Principals' Perceptions of the Effectiveness of the JROTC Program

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PRINCIPALS’ PERCEPTIONS OF THE EFFECTIVENESS OF THE JROTC PROGRAM

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Doctor of Education
in
Curriculum and Instruction

by
Patty Jean Blake

Approved by
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Keywords: Junior Reserve Officers’ Training Corps, JROTC, high school, principals.

Marshall University
May 2016
I hereby affirm that the following project meets the high academic standards for original scholarship and creative work established by my discipline, college, and the Graduate College of Marshall University. With my signature, I approve the manuscript for publication.

**Project Title:** Principals’ Perceptions of the Effectiveness of the JROTC Program

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**College:** College of Education and Professional Development, Marshall University

______________________________  ____________________________
Committee Chairperson          Date

4/27/16
DEDICATION

I dedicate this dissertation to my family—past, present, and future. I am wholly thankful to all who have gone before me to pave the way for me to walk the path I am on today.

To my father, Richard Roberts, who always told me I should be a doctor. I wish you had lived to see your words become a reality. To my mother, Mary Roberts, who is always in my corner and who has never doubted my ability to succeed; you are the best. To my brother, Mark and my sister, Debbie, thank you for traveling with me. We have come a long way.

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Most importantly, to my Holy Father, the Lord God Almighty—all glory and honor is yours. This dissertation proves that with God, all things are truly possible. You have given me blessings beyond my wildest dreams.
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ABSTRACT

The purpose of this national study was to investigate the perceptions of public high school principals regarding the effectiveness of the Junior Reserve Officer Training Corps (JROTC) program. The study examined the perceived influence of the program regarding the social development of the cadet, the behavior of the cadet, and the overall school environment. Data for this study was collected through an anonymous online survey emailed to current principals in public high schools across the United States where JROTC is offered as a course selection. Of the 3,062 schools identified as the population, 491 usable surveys provided participant information for data analysis. Principals indicated their level of agreement; from strongly disagree to strongly agree, regarding the perceived effectiveness of the JROTC program influence related to three constructs: social development of the cadet, behaviors of the cadet, and school environment. Responses were also compared based on demographic data related to the principals and to the schools. Findings indicated that high school principals perceived participation in the JROTC program as having a positive influence on the cadets’ social development, cadets’ behaviors, and on the overall school environment. Additionally, the study concluded that the strongest concentration of statistical significance based on demographics appears in the items measuring cadets’ social development. Findings resulting from the quantitative data and qualitative data, collected by open ended survey questions, suggest that the JROTC does more than merely prepare students for a successful military career. Findings from this study suggest that principals in schools with JROTC find the program to be effective in helping cadets meet goals and satisfy needs.
CHAPTER ONE: INTRODUCTION

High schools across the United States are under increasing pressure to produce students who are college and career-ready. Twenty first century skills focus on technology and collaboration. Employers repeatedly ask for employees who demonstrate the high level of responsibility, leadership, teamwork, and critical thinking necessary for success in the modern work place. The passage of No Child Left Behind (NCLB) focused the nation’s attention on accountability and held teachers and administrators to an exacting level of responsibility in ensuring that educational goals were met (United States Department of Education, 2004).

Schools and school districts must demonstrate that they are utilizing best practices and research-based models to prepare students to be competitive in a global society while a shift toward the Common Core brings with it a common standard of measure (Common Core Standards Initiative, 2015).

With the call for accountability showing no signs of fading, administrators and school systems must carefully consider curriculum. Administrators will want to select and maintain programs that facilitate goals and lead to student success. Principals must weigh carefully the advantages of a program against the disadvantages. In addition to curriculum, principals will need to explore various programs and practices in terms of how they influence the individual student and how they provide support within the context of the public high school system.

This study examines The Junior Reserves Officers’ Training Corps (JROTC) program that has been in existence for nearly a century. As a voluntary curricular program, JROTC is perhaps one of the most long-lived, well-known, and controversial educational programs in America. Data from each of the sponsoring military branches show over 3,000 schools across America host a JROTC program. In 2008, there were an estimated 700 schools on waiting lists for the program (Arnoldy & Lubold, 2008). Despite arguments from opponents who claim that
JROTC is a military recruitment tool that targets minority and disadvantaged youth, the program, open to all students over the age of 14, continues to grow. Some attribute program growth to shared funding with the U.S. Department of Defense (Coumbe, Hartford, and Kotakis, 2010). Schools considering the addition or continuation of JROTC might wish to consider the potential efficacy of the program. Principals will want to know if the program is academically sound and relevant to 21st century learners. Therefore, the purpose of this study was to investigate the perceptions of high school principals regarding the efficacy of the JROTC program in terms of its influence on social development, its influence on cadet behavior, and its influence on the overall school environment.

**Background**

The concept of a citizen soldier predates our nation’s birth. Prior to the Revolutionary War, each settlement in the new land provided its own protection. All able-bodied men bore a share of the responsibility for protecting the community; thus, every able-bodied male was both a citizen and a soldier (Bateman, 2007). As the country grew, so, too did the concern over the expanding separation between citizen soldiers and an elitist group of officers trained by military academies (Downs, 2011). This concern fueled three significant events in the history of American military education. First, the United States saw the formation of civilian-led military academies such as the Citadel and Virginia Military Institute. Next, the country passed the Morrill Act of 1862 that required military training in all land-grant universities. Finally, the National Defense Act of 1916 allowed military education in all civilian educational institutions (Downs, 2011).

The National Defense Act of 1916 established the Reserve Officers’ Training Corps (ROTC) and its counterpart, the Junior Reserves Officers’ Training Corps (JROTC) to maintain
and fill the ranks of officers in the event of a war and to provide educated and well-trained military personnel during times of peace (Long, 2003). The 1916 Act brought military involvement in the form of JROTC and ROTC into the public schools. The ROTC has always held a military orientation. Harrill (1984) however, noted that the JROTC focused more on maintaining and supporting social and educational goals and objectives.

Two world wars, a national depression, and other factors significantly shaped and influenced JROTC. Large waves of immigrants, increasing industrialization, a growing working class, and population shifts toward urban areas were key factors. By the end of the 1920s, units began to reflect the changing society and trended toward large public school systems, urban areas with high immigrant and working class populations, and southern cities noted for military academies, as well as pockets of poverty (Long, 2003; Bartlett & Lutz, 1998). World War I and World War II necessitated a channeling of funds toward war efforts and away from the programs. According to Long (2003), the end of World War II brought with it a national recognition for future preparedness that led to two significant periods of growth for JROTC.

The first period of growth came in the early 1960s. Robert McNamara, then Secretary of Defense, argued that JROTC produced no officers and made no direct contribution to the military. His stance was to eliminate funding to the program and to transfer existing units to the National Defense Cadet Corp (NDCC), a competing program that was fully funded by participating schools. With the exception of limited funds set aside for the conversion from JROTC to NDCC, the 1964 budget set aside no money to fund the JROTC. McNamara, however, did not expect the public outcry in support of the program. After an extensive survey of school officials, parents, and community members, an eleven member Department of Defense commission determined that JROTC was an “irreplaceable national asset” worth the cost (Logan,
According to Logan (2000), the commission recommended the elimination of the NDCC due to lack of support and resources and argued for the continuation and expansion of JROTC.

Prior to 1964, only the Army operated JROTC units (Peinhardt, 1998). That changed on October 13, 1964 when Congress enacted Public Law 88-647, also known as the Reserve Officers’ Training Corps Vitalization Act. The Act added Chapter 102 to Title 10, section 2031 of United States Code and allowed for the establishment of JROTC in secondary schools that met specified eligibility criteria. The Reserve Officers’ Training Corps Vitalization Act of 1964 gave each military department control over the implementation of the provisions of the act as well as authority for providing standards to measure performance and achievement (Reserve Officers’ Training Corps Vitalization Act, 1964). Each branch of the military determined its own curricular programs and goals and assumed direct operational control over the JROTC program. Although JROTC as a whole shares many fundamentals, programs vary according to the focus and mission of the sponsoring military department (Bogden, 1984; Perusse, 1997; Walls, 2003).

Department of Defense Directive 1205.13 issued in 1968 listed common objectives for all JROTC programs (Johnson, 1999; Perusse, 1997). Those objectives included:

1. To develop informed and responsible citizens.
2. To strengthen character.
3. To promote an understanding of the basic elements and requirements for national security.
4. To help form habits of self-discipline.
5. To develop respect for an understanding of the need for constituted authority in a democratic society.

6. To develop an interest in the military services as a possible career.

The 1964 Act set a goal of 1,200 units to be operational by 1966, required the sponsoring school to supply adequate facilities and a course of military instruction not less than three academic years in duration, and required the military to provide texts, equipment, and materials (Reserve Officers’ Training Corps Vitalization Act, 1964). The government amended the Act in 1973, allowing females to join as cadets (Bogden, 1984; Hawkins, 1988; Logan, 2000; Roberts, 1991).

The nation witnessed a second growth period of JROTC in the 90s. In 1992, the Department of Defense joined with the Department of Education to establish military career academies modeled on the concept of high-school career academies. This joint venture placed most of the academies in large urban areas that demonstrated a need for a more dynamic approach to education. The academies provided additional military personnel to deliver instruction in other school subjects. Features included integrated vocational and academic curricula, team-teaching, block scheduling, and small classes. Although the results reported from the academies were often remarkable, substantial resources were required from all partners involved (Taylor, 1999).

The National Defense Authorization Act of 1993, brought into being by then President George H.W. Bush, set a goal to double the size of JROTC from 1,500 units to 2,900 units (National Defense Authorization Act, 1993). General Colin Powell’s reaction toward the Los Angeles riots contributed significantly to the expansion. As Powell watched the drama and violence of the Los Angeles riots unfold in disbelief, he was sickened and heartsick (Powell &
Persico, 2003). A visit to the city in the aftermath of the destruction strengthened Powell’s conviction that the military’s values of citizenship, leadership, and respect for authority could help rebuild the community. Similarly, Senator Sam Nunn of Georgia believed the young military provided role models of self-discipline for the nation’s youth especially in neighborhoods damaged and demoralized by poverty and crime (Corbett & Coumbe, 2001). While Nunn worked to nurture local support for the JROTC program, Powell focused the military’s attention to the junior program, identifying it as the best opportunity for the Department of Defense to make a positive impact on the Nation’s youth (Coumbe, Hartford, & Kotakis, 2010).


A shared origin suggests shared patterns and outlooks for ROTC and JROTC. Indeed the vacillating growth pattern of JROTC mirrors that of its senior counterpart. Through most of the sixties, ROTC enjoyed public support and remained compulsory for all male students enrolled in public institutions of higher education. The turbulence of the Vietnam War era introduced a
significant shift in the programs and produced a monumental decline in military interest and support. Bateman (2007) noted that overall the program declined, with the largest program, the Army ROTC, dropping from 125,000 cadets in 1969 to a little more than 31,000 cadets by the end of the Vietnam War. In response to the protests and antimilitary sentiment, many colleges chose to make the courses elective non-credits or chose to drop the program entirely. This was especially prevalent on the elite campuses across the nation (Coumbe, Kotakis, & Gammell, 2008).

Attitudes affecting ROTC strongly influence attitudes regarding JROTC. The Clinton Administration opened previously locked military doors to homosexuals under the “Don’t Ask, Don’t Tell” (DADT) Policy (Lindemann, 2006). The policy drew enormous protests from a number of groups. On the college campus, DADT created a swell of anti-military sentiments, as many believed it was in direct violation of university non-discrimination policies. As a result, a strong resistance developed toward recruiters and military presence on campuses, both college and high school campuses.

Voices calling for a reinstatement of ROTC to the nation’s campuses competed with the discrimination protests of DADT. Downs (2011) argued that gay politics that opposed ROTC also held a key to opening the door for ROTC’s return. Student cadets and those who supported ROTC found themselves aligned with the gay rights activists as they joined the call for nondiscriminatory acceptance and respect. Many viewed the government repeal of DADT in 2011 as a gesture of tolerance and acceptance that helped welcome ROTC back to American campuses even in elite schools, such as Princeton, Yale, and Harvard (Downs, 2011). Currently, the programs seem to be enjoying an expansive era replete with concern for national safety and respect for those who protect our nation. ROTC is approaching record highs for enrollment. In
2012, Virginia Tech enrolled the largest class of ROTC cadets since the Vietnam War. Across the state at Old Dominion University, administrators have seen a 200 percent growth in ROTC in the past six years. According to Army ROTC administrators, growth has been the result of a campus culture that welcomes, respects, and values ROTC (Johnson, 2012).

An increase in interest and acceptance of ROTC reflects a similar trend in JROTC. Two momentous events shaped JROTC during the first decade of the new millennium. First, the attacks on the World Trade Tower in 2001 revived patriotism and awakened an increased realization for the need for national security. Increased interests in military action following the attack of 9/11 led to increased enrollments in JROTC programs, although many students who joined had already expressed an interest in a military career (Gehring, 2001; Morris, 2003).

The second pivotal event was the passage of No Child Left Behind (NCLB), which sought to bring about needed school reform sustained through strong accountability standards. Criticism of the curriculum and mandates of the legislated policy spurred the military to improve curriculum and seek program accreditation for JROTC. The belief was that without accreditation, the program would not be able to maintain enrollment, especially in areas where the academic credibility of the program was already under scrutiny. Arguments arose that the program modeled martial solutions that countered school and district stances on non-violence and safety. These criticisms spurred the military to revise curriculum and to reduce the focus on weaponry by making weapons training an optional component of the program (Logan, 2000). The revision to curriculum also included a shift in focus away from military training to a stronger emphasis on leadership, self-esteem, values, citizenship, communication, physical fitness, career exploration, and substance abuse prevention (Coumbe, Hartford, & Kotakis, 2010).
The current curriculum for JROTC reflects teaching practices based on best practice models that are consistent with the 21st century skill demands. Lessons are more interactive and use technological approaches to learning. Additionally, all branches have access to the same technology and curriculum (Blake & Heaton, 2014; Hawkins, 2009).

