and/or mentally unsuitable or undetermined people] from cadet ranks. Alumni without close or immediate military family members slightly surpassed alumni with military family experience expressing a belief that the tough mental and physical training is "necessary to build strength, discipline, and

stamina" and "necessary to build trust," indicating this was a "belief" carried in by civilians with no military exposure. Perhaps, for a small number of alumni, "equal" and "impartial" are terms contrary to unit cohesion, trust, and building physical strength, [self] discipline, and stamina. Male and female cadets share similar perceptions shown in Table 24 regarding physical training as necessary to build strength, discipline, and stamina. They mirrored each other regarding trust and unit cohesion. Where the two genders differ, however, although by a small amount, is in their perception of training being equal and impartial.

Table 24. Alumni Views of Physical and Military Training Toward Fourth-Class Cadets

		No			_
	Military in	Military in			
	Family	Family	Male	Female	
Physical & military training	n	n	n	n	Total
The training is necessary to build strength, discipline, and stamina	16	20	31	5	36
The training is necessary to build trust and unit cohesion	18	14	28	4	32
There were individuals who did not deserve to be at the Academy and this was the only way to get them to quit	1	2	2	1	3
We treated all cadets equally and impartially	1	1	2	-	2

Alumni were asked to rate which aspect of training influenced a cadet's chances to graduate. In sum, 74.6% (n = 47) alumni stated training favors those who can "figure out the system" more than any other factor. Figure 15 shows alumni responses to the question, "Which

statement best reflects your view about the training and development of cadets when you attended the Academy?"

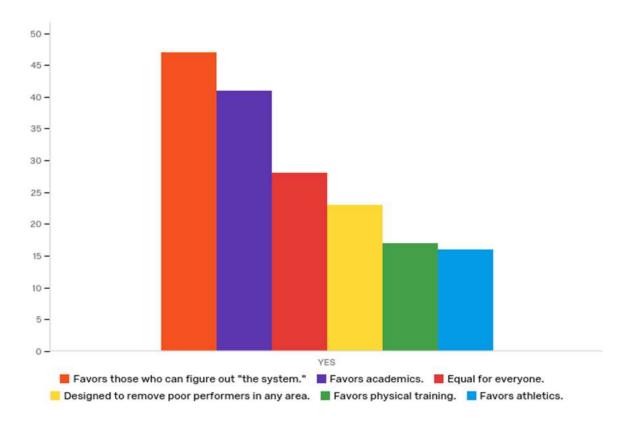


Figure 15. Views About Training and Development of Cadets

Alumni clearly indicate there is "a system" at the Academy that must be understood by cadets who are ambitious to complete the program and that it may be slanted toward those who achieve a certain grade point average. Further, they expressed a belief that the system favors cadets who decipher the social system; that is, those who can learn how to build social capital in the informal culture that forges a path to graduation. As shown in Table 25, male and female alumni shared similar views about favored training paths. Notably, alumni stated that academics are favored over athletics by nearly a factor of three, which suggests that physical ability is not perceived as a dominant factor in their program success. Indeed, academics is heavily weighted in the formula used by the Academy to determine an individual's rank among classmates.

Table 25. Alumni Views About Favored Training Paths

View of training and development	Male n	Female n	Total
Favors those who can "figure out the system"	40	7	47
Favors academics	36	5	41
Equal for everyone	26	2	28
Designed to remove poor performers	19	4	23
Favors physical training	12	5	17
Favors athletics	13	3	16

Alumni were queried about whether gender has an impact upon a cadet's ability to reach graduation. When their responses were compared and sorted by gender, of 65 respondents, 63.1% (n = 41) of alumni, regardless of gender, expressed a belief that men and women have an equal chance to graduate. However, as Table 26 shows, the variance between the responses "men are favored to graduate" and "women are favored to graduate" is revealing an imbalance in belief about perceived gender favoritism. Two male respondents stated outright that women are favored, while no female respondents held this belief. Three males (less than 1% of the total) stated outright that men are favored, while four females, or more than half (>50%) of all women who participated, stated outright that "men are favored." It is notable that none of the women, but roughly 1 in 6 men (10 of the 63), believed that women are favored to graduate, perhaps exposing a perception among male alumni that institutional changes intended to assimilate women into the historically male culture result in perceived preference of women over men in the culture. Yet in comparison, female alumni do not share in the perception of their male counterparts as mentioned previously, their (women) view is that while men are favored, anyone can graduate.

In turn, survey data in Table 26 shows that less than half of the women (n = 2) who were asked believed that within the Cadet Wing they were not the focus of training but have equal chance to graduate (n = 3). This points toward a potential awareness by women of the hegemonic status held by male cadets within the Cadet Wing suggesting they could not fully leverage the hegemonic masculine social capital contained in the predominantly male student body.

Table 26. Alumni Perceptions on Gender Upon Achieving Graduation

	Male	Female	
Response	N	n	Total
Men and women have an equal chance to graduate	38	3	41
Women are favored, but anyone can graduate	10	-	10
Men are favored, but anyone can graduate	3	4	7
Women are favored to graduate	2	-	2
Men aren't necessarily favored but are the focus of training	2	2	4
Men are favored to graduate	1	-	1

Yet men and women must figure out the social rules and decorum within the same environment and culture. This data has implications for the value of friendship bonds and student resilience among both male and female cadets. It may suggest gender differences in social interactions and networking while both genders strive toward graduation. Cadets may be aware they must "figure out the system" in ways separate from gender (perhaps academically). It suggests several males may perceive there is a "softening" of Wing culture. At the same time, other data reveals a belief among alumni that a supportive friend, regardless of gender, is "key" to sustaining through the training program. Specifically, 87% or 58 of 67 alumni stated that having a close friend increases the likelihood to graduate. This phenomenon occurs during

settings in which homophily is heightened and teams are united by task cohesion in an environment where, semiotically, all cadets interact and perform within the same culture.

Culture and Environment

A revision of Weidman's model for this study emphasizes the social and military training contexts as the central focus of analysis. Previous discussions examined venues for homophily which emerges in social interactions taking place during and between cadets' training cycles. These interactions further define homogeneity and normalize acceptable behaviors defining Cadet Wing culture. The noticeable boundaries of a homosocial group represent acceptance and affirmation; at the same time, they expose the reality that some individuals are not included (Thurnell-Read, 2012, p. 252). The Cadet Wing culture and the campus environment are interrelated, but not interchangeable. For example, a cadet may be able to sustain a GPA necessary to reach graduation but suffer from exclusion by peers within the Cadet Wing. Likewise, a cadet may succeed within the culture of the Wing but fail to sustain the academic grades necessary to graduate. In both scenarios, friendships may be the bridge leading to full acceptance and graduation.

Academy Culture

Transitioning from independent civilians to cohesive members of the Air Force, cadets are enculturated within the Academy environment through training and symbols. Military training begets a sense of identity and belonging within an individual (Kirke, 2009). A shift in social identity occurs within the process of gradually building friendships with cadet classmates. After the first year of training, 87.3% (n = 62) alumni stated they identified more with cadet friends than with friends they had before coming to the Academy. However, 12.7% (n = 9) retained identification with earlier friends than with other cadets. Table 27 parses friendship

affiliation by the presence of prior military exposure. The data reveals that alumni without military family experience self-identify with fellow cadets and outnumber those who do, suggesting that this new sense of identity may be unnecessary for those who already have some tie to military culture.

Table 27. Cadet Friendship Affiliation, Prior Military Association, and Self-Identity After One Year

	Military in Family	No Military in Family	
Friendship Affiliation	n	n	Total
I identified with cadet friends	29	35	64
I identified with friends I had before I became a cadet	7	2	9

To understand the influence of semiotics on cadet social bonding and identity, graduates were asked "how important were the symbols worn on your uniform?" Cadets may wear civilian clothes only when home on leave. During their first year, fourth-class cadets are required to be in uniform on and off campus. The uniform and insignia distinguish cadets within Wing culture and is the immediate platform for reading an individual's status in both the social and training contexts. Wearing the uniform is strictly regulated and continuously monitored by both the individual and the group. Uniform patches demonstrate membership within and allegiance to one's squadron. A cadet's surname is prominently displayed to the left of the words "US Air Force" across the front. The purpose of rank insignia and patches is to identify classmates within the Wing hierarchy.

Alumni responses about semiotic displays ranged from "not at all important" to "very important." Nearly 60% selected "necessary, but they didn't define how I saw myself" (57.8% or N = 41), suggesting that identity shift into Wing culture was not, and perhaps is never, total.

Perhaps because semiotics of the squadron is a temporary affiliation on the path to becoming an Air Force officer. The next highest choice of alumni was "important because they defined and announced my identity" at 25.4% (n = 18), indicating one of four respondents wearing the uniform and insignia was an important vehicle for broadcasting their group identity. A minority of respondents stated that uniform displays were "not important at all" to 15.5% (n = 11). One selected the answer "very important for telling others I had rank and positional authority." Stratification of the social and training contexts within the Cadet Wing is made visible on cadets' uniforms. Although necessary, according to alumni, overall the symbolism of the uniform does not define the individual, but functions as a unifying semiotic reminder and sorting hierarchy of cadets in their experiences of belonging in the Cadet Wing.

Academy Environment

The environment at a military academy necessarily constrains social connections across class/grade levels, recognizing that privileges taken for granted by civilian college students are earned by cadets. At the Academy, casual social interactions between fourth-class cadets and upper-classmen (freshmen versus sophomores, juniors, and seniors) are not permitted until after Recognition, a vital formal and traditional step in fourth-class cadet development, which occurs in March. Unchecked informal social interactions may lead to fraternization and open the door to inappropriate expectations and favoritism (and misconduct) within the cadet ranks. Apposite socialization does occur, however, in settings where cadets of different grade levels interact in sports, interest and support groups. In addition, cadets seldom get a weekend off as they are used for training and free weekends may be canceled on short notice. Such restrictions, coupled with the military environment and heavy academic load, create a culture where "academy life" can be emotionally, socially, and intellectually draining.

Military academies require conformity, punctuality, and adherence to rules and regulations. Individuals forego a freedom of choices enjoyed by civilian college students on simple things like meal time, going to football games, and when to awake in the morning. Such conformity creates perceptions of "misery" and "tribulations" and become topics of conversation among cadets. Institutional leaders realize, however, that the commonality of conformity unites students. Given the five and half decades of alumni respondents, the majority view shown in Table 28 reveals that commiseration about the Academy was beneficial to all. It suggests that friendships are borne in opposition to the institution and have probably done so since its earliest years.

Alumni were asked about the tone of conversations among friends while at the Academy. Alumni recalled when they got together to talk about life at the Academy, conversations often took a very negative tone as cadets complained about room inspections, seemingly ridiculous rules, and required actions. No alum indicated these conversation tones were "all positive." Similarly, only 2.8% (n = 2) chose "all negative" about the tone of conversations. Alumni stated their conversations among peers were "mostly negative" at 31.5% (n = 23); and a mix of "generally positive and negative" at 50.7% (n = 37); then, "mostly positive" at 15.1% (n = 11). Interestingly, alumni revealed these conversations did not influence their choice to stay at the Academy, as 67.1% (n = 49) stated. However, 32.9% (n = 24) felt these conversations did have an influence.

Another question probed this influence on cadet friendships, asking alumni to choose "which statement most closely reflects your opinion about how negative conversations about the Academy affected cadet friendships." Table 28 lists the response choices, perhaps indicating strength of individual desire and resilience, as alumni shared in conversations complaining about

Academy life, draw friends closer together. Sixty-two percent of alumni (n = 45) recalled responses to such negative conversations most frequently claiming such conversations drew them closer together in friendship. "Complaining about life at the Academy brought my classmates and I closer together" was the most shared opinion about their Academy experience.

There are negative influences on friendships as well, where 11% (n = 8) describe negative conversations as corroding friendships and 5.56% (n = 4) believe that negative conversations drove them to "question their choice to attend the Academy." For persons who cannot adjust to conformity, rules and regulations, negative conversations affect the mindset and endanger the motivation of an individual who may be contemplating leaving the Academy. In contrast, conversations about how tough life is at the Academy were perceived to foster stronger social bonds, supporting the idea "misery loves company."

Table 28. Perceived Consequences of Negative Conversation About Academy Life

	Male	Female	White	Non- White
Response	n	n	n	n
Complaining about life at the Academy brought my classmates and I closer together	36	9	41	4
Not at all. Most cadets ignored them	9	-	9	-
Sometimes these negative conversations corroded friendships between cadets	7	1	7	1
Those negative conversations reaffirmed why we were proud to be cadets	7	-	7	-
Those negative conversations made cadets question their choice to attend the Academy	4	-	4	-

Informal connections frame the social network within the Cadet Wing. Cadets apply, compete for, and can be assigned formal leadership positions within the squadron, group, or

wing as part leadership training and development. Social influence stems from conversations about cadet life as much as these formal contexts for communication, whether negative or positive. Packard's (1999) research distinguishes between informal leaders and formal leaders to make the point that social bonding occurs in unstructured relationship contexts as well as within the hierarchy of the Academy. Informal leaders are cadets with social capital and influence among their peers. When asked whether informal or formal leaders held more influence during their training experience, 48% (n = 35) pointed to informal leaders or more precisely, friendships. Some 35.6% (n = 26) stated that both types of leaders had influence upon them. Formal leaders were described as having influence by 11% (n = 8) alumni and 5.5% (n = 4) stated that neither informal nor formal leaders had an influence on their cadet experience. Alumni responses suggest that more often informal leadership or friendships, not necessarily influences from within the formal Wing hierarchy, had a larger influence upon social relations within the Cadet Wing.

Lastly, despite some assertions their decision to remain enrolled following the third-class (sophomore) year was entirely independent, another survey question reveals that alumni adamantly value friendships and tie them to their success in graduating from the Academy. Specifically, 90.4% (n = 66) chose "yes" when asked about this link between their friends and completion of the program, where 4.1% (n = 3) chose "no." A slightly larger number of responses 5.5% (n = 4) stated they were "undecided" regarding the importance of friendships and graduation. While a variety of institutional programs exist to retain cadets, alumni seem to be saying that friendship, not a formal relationship with program leaders, is what carried them through.

Academy Social Activities

Although Basic Cadets are restricted to interacting only with their classmates, they do have social encounters with upperclassmen; for example, students on sports teams seek out incoming cadets recruited for a tier 1 competitive sport and then include them during BCT as part of their sports team social circle.

Every cadet participates in athletics at some level, whether team or intramural sports.

Cadets may be members of recreation, mission, or culture clubs. Tinto's research (as cited in Altman, 2016, p. 96) about the social dynamics of ROTC students posits that involvement in teams or clubs during a student's college experiences is critical to campus social integration.

This concept applies equally to cadets who participate in sports and club programs, as the survey data reveals. Table 29 depicts alumni responses to questions about sport and club membership.

Fifty of 60 male alumni (83%) and four of nine female alumni (44%) were involved in intramural sports, which are required of cadets who are not in tier 1, or competition club or sport teams. Tier 1 team sports accounts for the second highest response for men and women when asked which sport or club they belong to. Cadets who are involved in tier 1 sports teams are often recruited to attend the Academy, as was the case for 25 male (41%) and three (33%) female alumni. Religious, recreational, and competition sports clubs elicited fewer but parallel responses from men and fewer responses from women as shown in Table 29. Culture clubs received the fewest responses at two each for male and female alumni.

Table 29. Membership in Sports and Clubs

	Male	Female	
Sports and Clubs	n	n	Total
Intramural sports	50	4	54
Team sports (Tier 1, i.e., football, basketball, hockey, etc.)	25	3	28
Chapel or religious clubs	23	4	27
Recreational or service clubs (i.e., equestrian, falcon, chess, karate, etc.)	22	1	23
Club sports (i.e., cycling, rugby, Frisbee, volleyball, rodeo, etc.)	20	2	22
Mission clubs (i.e., forensics, robotics, sabre drill, show choir, etc.)	14	2	16
Culture clubs (i.e., Hispanic, Way of Life, Freethinkers, etc.)	2	2	4

Alumni were then asked if sports or club involvement led to friendships. When asked, "Were your close cadet friends also members of the same sports or clubs you belong to?" 57.1% (n = 40) replied "yes" while 42.9% (n = 30) replied "no." This was substantiated with a follow-on question of "Did you have a close cadet friend who did not belong to your sports team, club or squadron?" In this instance, 80.6% (n = 58) replied "yes" and 19.4% (n = 14) replied "no." Investigating further, alumni were asked to describe where this friendship with another cadet who was not a member of a sports team, club, or other squadron developed. To gain more information about this context for friendship formation, alumni were invited to write an openended response describing where these relationships began. Forty-nine alumni entered a written response, while twenty alumni chose to answer, "not applicable." Figure 16 presents a word cloud of alumni entries about where their friendships began. Visually, "friends" dominate the figure while "squadron," "BCT," and "roommate" are prominent suggesting proximity as a force in forming friendships. A list of these independent responses appears in Appendix F.