**Problem Statement**

Although many records are found regarding the establishment of the ROTC and JROTC programs, there is a scarcity of research available regarding the efficacy of JROTC. Taylor (1999) notes that the bulk of observations reflect preconceived ideas of the program with little analytical support, either negative or positive for the preferred stance. The report argued that those who hold a positive view see the program and the military as a useful tool in building character and citizenship, while those who oppose the program view it as a threat to democracy.

Many of the existing studies are dated or are written by former military officers or those with connections to the armed forces. Very few articles are empirical or peer reviewed. Three common threads emerge in relation to research related to JROTC. Most research has revolved around three themes: (1) a comparison of cadets to non-cadets, (2) the perceptions of others related to the efficacy of the program and, (3) the correlation of JROTC cadets with measures of achievement or the exploration of specific program outcomes.

Some research studies have attempted to compare JROTC participants to non-JROTC participants across a number of variables (Bachman, 1994; Biggs, 2010; Bulach, 2002; Flowers, 1999; Hawkins, 1988; Hicks, 2000; Johnson, 1999; Roberts, 1991, Schmidt, 2001; Schmidt, 2003). Variables studied and measured include leadership, citizenship, self-reliance, and personal development, as indicators of academic success.
Another thread of research regarding JROTC comes from studies that viewed perceptions and attitudes about the program. Only a few studies have focused on the perceptions of high school principals (Morris, 2003; Logan, 2000, and Harrill, 1984). Other studies have included the perceptions of principals along with JROTC instructors or other community members (Marks, 2004; Bodgen, 1984). Perusse studied the attitude of counselors in 1997. Additionally, these studies were somewhat limited in scope. Morris (2003) limited her study to high school principals across the state of North Carolina. Harrill (1984) surveyed principals in the eight states, but limited his study to the third Army ROTC division headquartered in Riley, Kansas. Logan (2000) found strong positive responses from principals regarding the value and benefits to students, but limited his study to the Marine Corps JROTC program. Marks (2004) found positive perceptions toward the program from both principals and instructors, but noted that the higher academic-achieving students tended not to participate in the program due to tracking decisions that limit the number of elective courses. Perceptions of principals differed from JROTC instructor perceptions. Additionally, Marks (2004) limited his study to three high schools with Army JROTC within close proximity to Eastern Tennessee State University. Finally, Bodgen (1984) compared only two schools in Massachusetts: Billerica with a Marine JROTC and Quincy with an Air Force JROTC.

Finally, a third category of research has been devoted to exploring the JROTC program. Such research has been in the form of case studies or program evaluations (Dohle, 2001; Long, 2003; Kern, 2003, Santora, 2006; and Walls, 2003). Other research from this category appears as committee reports (Peinhardt, 1998; Mulholland, 2005; Price, 2007; and Taylor, 1999).

An emphasis on 21st-century skills such as cooperation and communication has brought about resurgence in the interest of character education and leadership development programs;
one of which is JROTC. Pema and Mehay (2009) argued that the size of the JROTC program, the at-risk population it serves, the controversy over goals and performance, and the lack of prior research make a compelling case for continued program evaluation. They claim that current decisions regarding the program at both federal and local levels are made in the absence of reliable information on program effectiveness. Moreover, the current growth of ROTC paired with its re-emergence on elite campuses across the nation, suggests a similar pattern for JROTC.

No national study was found that examined principal perceptions across all four military sponsored branches of the JROTC. Therefore, this study attempted to extend, to add, and to update the current research base by surveying high school principals in public schools with established JROTC programs across the United States.

**Purpose of the Study**

The purpose for this study was to explore the perceptions of principals in public high schools with established JROTC programs. The population included principals from public high schools across the nation with established JROTC programs. This study examined principals’ perceptions of JROTC related to three domains: the influence of JROTC curriculum on the social development of the student cadet, the behavior of student cadets, and the influence of the presence of the JROTC program on the public school environment. Additionally, this study compared perceptions of high school principals across demographic variables.

**Research Questions**

A review of the objectives named in the general-purpose statement for JROTC helped facilitate the development and formation of independent variables. Variables identified in the purpose statement include citizenship, personal responsibility, a sense of accomplishment, respect for authority, and self-discipline. Variables were studied through the investigation of
principals’ perceptions of JROTC organized across three broad domains: program influence on the social development of the cadet, program influence on the behaviors of the cadet, and program influence on the public school environment. Additionally, the study explored the effect, if any, of specified demographic variables on the principals’ perceptions. Principals’ perception was the dependent variable throughout the analysis of the research questions.

**Question 1:** What are principals’ perceptions of the influence, if any, of the JROTC curriculum on the social development of the student cadet?

**Question 2:** What are principals’ perceptions of the influence, if any, of the JROTC program on the behaviors of the student cadet?

**Question 3:** What are principals’ perceptions of the influence, if any, of the JROTC program on the public school environment as a whole?

**Question 4:** What are the differences in principals’ perceptions of the JROTC program due to demographic factors such as: the school’s national location, socioeconomic status, community status, school enrollment, minority population of student enrollment, proximity of school to a military base, school’s JROTC sponsoring branch, duration of JROTC program in the public school, principal’s length of school administrative experience, principal’s experience with military, principal’s age, principal’s race, and principal’s sex?

**Rationale of the Study**

This study proposed to build on prior research and add to existing data. Results are intended to provide school officials with data as they consider the discontinuation, maintenance, or implementation of a JROTC program. Demographic data will allow principals to examine comparable schools with existing JROTC programs. Military personnel could find the data useful and could consider it when revising and improving the JROTC program. Because of the
difficulty in controlling for intervening variables, sometimes hidden, a more solid approach focuses on perceptions regarding the program and program outcomes.

Additionally, this study derives relevance due to the dearth of knowledge from research; much which is dated, regarding the effect of JROTC in American high schools. Moreover, numerous studies come from those affiliated with the military, often as retired active duty officers (Flowers, 1999; Hicks, 2000; Logan, 2000; Marks, 2004; Schmidt, 2001, Schmidt, 2003, & Walls, 2003). Bias toward the military in general and toward the JROTC in particular can be problematic. Therefore, this study utilized the surveying of principals across a broad geographic area to produce current results that are more neutral in terms of bias toward the military in general or toward a specific sponsoring branch of the military. As school leaders, principals not only evaluate teacher performance but also are also keenly aware of their school programs, student and community concerns, and academic measures related to accountability. Because of their expansive knowledge of the school, including the needs of the students, and contributing factors to success, this study considered the perceptions of school principals to be reputable.

**Significance of the Study**

The more than 3,000 JROTC units across the nation attest to the program’s breadth and popularity. Further, the extensive reach and longevity of the program has the potential to influence a tremendous number of students. Corbett and Coumbe (2001) argued that the JROTC program design lends itself to students seeking direction and a sense of belonging, specifically, those students who could go on to become productive citizens. Some (Flowers, 1999; Taylor, 1999; Walls, 2003) perceived JROTC as a program that helps students from dropping out, joining gangs, engaging in disruptive behaviors or using drugs. Conversely, Lutz and Bartlett (1995) argued that the claimed benefits to “at-risk” students are questionable at best, due to the
problematic nature of the term “at-risk.” Still others voiced concerns over neutral results at best (Ayers, 2006; Bartlett & Lutz, 1998; Long, 2003). Results from this study provide data to aid in the decision-making process required for implementation, maintenance, or discontinuation of the program.

**Assumptions of the Study**

This study assumes that the JROTC program exists in school as defined by current literature. Additionally, the study assumes the programs are similar in nature and follow a prescribed curriculum with shared objectives. The study assumes comparable knowledge and teaching skills among instructors. The study further assumes that the program operates under dictates and guidelines established in conjunction with the military branch sponsoring the unit and the state or local school district. Regarding school principals, this study assumes that all principals are knowledgeable and competent regarding the JROTC and its stated objectives within the school. The study assumes that the school principal to which it is addressed will complete the survey and that all respondents will answer honestly.

**Limitations**

Limitations are factors outside the control of the researcher. This study operated under the following limitations. The study relied on the accuracy of the data regarding schools with functional JROTC units provided by the individual websites from each sponsoring military branch. The study was limited by the accuracy of the commercially-prepared list of email addresses for high school principals. The number of surveys returned was a limitation beyond the researcher’s control. Another limitation was the potential that the designated principal at each host school might not complete the survey. Finally, the study was limited by the self-reporting nature of the survey.
**Delimitations**

Delimitations are boundaries within the control of the researcher. The focus of this study was on perceptions. Only principals from public high schools with JROTC units within the United States, including Washington, D.C., were surveyed. The surveys were completed in the spring of 2016 and participants were given approximately four weeks to respond to the survey.

**Definitions**

**JROTC:** Junior Reserves Officers’ Training Corp; a voluntary curricular program sponsored by the military in secondary schools throughout the United States and its territories.

**Principal and School Demographics:** Demographics refer to the statistical study of human populations especially with reference to size and density, distribution, and vital statistics. Demographic variables were identified on the survey as the school’s national location (region), socioeconomic status, community status, school enrollment, minority population of student enrollment, proximity of school to a military base, school’s JROTC sponsoring branch, duration of JROTC program in the public school, principal’s length of school administrative experience, principal’s experience with military, age, race, and sex. See the following detailed demographic descriptors:

**Age:** The response of principals to the demographic item regarding age as measured by Part II Demographic section of the Principals’ *Perceptions of JROTC* survey.

**Community Status:** The response of principals to the demographic item regarding community status as measured by the Part III Demographic section of the
Principals’ Perceptions of JROTC survey. Choices provided were rural, suburban, or urban.

**Duration of JROTC in the Public School:** The total number of years of a JROTC program in place in the school as measured by the principals’ responses to the Part III Demographic section of the Principals’ Perceptions of JROTC survey.

**JROTC Military Sponsor:** The military branch responsible for sponsoring the JROTC program in the school as measured by the principals’ responses to the Part III Demographic section of the Principals’ Perceptions of JROTC survey. Choices provided were Air Force, Army, Marine, or Navy.

**Minority Population of Student Enrollment:** The estimated percentage of minority students enrolled in the school as measured by the principal’s responses to the Part III Demographic section of the Principals’ Perceptions of JROTC survey.

**Principal’s experience with military:** The response of principals to the demographic items regarding personal military experience as measured by Part III Demographic section of the Principals’ Perceptions of JROTC survey. Principals were asked to indicate prior experience, if any, as an enlisted soldier, ROTC cadet, and JROTC cadet. Choices provided were Air Force, Army, Marine or Navy.

**Principal’s length of school administrative experience:** The total number of years served as a full-time school administrator as measured by the principals’ responses to the Part III Demographic section of the Principals’ Perceptions of JROTC survey.

**Proximity of School to Military Base:** The distance in miles between the school and the closest military base as measured by the principals’ responses to the Part III Demographic section of the Principals’ Perceptions of JROTC survey.
Race: The response of principals to the demographic item regarding race as measured by the Part III Demographic section of the *Principals’ Perceptions of JROTC* survey. Choices provided were American Indian or Alaskan, Asian or Pacific Islander, Black or African American, Hispanic, White or Caucasian, or Multiple Ethnicity or Other.

School Enrollment: The total number of students enrolled in the school within the time frame of this study’s data collection as measured by the principals’ responses to the Part III Demographic section of the *Principals’ Perceptions of JROTC survey*.

School’s National Location (Region): National location of the school based on categories developed by the United States Census Bureau. These categories include northeast, south, midwest, and west.

Socioeconomic Status: The response of principals to the demographic item regarding the socioeconomic status as measured by the Part III Demographic section of the *Principals’ Perceptions of JROTC* survey. Choices provided were low socioeconomic status, moderate socioeconomic status, or high socioeconomic status.

Sex: The response of principals to the demographic item regarding sex as measured by the Part III Demographic section of the *Principals’ Perceptions of JROTC* survey. Choices provided were male or female.

Principal-Perceptions of Advantages and Disadvantages of JROTC program: principal perceptions of the advantages and disadvantages of the JROTC program in the public school as measured by principal responses to open-ended questions from Part II of the Principal’s Perceptions of JROTC survey.
Principal-perceived level of JROTC program influence on the school environment:
individual indicator items representing principal-perceived level of JROTC influence on the public school environment as measured by principal responses on the Principal’s Perceptions of JROTC survey. The survey uses a 4-point descriptive scale (1 – Strongly Disagree through 4 – Strongly Agree) provided for each indicator item in Part 1 of the survey instrument. Public School Environment was identified on the survey as Public School Environment, Positive Character Education, Safe Learning Environment, Community Service, Positive Extracurricular Activities, Connection to School, Reduced Discipline Referrals.

Principal-perceived level of JROTC program influence on student cadet behaviors:
individual indicator items representing principal-perceived level of JROTC influence on student cadet behaviors as measured by principal responses on the Principal’s Perceptions of JROTC survey. The survey uses a 4-point descriptive scale (1 – Strongly Disagree through 4 – Strongly Agree) provided for each indicator item in Part 1 of the survey instrument. Cadet Behavior was identified on the survey as Appreciation for Physical Fitness, Resistance to Temptation of Drugs and Alcohol, Regular School Attendance, Positive Work Ethic, Graduation from High School, and Critical Thinking Skills.