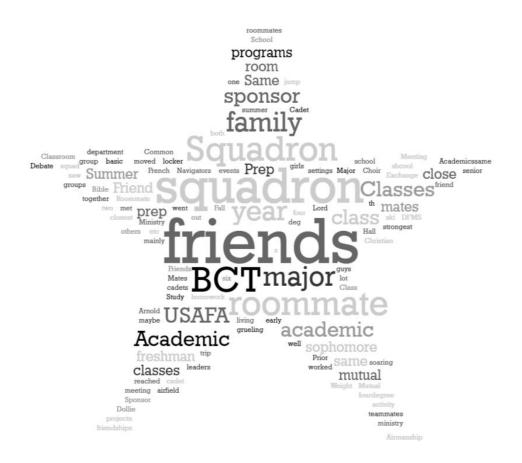


Figure 16. Pictograph of Where Close Friendships Began if Outside of Same Sport, Club, or Squadron

Alumni were asked about the importance of friendships associated with a sport or club activity to ascertain their influence upon a cadet's decision to stay at the Academy. Nearly 50% (n = 36) reported friendships in sports or club activities as "moderately important" to "extremely important" to their decision. In contrast, 25% (n = 18) stated these friendships were "not at all important" and had no influence upon their decision to stay. Alumni indicated that cadets forge friendships in ways like civilian university students, despite constraints upon their social mobility within the Wing. They reveal that participation in sport, club, or activities may be tied to resilience at the Academy, something that could be further studied by Academy researchers to address its attrition rate. Among civilian university students, sport participation has been linked

to lower dropout rates, improved grade point averages, and higher rates of college attendance (Eccles, 2003; Holt & Neely, 2011; Marsh & Kleitman, 2003). It may be that social bonding among cadets in these contexts could have a positive influence upon retention in the program.

Social connections extend beyond roommates and classmates. Table 30 displays alumni friendships formed outside of their graduating class. When asked, "Did you have close friendships with cadets in other class years?" 57% (n = 41) of alumni stated they had friendships with students from "both classes graduating ahead of and behind me." In contrast, 19.4% (n = 14) stated that they found close friends in "neither classes graduating ahead of or behind me." Further, 12.5% (n = 9) of respondents chose "the class or classes graduating behind me" and 11.1% (n = 8) chose "the class or classes graduating ahead of me." When combined, 80.5% (n = 58) alumni expressed the presence of close friendships with cadets outside of their own graduating class, something that may be surprising to Academy leaders. There were no differences in friendships between military family and no military family. Alumni with military family experience (n = 24) outnumbered alumni without military family experience for friendships outside of their own graduating class, where the opposite is true (n = 11) for not having friends outside of their own graduating class. This may be symptomatic of a Pygmalion effect inherited from having close or immediate family with military experience. Additionally, when examined for gender and ethnicity, alumni share similar patterns of socialization s in both classes graduating both ahead of and behind their own class.

Table 30. Alumni Friendships with Cadets in Classes Ahead of or Behind Their Own Class

	Military in Family	No Military in Family	Male	Female	White	Non- White
Response	n	n	n	n	n	n
Both classes graduating ahead of and behind me	24	17	35	6	37	4
Neither classes graduating ahead of or behind me	3	11	13	1	13	1
The class or classes graduating behind me	5	4	7	2	9	-
The class or classes graduating ahead of me	3	5	7	1	8	_

Impact of Friendships

Given how little free time they have, a cadet's choice of friends with whom to share it is important and revealing. As a freely chosen interaction among peers, friendship conforms to the simplest of sociological structures (Simmel, 1950), the dyad. The friendship dyad exists so long as both parties to the relationship are reciprocally involved and engaged (Levy, 2005).

Friendships facilitate cohesion and are a means of articulating group normative behaviors. At the same time, men and women experience and express friendship bonding behaviors differently (Brod & Kaufman, 1994; Mulac, 1988). Competition among friends, specifically male-to-male friends, is imperative to the strength of the social connection. In the Cadet Wing, first-class cadets (seniors) have more free time than fourth-class cadets (freshman) and men outnumber women nearly four to one. The combination of a shortage of free time and the gender imbalance within the Wing has an impact upon friendship options.

When asked "with whom did you spend most of your free time?" alumni selected "my closest same sex friend" 22.4% (n = 15) more frequently than any other response. When

examined by gender, male alumni preferred to spend time their girlfriend (n = 13) by a narrow margin over a friend of the same gender (n = 12). No alum selected "I preferred to spend time alone." Table 31 shows the distribution of responses. Spending time with a same sex friend and spending time with a girlfriend differ by one response. One female alum chose the "my boyfriend" response 1.5% (n = 1); and three female alumni chose closest *opposite* sex (male) friend but not boyfriend indicating a platonic relationship. There were responses in which a friend's gender was not identified: "one or two squadron mates;" my friend(s) in a sport, club or other activity;" and "my roommate." All roommates are of the same gender, and in tier 1 sports the teams are single gender. In the Academy environment, friendships, whether platonic or romantic, must be kept professional in the public sphere.

Examining friendship influence on resilience extends beyond friends as other significant relationships have influence on a cadet. Friends, family, and other respected adults have a role in resilience according to alumni. As Table 32 shows, the majority, 37 (55.2%), of respondents selected "this was not a decision for me, I was staying" when asked who had the most influence on their decision to stay, revealing the ambition they arrived with had not been diminished. Alumni chose "mostly my family or other adults I respect, but some from my friends at the Academy 14.9% (n = 10); "equally by my friends at the Academy and my family or other adults I respect" 14.9% (n = 10); and "mostly my friends at the Academy and some from my family and other adults I respect" 13.4% (n = 9); for a total of 44.6% (n = 29) times. One alum chose "my friends at the Academy" and no alum selected "my family or other adults I respect." This indicates some combination of influence among friends and family upon a cadet's decision to remain enrolled at the Academy is nearly equal to self-determination as the reason for staying.

Table 31. Friend with Whom Cadets Spend Free Time

•				Non-
D.	Male	Female	White	White
Response	n	n	n	n
My closest same sex friend	12	3	14	1
My girlfriend	13	-	13	-
One or two squadron mates	11	1	12	-
My roommate	8	1	9	-
My friend(s) in a sport, club or other activity	7	-	6	1
Whoever was around	5	-	5	-
My closest opposite sex friend	2	3	4	1
My boyfriend	-	1	-	1
I preferred to spend time alone	-	-	-	-
Total	58	4	63	1

For more than half of the survey respondents, regardless of gender or ethnicity, the idea of leaving the program was implausible, but at the same time their resolve to stay was sustained by social ties they recall as important. This was true for 67% of female alumni respondents.

Table 32. Who Most Influenced Cadet Decision to Stay Enrolled at the Academy

	Male	Female	White	Non- White	Total	
Response	n	n	n	n	n	%
This was not a decision for me. I was staying.	31	6	35	2	37	55.2
Mostly my family or other adults I respect, but some from my friends at the Academy.	8	2	9	-	10	14.9
I was influenced equally by my friends at the Academy and my family or other adults I respect.	9	1	9	1	10	14.9
Mostly my friends at the Academy and some from my family or other adults I respect.	9	-	9	-	9	13.4
My friends at the Academy.	1	-	1	-	1	1.5
My family or other adults I respect.	-	-	-	-	-	-
Total	58	9	63	3	67	100

Friendship influence on a 'decision to stay enrolled' was asked a second time. Table 33 shows perceived friend influence returned by alumni. In response, "How much influence do you believe the friends you made at the Academy had upon your decision to stay enrolled at the Academy?" nine (13.4%) alumni indicated friends made at the Academy had "a great deal" of influence in this decision, while 47.8% (n = 32) revealed friends held "little" or "no" influence in the decision to stay at the Academy. A moderate amount of influence was expressed by 20.9% (n = 14). Over half (55.2%) of alumni tell us of their independent determination to stay enrolled at the Academy while at the same time 52% (n = 32) point a "moderate" to "great deal" of influence of friends upon their decision to stay enrolled. There is a consistent opinion among alumni that the decision to stay was theirs alone, yet at the same time other data reveals that

staying was influenced by having a close friend. In other words, when they had to make the decision at the end of their sophomore year about whether to stay or go, staying was a personal choice, but the preponderance of data from other aspects of the survey show the experience of staying was made possible through sustaining friendships.

Table 33. Friendship Influence on Staying Enrolled at the Academy

Degrees of influence of friends on staying enrolled	n	%
A great deal	9	13.4
A lot	12	17.9
A moderate amount	14	20.9
A little	17	25.4
None	15	22.4
Total	67	100

Sixty-three percent (n = 41) of alumni declared that having a boyfriend or girlfriend neither helped nor hindered a cadet's trek toward graduation. Roughly one in four, (16 alumni; 24.6%), stated having a boyfriend or girlfriend helped them reach graduation, in contrast to 12.3% (n = 8) who stated having a boyfriend/girlfriend hindered one's path toward graduation.

However, when asked about whether having a close friend helped or hindered reaching graduation, 86.6% (n = 58) of alumni declared that having a close friend [regardless of gender] helped a cadet's likelihood to graduate. Nine alumni chose "neither" on the topic, while no alum indicated having a close friend would hinder a cadet's likelihood to graduate. In sum, alumni believe having at least one close friend is imperative to making it to graduation.

Having fun together, sharing Academy experiences, and sharing goals that drew them together most, as depicted in Table 34. "We trusted each other" and "we had fun together" were chosen most frequently. Alumni were able to choose "all that apply" for this question and were

allowed to select "other" and enter a factor not provided in the response options. Seventy-five alumni responded to a multiple-choice question about what drew friends together. More than one response was allowed. Seventy respondents were white, five self-identified as ethnic minority. There were 65 male alumni and 10 were female responding to this question.

Table 34. What Drew Friends Together by Gender and Ethnicity

Response	Male n	Female n	White n	Non-White n
We trusted each other	55	8	59	4
We had fun together	54	8	58	4
We shared similar Academy experiences	52	8	56	4
We had similar goals and values	50	8	54	4
We leaned on each other emotionally	42	8	46	4
We helped each other study for knowledge tests and/or classes	37	6	40	3
We shared similar sports, club or activity interests	36	6	39	3
Other	16	1	16	1

Fun, trust, similar experiences, and similar goals and values were more frequent responses than helping each other study, emotional support, and sharing similar interests as reasons alumni claim friends drew closer to one another. This supports Packard's (1999, p. 43) assertion that groups are formed based on *propinquity* (bonds stemming from physical or psychological proximity) and *homophily* (bonds formed with like individuals). Alumni assert that cadets form friendships first on *propinquity*, given the closed campus in which they live, and

then on homophily, as discussed previously about data revealing the impact of commiseration upon their friendship formation. The housing of cadets within squadron spaces accounts for part of this phenomenon. Likewise, as shown in earlier discussions of the influence of shared tasks upon social bonding, trust and trustworthiness are essential to group cohesion and identification. In the Academy environment, physical proximity and social bonding are concurrent phenomena. Inserted text responses by alumni about what drew friends together were as follows:

- Bible study
- Christian brotherhood
- Common faith
- We encouraged one another in our Christian faith
- Proximity
- Roommate
- Squadron mates
- We hated USAFA together
- Making it through bad times together
- We laughed together. When one of us felt like quitting, others in our circle talked
 that one person out of it. As time went on, we laughed more and enjoyed the
 challenges more together. Eventually, meeting and exceeding standards became
 rewarding
- French exchange program
- We were in the same major, squadron, or had completed BCT together

Both male and female alumni report experiencing homosocial bonding, underscoring the importance of this study to address social science research gaps raised by Hammaren and

Johansson (2014). When the survey probed the relationship between friendships and adjustment to Academy culture, alumni stated they were "very important" and "extremely important" 73.2% (n = 49) over any other response with 13.4% (n = 9) selecting "slightly important." One selected "not at all important".

Research by Christakis and Fowler (2009) concluded that to study how social networks function it is necessary to understand how they are formed and assembled. At the Academy, the squadron is a primary venue for social networking. It is the institution's practice to shift students out of their first squadron after a period, and this has an impact upon cadets' social bonds. Cadets presently change squadrons after the third-class (sophomore) year. Among survey respondents, all but one had changed squadrons at some point. Of the graduates who did change squadrons, 10.8% (n = 7) reported their friendships "remained close with friends in my first squadron" and 30.8% (n = 20) reported making "friends in my new squadron." The most frequent response revealed they remained "close with my first squadron friends and added close friends in my new squadron" with 49.2% (n = 32). They less frequently reported was "my close friends were not in either squadron" with 7.7% (n = 5), revealing friendships not tied to squadron mates. While alumni stated they were inclined to remain friends with someone they met in their first squadron, they added additional friends in the new squadron while retaining former friends. This suggests friendship bonds are maintained because of mutually shared values and interests, even in the absence of proximity.

Making a close friend in a new squadron was an easier experience for 46.9% (n = 30) alumni. Nine alumni (14.1%) stated this was immaterial for them as their close friend was on a sports team, club sport or activity group. Buote et al. (2007) argues that friendships are a conduit for cooperation and result in a sense of well-being and self-esteem. These benefits amount to

academic, physical, and emotional/psychological strength for cadets. In terms of their value to academic adjustment, alumni rated friendships from "not important at all" to "extremely important" with 13.4% (n = 9) selecting "extremely important." Thirty-three alumni (50.7%) chose "moderately important" or "very important." This raises the total to 43 alumni (64%) claiming moderate to extreme importance of friendships for academic adjustment. In contrast, 28.4% (n = 19) said friendships were "slightly important" and 7.5% (n = 5) said friendships were "not at all important."

According to King (2006, p. 504), intimate relations and military rituals emphasize interpersonal trust and teamwork built through training experiences, including arduous physical training and drills. Alumni rated the importance of friendship in adjusting to physical training as "extremely important" 9% (n = 6); "very important" 29.9% (n = 20); and "moderately important" 23.9% (n = 16). In sum, 67% of alumni (n = 42) indicated friendship was moderately or more important. Sixteen (23.9%) alumni rated friendships "slightly important" and 13.4% (n = 9) claimed it was not important at all. These numbers reveal that the physical demands of BCT are manageable through sustaining social ties.

Friendship played a larger role in terms of importance to emotional/psychological adjustment for cadets. Some 82% (n = 55) of alumni rated the importance of friends to their psychological adjustment to training as extremely to moderately important. Nine alumni (13.4%) chose "slightly important" and 4.5% (n = 3) alumni stated friendships as "not at all important". A clear majority of alumni recalled a positive association between friends and adapting to the unique demands of Academy life.

Early research about group cohesion (Aronson & Mills, 1959) posits that it stems from stressful training that requires cooperation and teamwork, and importantly, that it may increase

an individual's commitment. Alumni reported friendship longevity is an expectation of every graduate. Each new class arriving at the Academy becomes part of the "Long Blue Line" upon graduation. The "Long Blue Line" describes the connection of graduates spanning the decades since the first graduation in 1959. Alumni were nearly unanimous in declaring expectations for continuing friendships after graduation. Sixty-six of 67 respondents selected "yes" for this question, with one alum selecting "no" as a response. Having close or immediate family with military experience did not alter this expectation, according to alumni, as 33 said "yes." One alum with military family experience stated they did not expect to continue cadet friendships after graduation. This was followed with a question about the importance of Academy to the professional career friendships following graduation. In this question, graduates' responses varied as shown in Table 35, perhaps as a reflection of individual experiences in building social capital over time.

A question was presented for 2017 graduates about the importance of friendships to their professional career. Four 2017 alumni responded. Two alumni chose "very important;" one alum chose "moderately important." One chose "not important at all." Viewing in comparison to earlier graduates, this may indicate the perceived value of cadet friendships increases over time.

Table 35. Importance of Friendships Following Graduation

Response	n	%
Extremely important	5	7.5
Very important	16	23.9
Moderately important	17	25.4
Slightly important	12	17.9
Not at all important	2	3.0
Just recently graduated from the Academy	2	3.1
Total	65	100

Friendships provide social capital. Men and women may leverage gender to gain social capital among peers. Masculine and feminine roles come into the social picture when alumni are asked about spending time with other cadets. Male and female cadets, regardless of orientation, interact socially in the hegemonically masculine Academy culture. This question was posed to alumni, "With whom do you believe *male* cadets would be wise to spend most of their time?" Shown in Table 36, for all alumni responding, 59.7% (n = 40) stated male cadets should spend time with male and female cadets equally. For male alumni, 53.7% (n = 36) state that male cadets should spend time equally with male and female cadets. Nineteen male alumni (28.4%) stated male cadets should spend time with mostly other male cadets and a few female cadets. Forty-five percent of female alumni (n = 4) stated male cadets should spend time equally with male and female cadets. When examined by ethnicity, alumni expressed a similar pattern of responses. For gender and ethnicity, both female and non-white alumni stated male cadets should spend time with mostly male cadets than spending time with both genders equally.