Principal-perceived level of JROTC program influence on student cadet social development: individual indicator items representing principal-perceived level of JROTC influence on student cadet social development as measured by principal responses on the Principal’s Perceptions of JROTC survey. The survey uses a 4-point descriptive scale (1 – Strongly Disagree through 4 – Strongly Agree) provided for each indicator item in Part 1 of the survey instrument. Cadet Social Development was identified on the survey as Citizenship, Leadership, Self-Discipline, Self-Confidence, Teamwork, and Respect for Authority.
**Public High School:** A school that provides the standard curriculum as determined by the sponsoring state or school district for students in grades 9-12. The school educates all students within the attendance area free of charge.

**Student Cadet:** Student enrolled in a JROTC program.
CHAPTER TWO: LITERATURE REVIEW

Introduction

The Junior Reserve Officers’ Training Corps (JROTC) is celebrating a century of existence. Initiated in 1916, the program has endured alternating periods of praise and protest. Opponents claim that JROTC is a poorly disguised recruitment tool that eats up valuable school resources and promotes violence. Those in favor hail it as a valuable leadership development program that builds character and citizenship. Given the current political climate, recent focus on gun laws, and increased attention to school safety, the controversy is likely to continue.

The purpose of this study is to add to the current knowledge base of information by examining principals’ perceptions of the program. This chapter provides a summary of research related to JROTC and the variables of curriculum, cadet characteristics, and program support within the context of a public high school. A review of literature reveals that the studies surrounding JROTC fall under three major categories. The first category compares JROTC cadets to non-cadets across a number of categories. Another category of research examines the relationship of cadets or the JROTC program with the development of specific measures of achievement and outcomes. The third branch of research focuses on the perceptions of administrators and others regarding the efficacy of the program.

An examination of the literature based on the identified variables proposed in this study shows that many of the variables are not clearly discreet or mutually exclusive. For example, the idea of leadership crosses all boundaries. Leadership is taught in curriculum, expressed as a desirable cadet characteristic, and promoted as support for the overall context of the public school. This literature review is organized into the following sections: a history of the program, a discussion of the theoretical framework, the role of the principal, studies related to curriculum, studies related to characteristics of the cadet, studies related to support provided within the
context of the public school setting, studies that relate to advantages and disadvantages of the program and studies related to demographic data. Results from this study will add to the limited amount of information currently available.

**History**

The breadth and longevity of JROTC suggest a program of substance that is likely to endure. Continuance, however, is most likely premised upon modifications indicative of the socioeconomic and cultural status of its members. In the early stages of the country, the idea of an army designed for defense only was popularly held as a protection against the rise of a military take-over. Initially, a sense of noblisse-oblige produced an elitist group of officers, many of whom lacked training. It did not take long for the nation to realize that simply wearing a uniform did not make one a soldier. Mass casualties from the Civil War necessitated a more specialized and standardized training procedure (Bateman, 2007). To remedy the situation, President Lincoln signed The Morrill Act of 1862, giving federal funding to land-grand colleges that agreed to include military training in the curriculum. During the early years, support for the program was lukewarm due to a lack of standardized training and army support. To counter the apathy, representatives from The Ohio State University proposed national standards for military education in land-grant colleges. The sinking of the Lusitania in 1915 pointed to a possibility of impending war and re-awakened in the American conscious the need for a sufficient pool of trained officers (Coumbe, Hartford, & Kotakis, 2010). This need was realized with the passage of the 1916 National Defense Act, which established both the ROTC and its junior counterpart. However, the United States entered World War I in 1917 leaving little resources available for the newly established programs. From 1916-1919, only 30 schools across the nation established Army JROTC units (Coumbe, Hartford, & Kotakis, 2010).
Limited funding and attention continued well into the 1940s as resources were needed for World War II. Veterans returning home took advantage of educational opportunities provided by the Montgomery Bill. This resulted in a post war era, which was characterized by a lack of funding and manpower necessary to power the JROTC program. From 1947-1964 the government placed a freeze on JROTC (Coumbe, Hartford, & Kotakis, 2010).

The Cold War and the space race shook the nation from complacency. Robert McNamara, Secretary of Defense in the early sixties, viewed the JROTC program as an unnecessary expense for the military and as a program that “produced no officers and made no direct contribution” (Coumbe, Hartford, & Kotakis, 2010, p. 259). By refusing to set aside funding in the budget to sponsor the program, McNamara hoped instead to convert existing units to National Defense Cadet Corps (NDCC) units for which the military provided only minimal financial support. McNamara’s actions were met with protests that produced the opposite effect. Not only was his decision reversed, but also the JROTC program was enlarged when President Kennedy signed Public Law 88-647, also known as the 1964 Reauthorization Act (Coumbe, Hartford, & Kotakis, 2010). The reauthorization sought to improve the geographical distribution of units across the nation. Additionally, it expanded the program into every branch of the military service (Long, 2003; Taylor, 1999).

The Vietnam War, a bitter period in our nation’s history, interrupted the expansion enthusiasm. Strong opposition to the war turned into negative attitudes regarding the military in general. By the end of the war, the unpopularity of the military, combined with the repeal of the draft pummeled enlistment numbers and forced the military to reconsider the youth program as a potential for improving popularity (Bateman, 2007). Those who joined the JROTC were offered advanced grade level if they enlisted in the regular service as well as special consideration for
academy nominations (Coumbe, Hartford, & Kotakis, 2010). Additionally, the program experienced growth with the enrollment of the first female cadets in 1973 (Bogden, 1984; Hawkins, 1988; Logan, 2000; Roberts, 1991).

President Ford attempted a further expansion in 1976, but the military’s scattered management structure and lack of oversight failed to support the proposed growth (Coumbe, Hartford, & Kotakis, 2010). During the 1980s, the program experimented with a number of revisions. The pendulum of public opinion continued to swing following the pessimistic outlook for education painted by A Nation at Risk (National Commission on Excellence in Education, 1983). The report brought changes to education and educational programs, including JROTC.

Many changes targeted curriculum, but others addressed the management system and the development of a common mission statement. Beginning in the 1980s, the perception of JROTC as more of a social program caused some to question if the sole source of program funding should come from the department of the military (Coumbe, Kotakis & Gammell, 2008; Dohle, 2001).

Restructuring the program remained the focus throughout much of the 1990s. Curriculum acquired a stronger emphasis on citizenship, and new regulations increased the standards and qualifications for JROTC instructors (Coumbe, Hartford, & Kotakis, 2010). The restructuring, later renamed Operation Young American was in part a response to the Los Angeles Riots. Operation Young American further fortified the curricular component of citizenship and augmented expansion by providing financial support for schools that could not otherwise afford to establish a unit (Carr & Porfilio, 2012). With the establishment of a unit in White Mountain High School in Vermont, the military achieved the goal of having a JROTC unit in every state of the union (Coumbe, Hartford, & Kotakis, 2010).
Two events at the beginning of the millennium significantly influenced the JROTC. First 9/11 ignited a surge of patriotism and heightened awareness of the need for safety and national security. As the nation engaged in the war on terrorism, budgetary cuts to JROTC, viewed as more of a social program, became necessary to fund the military efforts. Some discussion arose about the possibility of transferring JROTC out of the Department of the Defense and either partially or fully placing it under another department for funding such as the Department of Labor, the Department of Justice, the Department of Education or the Department of Health (Coumbe, Kotakis, & Gammell, 2008). Attacks on the World Trade Center reminded America about the need for national safety and protection and created a resurgence in patriotism (Gerhig, 2001; Morris, 2003). JROTC grew in response. Expansion efforts attempted to make the program more geographically diverse and to provide more support for at-risk students and inner city students (Kern, 2003; Taylor, 1999). Units that did not attempt to accommodate the changing nature of the cadet were often victims of attrition. A study comparing two Navy JROTC units in Missouri explored the factors of growth and decline. The established JROTC unit located in a private, higher socioeconomic status, all-boys, predominantly white school closed, while the newer unit placed in a blue-collar school considered academically challenged, thrived (Dohle, 2001).

The second event to have a significant impact on JROTC was the passage of No Child Left Behind (NCLB) in 2001. Because this legislation required stringent accountability standards and an intense focus on core content areas, electives courses such as JROTC were given little to no priority (Coumbe, Kotakis, & Gammell, 2008; Mulholland, 2005). To maintain the ranks, the military turned to technology and accreditation. These two components brought increased flexibility to the program and opened the doors for a number of opportunities. For
example, the use of technology allowed all units access to the same curriculum, much of which is aligned to core standards. Schools could take advantage of technology and accreditation to ensure that curriculum was rigorous. Further, this permitted school districts the option of allowing students to substitute participation in JROTC for a credit in a course with complementary objectives, such as physical education or health (Blake & Heaton, 2014; Kern, 2003; Rice, 2006).

Initially, the JROTC was developed to provide and maintain military leadership. While the current purpose of the program continues to be debated, it might be assumed that the rationale behind the program in public schools is two-fold. First, as a conduit of service it is one of the few ways the military serves “American society in other than a warfighting capacity” (Coumbe, Hartford, & Kotakis, 2010, p. 257). Additionally, the program motivates and assists students to meet their needs in positive and socially acceptable manners.

Theoretical Framework

The general purpose statement of JROTC as a whole is “to instill in students in the United States secondary educational institutions the value of citizenship, service to the United States, personal responsibility, and a sense of accomplishment” (Department of Defense, 2006). The choice of the word “instill” is highly connotative and suggests an education that is more than the imparting of facts. To instill is to inspire, to encourage, and to motivate. This perception is apparent in the mission statement of the Army JROTC, which is to “motivate young people to be better citizens” (United States Army, n.d.). It seems appropriate, therefore, that an understanding of this study is situationally based within the framework of motivation, and specifically tied to the Human Motivation Theory developed by Abraham Maslow and expanded upon by others.
Human Motivation

Essentially, Maslow argues that humans are driven to act in an effort to satisfy needs and these needs are arranged in a hierarchical order (see Figure 1), the most basic of which is the physiological needs necessary to ensure survival (Maslow, 2014). An elementary understanding of Maslow’s theory helps the reader to understand the interplay of drive and behavior. Maslow makes a clear distinction between motivational theory and behavioral theory. Although behaviors generally have their origin in motivation, there are biological, cultural, and situational determinants that influence behaviors (Maslow, 2013). Maslow further notes that behavior can, and often does, have more than one motive. He describes man as a “perpetually wanting animal” who continually seeks growth through the satisfaction of needs which are hierarchically arranged, yet he maintains that no need or drive can be considered discrete or separate (Maslow, 2013, p.1).

Maslow asserts that the most dominant needs are those that form the base of the hierarchy. The emergence of a higher-level need is predicated on the satisfaction of the subordinate needs. Lower level needs must be satisfied, though not completely, before higher level needs appear.

Other humanists and educators have also addressed motivation and human need. William Glasser (1998), well known for Control Theory identifies basic needs as survival, love and belonging, power, freedom, and fun. He contends that all behavior is a choice made by the individual, to satisfy one or more of our human needs. Moreover, he argues that educators should structure schools in a manner that will help students satisfy basic needs for belonging and power (Glasser, 1998). Spencer (2004) argues that the satisfaction of basic needs is correlated to a
lower occurrence of disruptive behaviors. McClelland (1965) identifies human needs as achievement, power, and affiliation.

![Maslow’s Hierarchy of Needs](image)

**Figure 1:** Maslow’s Hierarchy of Needs

Pink addresses the topic of motivation and specifically identifies three important factors: autonomy, mastery, and purpose. In addition, he notes that intrinsic motivation supersedes the extrinsic motivation (Pink, 2009). A qualitative study by Larson (2014) examined motivational
factors to determine why students enroll and continue in Air Force JROTC. Interviews with twelve cadets in three California high schools indicated that intrinsic motivators such as achievement, advancement, and growth were more influential than extrinsic motivators in the decision to enroll in JROTC. Rather than intrinsic and extrinsic, duality for Maslow consists of being needs which are motivated by growth and choice and by deficiency needs which are often protective actions rooted in fear (Maslow, 2014). As a youth development program, JROTC frequently utilizes being needs to promote adolescent growth characterized by behaviors that delineate the hierarchy of needs.

Maslow’s theory of human motivation is most prominent in JROTC. The Air Force JROTC textbook defines motivation as the “inner force which drives people to act” (United States Air Force, 2006). Evidence of Maslow’s theory is present in the JROTC program as a whole, and is represented in the education of the cadet.

**JROTC and Maslow’s Hierarchy of Needs**

A personification of the program demonstrates an origin based in satisfying Maslow’s first level physiological needs. Mahan (1966) recognized early that “Historically, government interest in JROTC correlated highly with the nation’s security” (p. 71). At the conclusion of two world wars, the nation found little need for the JROTC program and many protested it and its senior counterpart as unnecessary programs that lacked rigor, consumed resources, and exploited low socioeconomic and minority students (Armato, Fuller, Matthews, & Meiners, 2013; Bartlett & Lutz, 1998).

In its shift away from a militaristic presentation and toward a social program (Coumbe, Kotakis, & Gammell, 2008; Kern, 2003), JROTC entered the middle level of Maslow’s pyramid associated with love and belonging. The results of one study showed that over 66 percent of
students surveyed joined JROTC because of recommendations made to them by others, while 77 percent re-enrolled in the program because it provided them with fun and activities with friends. Cadets noted the benefit of gaining an almost instant group of friends as well as a sense of belonging (Crawford, Thomas, & Estrada, 2004). It is important to recognize the positive relationship between belonging and academic performance. According to Christenson and Havsey (2004), the satisfaction of a variety of student needs, for example, social, emotional, physical, and intellectual, determines academic success. Students who feel a sense of belonging and who are learning are more likely to be motivated toward academic success (Christenson & Havsey, 2004). For some students JROTC satisfies the need for belonging.

To meet the needs of the 21st century student, JROTC integrated technology and sought accreditation (Blake & Heaton, 2014; Kern, 2003). In essence, the program attempted to help students find a sense of belonging within education and create esteem through achievement and respect from others, an effort akin to the satisfaction of needs at Maslow’s third and fourth levels in the hierarchy.

At the pinnacle of Maslow’s pyramid, we find self-actualization, which Maslow defines as the motivation “to become everything that one is capable of becoming.” He exclaims, “What a man can be, he must be” (Maslow, 2013, p. 7). Self-actualization is the need to reach one’s fullest potential. A well-known slogan for the U.S. Army summed it up: “Be all that you can be in the Army” (Chambers & Vergun, 2006).

The Role of the Principal

There are a number of ways to describe the principal in terms of leadership. Regardless of the definition or leadership style, it is generally accepted that the principal is the leader of the school and, as such, wields tremendous power for implementing, evaluating, and improving
teaching strategies and curricular programs. To fulfill leadership responsibilities, the principal must assume a number of roles. Because JROTC is a leadership development course, the significance of multiple roles is especially relevant. Principals not only evaluate leadership programs, but are also exemplars of leadership in its multifaceted dimensions.

**Playing the Part**

Some studies attempt to measure the successful principal by a series of preset traits or personal behaviors (McEwan, 2003; Whitaker, 2003). Regardless of how effectiveness is measured, it is a general assumption that, within the school, the principal fills a variety of roles and performs a host of functions. McEwan (2003) refers to principals as character builders, contributors, and change masters. Change masters “do not dictate or mandate;” they motivate and they do this by working with teachers and by working harder and longer than anyone else works (p. 84).

Successful principals, or what is referred to as “multipliers,” are identified as being one or more of the following: talent magnet, liberator, challenger, debate maker, or investor (Wiseman, Allen, & Foster, 2013). Multipliers are capable of maximizing the full potential in themselves and others. Chenoweth (2010) adds the term “advocate” to the principal’s role. As student advocates, principals create an environment under which students can meet high academic expectations.

In addition to coaches, nurturers, and inspirers, Hess (2013) adds the title of reformers to the principal’s role; reform efforts often require principals to become cage busters. This action is described as “upending stifling rules, policies, and routines to make it easier for successful and professional cultures to thrive” (Hess, 2013, p. 24).
Trail (2000) adds numerous roles to the job of principal including police officer, diplomat, teacher, social worker, and philosopher. Principals today are constantly multi-tasking and assuming a variety of roles and responsibilities. To implement successful reform, principals must be collaborators. The collective assumption of responsibility increases the likelihood that reform will be long lasting (Trail, 2000).

Greenleaf, proponent for Servant Leadership, asserts, “True leadership emerges from those whose primary motivation is a deep desire to help others” (Greenleaf & Spears, 2002, p. 4). Regardless of philosophical stance on leadership, a consensus would concur that leaders do serve others in various capacities. A review of current literature indicates two major areas of service in educational leadership. Principals work to create cultures that promote learning and principals facilitate buy-in from stakeholders.

**Building a Culture**

A positive culture in school contributes to student success. Several prominent figures in education explore the role of principal as culture builder (Chenoweth, 2010; Dufour, 2007; Marzano, Waters, & McNulty, 2005; Reeves, 2009; Reily, 2015; Sergiovanni, 1992). To gain an understanding of best practices in leadership, Martineau (2012) interviewed principals from successful schools. The idea of “reculturing” (p. 54) a school toward collaboration and professional learning communities was prevalent. Martineau found that shared planning not only facilitated professional growth, it also provided a sense of safety, as teachers were not expected to work in isolation.

Marzano (2005) argued that possibly the most important responsibility of the principal is to establish a culture that supports student achievement. Additionally he adds that principals are to be instructional leaders who are knowledgeable of curriculum and instruction, and who take
an active approach in sharing successful skills and research-based strategies that will continue to
support a culture of success. Principals focus on students as well as on teachers. Rice (2011)
argues that the role of administrators includes making sure that students not only master content
but have the opportunity to develop character through leadership development programs like
JROTC.

Chenoweth (2010) pointed to a “respectful relentlessness” in leaders. Good leaders
establish the expectation that every student will learn as well as a “relentless respect” toward the
assumption that all teachers want to be successful (p. 20).

The principal sets the tone for the school culture and plays a substantial role in nurturing
a positive climate. Principals considering the implementation of JROTC might first need to build
a supportive culture for the program. Building positive change begins with a comprehensive
understanding of the current climate (Esquith, 2014; Reily, 2015). Leaders must engage in
relationship building in order to establish trust and build rapport (Reily, 2015; Sergiovanni,
1992). Principals are encouraged to get to know their staff (Hoerr, 2015; Reily, 2015; Trail,
2000). A large part of morale depends on culture. Esquith argued that school morale starts with
the principal but must be maintained by teachers. To keep morale high, principals should work
to provide opportunities for teachers to feel appreciated and to appreciate each other. Such an
environment fosters collaboration and shared leadership. Since leadership is a vital component of
JROTC, the principal would want to ensure that leadership is effectively and appropriately
modeled in the school. Sergiovanni (1992) agreed with the military philosophy that urges
leaders to cultivate followership (Ameen, 2009). Subordinates do as they are told to do
sometimes through resentful compliance, but followers demonstrate commitment to a cause and
act without supervision to move beyond expectations.
When a positive culture does not exist in a school, it is the administrators’ job to create one. Sergiovanni (1984) identified five leadership forces that influence education. Those forces are arranged in a hierarchy of importance that include technical, human, educational, symbolic, and cultural categories (See Figure 2). At the top of Sergiovanni’s pyramid sits cultural leadership, which is defined as motivational and which is aligned to the Maslow’s philosophy of human motivation as well as to the leadership building focus of JROTC.

**Figure 2**: Sergiovanni’s Leadership Forces
All schools have a culture. A strong, positive, and functional culture aligns with a shared vision of excellence. Those with a weak or dysfunctional culture often lack direction and enthusiasm. Dufour (2007) asserted that cultural change cannot occur without deliberate leadership. Trail (2000) referred to this specific responsibility as a philosopher’s role in which principals help to define the values and beliefs that form the basis of the vision. The principal must include stakeholders in the development of shaping a vision for the school. Inclusion empowers stakeholders and creates the buy-in necessary to sustain school improvement and reform.

**Facilitating Buy-In**

The facilitation of buy-in is a second key function of educational leadership. Principals considering implementing JROTC should want to gain support of stakeholders. Some argue that the key to gaining buy in lies in constructing a solid understanding of best practices in curriculum and instruction and assisting stakeholders to see the value of implementing those practices (Daughterty, 2002; Martineau, 2012).

A crucial step in gaining buy-in is making change manageable (Hoerr, 2015; Martineau, 2012; Reeves, 2009). Principals must eliminate unnecessary nonessentials (Martineau, 2012; Reeves, 2009). Hoerr (2015) commented that one of the best things a principal can do to support teachers and gain buy-in is to “take whatever you can off their plates” (p. 85). Additionally, he pointed out that teachers share the same hierarchy of needs as students. Principals must work to help teachers feel safe, supported, appreciated, and valued. Creating a sense of belonging and opportunities for growth empowers teachers and creates buy-in. Teachers need to see that they can make a difference in the lives of students.
A “change leader” does not sell a program or idea. The role of the change leader is to “generate commitment” (Reily, 2015, p. 43). When commitment cannot be generated, the administrator needs to take a top-down approach. Dufour (2007) argued that the laissez-faire approach often equated with consensus and buy-in is not the most effective leadership style. He contends that allowing stakeholders to elect out of effective practices defeats the purpose of meeting shared goals. Team members working in isolation cannot obtain a unified vision.

As school leaders, principals assume a variety of roles and play a tremendous part in leading the education of the students served within the school. Principals direct and shape ideas, policy, and climates. The principals’ expansive knowledge of leadership is helpful in implementing and evaluating a leadership development program like JROTC.

Because of the scope and significance attached to the principal’s complex role, an assessment of the attitudes, perceptions, and beliefs of the principal is vitally important concerning program evaluation. During the past three decades, a handful of studies have examined the attitudes and perceptions of principals regarding the JROTC (Ameen, 2009; Harrill, 1984; Logan, 2000; Marks, 2004; Minkin, 2014; Miranda, 2014, and Morris, 2003). Harrill (1984) chose to survey principals because of their administrative power. He noted that administrators, who play a recognizable role in any course of instruction, have direct control of the JROTC program. Logan (2000) surveyed host principals across the nation for the Marine JROTC because their role has a significance related to any course of instruction in the school. He viewed the principal’s role as one of relevancy to the JROTC program. Two studies referred to principals as gatekeepers indicating their function in opening or closing schools to opportunities or programs (Minkin, 2014; Miranda, 2014). Morris (2003) studied the perceptions of principals in North Carolina regarding Army JROTC and determined that the
greatest influence on perceptions were the quality of the JROTC instructor, the years of experience the principal had with working with JROTC, and having a JROTC unit in the school. Additionally, Morris (2003) concluded that principals had the ultimate responsibility for decision making related to curriculum. Marks (2004) interviewed perceptions of principals and Senior Army Instructors and concluded that both groups perceived the program as a cost effective dropout prevention intervention. In general, studies that examined the perceptions of principals most usually presented data that indicated principals positively supported the JROTC program. Nevertheless, no national study was found that examined the perceptions of principals across all four branches of military service.

**JROTC Curriculum**

Knowledge of curriculum is essential for principals. However, numerous definitions exist for the term “curriculum”. At a fundamental level, we understand curriculum as a course of study. Curriculum is the content of a program established and measured by goals and objectives. Overall, the curricular structure of JROTC encourages the development of positive character traits in cadets so as to support the context of the public school setting. Topics of study are included in the program of instruction (POI) for the JROTC based on the sponsoring military branch. Overall, three main themes of the JROTC curriculum are citizenship, military history, and leadership (Kariuki & Williams, 2006).

Sieverling (1973) surveyed cadets in Pennsylvania and 42% indicated that the program of studies, or curriculum, was the most appealing feature of JROTC. According to Coumbe, Kotakis, and Gammell (2008), the curriculum for JROTC is based on the stated purpose for the program of instruction, which most commonly attempts to “teach citizenship, develop leadership,
build character, promote high school graduation, encourage attendance, and discourage substance abuse” (p. 317).

Curricular components of JROTC have been the topic of some dissertations and articles. Marks (2004) surveyed principals and JROTC instructors in three high schools located in northern Tennessee and northwestern North Carolina. Principals ranked the top three most important programmatic goals as promotion of citizenship, promotion of leadership, and completion of high school. JROTC instructors ranked high school graduation as the most important goal followed by development of self-esteem and academic achievement, and the development of leadership. Both groups listed recruiting for the military in the final position for goals. Hawkins (1988) claimed that the curriculum of Army JROTC promotes the development of leadership and citizenship. Bachman (1994) argued that JROTC programs primarily provide instruction that is challenging, physically demanding, and rewarding. He contended that the JROTC curriculum was designed to develop and train students in leadership. According to Bachman (1994), goals for JROTC included increased graduation rates, the development of leadership and strong character, and the avoidance of substance abuse and gang membership.

Rice (2006) commented on the practice of embedding credit in JROTC curriculum. She argued that JROTC curriculum covers the same objectives found in several content areas and that student cadets could, at the discretion of the school district, earn credit for physical education, speech, civics, economics, career exploration, or geography based on their participation in the JROTC program. Bodgen (1984) found that participation in JROTC substituted for a student’s physical education credit. Burns-McFadden (2011) compared NJROTC cadets to students in a traditional civics course in a large urban blue-collar high school. She questioned if NJROTC students held a more positive attitude toward democratic citizenship and if the NJROTC cadets
held more discussions of current events than did their counterparts. Results of the study indicated that students in NJROTC discussed international politics and news significantly more often than did students in the traditional civics course.

One of the most comprehensive studies of JROTC curriculum comes from Kern (2003) who explored the possibility of a joint curriculum defined as “single curriculum used by all the services” that includes identical lessons taught to all the cadets regardless of branch (p.2). Currently, all JROTC programs address leadership and personal skills. However, each program of instruction (POI) is specific and includes classes related to the specific sponsoring military branch. For example, Kern noted that the Air Force JROTC program of instruction includes fifteen units related to aerospace and aviation. The Navy JROTC includes four units on naval science. Marksmanship topics are included in Army and Marine JROTC only. Common topics include leadership, sexual harassment, conflict resolution, relationship development, group dynamics, inspection, goal setting, cadet evaluation, and motivation. Kern argued the military could not easily implement a “purple” or blended curriculum (Kern, 2003, p.114). Weaver (2012) supported this view and argued that rivalry among the varying branches is similar to rivalry between sports teams and healthy competition leads to systemic improvements.

In a similar vein, Taylor (1999) who supervised a report for the Center for Strategic and International Studies (CSIS) used both qualitative and quantitative data to compare 28 units in three diverse areas: Chicago, Washington, D.C., and El Paso. CSIS conducted the survey during the 1997-1998 school year and compared the POI for each branch. Findings indicated that although the branches were unique in their approach, each was working to improve the educational strategies and instructional techniques for JROTC.
One study examined top JROTC units across the nation. Through site visits, observations, and interviews, the study questioned what students learned from JROTC. Repeatedly, cadets noted that the curriculum for JROTC presented valuable information that could be used in life after graduation from high school (Crawford, Thomas, & Estrada, 2004).