Table 36. With Whom Should Male Cadets Spend the Most Time

Response	Male n	Female n	White n	Non-White n
Male and female cadets equally	36	4	39	1
Mostly male cadets and a few female cadets	19	5	21	3
Only male cadets	3	-	3	-
Only female cadets	-	-	-	-
Mostly female cadets and a few male cadets	-	-	-	-

Alumni were then asked the same question with whom *female* cadets should spend time. Table 37 shows male alumni responded 64.2% (n = 39) that female cadets should spend time equally with male and female cadets. Four female alumni chose this response (6%). Twelve male (17.9%) and two female (3%) stated female cadets should spend time with mostly female and a few male cadets. Nine alumni (13.4%) point to the masculine dominant culture as female cadets ought to spend time with mostly male cadets and a few female cadets. While no male alum indicated male cadets should spend time with only female cadets, no female alum indicated female cadets should spend time with only female cadets and a few male cadets.

Table 37. With Whom Should Female Cadets Spend the Most Time

	Male	Female	White	Non-White
Response	n	n	n	n
Female and male cadets equally	39	4	42	1
Mostly female cadets and a few male cadets	12	2	13	1
Mostly male cadets and a few female cadets	6	3	7	2
Only male cadets	1	-	1	-
Only female cadets	-	-	-	

For both questions about male and female cadets, the highest response rate was for male and female cadets to spend time with each gender equally. Where alumni responses differ is in the second highest frequent option. Regarding male cadets, alumni express that male cadets should spend time with mostly male cadets while alumni express that female cadets should spend time with mostly female cadets. Then when alumni responses were examined by the ethnicity, both groups stated both female and male cadets should spend time mostly with male cadets and a few female cadets. Gender preference (spend time with cadets of the same gender) is prominent in the same gender group. This suggests that females and minorities are cognizant there is something to be gained in relationships with male cadets who hold the preponderance of social capita.

Post Graduate Social Connections

Even 20 years after graduating, alumni report being "very good friends" with men and women whose friendships began while they were cadets. Friendships continued after graduation was evident by 91% (n = 61) alumni answering "yes" when asked if socializing with Academy friends still occurs. Less than 9% (n = 6) of alumni selected "no". This is further underscored by "how well do you reconnect with your Academy friends after an extended time of not seeing or visiting with each other?" where 65.7% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and another 25.4% (n = 44) chose "extremely well" and n = 44 (n = 44) chose "extremely

17) chose "very well". Two alumni chose "moderately well" and four chose "slightly well" (n = 3) or "not well at all" (n = 1).

Helping classmates was the topic of one question with a choice option of "extremely likely," 64.2% (n = 43) chose this response with another 26.9% (n = 18) choosing "somewhat likely." One alum each chose "neither likely nor unlikely." "somewhat likely" and "extremely unlikely." However, when asked "with whom do you prefer to spend time with now?" alumni responses begin to spread out to include personnel in other services. Figure 17 reveals alumni answers about with whom they now spend their time.

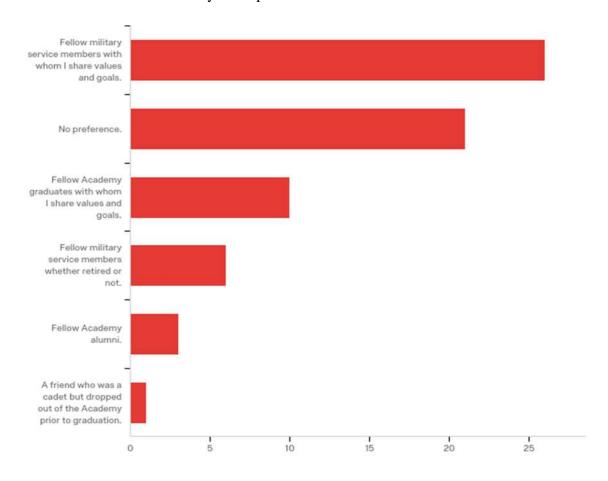


Figure 17. Post-Graduation Socializing

When it comes to spending time with Academy graduates, participants chose this response 4.5% (n = 3) compared to "fellow military service members with whom I share values

and goals" at 38.8% (n = 26) or "no preference" at 31.3% (n = 21). "Fellow Academy graduates with whom I share values and goals" was selected by 14.9% (n = 10) alumni. Less frequent than the previous choices were "fellow Academy alumni" (n = 3) and "a friend who was a cadet but dropped out of the Academy prior to graduation" (n = 1).

Alumni were asked to indicate other contexts where friendships are experienced with the same closeness as those experienced at the Academy. This is like one alum's response about forming friendships with other veterans, no matter which DOD branch, over civilians. Graduates chose this response 61.2% (n = 41) over "no" at 38.8% (n = 26). Sharing a similar response pattern was "Do you believe your current friendships are influenced by the friendship experiences you had while attending the Academy?" Alumni selected "yes" 61.2% (n = 41) over "no" at 38.8% (n = 26).

Chapter Summary

This chapter presented descriptive information derived from alumni regarding undergraduate friendships, experiences, and opinions on friendships structured around milestones of Basic Cadet Training, sports, clubs and activities, and post-graduation friendships. Alumni responses showed a pattern of evolution from self to homogenous social groups over time.

CHAPTER FIVE: IMPLICATIONS

We laughed together. When one of us felt like quitting, others in our circle talked that one person out of it. As time went on, we laughed more and enjoyed the challenges more together.

Eventually, meeting and exceeding standards became rewarding.

-- Air Force Academy alumni

Framework for Alumni Perspectives

This chapter presents a discussion of Air Force Academy alumni perceptions of their cadet friendships from In-Processing Day through Acceptance Day, a span of six very intense weeks of intense training, tumultuous change in social setting, and testing of individual mettle. A time in which a decision, a determination of one's choice to stay at the Air Force Academy, is fostered through friendships. A theoretical model was developed to depict Attributes and Integration of Normative Pressures (shown in Figure 18), providing a framework for discussion of Academy environment and culture, to conduct a comparative analysis of data gathered from Academy alumni survey participants. The integration model and survey results were used to thoughtfully formulate a response to the following research question:

What are the alumni perspectives of friendships formed in social and military training contexts of the Air Force Academy?

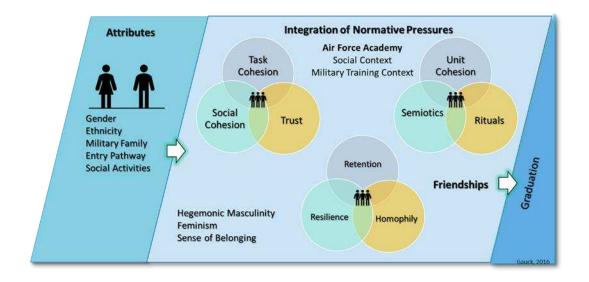


Figure 18. Attributes and Integration of Normative Pressures

Academy social processes are complex and unstudied; therefore, it was necessary to develop a theoretical model to frame the environment for a deeper understanding of friendship formation. And to inform data collection, the theoretical model begins with four attributes of cadets entering BCT and one attribute (Social Activities) following BCT. The main section presents three Venn diagrams clustered for events and outcomes, within the larger block of external social pressures present in the environment which affect interpersonal interactions. The diagram spans the time from in-processing through Acceptance Day allowing for a discussion of the implications of the study into the first year at the Academy. The period is one in which all cadets go through the same military training experiences with a shared objective to reach these milestones. The training environment and mandatory isolation from external social ties, which cadets experience during the first two weeks, creates a social excursion unique to military service academies. In the Integration of Normative Pressures model, graduation is a two-part milestone. It is a transition from undergraduate status to Air Force officer and a turning point reflecting

status as an Academy alum. Through the survey, alumni shared perceptions of Academy friendships and their current relationships.

Data analysis follows the chronology of training milestones and friendships which informed survey design, as shown in Figure 19. Findings from this study are relevant and timely for several reasons. First, this is believed to be the first academic study to specifically examine friendships within the culture of a military service academy and to suggest there is a connection between friendships and student resilience in this higher education setting. The study focused on a specific period of military training: from in-processing through the six weeks of Basic Cadet Training (BCT) at the end of which students reach Acceptance Day, and specific social conditions and perceptions of Cadet Wing culture and training. Days 36 through 41 are a transition period when Basics prepare for the start of the academic semester.



Figure 19. Timeline of Nominal Friendship Progression

Attributes

Young adults enter the Academy with inherent social attributes and then, as they move through military and academic training, undergo a progression in forming social ties and building the necessary social capital to thrive and, ultimately, become commissioned Air Force officers. Possessing attributes of gender, ethnicity, military family, and entry pathway when they arrive, cadets encounter (1) normative pressures including hegemonic masculinity, feminism, sense of belonging, social context of squadron culture, and military training, (2) act upon the individual

and the group throughout their experiences where (3) cadets possess, acquire, and share their ability to cope with unique stressors associated with Academy processes and programs. The outcome, reported by alumni, is lifetime friendships with peers.

The plurality (40%) of alumni applied to the Academy to "become a pilot"; however, the most frequent motivations stated among female alumni were to get "a free college education" and "be a career Air Force officer". Other reasons listed by alumni for attending the Academy were to play football, baseball, and basketball. The preponderance of alumni is white, yet the number of ethnic minorities entering as cadets continues to increase with each new class. The Class of 2022, for example, represents the most diverse freshman class in Academy history, with 78% men, 22% women, and 27% enrolled minorities (Rempfer, 2017).

Gender

No discussion of social bonding at the Academy can proceed without acknowledging that gender is a factor in social processes. Gender distribution of alumni participants remains weighted toward higher numbers of men than women because the latter were admitted to the Academy beginning in 1976, leaving over 20 years of male-only graduates prior to 1980. Additionally, the Cadet Wing continues to be predominately male whereas civilian universities typically have a more balanced enrollment by biological gender. Women were first admitted to the Academy in 1976. Their first graduating class in 1980 included Linda Garcia Cubero, the first Hispanic female graduate from the Air Force Academy and daughter of the Academy's dean at the time (Williams, 2007). Cubero was the first Hispanic woman in any of the military academies. Black males have been accepted at the Academy since 1959, just four years into its existence. Historically all-male, the Cadet Wing began as an institution in which masculine

social norms and traditions, reflecting the hegemonic masculinity of those decades, dominated its first 20 years.

Social bonding patterns among the all-male cadet student body stemmed from this single-gender environment, where even male cadets were ostracized if not able to form friendships.

Once women and minorities entered the Cadet Wing culture, all cadets competed for friendships and associated social capital in their quest to become a commissioned Air Force officer.

Therefore, a discussion of social dynamics within the Cadet Wing must acknowledge the tension at play between hegemonic masculinity and feminism as well as ethnic and social diversity.

Alumni responses suggest there has been a leveling of the playing field for all cadets.

Specifically, alumni expressed no preference for the gender, ethnicity or orientation of a friend, just that friendships could and did sustain them through the BCT and academic experiences.

Although fewer than male alumni responses, this study did capture female alumni perceptions of friendships across the period 1990 to 2014, with six of the eight female graduates from classes 2004 through 2009. This is of interest as media reports presented the idea that 2003 was a tumultuous year for female cadets at the Academy, a period in which some of the women respondents were still cadets.

Alumni do differ in opinions as to whom cadets should spend most of their time. Alumni were asked two questions regarding gender and time. One of male cadets and one for female cadets. The first question was "In the context of striving to graduate, with whom do you believe male/female cadets would be wise to spend most of their time?" The second substituted "female" for "male." One third, 19 of 58 male alumni stated *male* cadets ought to spend "most" of their time with mostly other *male* cadets and a few female cadets where 21% or 12 of 58 male alumni

stated *female* cadets ought to spend most of their time with mostly other *female* cadets and a few male cadets.

Cadets bring inculcated social skills, biases, and friendship experiences to the Academy. Then cadets must individually and collectively negotiate social influences, processes, and acculturation pressures to integrate into the Cadet Wing culture. During BCT, the Basic (freshman cadet) encounters a cadre of upperclassmen who encumber them with the regimentation and discipline of Academy culture within a socially restrictive environment. The Attributes and Integration of Normative Pressures theoretical model purposefully makes no distinction among cadets during military training. All cadets are on equal footing when beginning informal social connections in this environment. Additionally, alumni state they are not likely to include or exclude a cadet based on gender or race; homophily is present in some degree in endogenous peer social groups (Carrell et al., 2013, p. 873).

Learning more about how women *and* men successfully navigate the white maledominated military culture, particularly in the context of Academy cadet training, reveals the importance of platonic relationships regarding retention and post-graduation friendships.

Consequently, it makes sense to try to understand the nature of cadets' ability to bond socially within Cadet Wing culture.

Since its beginning, Academy graduates have advanced through the military training and academics to become leaders. Yet academic studies have not examined how cadets navigate the social environment of the Cadet Wing. There are several layers of social competency, processes, and social capital present in the Academy; however, this study on alumni perspectives of cadet friendships revealed information about long-lasting social connections and the associated sense of belonging as unrelated to gender or race.

The Academy continues to recruit more women, and more women are graduating from the Academy and advancing in their Air Force careers as more women apply. Of eight female alumni completing the survey, two identified as non-white, four attended a preparatory school, three played sports, and two had family in the military, specifically Air Force Academy alumni. Four female alumni were characterized/identified in more than one category. Nearly two-thirds of this group (n = 5) chose to come to the Academy for a "free college education" while two selected "be an Air Force officer" and for one "it is a family tradition.". Whether an expectation to carry on the family tradition or a result of living in a military family, the onus still falls upon the applicant's ambition to pursue an appointment to the Academy. Although no further detail was given in her response, one minority female alum stated she experienced feelings of "possibly being ostracized" during training; this was not mentioned by other alumni. Anyone may experience feelings of ostracism or rejection when entering a new social setting. Any cadet, regardless of demographic, who cannot adapt to the socially complex Cadet Wing environment, may possibly experience feelings of ostracism. The presence of diversity, both in gender and ethnicity, has steadily increased within the Cadet Wing (Deruy, 2016).

Survey data indicates adaptation to the social environment and the ability to endure through training is linked to building positive social connections. For example, female alumni reported the Academy favored men, but also stated "anyone can graduate". Likewise, for platonic relationships, female cadets stated they preferred to spend time with mostly male cadets and a few female cadets. Nearly all female alumni (n = 7) and 64% of male alumni (n = 40) alleged those who can "figure out the system" (i.e., navigate the social culture, abide by the Honor Code, immerse into Wing structure) were favored to graduate and then, to a lesser degree, alumni stated that academics, athletics, and fitness were factors influencing graduation.

"Figuring out the system" requires significant social effort. Five female alumni noted the necessity of "physical training to weed out those who do not belong at the Academy" regardless of gender, a factor rated equally with findings from the question. When asked about their view of the training and development of cadets while they attended the Academy, alumni reported that it "favors academics" behind "favors those who figure out the system", asserting that "the system"—that is, the relational aspects of Cadet Wing life—are more important to resilience than academic success alone. Alumni responses to a multiple-selection question emphasized first the social politics of Cadet Wing culture, and second, the weight of academics and physical training inherent in Academy education. Where and when cadets can build social capital through friendships, graduation is a likely outcome, according to alumni.

Alumni report highly valuing friendship bonds and realizing their importance to endurance. They assert that men and women have an equal chance to graduate (n = 39). Indeed, ten male alumni expressed belief that women are favored over men to graduate, while others (n = 7) assert men are favored to graduate, revealing that although gender bias remnants may remain, Cadet Wing culture has shifted since 1976.

It is key to focus on patterns of gender relations. Importantly, when it came to a question about whom they spent the most time with as a cadet, alumni claim to have spent equal time with both male and female cadets (n = 38) and most agreed that having a boyfriend or girlfriend neither helps nor hinders (n = 41) a cadet's likelihood to graduate. This romantic friend may or may not have been a fellow cadet. In general, having friends is of foremost importance as revealed by a 2004 graduate, "all of my favorite experiences at USAFA involve good friends of mine. Would be hard to nail down just one—certainly could not have made it through without

them". This individual did not state the gender of those friends, even casually, yet affirms that the presence of those friends was essential to his endurance through training.

Moreover, evidence from this study suggests that retention of women in the Academy is happening through close friendships with both male and female cadets. As a 2014 male graduate says, "Silver weekends when we were locked in, or on late night football games when our team sucked, having your bros (male and female) around you made those sucky weekends and dark cold nights so much better". This graduate specifically mentions male and female cadets as "bros" suggesting creation of a gender-neutral framework for social interaction he readily accepts. His use of this slang "bro," meaning "brothers," extends to female classmates as he assumes the ties of close friendship, regardless of gender. While this speaks positively about the changing social culture within the Air Force Academy, it is important to note that the Academy is still a predominately white, male institution into which minorities and women enter, and this is the continuing context where they forge friendship ties this graduate described.

It is evident that female *and* male cadets, regardless of ethnicity, can forge strong bonds of friendship while attending the Academy *and* have friendships continue long after graduation where these same friendships are a scaffold for further success. Cubero asserted in an interview, "being an Academy grad will open doors" and "I learned the value of true friendship and what it means to serve others before self" (Williams, 2007). This is a consistent message among Academy graduates and service veterans.