Each branch of the military determines its own curricular programs and goals. Therefore, each branch assumes direct operational control over the JROTC program. Individual mission statements vary depending on the sponsoring military branch. Official government websites for each military branch provide information regarding the individual mission statements, goals, and objectives.

The mission of the Air Force JROTC is “to develop citizens of character dedicated to serving their nation and community.” Stated goals for the program echo the common goals set forth in Directive 1205.13 (United States Department of Defense, 2006) which include instilling values of citizenship, service to the United States, personal responsibility, and a sense of accomplishment (U.S. Air Force, 2010).

The mission of the Army JROTC is “to motivate young people to be better citizens.” The vision for this branch is to provide quality programs that teach citizenship, character, and leadership development. Goals for the program include the development of citizenship and leadership. In addition, the program seeks to lead students to an appreciation of communication skills, physical fitness, mental management abilities, military history, teamwork, and the importance of high school graduation for future success in advanced education and employment opportunities (United States Army Junior Reserve Officers’ Training Corps, n. d.).

The Marine JROTC mission is “to develop informed and responsible citizens.” Goals for the program include strengthening character, promoting and understanding of the basic
requirements for national security, developing a respect and understanding of authority in a
democracy, and promoting a curriculum focused on leadership development (U.S. Marine Corps,
2007).

The Navy JROTC mission statement is “Helping today’s youth meet life’s challenges.” Like the Air Force, the program focuses on the common goals established for all JROTC programs and attempts to instill in students the values of citizenship, service to the United States, personal responsibility and a sense of accomplishment (U.S. Department of the Navy, 2011).

In summary, the Army and Marine branches focus on the citizenship and leadership components of the JROTC mission while the Air Force contains instruction in aerospace science and the Navy program includes instruction in naval science (Peinhardt, 1998; Walls, 2003). The JROTC programs share aspects of career academies due to the integrated curriculum and dedicated facilities and instructors (Pema & Mehay, 2009). It should be noted too that instructors, schools, and communities (Bodgen, 1984) build flexibility into the curriculum of JROTC programs to provide influence over the final program.

Over the years since the creation of JROTC programs, changes have been made to the curriculum. The first major change to the JROTC curriculum occurred in the mid-1980s with the adoption of the JROTC Improvement Plan (JRIP), which marked a significant shift away from military topics and toward social and character education (Coumbe, Kotakis & Gammell, 2008). Up to half of the instruction was focused on the use of technology in an effort to draw academically strong students toward engineering and science, fields which were desperately needed in the military (Kern, 2003).

The government fully implemented the new JROTC POI by the 1990s. By 2002, revisions to curriculum were based on educational theories and aligned with national standards.
The program relied on a learning model developed by Dr. Steven Dunn (Kern, 2003; U.S. Army JROTC, 2010). Criticism of the JROTC curriculum, as well as mandates from NCLB, spurred the military to seek accreditation as a way of justifying program validity. Without accreditation, some believed that the program would fail to maintain enrollment numbers, especially in areas where academic credibility of the program was already under scrutiny. The Commission on International and Trans-Regional Accreditation (CITA), along with the Southern Association of Colleges and Schools (SACS), performed the accreditations. The Marines were the first to receive accreditation for curriculum, followed by the Army on June 1, 2005, and the Air Force on September 10, 2005 (Coumbe, Kotakis, & Gammell, 2008). According to Commander Royal Connell, Cadet Education and Curriculum Coordinator for the Naval JROTC Program Office, Navy JROTC was most recently accredited by AdvancED/SACS in 2012 (Royal Connell, personal communication, April 13, 2015).

Evidence from several studies suggests that the quality of the instructor plays a vital role in the success of the program (Bogden, 1984; Crawford, Thomas, & Estrada, 2004; Morris, 2003; Santora, 2006; Sieverling, 1973). Using the Hayes Pupil-Teacher Reaction Scale as a measure of teacher effectiveness, Sieverling (1973) revealed that JROTC instructors were rated 1.7 points higher than academic instructors were. Results were significant at the .0001 level and indicated that participants viewed the JROTC instructors as more effective than general education academic instructors. In response to educator quality, the Department of Defense requires each military branch to certify JROTC instructors and requires the senior instructor to possess a baccalaureate degree (Department of Defense, 2006).
Characteristics of JROTC Cadets

Another area of the JROTC program has to do with character building. Character education is not a new concept. Milson (2000) as noted in Spencer (2004) pointed out that as early as 1916, John Dewey asked teachers to provide opportunities to assist students in character development that would support positive social change. Character development is a prominent feature of the JROTC program.

A number of studies on JROTC focus on comparing the traits and learned characteristics of non JROTC students with those of cadets or variations of this theme. Some of the studies are specific to military branch, location, or grade level. One of the earliest studies emerged when the Pennsylvania state school board questioned the value of JROTC. To measure the effectiveness of the JROTC program in Pennsylvania public schools, Sieverling (1973) surveyed 97 matched pairs of JROTC cadets and non-cadets in six public high schools with Army, Air Force, and Navy JROTC programs. The study, conducted during the 1972-1973 school year, examined perceptions related to citizenship, leadership, and self-reliance. Despite the perceptions that JROTC cadets scored higher on leadership, citizenship, and self-reliance, the study failed to produce significant results.

Hawkins (1988) compared 83 senior level cadets in Army JROTC with 92 seniors from seven public high schools in central Virginia, with JROTC units in place for a minimum of two years. Hawkins explored the variables of leadership, citizenship, and self-reliance. Mean scores for JROTC cadets were higher but not significantly so.

Roberts (1991) replicated the Hawkins study comparing army JROTC senior cadets with non-cadets from six public high schools in Washoe County, Nevada. Roberts found higher mean averages for JROTC cadets in all six schools for leadership and self-reliance. He found higher
mean averages in five of the six schools for JROTC cadets in citizenship. He found statistically significant differences in leadership and self-reliance for JROTC cadets in two of the six schools, and for citizenship in half of the schools.

Bachman (1994) utilized a partial replication of the studies by Hawkins and Roberts to examine leadership and self-esteem. Bachman compared Army JROTC cadets in the junior class with non-cadets in three public high schools in California. Results were significant for JROTC cadets in both areas. Five years later, Flowers (1999) modified the Bachman study to measure leadership, self-esteem, attendance, and suspension. He compared 57 Army JROTC cadets in the sophomore class to 57 non-cadets in three schools. Two of the schools were located in Alabama and a third school was a Department of Defense operated school in Europe. Results were significant for JROTC cadets in better attendance and leadership.

Another matched-pair study compared 67 Navy JROTC cadets to 67 non-cadets in Detroit Michigan. Machir (1991) examined dogmatism, personality type, and self-esteem and found no significant differences. However, JROTC cadets did score significantly higher than non-cadets on the section of the Piers-Harris Self-Concept Scale for Children that measured “happiness and satisfaction” (Machir, 1991, p. 45).

One study compared Army JROTC senior cadets to beginning cadets to determine if the program contributed to the development of self-esteem and learning skills (Rivas, 1995). Rivas surveyed 117 cadets in four public high schools. Results indicated that participation in JROTC positively affected self-esteem and that this was more pronounced in female cadets.

At the turn of the millennium, studies appeared demonstrating the efficacy of JROTC in terms of character building. Studies using the Democratic Maturity Test (DEMO) developed by Cassell and Kolstad in 1998 utilized Dewey’s definition of democracy as the “interdependence
of independent individuals” (Reiger & DeMoulin, 2000, p. 43) to measure democratic maturity. Kolstad and Ritter (2000) and Demoulin and Ritter (2000) used DEMO to compare JROTC students to college students. DEMO consists of 200 true or false questions. Each of the eight categories contains 25 items. The first four categories measure Personal Maturity (independence) and the second four categories measure Social Integration (interdependence).

Demoulin and Ritter (2000) included the Self-fulfillment Inventory (SELF) designed by Cassell in 1998. Like the DEMO, it, too, consists of 200 true or false questions distributed in groups of 25 across eight categories. The test is designed to measure cognitive dissonance or “hurts” created by unfulfilled personal needs (p. 411). The results of both studies pointed in a favorable direction for JROTC. The Demoulin and Ritter study (2000) noted that sympathy, one of the critical factors to determine the success of living in a democracy, was the only category in which the college students showed significance over the JROTC cadets and concluded that the program fostered democratic maturity. Reiger and Demoulin (2000) compared JROTC cadets in New Jersey to randomly paired non-cadets in Tennessee. The study found significant correlations for JROTC students in terms of assertiveness, caring, and social integration, thus indicating that participation in JROTC contributed to democratic maturity.

The Personal Development Test (PDT), measures various indicators of maturity and personality development. Some indicators include coping skills, self-esteem, sympathy, self-efficacy, and caring. Schmidt (2001) gave the PDT to 64 JROTC cadets and over 1,900 high school students. JROTC cadets’ scores were statistically higher than those of typical high school students. In a later study, Schmidt (2003) used the PDT to compare scores from 122 California JROTC cadets with almost 800 typical high school students. Once again, the cadets
scored significantly higher than did high school students. Schmidt’s findings concur with those of Demoulin and Ritter (2000).

Bulach (2002) developed a survey consisting of 96 items measuring 16 character traits and used the survey to compare scores of 277 JROTC students with 200 high school students in Atlanta, Georgia. JROTC cadets scored higher in all but two of the items indicating that the JROTC program has a positive effect on student character.

Rather than comparing cadet to non-cadet, Kariuki and Williams (2006) explored the correlation between character traits and academic achievement. In their study, grade point average served as the standard of achievement. The study surveyed random samples of 20 male and 20 female cadets from the Air Force JROTC program at Sullivan South High School near Knoxville, Tennessee. Results showed a significant relationship between positive character traits and grade point averages. This study demonstrates agreement with Bulach (2002) that strong character education programs like JROTC have a positive influence on the cadet’s behavior and academic achievement.

Taylor (2007) consulted with Bulach and continued the exploration of character education within JROTC. Taylor compared character trait scores and performance factors between Air Force JROTC cadets and non-cadets enrolled in grades ten through twelve at a diverse suburban New York High School. Taylor chose eight character traits that exemplified the AFJROTC curriculum and provided a Likert-scaled self-reporting survey to participants. He conducted a post-hoc examination of district data regarding behavioral information such as graduation rate, attendance, rate, and suspense rate. Results were positive for JROTC in behavior and Taylor found statistical significance for seven of the eight character traits measured. In contrast, Williams-Bonds (2013) surveyed approximately ninety juniors from a predominantly
black Midwest urban high school and found no significant differences between Air Force JROTC cadets, student athletes, and high school students in terms of academic achievement and perceptions of leadership and citizenship.

**Principals’ Perceptual Understanding of JROTC within the School Environment**

An understanding of context involves the perceptual positioning of the program in terms of support for a successful school environment. Common indicators of school success include a safe learning environment, positive character traits, community service, student engagement, positive behavior and positive extracurricular activities. Six studies examined the perceptions of school administrators toward JROTC.

Harrill (1984) studied the attitudes of principals in schools with JROTC units in the Army’s Third Region headquartered in Kansas. One hundred fifty eight administrators from the seven state area responded to a survey about the seven mission statements of the program. Administrators were asked to compare an idealized program to the reality of the existing program. Overall, principals agreed that the program met stated goals, however, one fourth of the respondents saw room for improvement.

The study was partially replicated in 2000 by Logan who examined perceptions of administrators across the nation with an established Marine JROTC. Like Harrill (1984), Logan included a section in the survey that asked administrators to rank the value of elective courses including JROTC. In Harrill’s (1984) study, 53% of administrators surveyed ranked JROTC in either first or second place as a valued elective. Results from Logan’s study indicated that 66% of respondents ranked JROTC in either the first or the second place in terms of value. Only one-fifth of the respondents saw room for improvement (Logan, 2000).
Morris (2003) surveyed perceptions of 184 high school principals in North Carolina regarding the benefits of JROTC. Results indicate that the principals believe JROTC “positively affected school climate” and 89% of the principals surveyed indicated that JROTC improved discipline across the wider curriculum (p. 157). Moreover, respondents indicated that the program provided a positive peer group for students and improved attendance rates. Marks (2004) studied the perceptions of principals and Army JROTC instructors regarding dropout rates and college transition rates. Although results did not show a significant difference for cadets in terms of dropout rates, principals agreed that the program was a cost-effective strategy for dropout prevention.

Ameen (2009) explored the perceptions of administrators, instructors, teachers, cadets, and parents related to the effect of JROTC on citizenship, leadership, respect, self-discipline, respect for authority, and goal setting. Results were mixed. Additionally, Ameen compared data for fifty Air Force JROTC cadets in an urban high school in southeast Virginia. Again, results were mixed. Discipline referrals were lower for non-cadets than for cadets but cadets scored significantly higher than non-cadets scored on grade point average. A research study by Taylor (1999) concluded that Army JROTC cadets had higher attendance and graduation rates than the overall average school population. Another study compared 73 JROTC cadets to non-cadets in four schools in Missouri and found no significant differences in terms of achievement, graduation rates, or college enrollment rates (Biggs, 2010).

Days and Ang (2004), noted that principals in schools with JROTC programs believe the program reduces disciplinary issues in the school. Minkin (2014), who used online surveys to explore the perceptions of fifteen administrators in a large Florida school district, reported a reduction of discipline referrals in a qualitative study. Administrators responded positively
regarding a decrease in discipline referrals for cadets and an increase in attendance. Motivation was noted as a contributing factor. Administrators “observed that JROTC gave the students the drive and motivation to take their education seriously and thus avoid missing their classes” (p.73).

Weaver (2012), from the University of Southern Mississippi, examined the perceptions of cadets enrolled in JROTC programs for the Army, Air Force, and Navy in the Gulf States region. No significant differences were found among supporting branches in how cadets perceived variables of mentorship, dropout rates, attendance or academic achievement. However, cadets did view the variables favorably with the most favorable response given for mentorship.

Two committee reports looked at the JROTC program in terms of how it supported the educational system. Common Ground, a report by the National Association of School Board of Education, noted that military programs like JROTC were successful due to the holistic approach to education and student development (NASBE, 2010). The report recommended that state boards search out and support evidenced based programs and strategies to help students become college and work ready. This recommendation encompasses military themed programs. Hugh Price, who facilitated the development of ChalleNGe program participated in the common ground study as well as an additional study sponsored by the Brooking Institute, explored the success of military programs and revealed a list of program attributes that contributed to success. Attributes worthy of emulating appeared at all levels of Maslow’s hierarchy of needs (Price, 2007).

**Advantages and Disadvantages of Having JROTC in High Schools**

Despite the praise and reported benefits, there are those who criticize the program. Opponents claim that JROTC is a poorly disguised recruitment tool, which overwhelms valuable
school resources and promotes violence and a blind obedience to authority (Ayers, 2006; Berlowitz, 2000; Lutz and Bartlett, 1995).

Some opponents see JROTC as a highly effective recruitment tool that targets minority and disadvantaged youth (Ayers, 2006; Bartlett and Lutz, 1998; Long; 2003). Surveys and studies indicate that participants in JROTC are more likely to enlist in military service (Biggs, 2010; Corbett and Coumbe, 2001). Others view JROTC as a distraction to or burden on the military (Coumbe, Kotakis, & Gammell, 2008; Mahan, 1966). They argue that there is no recruiting advantage since the junior program enrolls many cadets who could not qualify for enlistment in the Army, let alone entry into a commissioning program (Coumbe, Kotakis, & Gammell, 2008). Mehay and Pema (2009), note that contrary to public opinion, surveys, and some studies, the vast numbers of JROTC participants do not join the military.

Berlowitz (2000) further argues that once students elect to join the JROTC, they are given a “watered down” curriculum (p. 394) and are inundated with so many time consuming requirements that they are not neither prepared nor able to participate in more challenging college preparation activities or courses. He found only four credible studies on JROTC and commented that the emphasis has been on leadership skills. Further, he found no studies which reported school-based outcomes such as reduction of drug use or improved school environment. Long’s study (2003), chaired by Berlowitz, supported opposition to JROTC and presented evidence to portray the program as a recruitment tool that focuses on enlisting minority and disadvantaged groups. Some accuse the military of being manipulatively deceptive and call for increased honesty regarding the program (Huet-Vaughn, 2013; Long, 2003). Arnoldy and Lubold (2008) stated that the purpose of JROTC is to recruit for the military. They argued the unlikelihood of pentagon funding as support for their position. Ayers (2006) argued that the
discipline provided by JROTC failed to produce critical thinking skills. He likened it to obedience training, which “may have a place in instructing dogs, but not in educating citizens (p. 597).”

Meyer and Sandy (2013) questioned the effectiveness in JROTC toward cultivating a democratic culture permeated by social justice. While they concede that the program has helped some, they maintain that JROTC equates patriotism with militarism and therefore, supports the premise that cadets are more patriotic than those who “exercise their rights of free speech” (pp. 19-20).

Lutz and Bartlett (1995) agreed that JROTC fails to support peaceful solutions. They argued that JROTC is “antithetical” (p. 9) to promoting democracy and fails to teach students how to resolve conflicts peacefully. They recommend teaching patriotic behavior and citizenship through community service opportunities and service learning outside of military flavored environments.

Other critics of the JROTC program include Carr and Porfilio (2012) who questioned the role as well as the curricular content of the program; McManimon, Lozenski, and Casey (2012), who have criticized elements of the curriculum within JROTC, having what they consider a hidden agenda of glorifying war and teaching intolerance. In addition, they complain about a lack of ethical issues in the program, a pseudo-leadership style that opposes critical thinking, and a lack of national studies to support the program. To bolster their stance, they noted that the studies by Pema and Mehay (2009, 2010) were the only studies to use national data and those results were mixed regarding cadet achievement.

In search of an effective and comprehensive evaluation of JROTC, Mulholland (2005) cited, Russell Gallagher, Director of JROTC programs in Philadelphia, who argued that the
program must be understood in terms of “tangibles and intangibles” (p. 6). Additionally, Marks (2004) argued that JROTC provides benefits to the school that cannot be measured, and Bachman (1994) provided examples of character attributes that are difficult to measure including responsibility, discipline, self-esteem, and confidence. Mulholland (2005) claimed that character–building intangibles were the catalyst behind the expansion authorized by President George H. Bush in 1992. One of the positive intangibles to surface in the study was the program’s ability to help cadets fill a need for a sense of belonging. Other studies noted the importance attached to belonging (Bogden, 1984; Corbett & Coumbe, 2011; Marks, 2004). Finally, Mulholland (2005) concluded that a valid instrument of measurement must be in place before one can label any aspect of the program as either positive or negative.

In a study by Pema and Mehay (2009), researchers pointed to an increase in self-esteem for female cadets. A second study (Pema & Mehay, 2010) explored the effect of the intensity of the program and found that graduation rates were higher for JROTC students who participated early in the program and for those who remained in the program.

Some studies explored the appropriateness of JROTC for particular students and sought to determine which students derived the most benefit from participation in the program (Bogden, 1984; Morris, 2003; Perusse, 1997). Perusse (1997) found that counselors most often recommend JROTC to students on track to receive a regular diploma, students in an advanced studies program, those who were female, a member of a minority, a member of student council, a student with a grade point average of 2.0-3.5, those who had no postsecondary plans, and those who planned to pursue a technical field. In another study, Morris (2003) agreed that those who benefit most had grade point averages of 2.1-3.5. Perhaps Bogden (1984) best summed up the benefits of JROTC when he argued the most significant factor to consider is the type of student likely to
participate in the program. According to Bogden, “who the program serves has the greatest influence on how the program is received” (p. 56).

The curriculum is only one area of contention for those who contest JROTC. Resistance has existed since the beginning of the program (Long, 2003; Peinhardt, 1998) and lists of organizations opposed to JROTC are readily available (Taylor, 1999; Peinhardt, 1998; Morris, 2003). One of the major arguments against JROTC is the lack of quality curriculum and instruction. Opponents claim that JROTC instruction is not interactive and relies on non-challenging lesson plans. In addition, there is often no oversight of the curriculum by school districts (Bartlett & Lutz, 1998). Disputes arose that the program modeled martial solution that countered school and district stances on non-violence and safety. In the 1990s, criticism spurred the military to revise curriculums and to reduce the focus on weaponry by making weapons training an optional component of the program (Logan, 2000). The revision included a shift in focus away from military training to a stronger emphasis on leadership, self-esteem, values, citizenship, communication, physical fitness, career exploration, and substance abuse prevention (Coumbe, Hartford, & Kotakis, 2010).

Demographic Influences on JROTC Programs

Studies that explore the influence of demographic variables on the JROTC program often focus on a few key and often controversial variables: race, gender, geographic location, and socioeconomic status.

In the beginning, the federal government allocated funding to schools that incorporated vocational education, which included military training, into the curriculum. Urban areas with high concentrations of working class and minority populations were ideal environments for the new program. The southern section of the United States, with a high number of military
academies and military bases became another region with large JROTC programs (Long, 2003; Peinhardt, 1998). JROTC legislation of 1993 authorized increased financial assistance to schools in economically or academically disadvantaged areas. Critics viewed the increased funding as an enlistment ploy to target disadvantaged youth (Peinhardt, 1998). Objections resulted from the claim that JROTC benefited “at-risk” students. Some have argued that the poorly defined term labeled and tracked students (Bartlett & Lutz, 1998).

JROTC was perceived as a program that prevented students from dropping out, joining gangs, engaging in disruptive behavior, or using drugs (Coumbe, Hartford, & Kotakis, 2010). Yet opponents maintained that the program refused to accept students with behavioral problems or low academic achievement (Lutz & Bartlett, 1995). Department of Defense Instructional Directive 1205.13 (Department of Defense, 2006) states that the principal and senior instructor will agree upon the maximum number and suitability of any students ineligible for the program and may enroll an ineligible student if so stipulated by the student’s Individual Education Program or 504 Plan with the school assuming responsibility for providing any special equipment or additional instructors.

Race is another demographic issue of contention within the JROTC program. Often poverty and minority status are linked and it can be difficult to separate the influence of the two factors as independent variables. Mehay and Pema acknowledged the diverse population of JROTC participants included at-risk and disadvantaged students. They stated that approximately 40% of units are located in urban schools and approximately half of the cadets are minority students and 40% of the cadets are female (Pema & Mehay, 2010).

Meyer and Sandy (2013) claimed that 54% of JROTC participants are students of color. Others argued that the structure of JROTC has the ability to influence the behavior and
achievement of lower-socio-economic students, many of whom are also inner city and or minority students (Huet-Vaughn, 2013; Johnson, 1999). Berlowitz (2000) viewed the program as part of a system of indirect violence perpetrated against targeted groups; one he argued, that positioned institutions in a way to allow for the discrimination of specific groups by economic force. Such a practice, he argued, coerces African American and other racially oppressed groups into military enlistment. Others viewed JROTC is a recruitment tool aimed specifically at inner city, rural, and impoverished youth (Ayers, 2006; Bartlett & Lutz, 1998; Berlowitz, 2000). Berlowitz argued that globalization had intensified economic disparities and contributed to a greater impoverishment of minorities. Minority and poor students are targeted and caught in what he calls the “push-pull phenomenon” (p. 394). Poverty pushes them toward the program and the promise of benefits pulls them in.

An early study (Mahan, 1966) found the program was most attractive to boys from lower socioeconomic backgrounds who ranked in the lowest academic third of the class. He argued too, that the program provided “immense educational benefits to Negro youth” (p. 72). Two studies used an ex-post facto comparative analysis of High School and Beyond (HS&B) data (Hicks, 2000; Johnson, 1999). Johnson (1999) concluded that students most likely to participate in JROTC were male, of lower socio-economic status, and African American. Hicks (2000) explored the influence of six different variables on citizenship and concluded that participation in Army JROTC was the strongest influence on citizenship scores. Additionally, the study implied that participation in Army JROTC by minorities and females resulted in improved citizenship skills when compared to their majority peers who did not participate in Army JROTC. A report by Peinhardt (1998) surveyed 358 cadets across all branches of the program in the cities of
Regardless of gender or racial and ethnic identity, 94% stated that the program had met or exceeded their expectations.

In a case study of a predominantly black school, Boykins (1992) examined the influence of JROTC on leadership, empowerment, and academic achievement for black students. Results supported the efficacy of the JROTC program to affect positively the studied variables. Statistical data pointed to improvements in academic achievement as measured by the grade point average for most of the black students who participated in JROTC. Teachers observed self-discipline, self-esteem building, and peer influence as the strongest factors contributing to the positive change in student behavior.

Many report a disproportionate number of minority cadets enrolled in JROTC programs (Berlowitz, 2000; Johnson, 1999; Long, 2003; Santora, 2006; Taylor, 1999; Price, 2007). According to Long (2003), minority students accounted for approximately 62% of all JROTC enrollment in 2001. By 2010, Pema and Mehay reported that the total number of minority students enrolled in JROTC had dropped to approximately 50% (Pema & Mehay, 2010). Price (2007) attributed the large number of African American cadets to the prominence of black leadership within the military and commented that the military is a “rare institution not dominated at the top level by whites” (p.13).

A qualitative study conducted at Passaic High School explored the Hispanic influence on the growth of a Naval JROTC program (Santora, 2006). Approximately 89% of cadets enrolled in the program were of Hispanic or Latino ethnicity. The study concluded that the large population of Hispanic cadets was representative of the city’s Hispanic population (66%) and not a pattern of discrimination or exploitation. Santora referred to Passaic as a “city of immigrants” where students often find that JROTC helps to fill the need for a sense of belonging. Santora
pointed out that often immigrants and inner city populations do not view the increased focus of JROTC in cities as discriminatory. Rather, they view the program as a source of respect rather than recruitment. Further, he commented that only ten percent of the students who participated in the highly respected Naval JROTC program at Passaic High School enlisted in military service after graduation.

A sense of belonging and acculturation is echoed in studies that illustrate the role of JROTC in helping students make a connection to school and community (Bogden, 1984; Corbett & Coumbe, 2001; Walls, 2003). One qualitative study explored how a Vietnamese refugee’s participation in JROTC not only helped him build patriotism but also assisted in developing a sense of belonging as both a Vietnamese and American citizen. Grounded in Butler’s theory of performance, Davila (2014) argued that we become what we do. The behavioral components of JROTC, including codes of conduct, ceremony, drill, and uniform helped the refuge assimilate into his new culture and still maintain his Vietnamese identity. The importance of this study relates to the magnitude of impact created by participation in what some regard to be “peripheral” courses (Davila, 2014, p. 452).