The present study seeks to show that as Academy culture has evolved since Pershing's study, it is evident that female cadets can forge strong bonds of friendship with male cadets (and vice versa) while attending the Academy and have those friendships continue after graduation. Forty years after women received their first appointments to the Academy, alumni suggest the

culture is changing for cadets; specifically, alumni expressed that friendships could and did sustain them through the BCT and academic experiences. Alumni do differ in opinion of with whom cadets should spend most of their time. One third, 19 of 58 male alumni, stated *male* cadets ought to spend most of their time with mostly other *male* cadets and a few female cadets where 21% or 12 of 58 male alumni stated *female* cadets ought to spend most of their time with mostly other *female* cadets and a few male cadets.

Cadets bring inculcated social skills, biases, and friendship experiences to the Academy. Then cadets must individually and collectively negotiate social influences, processes, and acculturation pressures to integrate into the Cadet Wing culture. Learning more about how women *and* men successfully navigate the white male-dominated military culture, particularly in the context of Academy cadet training, reveals the importance of platonic relationships regarding retention and career success. Consequently, it makes sense to try to understand the nature of cadets' ability to bond socially within Cadet Wing culture.

In the theoretical model, female cadets [alumni] who successfully adapt to this traditionally masculine military setting are no longer "token" or a "male" or "objects of conquest" but are perceived by male cadets [alumni] as peers, as survey data reveals. There are several layers of social competency, processes, and social capital present in the Academy; however, this study on alumni perspectives of cadet friendships revealed information about long-lasting social connections and the associated sense of belonging as unrelated to gender or race.

Ethnicity

The Academy has welcomed ethnic diversity from its inception when three black men were admitted to the Class of 1959 (*Missoulian*, 2012). In their own words, minority alumni say friendships carried them through and a new friend's ethnicity appears not to have had any

importance. Belonging to a "circle of safety" (Sinek, 2014) in which members of a group can focus their energy and time to guard against outside dangers benefits all. The Academy is constrained by federal law from specifically recruiting women or minorities to meet quotas. However, it does due diligence in reaching out to these underrepresented groups (*The Atlantic*, 2016). Occasionally stories portraying the Academy's culture as racist and hostile to minorities appear in the press (Zubeck, 2016). Yet female and minority-group cadets are succeeding, as substantiated by this research, and according to an article by Deruy (2016). Even with an average attrition rate over 18%, within which ethnic minorities and women are over-represented, the data from alumni about their resilience suggests that where social bonds are strong as "anyone can graduate". The question is *what is going right at the Academy* among all cadets, the *majority* (82%) of whom complete the program and become Air Force officers. Alumni feedback provides insights.

Survey respondents were asked a question about ethnicity using the two-category system of white and non-white. Within the sample context, non-white alumni were prior enlisted (n = 5) and/or attended preparatory schools (n = 2) before the Academy. This does not suggest all non-white cadets were prior service given that applicants can apply directly to the Academy and are not required to have military experience. Minority alumni shared these qualities: playing sports, club sports or intramural sports; and closest friend(s) on the same sports team. Where each met their closest friend ranged from BCT to weight room to doing homework. One graduate recalled feeling homesick during Doolie Day Out, while another spent the day with his girlfriend from prep school. During Doolie Day Out, cadets may spend the day with a host family, fellow sports team members, or their family if they reside within 50 miles of the Academy. The design of the military training program gives very little time for any other focus, compelling cadets to build

support networks among their peers. It is only after they endure three weeks of forced isolation from social media and family during their BCT experience that cadets are permitted to leverage additional support from a sponsor family, sports team, club, or in other activities.

Entry Pathway

Paths of access to the Academy vary and each has implications for program completion, as alumni responses reveal. Entering a military academy directly from high school imparts a dual transition adjustment for incoming freshmen. Cadets become enculturated within the Cadet Wing as they are simultaneously transitioning to their post-secondary education experiences. Entering college is daunting enough for civilian freshmen; cadets have the additional challenge of stern military discipline overlaying their adjustments to life away from home. Their military indoctrination takes place in the period of interest to this study—during the six weeks of BCT prior to the start of the academic year. Alumni reporting from high school (n = 53) comprised much of the sample, followed by those arriving from a preparatory school (n = 12). These two entry pathways reflect the experiences of 84% of study participants. At the same time, alumni asserted a keen awareness of the importance of social bonds as early as In-Processing Day. They understandably embrace one another given their proximity and shared challenge of enculturation.

Military Family

Seventy-four percent of alumni entered the Academy directly after high school. The link between where a cadet originated before entering Air Force Academy and resilience would benefit from more data, but it appears evident that having a close association to a service member, veteran or Academy alum may have a positive impact upon a cadet's adaptation to training and ease transition into the Cadet Wing. Survey respondents were equally divided about whether there was an immediate or close family member with military experience.

Weidman's model of undergraduate socialization (1989) lists parental socialization factors of socioeconomic status, life style, and parent/child relationships as influential factors of undergraduate success. In the Attributes and Integration of Normative Pressures model shown in Figure 18, this portion of Weidman's model is refocused to include an immediate or close family member who has military experience. Military influence plays an additional role in the enculturation of a cadet as individuals raised in a military household are likely more familiar with military customs and expectations than those who are not. Alumni with close or immediate military family (n = 36) were influenced to some degree regarding expectations of military social behaviors. The full impact of exposure to military socialization experienced by any cadet before entering the Academy falls outside the scope of this study; however, one can infer its advantage in the familiarity of vocabulary and customs others must newly acquire. Twenty alumni (27%), or roughly 1 in 4, reported having immediate or close family members who are alumni of either the Air Force Academy (n = 16) or the United States Military Academy (n = 4). Fifty-five percent of alumni report having close or immediate family military members, including associations with someone who had direct experience with a military academy. While 70% of alumni (n = 51) said having an immediate or close family member in the military did *not* shape their cadet friendships, there were ten alumni who "knew some about what to expect, but desired to have been more prepared (physically, mentally or emotionally)" inferring the presence and awareness of military family influences.

Inherent in the two sub-groups of 'direct entry' and 'military family' are social characteristics more closely associated with high school adolescents and first-year college students described by Richey and Richey (1980, p. 538) where cadets are in "need of the social support offered by a best friend." Cadets codify influences of background characteristics and

parental socialization when engaging in first contact with peers when establishing friendships. Cadets who were National Honor Society members, varsity letter recipients, in Scout programs or in the top 20% of their high school class, must form new social bonds within an equally high-performing peer group. Individuals who are socially savvy will make friends more readily than those who are socially awkward. Individuals who forge social connections are, overall, better equipped to handle transitions as friends may provide support not satisfied by family members. Importantly, the dramatic change in peer groups that begins upon reporting to the Academy affords individuals the opportunity to cast aside failed friendship ties of the past, perhaps in high school, and set forth on a renewed course for social success—if, as alumni say, they can "figure out the system."

Social Activities – Sports, Clubs, and Activities

Specific support for all members of the Cadet Wing exists within over 80 institutionally-approved sports and social clubs. Clubs provide opportunities for associating with cadets of similar interests. Academy leaders consider clubs a venue where "Many cadets [can] find and foster new friendships"." (U.S. Air Force Academy, 2018a) Minority students may benefit most from friendship bonds: seven minority female alumni of the Classes of 2004 and 2007 praised the personal value of close cadet friendships originating in BCT and emanating from involvement in a sport, with one stating, "A girl that I went to the prep school and was on the track team with. . . we are still very close. It's been wonderful having such a long lived and close friendship."

Each cadet club is managed by an officer, senior enlisted member, or civilian staff and fosters the friendships, personal development, and character development of cadet members.

Alumni offered mixed interpretations of the importance of friendships developed through

membership in a sport, club or activity. Three of ten (n = 22) said this was "very important" or "extremely important," where 20% (n = 14) selected these friendships as "moderately important." For context, 53 alumni participated in intramural sports and 44 participated in club sports (cycling, rodeo, volleyball, etc.) and recreational or service clubs (equestrian, falcon, chess, etc.). Division I (tier 1) team sports (football, basketball, baseball, etc.) were played by 27 alumni in this study. Culture clubs (Hispanic, Way of Life, Freethinkers, etc.) were the smallest category of organizations participated in at 6% (n = 4). Every cadet is required to participate in intramural sports if not be involved in a club sport or Division 1 level sport (sports for which individuals are recruited to attend the Academy). Therefore, every cadet is presented with opportunities to interact and learn through shared interests.

Masculinity is perpetuated through competitive sports where prowess is expressed through inclusion and exclusion. Cadets involved in Division 1 Academy sports programs at one time sat at separate chow hall tables (circa 2017) for their noon meals. Academy leadership recognized this segregation of cadets eroded cohesion among cadets in the same squadron. Thus, male and female sports teams' tables in Mitchell Hall (Air Force Academy dining facility) were abolished for noon meal, requiring the athletes to eat with their squadron mates instead. The only people to complain were the coaches (Brigadier General Andrew Armacost, USAFA Dean of Faculty, personal communication, January 2017). This suggests that friendship ties are also valued by Academy leadership.

As the academic year progresses, cadets become acclimated to the intensity of the schedule and, when permitted, engage in social activities away from the Academy with their cadet friends. Other cadets found social satisfaction within formal Academy activity programs such as intercollegiate sports, club sports, and clubs. The value of social interaction comes about

by being together regardless of reasons, circumstance, or background. A 1988 graduate said, "I had two very close friends via the Officers' Christian Fellowship Ministry." Another 1988 graduate reported, "My friends from Cadet Chapel sponsored programs were very encouraging and contributed to my personal growth and resiliency in facing stresses of cadet life." An indication of a shift in the Academy's social culture since 1993, was reflected in the July 2018 *The Gazette* story about a current Air Force Academy football defensive back who came out as a gay man (Briggeman, 2018). Seven years ago, he would have been expelled for coming out. Another example of the shift within Academy culture is seen in the fact that its first woman Superintendent, USAFA graduate Michelle Johnson, retired at the rank of Lieutenant General. Its current Commandant, Lieutenant General Kristin Goodwin, is an openly gay woman with a wife and two children.

Academy Culture and Social Context

The influence of the independent variables—gender, ethnicity, entry pathway, and military family ties—upon the development of cadet friendships emerge in patterns of socialization and friendship formation throughout training. Each cadet begins and is sustained through friendships within the Cadet Wing social hierarchy and culture.

From multiple personal conversations and observations of 47 cadets, some who may have participated in this study, over a 15-year period as a sponsor parent, a pattern of social bonding during important training milestones emerged and informed the researcher. It appeared cadets were choosing to endure the academic rigor and physical training while they simultaneously expressed enjoyment of their friendships. While attrition from the Academy can occur for other reasons (e.g., low grades, improper conduct, fitness unsuitability), it became evident over years of sponsoring cadets that if they did not sufficiently bond with peers socially or form a

connection to the institution, they were inclined to drop out of the program and return to civilian life, despite coming from positions of academic, athletic, or family strength. One alum had this to say, "When one of our group made the choice to leave the Academy, the rest of us had to do some serious thinking about whether or not we were going to stay."

Friendships seem to be key to the resilience of any cadet. Alumni overtly indicate that anyone can graduate, although they make clear that close friendships can empower a cadet through the stressors of the Academy experience and long afterward. A 1984 graduate stated, "I have lifelong friends I can still depend on today, over 34 years ago." And a 2008 alum states, "Overall, the friendships I created while at the Academy still carry through to today. Mostly from my graduating squadron class. Many of them attended my wedding and we still talk on a quarterly basis minimum".

Cadets and alumni shared their friendship experiences with the researcher, revealing apparent positive impacts of friendships on their choice to stay at the Academy, even though each faced demanding academic, military, and physical fitness challenges. Social and emotional support extracted from social bonds with fellow cadets appeared to bolster their grit and resolve, aiding them in "pulling through". They faced obstacles such as academic probation, disqualification from pilot training (the reason many entered the Academy), or physical injuries from the intense military and athletic training. The threat of failure was and is palpable for them and leaving can mean repayment of tuition and redirection to the Air Force enlisted ranks. Yet alumni tell us friendships help to earn the unique privilege of tossing their covers into the air as the Thunderbirds soared over Falcon Stadium on graduation day.

Competition among cadets is high and likely very different from their high school social and friendship experiences. Typically, over 12,000 people apply to the Academy each year and

about 1,400 are evaluated as eligible for meeting admission criteria. While alumni stated they were aware that establishing a friendship early was important, it is fair to say that such ambitious high performers have a challenge connecting with others no matter where they find themselves. Entering the Academy puts them in proximity to others with these same characteristics and social challenges, making friendship formation both more important and more challenging.

Alumni recalled expecting to make new friends upon arrival for BCT (n = 35) while others already knew someone in their class, likely from preparatory school (n = 11). This was not so for all alumni as there was apprehension (n = 18) about meeting classmates and expectations of difficulty in making friends (n = 3), and these feelings were shared regardless of ethnicity or gender. Alumni recollections of realizing they needed a friend soon after beginning their training reveals that new cadets quickly and actively seek peer support, even if they are deemed to be the "cream of the crop".

Social Transitions – Military Training Context

In the 19 years since Packard's examination of cadet leadership culture (1999), direct knowledge of cadets and their ability to manage social relationships throughout their undergraduate experience has not received academic attention. However, through the benefit of over-time snapshots resulting from alumni participation in the survey for this study, we can begin to understand the nuances of cadet socialization within the Cadet Wing that contribute to resilience. As cadets who bring inherent, predetermined personal social competencies with them to the Academy, they found a way to come together in esprit de corps as "one team." Given alumni vehemence about the value and length of those friendships, we can inversely infer that cadets who did not successfully forge at least one friendship by Acceptance Day are more likely to leave. Perhaps this is what they mean when they point to "figuring out the system". A

surprising one in five do not figure out the system, which carry even cadets who experience upsets or are low-performing students through the experience. This study posits that understanding how cadets relate to one another during the key milestones of BCT and during their first academic year can reveal whether and how to create programs and policies that improve skills that build social capital and afford them resilience.

Alumni express a need to tell their stories about Academy life and shared experiences (good and bad) of military training and academic rigor. Nine of 10 alumni still socialize with friends from the Academy. These life-long friendship bonds were forged during the Academy experience. Earning the moniker "ring knocker," alumni report strongly (90%) that having a close cadet friend increased the likelihood of graduating from the Academy. They overtly acknowledged the importance and value of friendships within the social ecology of the Cadet Wing, so much so that even after extended periods of absence from one another, alumni reconnect with their friends either "very well" or "extremely well" over 90% of the time. Indeed, one graduate stated, "I have lifelong friends I can still depend on today, [from] over 34 years ago".

While some alumni claimed sole and independent responsibility for choosing to stay at the Academy and graduate, they too may have been influenced by friends as they almost unanimously proclaim cadet friendships were essential to their journey as an undergraduate. One alum, perhaps attributed to selective memory, summed up the experience as, "I hardly ever think back and dwell on the challenges, but I remember and talk about all the fun I had".

Described as a rewarding yet difficult experience, entering cadets may be thankful for a "free education," it does have its price—grit, strong self-discipline, persistence, and excellent time management skills. It is possible to get through the Academy on your own; however, it is

not probable, and in any case the program is not designed to be a solo experience. The intense early training is intended to diminish individualism reshaping one's identity and bonding socially to peers and the homogeneity of Wing culture. The Academy's Admissions website alludes to this transformation: "BCT in the Cadet Area focuses on the transition from civilian to military life. To succeed, you must accept the challenges that the Air Force Academy presents, realizing that the training you receive is directed toward making you an effective member of the Air Force" (U.S. Air Force Academy Admissions, p. 2). For some dropout students, this transition does not take place. Data from this study inversely reveals that insufficient social bonding may be the first step toward self-separation (not dismissal for illicit behavior) for a cadet. Alumni described establishing supportive friendships beginning with making friends with one's roommate, the person in immediate and closest proximity to them. Roommates are assigned during BCT and first academic year. A specific roommate may be requested for the following academic years. Cadets from preparatory schools are not assigned to the same squadron.

When asked about how much friendship contributes to a cadet's resilience, a 2013 graduate stated, "It depends on the person. Friendships made it more enjoyable, but many cadets are type A and are going to do what it takes to graduate". Many cadets, because of the nomination and selection process, are National Merit Scholars, high school valedictorians, and/or outstanding athletes. In short, they are smart, ambitious, and determined young people.

Nevertheless, integrating into military life is their common challenge, particularly in the period under study here when they are initially pushed to the limits of endurance emotionally and physically.

Alumni responses showed that building friendships follows a progression over the timeline of the BCT training experience, as shown in Figure 18. Friendship begins with the

person or persons such as a roommate and squad members. This is reasonable as these are cadets in closest physical proximity during early military training. Sixty-five percent of alumni stated "I got to know my roommate and a few classmates" during the first two weeks of training. Second to this, alumni shared "the only person I had time to get to know was my roommate." When combined with the first group, 62 alumni indicated their first circle of friends was their roommate and a few classmates. It is these interactions, where reciprocity and investment in a social connection produces social capital, that trust and improved connectivity and cooperation, improved cohesion, increased ego-resilience, mindfulness, and exerted positive social influence on peers grew—all important components of cadet friendships and overall resilience consistent with prior research (Pidgeon & Pickett, 2017, p. 104).

Social bonding begins in the early days of the Academy training environment. Packard (1999) posits that students form groups based on *propinquity* (bonding with others in physical or psychological proximity), then *homophily* (associating/bonding with like individuals). This is evident in alumni responses. It also supports Sinek's (2014) claim about dorm residency providing the venue for social bonding. Sinek's example pointed to meaningful socialization within a new college experience. The environment for forging new college friendships is far more unique for Academy students, who are constrained from conversing freely during intense training and forced to do so in less public settings where commiserating about their circumstances can take place, as training instructors realize. Military training is designed to revise an individual's identity during indoctrination to regimented military life. Standards imposed by the training environment prohibit cadets from speaking to each other freely during the first two days of BCT, while in formation, standing at ease, waiting in line, or in the early days during meals, which they march to in silence. So, the stakes are high to develop social

support at the same time the opportunities for doing so are limited. At the Academy, the environment—dorms, classrooms, intramural and training fields in which military training takes place, or other spaces for informal interaction and the amount of time spent in these locations—presents selective opportunities for social interactions on a personal level, at present primarily between nearly non-stop scheduled training activities. Patterns of social interaction generally form during encounters within rooms, halls, and other squadron spaces within the dormitories, and even these encounters are defined by the rank hierarchy of the Cadet Wing. One can infer that cadets' conversations evolve around the daunting challenge they share common interests of music, food, hometowns, and high school as a means of navigating from 'acquaintance' to getting to know and understand each other as 'friends' through conversational inquiry, sorting through the group to find individuals of similar attitudes, goals, and interests. Again, alumni state that these friendships endure over time.

A 1990 graduate shared this perspective, "My freshman roommate is still my best friend to this day". And a 2007 graduate said: "A girl that I went to prep school and was on the track team with. . . we are still very close. It's been wonderful having such a long-lived and close friendship". Military training and academic responsibilities are consistent for all cadets; however, friendship attachments with other cadets can vary, as reflected by a 2012 graduate who said, "to this day, I consider the people I graduated high school with to be my closest friend and most of my Academy connections to be acquaintances." Even with his closest friends from high school, the value of close friendships is evident; however, in his case it was apparently not with his Academy classmates. He further added, "I arrived at the Academy with a strong identity closely tied with my high school friends and where I grew up". Trust within social bonds, as

reflected in alumni comments, takes time to evolve and solidify. According to Flanagan (2013) it is the basis for cooperation inherent in friendship.

Using the Attributes and Integration of Normative Pressures model, we can see how alumni begin and gradually develop friendships in the difficult and stressful military training environment. While it may be argued military training is detrimental to the individual, 72% of alumni point to friendships as very important or extremely important to adjusting to Academy culture. Buote et al. (2007, p. 685) argued "friendships are essential in major life transitions of young adults to college life and may counteract the difficulties and stress associated such changes." Alumni confirm this argument. When Buote et al. writes of friendship quality, they convey their respondents' messages about individual traits of similar interests, desirable personality traits, intelligence, proximity, time together, trust, intimacy, social behaviors, personal challenges, shared experiences, and feelings of happiness—not shared gender. Indeed, Carrell et al. (2013, p. 881) writes of endogenous social groups influencing academic performance. Again, alumni confirm this, regardless whether they were separated within the Cadet Wing during a dorm shuffle, alumni state that friendships remained a conduit for cooperation. Through social support they associated those friendships with feelings of wellbeing, self-worth, and self-esteem, giving encouragement, and helping one another.

Integration of Normative Pressures

Academy social processes and outcomes during the period of the study are graphically depicted in the Figures 18 and 19. The variety of complex forces within the Academy training environment combine before graduation and commissioning, and they stem from what appears to be simple obedience and regimentation. However, the Integration of Normative Pressures model is intended to address gaps in research about the Cadet Wing completed by Packard (1999) and

Carrell et al. (2013), who pointed to endogenous cadet peer groups as the single factor skewing their research results. Endogenous peer groups overwhelmed formal cadet squadron leadership hierarchy in Packard's study and significantly negatively affected academic performance of cadets in Carrell et al.'s study. In other words, previous research could not account for the phenomenon of social connectedness that compelled individuals to submit to and continue training. Peer-to-peer influences apparently combine with structured program methods intended to induce membership identity among trainees. Endogenous social connections occur in a natural progression throughout cadets' training and academic experiences at the Academy, as alumni stated. This progression takes places by the need they express having from day one and is further inculcated through rituals and milestones achievements framing the BCT and shared training experiences of their first year within the Cadet Wing.

Task Cohesion, Social Cohesion, and Trust

The Academy's military training program is marked by a series of objectives achieved by cadets beginning with In-Processing Day. There is a point in the training process where, if cadets have not yet bonded socially with their peers, the likelihood of them bonding socially (and staying at the Academy) diminishes. During and throughout training evolutions, integration of identified social normative pressures are in play. These social pressures begin with BCT in the closed Academy environment. Alumni survey responses suggested an increase in the number and depth of friendships over time in this crucial period.

During the initial transformation from civilian life to cadet life in the first three weeks of BCT, 64% of alumni shared experiencing getting to know a roommate and a few classmates. This small circle of influence represents the close physical proximity affecting early friendship formation where cadets have limited social interaction with a few peers. While 49 of 67 alumni

(73%) felt it was important to begin making friends, 85% experienced *making* friends, at a minimum, with his/her roommate during this phase of training. This affirms Zeggelink's (1995) research that among any group of individuals previously unknown to each other and confined to a specific closed setting for a given amount of time mutual strangers will begin to form social connections.

The social environment of a squadron serves as an impetus to changing behavior and developing new leadership skills or to stifling old behavior patterns (Packard, 1999). Personenvironment theory of Chickering and Reisser (1993) allows for consideration of context, socialization processes, formal and informal socialization, and the structural and organizational characteristics of the Academy. Both environment and context are present as a cadet's first roommate friendship experience lends insight about interpersonal socialization processes, personal habits, attitudes, and valued academic performance affecting friendship selection—not least because in the Academy much of these processes are shaped by the institution. It appears patterns of social connection begin with the person or persons in closest physical proximity (a roommate) then trends to friendships beyond the roommate. Such selection is evident in the second social milestone, outdoor training of basic cadets in Jacks Valley, as will be discussed below.

Further examination of friendship formation revealed additional social bonding during military training as 51 alumni reported developing "friendship with one or more classmates" or developing "strong friendships with one or more classmates" by the mid-point of BCT when Doolie Day Out occurs. At this juncture, cadets, who have been isolated from family and prior friendships for three weeks, reported forming friendships with classmates. Further, alumni were equal in choices of spending time with cadet friends and wanting to talk to family when asked

for a preference, indicating a transition phase of their sense of belonging and social identity away from one's family of origin to the Cadet Wing. Although cadets participate in both reconnecting with family via telephone and spending time with fellow cadets, Doolie Day Out marks a social and acclimation transition. This transition in social networks since arriving at the Academy, even in the absence of planned formal social engagement activities found in civilian universities, points to cadets forming friendships within the Academy environment without the intervention of programmed social events outside of clubs and sports.

Encounters during Doolie Day Out further reveal evidence of friendship transition beyond "self" and toward "sense of belonging" within cadet social structure. Evenly divided between wanting to spend time with family and wanting to spend time with new friends, alumni point to transference in individual and collective sense of belonging of cadets. Alumni stated being able to complete basic training "with help from friends" as 45% reported having challenging moments but "made it through with help from friends". They further stated a friend's gender, whether the relationship was romantic, was immaterial so long as a friendship connection was present. This points to cadets' transitioning their individual sense of belonging while increasingly identifying as a "cadet" among peers and existing social contexts. The Attributes and Integration of Normative Pressures model, an extension of Weidman's (1989) theory regarding integration in social and military training contexts, accounts for individual adjustments during each period of training. Adjustment to Academy culture advanced more rapidly during the next social milestone as the persistence of proximity, stress, and need continued.

The outdoor training experience following Doolie Day Out scored a higher level of social cohesion than experienced in the earlier weeks of BCT. Over 67% of alumni described their

outdoor training, referred to as "Jacks Valley" because of the location on the Academy, as the period when they experienced the greatest trust and reliance on classmates and learned to be in a real close-knit military unit (n = 47). An increase in scope and depth of friendship is common during this phase of training as new challenges are thrown at the cadets and fatigue is experienced. Intense physical activity inherent in the second phase of BCT bolsters peer friendships, as 49% or nearly half of alumni stated the "experience strengthened my friendships with classmates" through interpersonal interaction to achieve a common goal (task cohesion). Physical, mental, and emotional challenges endured during this aspect of training imparted social bonding and sense of belonging as cadets grew closer together while exposed to intense physical training and being increasingly sleep deprived. Indications of task cohesion, social cohesion, and trust, as depicted in Figure 20, are shared and consensual sets of social norms developed through interpersonal interaction.



Figure 20. Visual Indications of Task Cohesion, Social Cohesion, and Trust (Photos refer to general experiences, not images of study participants.)

Unit Cohesion, Semiotics, and Rituals

A fourth social milestone takes place on Acceptance Day. This public ceremony, when the newest cadets march into the Cadet Wing to join upperclassmen, is a symbolic representation of earning a place within the larger group. Appropriately titled "Acceptance Day," this ceremony is when new cadets receive uniform shoulder boards, a visual symbol of membership, denoting their rank within the Cadet Wing hierarchy. Nearly two-thirds of alumni point to the need for friendships during BCT and tie them to their reason for becoming part of the Cadet Wing. A 1990 graduate summarized the experience: "The pressure of BCT and the Doolie (freshman) year cause friendships to become tighter. The pressure squeezes out any space between you and your friends." The phrase "squeezes out any space" shows the emotional and psychological intimacy experienced within cadet friendships. The more familiar cadets are with each other, the stronger their social bonds. A prerequisite to effective performance, social bonds of friendship develop alongside successive task completions. Fifty-eight percent of alumni indicated their classmates specifically contributed to their reaching Acceptance Day without dropping out of military training. Acceptance Day is their final achievement before starting the academic year when entirely new challenges are added to the military discipline they just acquired.

The person-environment theory allows for consideration of context, socialization processes, formal and informal socialization, and the structural and organizational characteristics of an institution (Chickering & Reisser, 1993). Patterns of social interaction during military training are influenced by cadet attributes and finding common interests. Female and male cadets are segregated in specific private spaces (e.g. dorm room, restrooms) within the squadron space of the dormitory, yet they also have opportunities to interact in hallways, classrooms, and training events. The more frequent the social interactions, the more familiar the cadets become

with each other. Ranked by alumni respondents, "fitting in with classmates" is third behind "this training taught me to trust and rely on my classmates," and "this training taught me what it is like to be in a real close-knit military unit." This indicates cadets were experiencing social bonding as more valuable than "being popular" after their freshman year alumni recalled identifying more closely with cadet friends than with friends they knew before entering the Academy (n = 62). Relationships were founded upon a growing sense of self-confidence in one's ability and strengthened by a shared sense of accomplishment as shown in Figure 21. This increase in breadth and depth of friendship during the Jacks Valley phase of BCT points to task cohesion as a conduit for friendship formation. In the field, cadets learn fundamental skills in small unit tactics—use of firearms, battlefield teamwork, and combat skills. This phase of training pushes physical and emotional limits, building self-confidence and mutual trust as cadets bivouac and learn to stay focused under rough conditions. It seems military task cohesion is a suitable substitute or addition to the planned social activities found on civilian college campuses as 49% strongly imply "the experience strengthened my friendships with classmates." Additionally, 27% of alumni stated the experience helped build close friendships that helped them as they went on to complete BCT.

Strength, discipline, and stamina partner with trust and unit cohesion in the fourth BCT milestone. Alumni who experienced "having fun together;" "sharing similar Academy experiences," and "helping each other study for tests" highlighted the value of friendships as essential to group cohesion. For 98% of alumni, fun was what drew friends together. Recovering from difficulties associated with military training and academic challenges is predicated upon trust within a social group. In their own words, alumni shared "making it through bad times together," "we hated USAFA together," and "we encourage one another through our Christian".

faith" as circumstances which drew cadet friends together while at the Academy. Indeed, research shows that involvement with and integration into peer groups with similar goals, values, and interests greatly increase college completion and is consistent with previous research (Altman, 2016; Tinto, 1975, 1982, 1987, 2006). Friendship development continues through the end of BCT and into the first academic year.

By this point in their training, completing BCT and transitioning into the academic year, unit cohesion has lent some degree of comfort as cadets have performed the rituals and acclimated to wearing the uniform, marching and other semiotics of military life, as shown in Figure 4. Cadets are organized from "flight" (the smallest) to Cadet Wing (the largest). Each squadron has its own identity and each grade level (class) has its own identity.

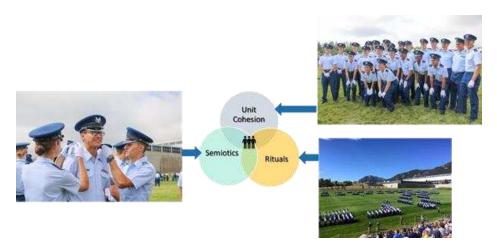


Figure 21. Visual Indications of Semiotics, Unit Cohesion, and Rituals – Acceptance Day (Photos refer to general experiences, not images of study participants.)

Each cadet is required to participate in at least two social groups, first as a squadron member and then as a cadet in any number of chosen friendship associations. One alum reported no change of squadrons, remaining with the same group of cadets throughout the entire undergraduate experience. When cadets moved to a new squadron varied. During some years, cadets moved following the freshmen or fourth-class year while other cadets changed squadrons

following the sophomore or third-class year. Changing squadrons meant changing physical location within the dormitory complex. Friends were no longer co-located within the same squadron spaces.

Retention, Resilience, and Homophily

Young people seek peers with similar interests, values, and backgrounds. Friendships that continued after the squadron switch denote a degree of social bonding, as 8% of alumni remained close friends with classmates in their first squadron while also making close friends in their new squadron. Making close friends in the new squadron was selected by 32% of alumni, indicating those social connections were perhaps driven by physical proximity. Twenty-three alumni, roughly one fourth, indicated making close friends was easier in their first assigned squadron, while 29 indicated it was easier in their new squadron. The perceived ease of making friends in the new squadron may be attributed to familiarity with the environment, identification with peers, or already having support of close cadet friends. When close friend(s) on sports teams (in lieu of squadron friends) is examined, 98% of alumni reported having at least one close friendship as an undergraduate. Therefore, study partner or workout partner choices, friendships, and roommate/workout pairs all show patterns of endogenous peer group formation mimicking the same type attraction (homophily) patterns studied by Carrell et al. (2013). Depicted in Figure 22, the association between quality of new friendships and social adjustment is significant.

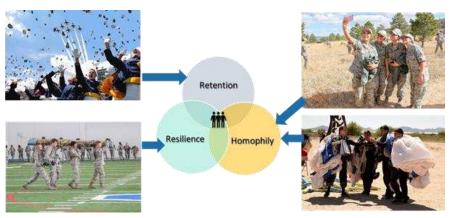


Figure 22. Visual Indications of Retention, Resilience, and Homophily (Photos refer to general experiences, not images of study participants.)

As such, close friendships reported by alumni emphasized interpersonal trust and teamwork built through military training and routine where over half (52%) of alumni claim friendships were moderately to very important. Further, when emotional/psychological adjustment is considered, alumni strongly declared friendships were moderately to extremely important (82%). Findings indicate the type of social bonding and friendships counter the "misogyny and racism-- a male-dominated, closed culture" perceptions of the Academy and may be more closely associated with an individual's attitudes about friendship overall. That cadets connect with like-minded cadets, regardless of the environment, suggests there is neither "masculine" nor "feminine," but a homogenizing, in appearance and purpose, of social connections within the Cadet Wing. A 1988 graduate describes his experience as, "God used these men and women in my life to reveal His profound excellence and wisdom that I find irresistible." He further adds "My cadet friendships didn't start developing until I was selected for airmanship programs, and found similarly motivated people down at the airfield, both on the soaring and jump sides of the house. Apart from one individual, a 2015 graduate, who said "I made no friendships of significance outside of the airfield," the preponderance of alumni reported making at least one close friend within their squadron, sport or club. Arguably, the

Academy's overarching military culture perpetuates positive, lasting social connections and friendships purely because of its membership requirements. However, friendships appear to be the arena in which the homophily required for membership is established and maintained.