Additionally the increased enrollment of females at Passaic (63%) also represents a growing national trend as confirmed by other studies (Dohle, 2001; Taylor, 1999). Rice (2006) examined the correlation between emotional intelligence and grade point average across several variables including gender. She concluded that emotional intelligence is positively related to grade point average and grade point averages, as a whole, were higher for girls than for boys. Bachman (1994) noted that while male cadets scored higher than female cadets in leadership, female cadets had higher scores than male cadets in self-esteem.
In terms of program influence on “at-risk” students, it is worth recalling that the term “at risk” is ambiguous. Bartlett and Lutz (1998) implied that while initially the term indicated students who were potentially at risk of dropping out of school, a shift in contextual understanding now links the term to a potential for delinquent behaviors such as drug use, violence, and crime. Moreover, they argue that the term is racially charged and stereotypes students of color.

Coumbe and Corbett (2001) argued that JROTC was never intended to “morally and educationally uplift hard-core delinquents” (p. 44). They noted that the program is best suited for students seeking direction and a self of belonging. Following the Los Angeles Riots in 1992, then Chairman of the Joint Chiefs of Staff, General Colin Powell, visited the area and proclaimed that JROTC was the best way for the Department of Defense to be a positive influence on American youth (Coumbe, Kotakis, & Gammell, 2008). He argued that the program held particular value and potential for inner city youth. Flowers (1999) described “Operation Capital” as the federal attempt to add units to large inner city schools in order to emphasize high school completion, promote abstinence from drugs and alcohol, and increase academic achievement.

Others have contended that the overrepresentation of units in particular geographic locations was due to school demand and a lack of oversight by the Department of Defense to ensure geographic balance (Taylor, 1999; Walls, 2003). Lutz and Bartlett (1995) noted that 65% of the nation’s JROTC units were located in fourteen southern states. The perceptual shift of JROTC being a “full-service” program instead of an “at risk” program is responsible for at least a part of the NJROTC success at a New Jersey high school according to Santora (2006, p.162). The shift mimics the success of a high school program in Missouri that reframed the term “at risk” to “at promise” (Dohle, 2001, p. 7). Dohle interviewed parents, alumni, and predominant
figures in the JROTC program including Coumbe, Rice, and Pinehardt, noted researchers cited in this document. He attributed the success of a unit to its ability to help cadets satisfy certain personal needs. Dohle argued that programs flourished if the student felt served, while programs died if they cannot help to meet the needs of the students they serve.

To accentuate the at-risk status of cadets, Pema and Mehay (2010) found that those who enrolled in JROTC were more likely to be minority males in large urban high schools who resided in a single parent home. Regardless of other demographic factors, they concluded that cadets who enrolled early and remained in the program had positive academic outcomes.

Miranda (2014) provided one of the most current and interesting studies. In an attempt to explore how values, attitudes, and beliefs influence the support of administrators toward JROTC, Miranda took a qualitative approach relying on interviews and photo elicitation. Six Rochester, New York area administrators volunteered for the study. The study included at least one administrator from each school classification based on the National Center of Educational Statistics (NCES). Miranda interviewed principals from urban, suburban, town, and rural schools to provide a sample representative of the “geopolitical and socioeconomic spectrum” served by the community (p. 69). Despite personal experiences, all principals seemed to agree to the benefits of JROTC and expressed favorable opinions of the program. Miranda concluded that the largest barrier to the establishment of a unit in a school was the administrator’s lack of knowledge and awareness of the program.

A study by Walls (2003) compared JROTC with other youth development organizations programs and found that although other programs met the developmental needs of adolescents, no program had the comparable volume, longevity, or wide acceptance as JROTC.
Pema & Mehay (2009), associated with the Naval Postgraduate School in California, used data from High School and Beyond (HSB) and data from the National Educational Longitudinal Study (NELS). The data extended across two decades. HSB data followed a randomly selected representative sophomore cohort group and interviewed participants at intervals from 1980 to 1992. NELS surveyed eighth grade students from 1988 to 2000. In addition, both surveys collected relevant data from school officials such as enrollment, dropout rates, suspensions, standardized test scores, and racial composition. Another study by Pema and Mehay (2010) used only HSB data. Both studies inferred participation in JROTC through transcript analysis.

Alternately referred to as a character education program and a youth development program, JROTC has a history shrouded in controversy. From a theoretical standpoint of human motivation, it has sought to help cadets satisfy individual needs in order that they might contribute positively to social good. Studies related to JROTC have explored the influence of the program on cadets, on curriculum, and on the support provided by the program within the public high school setting. Results from studies are often mixed or inconclusive. Research is limited and empirical data is almost nonexistent. The dearth of data supports the need for continuing study.
CHAPTER THREE: METHODOLOGY

This chapter describes the research procedures used to examine perceptions of principals regarding the influence of JROTC programs on cadets’ social development, cadets’ behaviors, and on the overall school environment. Further it explores demographic factors that influence these perceptions. This chapter includes the description of the research design, population, instrumentation, data collection methods, and statistical tests used to analyze the data collected for this study.

Research Design

This study was designed to be descriptive in order to illustrate principals’ perceptions of the influence of the JROTC program on designated variables. Those variables include the cadets’ social development, cadets’ behaviors, and the overall school environment. Also, differences in principal perceptions due to demographic factors were examined using an ex post facto design. In addition, open-ended questions were used to collect and analyze qualitative data describing principals’ views on the advantages and disadvantages of the JROTC program.

Population

The population for this study was all current high school principals in public high schools across the United States where JROTC is offered as a course selection. Department of Defense schools, charter schools, and private schools were excluded from this study. This study included public high schools with JROTC that are located within the Washington, D.C. area but excluded all schools with JROTC units located outside of the country. Additionally, this study excluded all Department of Defense schools, all JROTC Career Academies, and all public high schools that do not sponsor a JROTC unit.
Principals were selected because of their broad expertise in school curriculum, instruction, and leadership. Due to the likelihood of differentiating roles and responsibilities, this study does not include assistant principals, deans, or other administrators. As school leaders, principals not only evaluate teacher performance but also are also keenly aware of programs, student and community concerns, and academic measures related to accountability. In addition, they have a powerful insight into student behavior and are sensitive to changes in school climate. Bogden (1984) suggested that perceptions of those in charge of the JROTC program were the most effective measure of program effectiveness. Because of their extensive knowledge of educational strategies and curriculum, including the needs of the students, and contributing factors to success, this study considered the perceptions of professional school principals as valid and reputable.

Instrumentation

The instrument for this study is based on perceptions of the participants. Shiraev and Levy (2007) defined perception as the “process that organizes various sensations into meaningful patterns” (p. 105). This process involves integrating prior knowledge with current sensation. It is influenced by a culture as a set of shared attitudes, beliefs, opinions, and behaviors. The biggest limitation for attitude scales is the inability to predict behavior consistently (McLeod, 2008). If that is the case, results of this study must be taken as a snapshot in time rather than as a predictor for the future. Attitudes, beliefs, perceptions, and opinions change.

The instrument in this study was a researcher developed three-part questionnaire (Appendix C) that examined the perceptions of principals concerning JROTC. The development of the survey for this study was based on an exhaustive literature review, personal interviews and observations, and an examination of stated JROTC program goals. For this survey, perceptions
represent the beliefs or attitudes principals hold about the JROTC program. Also, in order to avoid bias towards any one branch of the military, the survey sought feedback from schools with JROTC sponsored by all four military branches.

**Pilot Study**

A pilot study (Appendix A) was conducted to gain insight into the construction of the survey. The researcher received permission to conduct the survey from a nearby county school system (Appendix B). The researcher submitted the pilot study survey to seven school administrators, consisting of principals and assistant principals, and from four JROTC instructors, retired military personnel, who were employed currently at two public high schools in close proximity to Marshall University. Each JROTC unit is staffed by two instructors with expertise and knowledge of the JROTC program in terms of curriculum and goals. Contributions from the JROTC instructors assisted in clarification and understanding of the survey questions related specifically to the JROTC program.

The pilot study was a voluntary group, and received no compensation. The researcher contacted the principals of two high schools in the cooperating county and confirmed voluntary participation. Surveys were mailed in late October 2015. Participants were asked to complete the survey, to answer questions about the instrument, and to make comments for improvement or revision. A self-addressed stamped envelope was included for convenience in returning the completed surveys.

The purpose of the pilot study was to check for understanding and content validity of the survey. Participants were asked to review the questions on the survey and then to comment on the validity of the questions. Specific questions asked included:

1. Are the survey instructions clear and easy to understand?
2. Are the questions clear and easy to understand?
3. Are the questions about social development appropriate in relation to the JROTC program?
4. Are the questions about cadet behaviors appropriate in relation to the JROTC program?
5. Are the questions about the program influence on the school environment appropriate in relation to the JROTC program?
6. Do you notice any problems or errors in any question? If so, which question(s)?
7. What are your opinions about the length of the survey?
8. What suggestions would you make to improve the survey?
9. Do you have any additional comments?

Results from the surveys as well as follow up conversations with the pilot study participants yielded useful information. All participants agreed that the survey items were valid and appropriately aligned to the constructs. In particular, one participant noted that the questions aimed at assessing social development of the cadet fell within the unit’s goals and objectives to “develop citizens of character.” Participants also agreed that the length of the survey was appropriate and that the directions and the questions were clear and easily understood.

One participant suggested expanding the sample to include students and parents. Another participant recommended changing question six from “The JROTC curriculum strengthens cadets’ social development of respect to authority” to “The JROTC curriculum strengthens cadets’ social development of respect for authority.” Additionally, it was noted that the researcher had mistakenly used the term JROTC in part III of the survey when asking about the administrators’ prior experience with the program during college. One participant commented that JROTC was exclusive to high school. Question 13 was corrected to read, “I participated in ROTC in college.” Using appropriate recommendations, a final survey, Principals’ Perceptions of JROTC (Appendix C) was developed.

**Final Instrument**

To assess perceptions about the JROTC program, the survey asked principals to rate their level of agreement or disagreement with a statement about the JROTC program or about a
perceived aspect of the program. Part 1 of the survey consisted of 18 questions with a four point Likert-type scale to gain participant responses from Strongly Disagree (1) to Strongly Agree (4). The principals’ perception was the dependent variable. The 18 questions were divided into three sections, each composed of six questions. The sections included variables representing the social development of the cadet, behaviors of the cadet, and the overall school environment. Part 1 of the survey examined perceptions related to the following research questions:

Research Question 1: What are principals' perceptions of the influence, if any, of the JROTC curriculum on the social development of the student cadet?

Research Question 2: What are principals’ perceptions of the influence, if any, of the JROTC program on the behaviors of the student cadet?

Research Question 3: What are principals’ perceptions of the influence, if any, of the JROTC program on the public school environment as a whole?

Part 2 of the survey consisted of three open-ended questions. The first open-ended question asked participants to discuss the most significant advantages of having a JROTC in school. The second question asked principals to discuss the most significant disadvantages of the JROTC program. The final question allowed the participants to include additional comments. These open-ended questions provided a qualitative aspect to help researchers understand why principals hold the perceptions they do.

Finally, Part 3 of the survey consisted of a demographic section intended to obtain information used to compare data related to specified items in the final research question.

Research Question 4: What are the differences in principals’ perceptions of the JROTC program due to demographic factors such as: the school’s national location, socioeconomic
status, community status, school enrollment, minority population of student enrollment, proximity of the school to a military base, the school’s JROTC sponsoring branch, duration of the JROTC program in the public school, principal’s length of school administrative experience, principal’s experience with the military, principal’s age, principal’s race, and principal’s sex.

Data Collection Procedures

The study was submitted to the Internal Review Board (IRB) for approval and approval was received (Appendix D). To begin the data collection process, it was necessary to attain accurate emails for all principals whose schools have a JROTC program. The first step in this process was to develop a list of all schools with a JROTC unit. This was accomplished by the researcher visiting websites for every branch of the military and then creating a list of all participating high schools organized by state and sponsoring military branch. The list included 3,427 schools. Next, the researcher reviewed the school lists to determine which schools were to remain in the study and which schools would be eliminated according to this study’s population definition as high schools with a JROTC program. One hundred forty-one schools with the following terms connected to their title were immediately eliminated: career center, academy, charter, and military. In addition, schools sponsored by the Department of Defense, identified by the uniform resource locator (URL) within the website address, were eliminated. This left 3,286 schools on the list. Additionally, 29 schools were identified with ambiguous designated titles. Three of those 29 schools were eliminated once it was determined that they did not meet the standards for a public high school; for example, any school designated as an academy was eliminated. The final total number of high schools identified by the researcher as appropriate for the study was 3,283.
The researcher then attempted to locate contact information for each school principal. In the interest of time, and to ensure accurate and current data, the researcher chose to purchase a commercially prepared list of all public high school principals’ emails (High School Principals Email List, 2015). Correspondence with the marketing company responsible for producing the list stated that it included all public high school principals within the United States. The list was then used to provide email addresses for all the schools identified by the researcher as appropriate for the study.

Once the commercial email list was received the researcher compared each of the schools from the JROTC websites with schools on the public school list. Some schools that had been previously omitted were reinstated once it was confirmed that the school was indeed a public high school. Other schools previously on the list were omitted. For example, the researcher investigated every school that was on a JROTC website but not on the public high school list. In some cases, the school had been closed. In other cases, the school had been consolidated with another school in the district. To ensure the highest accuracy possible, the researcher investigated each school that was not clearly on both lists. For example, the JROTC list indicated a unit at Madison Park Technical and Vocational School; however on the public high school list this school was listed as Madison Park High School. An internet search of the facility confirmed that the school met the criteria for inclusion in the study and it was therefore maintained. In some instances, locating the correct school was problematic. Several districts had more than one “Central” high school. The researcher was careful to match the correct school with the city and the school district. In other instances, a school might be listed as Washington High School on one list but be listed as George Washington High School on another list.
Finally, the researcher attempted to secure appropriate principal emails. Again, the researcher used the Internet to confirm data. Any email that appeared to be incorrect was checked. For example, if the principal was listed as John Smith but the email was listed as maryjones@publichighschool.com, the researcher checked the listing over the Internet or attempted to contact the principal via the internal site or by telephone. Correspondence with a member of the school board in a Nevada district confirmed that principal emails were not publicly released. When the researcher was unable to locate the email address for a school principal, that school was eliminated from the study. After a careful review and thorough cross-comparison of both lists, the final number of schools to be included in the study was 3,241.