Although bound by the circumstances of military training, shared experiences provide individual opportunities for emerging patterns of trust, loyalty, integrity, and accountability. Alumni point to receiving benefits of reciprocal social capital from peers through accepting and offering help and encouragement from classmates during the outdoor training phase. This "figuring out the system" and integration of normative pressures built through task cohesion, social cohesion, and trust acts upon the individual as a member of the group [element, squad, squadron] and on individuals in the group demonstrating social bonding through adversity. The social bonds constructed throughout training result in new interpersonal, intrapersonal, and leadership skills for cadets, who must demonstrate these competencies to earn credibility with one another and for assessment by their trainers. This presents a logical extension of studies by Packard and Pershing, emphasizing the value of creating an environment of shared struggle to increase comradery and loyalty (Pershing, 2006). Yet there is more to it than this.

While alumni assert very clearly that "anyone can graduate," at the same time they attest that friendships are key to doing so. They seem to be saying that informally bonding with peers thwarts efforts on the part of the institution to attrite cadets. This points to the importance of teaching cadets how to win friends while assuring equitable opportunities for informal social ties for women and minorities. Alumni responses strongly point to the idea that sustaining social bonds happen when they have opportunities to converse about shared experiences, regardless where and no matter with whom. This suggests that the Academy's demanding training program, military and academic, is a unifying experience specifically for cadets who have a chance to

speak (and emote/laugh) about it, and the shift in identity the institution seeks to instill occurs outside programmatic efforts.

Friendship Value

The Air Force Academy fosters a level of social bonding usually associated with members of military special operations teams and very often produces similar life-long friendships. Intense experiences lead to intense bonds, yet social miscues can occur, and some miscues bring consequences. Given the finite period of military training covered in this study, all other things being static, the prominent variable for retention is the ability to form friendships with peers. "I wasn't sure that I would stay at the Academy because I struggled academically, but I had friends who were very smart, helped me study and find the right major for me to excel," stated a 2008 graduate. Those entering military service with elevated levels of resilience may be more likely to adapt to stressful situations and manage psychological stress (Bezdjian, Schneider, Burchett, Baker, & Garb, 2017, p. 482). Knowing their own population, alumni were asked about the importance and value of friendships. When asked outright, alumni said it was not their friends who influenced their *choice* to stay. Yet, when asked about the value of friendships, alumni proclaimed the importance and value of friendships in their ability to sustain the Academy experience. Although they stated the choice to remain at the Academy was theirs alone (n = 36), this declaration more likely reflects the leadership experience and bravado of alumni than contradicting data about the importance of their social bonds to completing the program. When asked about friendship influences in another way, alumni acknowledged the influence of friends and family or other significant adults in their decision to remain at the Academy varying from fewest recalled of "my friends at the Academy" (n = 1) to equally recalled "mostly my friends at the Academy and some from my family and other adults" (n = 9); "equally my friends

at the Academy and my family or other adults" (n = 9); to "mostly my family and other adults, but some from my friends at the Academy" (n = 10). In yet another pass with alumni in the survey, alumni declared friendships of *immense* value, perhaps indicating friendships do influence cadets at a sub-conscious level but for different reasons. "When deciding whether to stay at USAFA going into junior year, I called and had a long talk with another polo player who was a senior when I was a freshman and went into the career field that I was destined for. That talk helped me make the decision to stay," wrote a 2008 graduate.

Social bonding provides benefits. As a group, alumni declared "yes" cadet friendships are important to graduating from the Academy at a resounding 90% (n = 64). One light-hearted comment from a 1963 graduate speaks of a benefit of friendships when he says, "My BCT roommate's mother concealed a large piece of fudge in a package of shoe shining equipment. It got by the upperclassmen and sustained us when we weren't getting much to eat". Expanding on this connection are these words from a female 2005 graduate, "My sponsor family and the other cadets who went there with me were pivotal for helping me stick with it. They truly were FAMILY!" How cadet friendships precisely influence retention requires further study, yet evidence strongly suggests cadet friendship bonds significantly increase resilience.

The reciprocal benefits resulting from social bonds increases social capital or the resources (influence and information) that flow through networks of relationships (Adler & Kwon, 2002; Coleman, 1988). Relationships with others and membership in the social network of the Cadet Wing impart information and influences key to "figuring out the system." Cadets tend to spend the most time around cadets with whom they feel comfortable and accepted (homophily). These endogenous peer groups exert influence on attitudes, perceptions, academic performance, and behaviors according to Packard (1999) and Carrell et al. (2013). Alumni state

this same influence of social capital remains present, if even unwittingly, as is the case with this 1988 graduate, "I made my best friend at the Academy . . . from road trips to struggling with a variety of academic challenges, we found a lot of common ground . . . the friendship didn't influence my decision to stay at the Academy as much as it did to enhance the experience while I was there". While this alum outwardly states his friendship did *not* influence his decision to stay, his remark exudes nearly every positive aspect of strong social bonding, sense of belonging, social capital, and social cohesion found in a close cadet friendship and its influence on resilience. How could he *not* have been influenced by his friends? Resilience and sense of belonging emerged from social cohesion, task cohesion, and semiotics within this military training environment, which highlight the vital role informal peer interactions have in resilience. Cadets interact with their classmates to find community and meet their academic and personal goals, which is how alumni defined their undergraduate success, and this social interaction plays a strongly positive role in Academy post-secondary experiences. While individual experiences may vary, the role of social cohesion is vividly present.

Quality of new friendships is a significant positive predictor of overall university adjustment according to Buote et al. (2007, p. 672). And friendship quality was more important than the quantity of friends. In step with previous research, alumni tell us that not only were these friendships serving an important function of adjustment to Academy life, they increased the likelihood of being introduced to other potential friends who would further expand one's social network and social capital. Social capital exchanged within the Cadet Wing includes emotional and social comfort, encouragement, success tips, comforting sarcasm and humor, as well as tips and tricks brought by those who were enlisted or come from a military family. If in the absence

of supporting friendship ties, a cadet is not engaging in this kind of social capital, it is easy to understand why s/he might dropout.

Post-Graduation

Following graduation, alumni unanimously express appreciation for lasting friendships. Graduates carry patterns of friendship from the Academy into their post-graduate years. They report a preference for spending time with fellow military members with shared values and goals regardless of service affiliation (n = 26) over fellow Academy graduates (n = 9) and seek this kind of fellowship in other contexts such as work, church, and community organizations (n = 41). Similarly, alumni find it easier to form friendships with other veterans than with civilians (n = 41). There is power in shared language, experiences, and cultures across branches of the military which can benefit individuals many years after graduation.

Social capital provides life-long career benefits. Alumni responses were nearly unanimous about continuing friendships (n = 65) with the majority proclaiming friendships were "moderately" to "extremely" important (n = 36) following graduation. A 2008 graduate announced, "Overall, the friendships I created while at the Academy still carry on through today. Mostly from my graduating squadron class. Many of them attended my wedding and we still talk on a quarterly basis minimum." His sentiments were echoed by a 2009 graduate, "... I remain friends with my basic squadron cadets to this day," and a 1990 graduate said, "My freshman roommate is still my best friend to this day. I wish we could have roomed together all four years".

When asked the question, "how well do you reconnect with your Academy friends after an extended period of time" their voices declared "extremely well" (n = 42) and "very well" (n = 18) expressing strong social ties that transcend distance and time. Evidence suggests that links

between undergraduate social capital in the social-psychological realm (trust and commitment) and activity (involvement in military training) give rise to social capital and healthy connections that extend beyond the undergraduate experience and enhance post-graduate social connections. This is captured in the comments by this 2008 graduate, "Even though we haven't seen each other in years, we still keep up with each other occasionally and we'd have no problem picking up our close friendship right back up despite it being 10 years since graduation." Hence, the Academy culture fosters the same connections studied by Pettit et al. (2011) in both social capital breadth (extensiveness of friendship network) and depth (committed and supportive relationships).

The reciprocity of social capital influences a wide range of personal traits, as well. "The main aspect of friendship I was taught at the Academy and still live by is that you never leave a classmate hanging. In other words, never let a friend deal with something negative on their own, even if you cannot really help, you stand next to them and take the 'punishment' with them," stated a 2007 graduate. This graduate speaks to important layers of nuance to the critical questions of social bonding when we discuss student success, and what success means, looks and feels like (Coates & Matthews, 2018, p. 905). This alumni's statement also reflects the synergy that occurs within peer-to-peer interactions. It is at the individual level where students have the most direct interactions with each other and where peers have the most influence in helping students connect with other social networks (Peregrina-Kretz, Seifert, Arnold, & Burrow, 2018, p. 1083).

Limitations

This study was conducted with alumni from one of five service academies in the United States. Although all service academies employ similar military training, there are variations in

execution and routine. While the findings are the basis for generalizing to the Air Force Academy, it is unknown whether the findings produced can be generalized to other service academy alumni populations.

The researcher did not ask alumni if they were enrolled in a Junior Reserve Officer

Training Corps program while in high school. Junior Reserve Officer Training Corps are

citizenship and leadership development programs are partially funded by branches of the United

States military in partnership with local high schools. Although not identical to having military

family, these programs utilize similar concepts of building teamwork, self-confidence,

leadership, and instilling core values of honor, courage, and commitment. This study did not
capture this attribute.

Another limitation was data were obtained from an online survey without follow-on interviews for gathering context or deeper exploration of friendship experiences. This limits context of interpretation of the researcher regarding alumni free-text entry responses thereby opening data interpretation to researcher bias. Additionally, with an anonymous online survey, the researcher cannot verify the survey was taken by the alum or by another person on behalf of the alum.

A fourth limitation is this study relied on alumni's ability to recall friendship experiences in the past, in some cases up to 55 years ago. Completeness and accuracy of recalled experiences produces an intangible margin of perceptions due to the passage of time. This could be remedied through a replicate study of current Academy undergraduates. Nonetheless, alumni provided adequate data within the survey to give rich context for interpretation when combined with researcher's experiences and knowledge of cadet life at the Academy.

The Air Force Academy reports the highest attrition rate among all military service academies and yet resists cooperative exploration of its practices with outside academic researchers. Behavioral research is conducted internally at the Academy each spring semester, generally in the form of multiple surveys presented in a single week to the third year (sophomore) class; however, results of that research are not made available to the public. Beginning with an initial request for access to the undergraduate cadet population in October 2014 and culminating with an official in-person meeting with the Dean of Faculty in February 2017, the researcher was never granted access to cadets for anonymous data collection. Forced to adjust, the researcher reconfigured the survey to query Academy alumni instead. The Association of Graduates (AOG) ignored requests for an anonymous distribution of the online survey link to graduates. Cooperation by the AOG would have provided access to 59 years of graduates who could have voluntarily participated in this study. However, this request proved to be a dead end as neither formal nor informal inquiries for assistance were acknowledged (the AOG has since added the researcher's email to their distribution list for soliciting contributions to the Academy Foundation). Air Force Academy solipsism isolates an exceptional military school from cooperative academic research, perhaps further fostering public misconceptions and uninformed interpretations of Academy culture. Correct or not, the perceived implication is the Academy is hiding something. The Academy has dual roles as a military organization and a university. Silence among the leadership (and USAFA IRB) about opening the Academy to impartial academic research prevents a full understanding of taxpayer-supported programs and neuters efforts to support and improve cadet experiences and performance, address the alarmingly high attrition rate, and more effectively train Air Force officers.

Had the researcher received cooperation in distributing the anonymous survey link, alumni participation in the study may have been far greater. Interpretations of findings in this study are impacted by limitations outside the researcher's sphere of control. The sample was too small to provide viable comparative analysis of sub-groups (i.e., ethnic minorities) and too impersonal and general to gather information about other attributes (i.e., detailed sport or club participation, partner preference, specific friendship memories) or other social events (i.e., commitment night, ring dance) for a thorough academic discussion of similarities or differences regarding ethnicity, gender, and academic major as sub-groups of the graduate population. Yet, alumni participation did provide a valuable snapshot of the value of cadet friendships.

A more rigorous sample of the target population was preferred. The response rate was over 10%, yet less than half the desired 165 participants. While within accepted range for a qualitative study, this leaves room to pursue further saturation of the study population for a more cross-sectional and longitudinal examinations of the relationships between cadets' friendships and their resilience. Experiences and conversations with cadets for 15 years enriched the researcher's perspective and interpretation of data often providing tacit insights to cadets' experiences. While cadets have changed, their friendship experiences demonstrate a similar pattern of connections with each other. Yet at the same time these experiences may have influenced interpretation of data as the researcher may have inadvertently filtered survey responses and alumni comments in gathered data in the context of 15 years of experience rather than the 40 years of alumni experiences.

Implications

Getting into the Air Force Academy requires ambition and is highly competitive. The irony is that when highly-touted appointees arrive at the Academy they must toss aside their

habit of self-driven excellence and replace it with selfless service and teamwork to succeed within the Cadet Wing. Their previous accomplishments become null and void—no one knows about them anyway. What if Academy applicants could receive training about social competency, informal networking, inter- and intra-personal social skills, and the value of lifetime friendships before reporting for in-processing or immediately following admission? Obtaining skills for developing an extensive friendship network may enhance resources and support for cadets who, as young adults, are experiencing a transition period from high school friendships into something far more demanding. Perhaps such training could take place while in high school and lead to certification submitted during the application process. These skills could be taught formally as part of the BCT training program. Applicants arriving with an 'edge' on the value of teamwork, cohesion, and social bonding could more fully engage in and derive benefits from military, academic, and physical training, thereby elevating Academy culture and the Air Force.

Future Research

This study of cadet friendships could be extrapolated to students in the other four service academies. A deeper understanding of the role of social bonding at service academies, currently addressed by studying resilience, could support implementation of student programs at institutions like the Air Force Academy concerned with a high and disproportionately minority/female dropout rate. With a lifetime of leadership development experience with young adults and children, the researcher posits a theoretical model that provokes conversation in future publications about military academies, specifically addressing Colonel Packard's (1999, p. 118) statement suggests "that an understanding of relationships and an ability to work with people are important considerations when followers and peers judge the leadership abilities of those with whom they work." As such, time spent improving cadet peer-to-peer relationships of both

genders may improve chances of success within a setting that has relevance to cadets' daily lives and may improve use of alternate strategies in leadership. Informed research about cadets' socialization practices may reveal pitfalls in programs well-intended to support their academic, military and physical training adjustments. Resources could be focused upon empowering struggling cadets through development of stronger social ties. Almost one in four who drop out of the Academy are female or people of color. Examining socialization patterns in the Cadet Wing could reveal the further value of friendship bonds for Academy cadets, who remain largely isolated from external support for much of their experience. Somewhere, somehow these individuals may not be sufficiently bridging or connecting socially within the Cadet Wing. A greater attempt at understanding why is important to the institution's future.

The recommendation for research regarding applied concepts on homosociality (including an overview of hegemonic masculinity and feminism), semiotics (to examine rituals and symbols of social membership), and personality and social dynamics of trust in friendships to aid in understanding undergraduate resilience at military academies may be one means to reduce attrition. Research using identity fusion theory, to explore group alignment, measure the sense of "oneness" or belonging, and gauge how some individuals feel with a group, along with social identity theory, may provide greater support of academic or physical fitness at risk individuals at the Academy.

Packard (1999) argued it may be more important to monitor a team's interpersonal processes and interactions since cadet peer groups appear to create a consistent (social) environment with potential to directly affect performance. The theoretical model presented in this study offers context for exploring these interpersonal processes. However, this topic remains relatively unexplored or unpublished by the Academy and specifically by the Behavioral Science

Department and Center for Character and Leadership Development, which are the Academy's primary programs for conducting internal studies of this nature. For the Academy, opening access to social science and education research can facilitate enhanced followership and leadership training and exercises focused upon strengthening both individuals and teams. The entire Cadet Wing changes every four years. Ongoing work by faculty and staff with cadets during the vulnerable transition phase framing this study may shape the sociocultural context to the benefit of the Academy. Air Force leadership could open the Academy to select post-graduate research to study how cadets learn to adapt to military culture, make friends, and handle the inevitable emotional upheaval that arises during BCT, particularly since their central purpose for attendance is to obtain an undergraduate degree. Objective academic research can provide valued insights to social adjustment, transition, and reduction of any attrition to inform best practices for this early training and its delivery.

While the study population was too small to establish to what extent overt gender fairness policies currently impact social bonding among cadets, it is an issue worthy of further academic research. Additionally, extending this research to other service academies may reveal patterns of social bonding and further inform the Department of Defense in developing future leaders. The social view of gender fairness may be shifting as Generation Z (born after 1991) enters the service academies, as their opportunities to form person-to-person social connections is greatly influenced by technology (i.e., social media) than previous generations and has brought substantial changes in American culture, making engagement in the military training environment far different for current and future cadets than previous generations. Forced social changes within the military and changing social views among Generation Z point to concomitant transitions within Academy culture; more specifically, alumni responses show that Academy

friends are trending toward a more inclusive perception of diversity thereby gaining resilience through social ties created across a more complex spectrum of social interactions.

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APPENDIX A: SURVEY

USAF Academy Alumni Friendship Survey 2017

INTRODUCTION

Q1.1 ABOUT THE STUDY AND RESEARCHER(S):

Title of the study: Role of Social Capital in Retention of Air Force Academy Cadets

Purpose of the study: One factor contributing to graduation from the USAF Academy (USAFA) may be the value of social bonding and friendships. This survey asks about the role of friendships and their influence upon your graduation from USAFA. You are invited to participate in this survey as you are a USAF Academy alumnus. Your participation will provide insights about the role friendships played in your undergraduate experience, the influence of those friendships upon completion of the program, as well as your perception of the importance of these friendships.

Participant guidelines: You will be asked to recall and respond about your friendships and experiences. No personally identifiable information is required. You may return to a question to change your answer if necessary. The survey should take about 20-30 minutes to complete. There are no foreseeable risks or discomforts in participating in this study. Your participation is voluntary; you also may withdraw at any time and stop participation without penalty.

About the researcher: Brian Gauck, Commander, USN (Retired) is a Doctoral Candidate at Colorado State University. He holds Bachelor and Master of Science Degrees from Purdue University. Brian and his wife live in Colorado Springs. Of their four children, three of them, plus two sons-in-law, are serving in the Navy and Marine Corps. The Gauck family has been sponsoring Air Force Academy cadets since 2003.

Principal investigator and research chairperson: Dr. Carole Makela, College of Health and Human Services, School of Education, Colorado State University. If you have questions about this survey or comments you would like to share, contact Brian Gauck at (719) 641-5718 or brian.gauck@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: RICRO_IRB@mail.colostate.edu; (970) 491-1553. Thank you in advance for your participation, and for being part of the "Long Blue Line."

PLEASE BEGIN THE SURVEY.

Q1.2 What year did you graduate from the Academy?	
Q1.3 Are you presently on active duty? Yes (1) No (2)	
Q1.4 As of today, how many years following graduation have you served (active duty and reserve) in the military?	
End of Block PROFILE QUESTIONS	
Q2.1 THE FOLLOWING QUESTIONS ARE ABOUT YOU: What is your biological gender? Male (1) Female (2)	
Q2.2 Do you identify as white or non-white? White (1) Non-White (2)	
Q2.3 Where were you before reporting to Basic Cadet Training (BCT)? High School (1)	

Home School (2)		
Enlisted member	of the Air Force (3)	
Enlisted member	of another Service (4)	
Prep School (Plea	ase list which one.) (5)	
Prior enlisted who	o also attended a prep school (8)	
Other college or u	university (6)	
Other (7)		
-	erience, do you believe where you w rting BCT influenced the friendship	
	adet, did you have one or more imm andparent, uncle, aunt, cousin) who	
_	' for each of the choices. Do you have (e.g. parent, sibling, grandparent	= =
graduated HOIII tile.	Yes (1)	NO (2)

United States Naval Academy (2) **United States Military** Academy (West Point) (3) **United States Coast** Guard Academy (4) Merchant Marine Academy (5) Q2.7 Based on your experience, do you believe that having an immediate or close family member currently in the military, or who has served in the military, shaped the friendships you made as a cadet? Yes (1) Undecided (2) No (3) Q2.8 What was your primary reason for attending the Academy? A free college education. (1) To be a pilot. (2) To be an Academy graduate. (3) To be a career Air Force officer. (4) It's a family tradition. (5) My parents expected me to. (6) Other (7) _____

United States Air

Force Academy (1)

IN-PROCESSING

Q3.1 THE FOLLOWING QUESTIONS ARE ABOUT YOUR EXP	ERIENCES
DURING IN-PROCESSING (For each question, please select the best	

DURING IN-PROCESSING (For each question, please select the best response): Recalling your experience during In-Processing, which statement best describes the expectation you had about meeting your classmates? I was apprehensive about meeting my classmates. (1)			
	I was looking forward to making new friends. (2)		
	I knew other people in my class but we were not in the same squadron. (3)		
	I knew other people in my class who would also be on the same sports team. (4)		
	I expected to have a difficult time making friends. (5)		
Q3.2 I friends?	Ouring In-Processing, do you recall feeling it was important to begin making Yes (1)		
	Undecided (2)		
	No (3)		
describe your	During the <i>first two weeks</i> of Basic Cadet Training (BCT), how would you adjustment to military culture (e.g., learning to wear the uniform, basic military nysical training)? I feared I would wash out. (1)		
	I had challenging moments but with help from my classmates I made it through.		
(2)			
	I had challenging moments but I was determined to do this on my own. (3)		

I knew some about what to expect, but I wish I would have been more prepared
(physically, mentally or emotionally). (4)
I came with prior military background or knowledge and was aware of what to
expect. (5)
Q3.4 Reflect upon your <i>first two weeks</i> of BCT. You were getting uniforms, studying for knowledge tests and learning how to fit in. Which statement most closely describes the experience of meeting your classmates during this time?
I didn't really get to know anyone during the first two weeks. (1)
The only person I had time to get to know was my roommate. (2)
I got to know my roommate and a few classmates. (3)
I already knew my friends from prep school. (4)
I got to know cadets on my sports team. (5)
Q3.5 Was it your experience that your cadet friendships helped you adjust to the culture of the Academy?
Yes (1)
Undecided (2)
No (3)
Q3.6 During BCT, do you recall feeling a need to connect with your classmates right
away? Yes (1)
Undecided (2)

BCT?	Q3.7 Was it your experience that cadet friendships made during BCT continued after Yes (1) Undecided (2) No (3)
rejecte	Q3.8 With regard to your BCT experience, do you recall feeling like you were isolated, ed or ostracized by your fellow cadets at any point? Yes (1) Maybe (2) No (3)
endure	Q3.9 How important were the friendships you developed during BCT to your ability to e that training? Extremely important (1) Very important (2) Moderately important (3) Slightly important (4) Not at all important (5)
DOO	End of Block LIE DAY OUT

No (3)

at that point?	
r	I was not making friends with other cadets. (1)
	I was still getting acquainted with other cadets. (2)
	I had developed a friendship with one or more cadets. (3)
	I had developed a strong friendship with one or more cadets. (4)
Q4.2 V	With whom did you spend Doolie Day Out? My sponsor family. (1)
	My own family. (2)
	A family who was not my sponsor family. (3)
	My sports team and coaches. (4)
	My new cadet friends. (5)
	A cadet(s) I did not meet until that day. (6)
	With one of my new cadet friends and a cadet or two I didn't know before that
day. (7)	
	Other (8)
Q4.3 I	How did you emotionally deal with the intense training during this phase of BCT? I was homesick, felt alone, and desperately wanted a break from training. (1)
	I wanted time alone. (2)
	I wanted to spend time with my cadet friend(s). (3)
	I wanted to spend time my sports team. (4)

Q4.1 **THE FOLLOWING QUESTIONS ARE ABOUT YOUR DOOLIE DAY OUT EXPERIENCE:** By Doolie Day Out, which statement most closely describes your friendships

End	0	fB	lock

JACKS VALLEY

Q5.1 THE FOLLOWING QUESTIONS ARE ABOUT YOUR OUTDOOR TRAINING
EXPERIENCE BEFORE STARTING YOUR FOURTH CLASS YEAR (i.e., outdoor training,
run to the rock, in the mountains or Jacks Valley): Did friendships with your classmates play a
role in your completion of the required outdoor training (i.e., outdoor training, run to the rock,
Jacks Valley)?
Yes (1)

Undecided (2)

No (3)

Q5.2 Which statement most closely describes your outdoor training experience (i.e., outdoor training, run to the rock, in the mountains or Jacks Valley)?

I thought I would not make it through. (1)

This training taught me to be strong and independent. (2)

This training taught me to trust and rely on my classmates. (3)

This training taught me what it's like to be in a real close-knit military unit. (4)

I began to fit in with my classmates during this training phase. (5)

I wasn't at the Academy to make friends. (6)

Q5.3 Which statement most closely describes your friendship experience during outdoor training (i.e., outdoor training, run to the rock, in the mountains or Jacks Valley)?

I had not made friends with anyone yet. (1)

I got to know one or two classmates. (2)

I got to know many of my classmates. (3)

I started to build a close friendship with one or two classmates. (4)

I made one or more close friends. (5)

Q5.4 Which statement best describes your relationship with your classmates during outdoor training (i.e., outdoor training, run to the rock, in the mountains or Jacks Valley)?

The stress of that experience strained or damaged my friendships. (1)

I made it through on my own. (2)

I needed help and encouragement from my classmates. (3)

The experience helped me build close friendships. (4)

The experience strengthened my friendships with classmates. (5)

End of Block

ACCEPTANCE DAY

Q6.1 THE FOLLOWING QUESTIONS ARE ABOUT ACCEPTANCE DAY

EXPERIENCE: Acceptance Day was an important milestone in your training; it formally launched your first year as a cadet. At that point in your training, whether physically or academically, which do you think you relied upon most--your individual strengths or the support of your cadet friends?

Individual strengths (1)

Individual strengths and classmates' support equally (2)

Classmates' support (3)

Q6.2 On Acceptance Day, which statement best describes the friendships you had made by that point in time?

I didn't form friendships during BCT. (1)

I formed a few friendships during BCT, but they were temporary. (2)

I formed key friendships during BCT. (3)

I formed close friendships that continued through my Academy experience. (4)

I formed friendships that continue to this day. (5)

Q6.3 Select "yes" or "no" for each of the statement(s) about your friendships on Acceptance Day.

	Yes (1)	No
I had friends who shared similar values. (1)		
I had friends who shared similar goals. (2)		
I had close friends from prep school. (3)		
I had not yet found a person I would call a close friend. (4)		
I had acquaintances. (5)		
I was focused solely on my own goals. (6)		

Q6.4 After completing at least one year of academics as a cadet did you identify more with your cadet friends or with the friends you knew before coming to the Academy?

I identified with cadet friends. (1)

I identified with the friends I had before I became a cadet. (2)

Q6.5 While a cadet, how important were the symbols worn on your uniform (e.g., props & wings, your rank, or squadron patch)?

Not at all important. (1)

Necessary, but they didn't define how I saw myself. (2) Important because they defined and announced my identity. (3) Very important for telling others I had rank and positional authority. (4) End of Block **CADET WING CULTURE** Q7.1 THE FOLLOWING QUESTIONS ARE ABOUT THE CULTURE OF THE CADET WING. While you were a cadet, when you and your friends talked about life at the Academy what was the tone of those conversations? All negative. (1) Mostly negative. (2) Generally, both positive and negative. (3) Mostly positive. (4) All positive. (5) Q7.2 Did the tone and content of the conversations you had with your cadet friends while you were a student have any influence upon your choice to stay enrolled at the Academy? Yes (1) No (2) Q7.3 Reflect for a moment about conversations you may have overheard or participated in about the Academy while you were cadet. Which statement below most closely reflects your opinion about how negative conversations about the Academy affected cadet friendships. Not at all. Most cadets ignored them. (1) Those negative conversations made cadets question their choice to attend the

Academy. (2)

	Sometimes these negative conversations corroded friendships between cadets. (3)
	Those negative conversations reaffirmed why we were proud to be cadets. (5)
	Complaining about life at the Academy brought my classmates and I closer
together. (6)	
Q7.4 S	Social science makes the distinction between informal leaders, those who are <i>not</i>
chosen (e.g. ti	osen (inspiring peers, innate leaders); and formal leaders, those who <i>are</i> elected or raining officers, squadron commander, etc.). Who do you recall having the most your experience as a cadet? Informal leaders (1)
	Formal leaders (2)
	Informal and formal leaders equally (3)
	Neither informal or formal leaders. (4)
-	In general, do you believe that cadet friendships are important to graduating from
the Academy	Yes (1)
	Undecided (2)
	No (3)
Basics/Doolie	Recall your experiences as an upper class cadet. At some point you were training es. Which statement most closely describes your view of physical and military rd Fourth Class cadets?
	There were individuals who did not deserve to be at the Academy and this was the

only way to get them to quit. (1)

The training was necessary to build strength, discipline, and stamina. (2)

The training was necessary to build trust and unit cohesion. (3)

We treated all cadets equally and impartially. (4)

End of Block

SOCIAL ACTIVITIES

Q8.1 THE FOLLOWING QUESTIONS ARE ABOUT YOUR SOCIAL ACTIVITIES WHILE A CADET. Select "yes" or "no" for each choice. While you were a cadet, were you involved in any of the following:

Yes (1) No (2) Team sports (i.e., football, basketball, hockey, etc.) (1) Club sports (i.e., cycling, rugby, Frisbee, volleyball, rodeo, etc.) (2) Recreational or service clubs (i.e., equestrian, falcon, chess, karate, etc.) (3) Mission club (i.e., forensics, robotics, sabre drill, show choir, etc.) (4) Culture clubs (i.e., Hispanic, Way of Life, Freethinkers, etc.) (5) Chapel or religious clubs (6) Intramural sports (7)

Q8.2 Were your close cadet friends also members of the same sports or clubs you belong to?

Yes (1)

	NO (2)
Q8.3 squadron?	Did you have a close cadet friend who <i>did not</i> belong to your sports team, club or Yes (1) No (2)
	If your close friend was not a member of your sports team, club or squadron, in did your friendship develop? (i.e., sponsor family, weekend away from campus, nold Hall) Please describe: (1) Not applicable. (2)
Q8.5	Did you have close friendships with cadets in? the class or classes graduating ahead of me. (23) the class or classes graduating behind me. (24) both classes graduating ahead of and behind me. (25) neither classes graduating ahead of or behind me. (26)
	How important were the friendships you developed as a member of a sport or club ur decision to stay at the Academy? Extremely important (1) Very important (2) Moderately important (3)

Slightly important (4)

Not at all important (5)

I was not a member of a sport, club or activity. (6)

End of Block

IMPACT OF FRIENDSHIPS

Q9.1 THE FOLLOWING QUESTIONS ARE ABOUT THE IMPACT OF YOUR FRIENDSHIPS. When you were a First Class Cadet, with whom did you spend most of your free time?

My closest same sex friend. (1)

My closest opposite sex friend. (2)

My roommate. (3)

Whoever was around. (4)

One or two squadron mates. (5)

My friend(s) in a sport, club or other activity. (6)

I preferred to spend time alone. (7)

My boyfriend. (8)

My girlfriend. (9)

Q9.2 Who had the most influence on your decision to stay enrolled at the Academy? My friends at the Academy. (1)

Mostly my friends at the Academy and some from my family or other adults I respect. (2)

I was influenced equally by my friends at the Academy and my family or other adults I respect. (3)

Mostly my fan	nily or other adults I respect, but some from	om my friends at the
Academy. (4)		
My family or o	other adults I respect. (5)	
This was not a	decision for me. I was staying. (6)	
your decision to stay enrolled A great deal. (1	•	e at the Academy had upon
A lot. (2)		
A moderate an	nount. (3)	
A little. (4)		
None. (5)		
Q9.4 Select "yes" or 'n and your closest friends togetl	no" for each item. What about your Acad her most? Yes (1)	emy experience drew you No (2)
We helped each other	er	
study for knowledge tests and/or classes. (1)		
We had fun together (2)	r.	
We shared similar Academy experiences. (3)		
We had similar goals	s	

and values. (4)

other emotionally. (5)

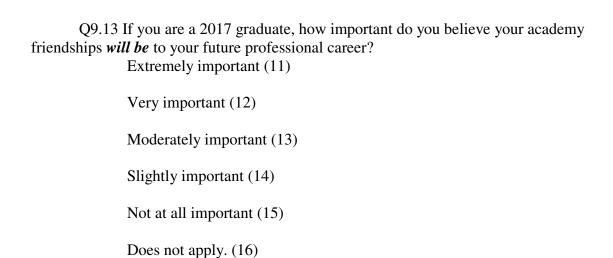
We leaned on each

We shared similar sports, club or activity interests. (6) We trusted each other. (7) Other (8) Q9.5 How important do you think your cadet friendships were to your adjustment to Academy culture? Extremely important (1) Very important (2) Moderately important (3) Slightly important (4) Not at all important (5) Q9.6 Currently cadets are assigned to one squadron when starting at the Academy then moved to a new squadron. This may have followed your Fourth-Class year or your third-class year. Which statement *most closely describes* your friendships following this mandatory move? I remained close with friends in my first squadron. (1) I made close friends in my new squadron. (2) I remained close with my first squadron friends and added close friends in my new squadron. (3) My close friends were not in either squadron. (4)

Cadets did not change squadrons when I was at the Academy. (5)

_	Choose the statement that <i>most closely describes</i> your experience making a close hanging squadrons. It was easier in my first squadron. (6)
	It was easier in my new squadron. (7)
	It was immaterial as my close friend and I were on a sports team, club sport or
activity. (3)	
	Cadets did not change squadrons when I attended. (9)
Q9.8 I academic adju	How important do you think your cadet friendships were to your ustment? Extremely important (1)
	Very important (2)
	Moderately important (3)
	Slightly important (4)
	Not at all important (5)
Q9.9 I to physical tro	How important do you think your cadet friendships were to your adjustment uning? Extremely important (1) Very important (2) Moderately important (3) Slightly important (4) Not at all important (5)

Very important (2) Moderately important (3) Slightly important (4) Not at all important (5) Q9.11 While you were a cadet, did you expect to continue your cadet friendships after graduation? Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1) Very important (2)	_	How important do you think your cadet friendships were to your ychological adjustment to Cadet Wing culture? Extremely important (1)
Slightly important (4) Not at all important (5) Q9.11 While you were a cadet, did you expect to continue your cadet friendships after graduation? Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)		Very important (2)
Q9.11 While you were a cadet, did you expect to continue your cadet friendships after graduation? Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)		Moderately important (3)
Q9.11 While you were a cadet, did you expect to continue your cadet friendships after graduation? Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)		Slightly important (4)
Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)		Not at all important (5)
Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)		
Yes (1) No (2) Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)	_	While you were a cadet, did you expect to continue your cadet friendships after
Q9.12 How important were your academy friendships to your professional career following graduation? Extremely important (1)	8	Yes (1)
following graduation? Extremely important (1)		No (2)
Moderately important (3) Slightly important (4) Not at all important (5) I just recently graduated from the Academy. (6)		duation? Extremely important (1) Very important (2) Moderately important (3) Slightly important (4) Not at all important (5)



Q9.14 Which statement best reflects your view about the training and development of cadets when you attended the Academy?

	YES (1)	NO (2)
Equal for everyone. (1)		
Favors academics. (2)		
Favors athletics. (3)		
Favors physical training. (5)		
Designed to remove poor performers in any area. (4)		
Favors those who can figure out "the system." (6)		

Q9.15 Think about how a cadet's gender may be linked to achieving graduation while you were a cadet. Which statement most closely reflects your perception of gender and graduation:

Men are favored to graduate. (1)

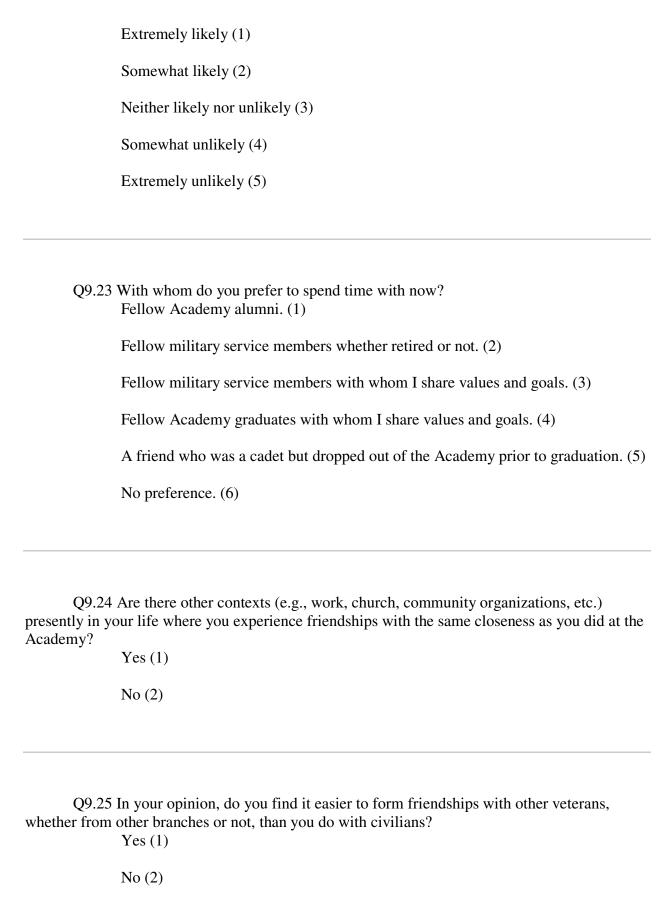
Men are favored, but anyone can graduate. (2)

Men aren't necessarily favored, but are the focus of training. (3) Men and women have an equal chance to graduate. (4) The women are favored, but anyone can graduate. (5) The women are favored to graduate. (6) Q9.16 In the context of striving to graduate, with whom do you believe **male** cadets would be wise to spend most of their time? Only male cadets. (1) Only female cadets. (2) Male and female cadets equally. (3) Mostly male cadets and a few female cadets. (4) Mostly female cadets and a few male cadets. (5) Q9.17 In the context of striving to graduate, with whom do you believe **female** cadets would be wise to spend most of their time? Only female cadets. (1) Only male cadets. (2) Female and male cadets equally. (3) Mostly female cadets and a few male cadets. (4) Mostly male cadets and a few female cadets. (5)

Q9.18 Recall a situation from your cadet years where a cadet you knew had a boyfriend or girlfriend who was also a cadet. In your view, does having a boyfriend/girlfriend help or hinder a cadet's likelihood to graduate?

	Help (1)
	Neither help or hinder (2)
	Hinder (3)
Q9.19 likelihood to	In your opinion, does having a close cadet friend help or hinder a cadet's graduate? Help (1) Neither help or hinder (2) Hinder (3)
00.20	
Q9.20	Do you still socialize with your Academy friends? Yes (1) No (2)
	How well do you reconnect with your Academy friends after an extended time of visiting with each other? Extremely well (1)
	Very well (2)
	Moderately well (3)
	Slightly well (4)
	Not well at all (5)

Q9.22 How likely would you be to step up and help any Academy classmate today?



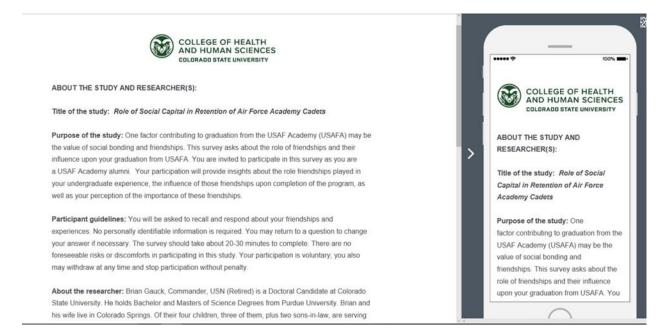
_	Do you believe your current friendships are influenced by the periences you had while attending the Academy? Yes (1)
	No (2)
	End of Block
VOLUNTAR	Y WITHDRAWAL AND RETURN
Q10.1	Did you withdraw from the Academy for any time and then return? Yes (1)
	No (2)
Skip T	o: End of Block If $Q10.1 = No(2)$
Q10.2 Academy?	Who would you consider as the most influential in your decision to return to the Friend(s) at the Academy (1)
	Friend(s) not at the Academy (2)
	Family (3)
	Mentor or another trusted person (4)
	I made my own decision without being influenced by anyone else. (5)
	Other (6)
_	In your view, are cadet friendships an important factor in whether someone returns ving from the Academy? Yes (1)

Undecided (2)
No (3)
End of Block
CONCLUSION
*
Q11.1 Thank you for participating! One final question to finish the survey. In the
Q11.1 Thank you for participating. One that question to this in the survey. In the
previous questions, you were asked to reflect on your academy friendships. These questions ma
have brought to mind a pivotal memory in one of those friendships. Would you please share it
here?

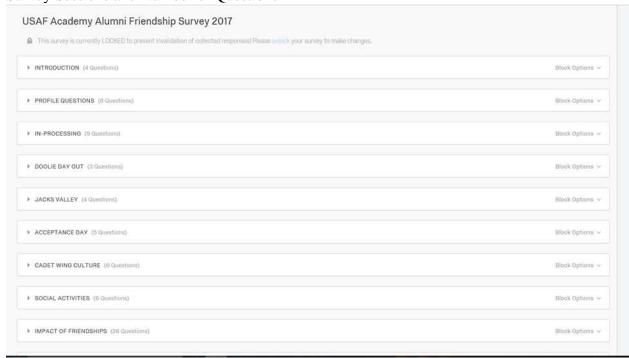
End of Block

APPENDIX B: SURVEY SCREEN CAPTURES

Survey Introduction as Viewed on Computer Screen and Mobile Device



Survey Sections and Number of Questions



Sample of Survey Questions from Section 9

A little. None. ect "yes" or 'no" for each item. What about your Academy e					
None. het "yes" or 'no" for each item. What about your Academy e					
ect "yes" or 'no" for each item. What about your Academy e					
nds together most?	xperience drew you	and your closest			
	Yes	No			
helped each other study for knowledge tests and/or classes.					
had fun together.					
shared similar Academy experiences.					
had similar goals and values.					
leaned on each other emotionally,					
shared similar sports, club or activity interests.					
trusted each other.					
er					
r important do you think your cadet friendships were to you	ır adjustment to Aca	ademy culture?			
Fatorial Secretary					
Moderately important					
	helped each other study for knowledge tests and/or classes, had fun together, shared similar Academy experiences, had similar goals and values, leaned on each other emotionally, shared similar sports, club or activity interests, trusted each other.	helped each other study for knowledge tests and/or classes. had fun together. shared similar Academy experiences. had similar goals and values. leaned on each other emotionally, shared similar sports, club or activity interests. trusted each other. er w important do you think your cadet friendships were to your adjustment to Acadextremely important Very important Moderately important Moderately important	helped each other study for knowledge tests and/or classes. had fun together. shared similar Academy experiences. had similar goals and values. leaned on each other emotionally, shared similar sports, club or activity interests. trusted each other. er vimportant do you think your cadet friendships were to your adjustment to Academy culture? Extremely important Wery important Moderately important Moderately important	No helped each other study for knowledge tests and/or classes.	No helped each other study for knowledge tests and/or classes.

APPENDIX C: CONSENT AND CONTACT LETTER

Dear Air Force Academy Alumni,

My name is Brian Gauck. I am a retired Naval Aviator and a doctoral candidate in the School of Education at Colorado State University studying in a program entitled Organizational Learning, Performance, and Change. My wife and I have been sponsoring cadets since 2003. I believe one factor contributing to graduation from the Academy may be the value of friendships and social bonds formed while a cadet.

I am working with Dr. Carole Makela, PhD, Colorado State University, and my committee chair, to learn more about the role friendships played in your undergraduate experience. You are invited to participate in this anonymous survey because you are an Air Force Academy alumnus. The survey asks questions about your cadet experience during BCT, involvement in cadet activities and sports, your cadet friendships, and their role and influence upon your graduation.

No personally identifiable information is requested or required to participate. The survey should take about 25-30 minutes to complete.

I am also asking that you share this survey link with your Academy alumni friends, at minimum 3 others or as many more as you'd like since I hope to gather data from the largest number possible. There are no foreseeable risks in participating in this survey. Your participation is voluntary, and you may stop at any time without penalty.

When we analyze and share the results of the study, all participants' data will be combined. While there are no direct benefits to you, we hope to gain an understanding of the value of friendships to cadet graduation. The findings of this study, which may be of interest to you, will be electronically published in .pdf form by CSU after Spring 2018 and readily found using a Web search.

To indicate your consent to participate and begin the survey, click the link below: \$\{\l!://SurveyLink?d=Take the survey\}

If you have any questions about the research, contact Brian Gauck at brian.gauck@colostate.edu.

If you have any questions about your rights as a volunteer in this research, contact the CSU Institutional Review Board at: RICRO IRB@mail.colostate.edu or call (970) 491-1553.

Carole Makela, Ph.D.
Professor and Chair
Colorado State University

Brian Gauck Doctoral Candidate Colorado State University

APPENDIX D: SURVEY REMINDER MESSAGE

There's still time left to complete your survey on Friendships Formed at the United States Air Force Academy. A few minutes of your time will help me gain an understanding of the value of friendships and graduation.

To indicate your consent to participate and begin the survey, click http://colostate.az1.qualtrics.com/jfe/form/SV_1GJJYVysWxT0jTn If you have any questions about the research, contact Brian Gauck at brian.gauck@colostate.edu.

If you have already completed the survey, I thank you! You may disregard this message.

Brian Gauck Doctoral Candidate Colorado State University



Research Integrity & Compliance Review Office Office of Vice President for Research Fort Collins, CO 80523-2011 (970) 491-1553 FAX (970) 491-2293

Date: December 12, 2017

To: Carole Makela, Ph.D., Professor, School of Education

Brian Gauck, Doctoral Student, School of Education

From: IRB Coordinator, Research Integrity & Compliance Review Office

(RICRO IRB@mail.colostate.edu)

Re: Friendships Formed at the United States Air Force Academy: Alumni

Perceptions of Social Capital

Funding: None

IRB ID: 230-18H Review Date: December 12, 2017

This project is valid from three years from the review date.

The Institutional Review Board (IRB) Coordinator has reviewed this project and has declared the study exempt from the requirements of the human subject protections regulations with conditions as described above and as described in 45 CFR 46.101(b):

Category 2 - Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

The IRB determination of exemption means that:

- This project is valid for three years from the initial review. After the three years, the file will be closed
 and no further research should be conducted. If the research needs to continue, please let the IRB
 Coordinator know before the end of the three years. You do not need to submit an application for annual
 continuing review.
- You must carry out the research as proposed in the Exempt application, including obtaining and documenting (signed) informed consent if stated in your application or if required by the IRB.
- Any modification of this research should be submitted to the IRB through an email to the IRB Coordinator, prior to implementing any changes, to determine if the project still meets the Federal criteria for exemption.
- Please notify the IRB Coordinator (RICRO_IRB@mail.colostate.edu) if any problems or complaints of the research occur.

Please note that you must submit all research involving human participants for review by the IRB. Only the IRB or designee may make the determination of exemption, even if you conduct a similar study in the future.

APPENDIX F: WHERE DID FRIENDSHIP DEVELOP

Academic
Academic Major
Academics/same major
Airmanship - airfield friendships, both soaring and jump
Arnold Hall
As a roommate
BCT roommate
BCT, roommate, squadron events
BCT, through my sponsor family, and in homework settings after class
BCT/ 4th class year
Bible Study
Cadet Squadron
Choir & meeting girls
Class, prep school
Classes
Classes
Classroom
Common Classes, and mutual friends
Debate
Dollie year, sophomore roommate
early roommate who moved to another squadron

Friend from BCT squadron that I saw in the locker room

Friend of a friend, or teammates of friends.

I was very close with the other six cadets who went on the French Exchange with me (Fall '77).

living as roommates

Meeting them through mutual friends

Mutual friends

Mutual Friends

My academic department (DFMS)

My closest friends were mainly friends from my freshman squadron. I had close friends in my squadron as well from sophomore to senior year, but I would say my strongest friends were from that freshman group and then maybe one or two others

Other cadet leaders, guys in my academic classes, Christian ministry groups

Prep school

Prior four-degree in my squad, met in class, in the same major, etc.

Roommate, summer programs, and friends from four deg year.

Same academic major, worked on a lot of grueling projects together

Same sponsor family

ski trip

Sponsor family and basic squadron friends

sponsor family, prep

Squadron

Squadron Mates

Squadron mates.

Squadron mates. Academic classes. I reached out to them.

squadron or same major

Summer activity

The Lord's USAFA Navigators Ministry

USAFA Prep School, USAFA Summer programs

Weekends down town or skiing; roommate

Weight room

APPENDIX G: PERMISSION LETTER

---- Forwarded Message -----

From: Brian Gauck < bgauck@gmail.com >

To: "driftwood 62@yahoo.com" <driftwood 62@yahoo.com> Sent: Thursday, September 24, 2015, 8:08:30 AM MDT Subject: Fwd: Network of Relationships Questionnaire

----- Forwarded message ------

From: Wyndol Furman < Wyndol.Furman@du.edu>

Date: Wed, Sep 23, 2015 at 10:34 PM

Subject: Re: Network of Relationships Questionnaire

To: Brian Gauck < bgauck@gmail.com > Cc: "Erin E. Miller" < Erin.E.Miller@du.edu >

I will have it sent

Dr. Wyndol Furman
John Evans Professor and Director of Clinical Training
Department of Psychology
University of Denver
Denver, CO 80208
(e) wfurman@nova.psy.du.edu
(p) 303-871-3688
(f(303-871-4747

http://www.du.edu/psychology/relationshipcenter/

From: Brian Gauck < bgauck@gmail.com>

Date: Wednesday, September 23, 2015 at 8:32 PM **To:** Wyndol Furman < <u>Wyndol.Furman@du.edu</u>> **Subject:** Network of Relationships Questionnaire

Dr. Furman,

Did you know 20.3 percent of the Air Force Officer Corps are graduates of the United States Air Force Academy? Did you know the 1,200 incoming students entering the AF Academy each summer represent all 50 states and must forfeit their cell phone and computer during basic training? These young men and women form friendships within their peer group under the stressful conditions of basic training while isolated from their previous friendships and family.

My name is Brian Gauck. I am currently a PhD student at Colorado State University in the final stages of my degree program. My research topic is "Informal Social Connections Formed by Cadets During Basic Training at the United States Air Force Academy." I plan to survey and interview Third Class Cadets (Sophomores) about friendships and whether they will continue their education at Air Force Academy beyond their Third Class year.

May I have permission to use a modified version of the Network of Relationships Questionnaire in my data collection?

I am available to answer questions or clarify where necessary.