To increase the probability that an appropriate school would not be eliminated through error or oversight, the researcher added two questions to the survey instrument. Principals were asked if the school was a public high school and if the school had a JROTC unit. A negative response to either question from the survey served to filter and refine the population participant list.

A cover letter detailing anonymous survey consent and providing a link to the electronic survey (Appendix E) was emailed to the finalized population participant list of public high school principals with a JROTC program throughout the United States. The researcher chose to use Survey Monkey to assist with data collection. This web tool allowed for the expeditious delivery of data. The cover letter explained the importance of the survey, focused on the ease and importance of responding, reminded respondents that participation was voluntary, and assured participants of confidentiality. Two weeks after the initial survey was sent, the researcher sent an additional email to thank those who had completed the survey and to remind those who had not yet completed the survey to do so. Participants were given four full weeks in
which to complete and return the survey. At the end of the four-week term, the survey was closed.

**Methods of Data Analysis**

Due to the use of Likert Scales for the collection of data, the mode and Chi Square statistic were used to analyze participant responses. McLeod (2008) recommends the use of the mode as the most suitable for Likert scale interpretation; as was the form of the survey questions in this study. The Chi-Square allows for the analysis of frequencies of responses throughout categories. This test allowed for the statistical analysis of participant responses resulting from the Likert scale categories of *Strongly Agree*, *Agree*, *Disagree*, and *Strongly Disagree*. Therefore, mode and Chi-Square statistics were used to analyze data for Research Questions 1, 2, and 3.

Part III of the survey collected demographic data to serve as independent variables. Comparisons of principal perceptions were made among the demographic variables using the Mann Whitney-U and the Kruskal-Wallis statistics to answer Research Question 4. The Likert scale responses of *Strongly Agree*, *Agree*, *Disagree*, and *Strongly Disagree* were considered to be ordinal data. The Mann Whitney-U and the Kruskal-Wallis statistics allowed for a refined statistical analysis of this data with ranks of 4, 3, 2, and 1 assigned to these responses. This study used the Mann Whitney-U test to analyze the demographic variables between two independent group factors identified as principals’ sex and veteran status. The Kruskal-Wallis test was used to analyze the demographic variables with three or more independent group factors descriptive of the school and the school principal. Variables related to the school included geographic location of the school, proximity of the school to the nearest military base, enrollment of the school, percentage of minority population in the school, socioeconomic status of the school, community status of the school, military sponsor of the JROTC, and length of the JROTC program.
Demographic variables descriptive of the principal included the principals’ participation in JROTC, the principals’ participation in ROTC, the length of the principals’ administrative experience, the length of the principals’ administrative experience in the current school, the principals’ age, and the principals’ race.
CHAPTER FOUR: ANALYSIS OF FINDINGS

Introduction

The intent of this study was to examine principals’ perceptions of the influence of the Junior Reserve Officers’ Training Corps (JROTC) program. Chapter four presents an analysis of the findings and is organized in the following manner: (a) data collection, (b) participant characteristics, (c) findings for each of the four research questions, and (d) a summary of the results.

Data Collection

At the beginning of January 2016, the researcher emailed participants (N=3,241) an anonymous survey consent (APPENDIX E) which included a link to the survey. The survey was sent to principals in public high schools with active JROTC units across the nation. The researcher emailed the survey using the blind copy feature to protect the privacy of participants and ensure anonymity. No Internet Protocol (IP) addresses were collected.

A number of issues were resolved to finalize the participant list. First, approximately 65 emails were returned for confirmation. The researcher confirmed that the survey was not spam and the emails were delivered. Eight principals responded by email that they were no longer employed by the school or county. Six of those respondents provided an email address for their replacement. Those six principals were sent the survey and the email list was corrected. One respondent listed the school counselor as the contact person. The survey was mailed to the counselor who was asked to forward it to the current principal. One school did not provide a current principal. The researcher contacted the school, identified the principal, and sent an email. Next, a total 159 surveys were rejected or returned as undeliverable. These were eliminated from the participant list. Finally, two counties in Florida declined participation due to
policies that restrict research without prior consent. Therefore, an additional 19 schools from these two counties were removed from the email list.

After the above noted revisions to the list were made, a total of N=3062 principals remained on the participant list. Three hundred and twenty-one surveys were returned within the first two weeks of collection. Additionally the researcher received several personal emails from participants. One respondent suggested that the consent form be revised to indicate that the survey takes less than ten minutes to complete. This suggestion was considered and implemented. After two weeks, a second email was sent as a thank you to those who had responded as well as a reminder to those who had not. After four weeks, the survey was closed.

The researcher collected 540 responses. The first two questions of the survey asked if the participant was a high school principal and if the participant had an active JROTC unit in the high school. A negative response to either of the first two questions indicated that the participant did not match the requirements and the participant was therefore disqualified. Responses of “NO” to the first two questions reduced the number of usable surveys by twenty-one. Twenty-five surveys were returned with no data, and were deleted from the usable surveys. A judgement was made by the researcher to further eliminate three surveys which demonstrated qualitative comments that were incongruent with the participants’ quantitative assessments. In this situation, the participants had *Strongly Disagreed* with most or all of the survey items in Part 1 but had written very positive commendations for the program in Part II of the survey which was comprised of open ended questions. Because of the discrepancy, the researcher judged the Likert-scale items as being inaccurate and made a professional judgement to eliminate the three surveys in an effort to reduce possible error.
Of the 540 returned surveys, 49 were unusable and 491 surveyes were retained. A sample size calculator from Survey Monkey indicated that a total of 342 surveys from a population of 3,062 would yield a sample that fell within the 95% confidence level with a 5% margin of error. This study collected 491 usable surveys. Therefore it can be said with 95% confidence that the sample reflects the population within a 5% margin of error.

Participants

Part III of The Principals’ Perceptions of JROTC Survey (Appendix C) asked principals to respond to several demographic questions. Principals were asked to provide information regarding their personal experience with military service, ROTC, and JROTC. Data regarding the principals’ military experience are provided in Table 1. Principals were asked to provide personal information including their total years of administrative experience, their years as an administrator in the current school, their age, race, and sex. This data regarding participants are provided in Table 2. The most common responses were returned from principals who were male, Caucasian, between the ages of 40-49, who had 10-20 years of administrative experience in total and less than five years of administrative experience in their current school.

Finally, the survey collected demographic data related to the principals’ schools. Information collected about the school included: location, socioeconomic status, community status, enrollment, percentage of minority population, proximity to nearest military base, military branch sponsoring the JROTC program and the length of the JROTC program. This data regarding the participants’ schools is provided in Table 3. The most common responses were returned from principals who indicated that their school was located in a rural community in the south and represented a low socioeconomic status. Additionally, the most common responses from principals indicated that the school had a student body population of 100-1499 with a
minority population between 25 and 49 percent and was located within 50 miles of the nearest military base.

The difference in sample size (n) for each question is directly attributed to the voluntary nature of the survey. Some participants did not complete the demographic section. Other participants answered with comments such as “I don’t know” and still others appeared to have skipped a few questions.

Table 1

*Number of Principals with Prior Military Experience - JROTC Survey*

<table>
<thead>
<tr>
<th>Military Branch</th>
<th>Air Force</th>
<th>Army</th>
<th>Marine</th>
<th>Navy</th>
<th>Totals</th>
<th>% of total sample of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enlisted</td>
<td>5</td>
<td>17</td>
<td>5</td>
<td>7</td>
<td>34</td>
<td>6.92% (n=482)</td>
</tr>
<tr>
<td>ROTC</td>
<td>4</td>
<td>19</td>
<td>0</td>
<td>3</td>
<td>26</td>
<td>5.30% (n=482)</td>
</tr>
<tr>
<td>JROTC</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>2.24% (n=481)</td>
</tr>
</tbody>
</table>

Table 2

*Demographic Characteristics of Principals*

<table>
<thead>
<tr>
<th>Total Years of Administrative Experience (n=464)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 years</td>
<td>148</td>
<td>31.90%</td>
</tr>
<tr>
<td>10-20 years</td>
<td>247</td>
<td>53.20%</td>
</tr>
<tr>
<td>≥ 20 years</td>
<td>69</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Years of Administrative Experience at Current School (n=465)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 years</td>
<td>202</td>
<td>43.40%</td>
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<tr>
<td>5-9 years</td>
<td>157</td>
<td>33.80%</td>
</tr>
<tr>
<td>≥10 years</td>
<td>106</td>
<td>22.80%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Age (n=448)</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>&lt; 40 years</td>
<td>45</td>
<td>10.00%</td>
</tr>
<tr>
<td>40-49 years</td>
<td>201</td>
<td>44.90%</td>
</tr>
<tr>
<td>50-59 years</td>
<td>163</td>
<td>36.40%</td>
</tr>
<tr>
<td>Age Group</td>
<td>n</td>
<td>%</td>
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<tr>
<td>-----------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>≥ 60 years</td>
<td>39</td>
<td>8.70%</td>
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<table>
<thead>
<tr>
<th>Sex (n=464)</th>
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<tbody>
<tr>
<td>Male</td>
<td>312</td>
<td>67.20%</td>
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<tr>
<td>Female</td>
<td>152</td>
<td>32.80%</td>
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<table>
<thead>
<tr>
<th>Race (n=466)</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>American Indian/Alaskan Native</td>
<td>6</td>
<td>1.30%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5</td>
<td>1.10%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>64</td>
<td>13.70%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>31</td>
<td>6.70%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>351</td>
<td>75.30%</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>1.90%</td>
</tr>
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</table>

Table 3

**Demographic Characteristics of Schools**

<table>
<thead>
<tr>
<th>Location (n=478)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>82</td>
<td>17.20%</td>
</tr>
<tr>
<td>Midwest</td>
<td>64</td>
<td>13.40%</td>
</tr>
<tr>
<td>South</td>
<td>277</td>
<td>57.90%</td>
</tr>
<tr>
<td>Northeast</td>
<td>55</td>
<td>11.50%</td>
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</table>

<table>
<thead>
<tr>
<th>Socioeconomic Status (n=469)</th>
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<th>%</th>
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<tbody>
<tr>
<td>Lower</td>
<td>278</td>
<td>59.30%</td>
</tr>
<tr>
<td>Middle</td>
<td>179</td>
<td>38.20%</td>
</tr>
<tr>
<td>High</td>
<td>12</td>
<td>2.60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Status (n=470)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>180</td>
<td>38.30%</td>
</tr>
<tr>
<td>Suburban</td>
<td>156</td>
<td>33.20%</td>
</tr>
<tr>
<td>Urban</td>
<td>134</td>
<td>28.50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Enrollment (n=473)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;500</td>
<td>42</td>
<td>8.90%</td>
</tr>
<tr>
<td>500-999</td>
<td>112</td>
<td>23.70%</td>
</tr>
<tr>
<td>1000-1499</td>
<td>121</td>
<td>25.60%</td>
</tr>
<tr>
<td>1500-1999</td>
<td>97</td>
<td>20.50%</td>
</tr>
<tr>
<td>2000-2499</td>
<td>54</td>
<td>11.40%</td>
</tr>
<tr>
<td>≥2500</td>
<td>45</td>
<td>9.50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minority Population (n=470)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25%</td>
<td>126</td>
<td>25.70%</td>
</tr>
<tr>
<td>25-49%</td>
<td>135</td>
<td>28.70%</td>
</tr>
<tr>
<td>50-74%</td>
<td>97</td>
<td>20.60%</td>
</tr>
<tr>
<td>≥75%</td>
<td>112</td>
<td>23.80%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proximity to Nearest Military Base (n=440)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50 miles</td>
<td>224</td>
<td>50.90%</td>
</tr>
<tr>
<td>50-99 miles</td>
<td>106</td>
<td>24.10%</td>
</tr>
<tr>
<td>100-149 miles</td>
<td>55</td>
<td>12.50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>≥150 miles</td>
<td>55</td>
</tr>
<tr>
<td>Sponsoring Military Branch (n=474)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Force</td>
<td>106</td>
<td>22.36</td>
</tr>
<tr>
<td>Army</td>
<td>241</td>
<td>50.80</td>
</tr>
<tr>
<td>Marines</td>
<td>46</td>
<td>9.70</td>
</tr>
<tr>
<td>Navy</td>
<td>81</td>
<td>17.10</td>
</tr>
<tr>
<td></td>
<td>Length of Program in School (n=428)</td>
<td></td>
</tr>
<tr>
<td>&lt; 10 years</td>
<td>58</td>
<td>13.60</td>
</tr>
<tr>
<td>10-19 years</td>
<td>153</td>
<td>35.70</td>
</tr>
<tr>
<td>≥ 20 years</td>
<td>217</td>
<td>50.70</td>
</tr>
</tbody>
</table>

**Data Analysis**

The four research questions framed the organization of the data analysis. Part I of the Perceptions Survey addressed Research Questions 1, 2, and 3. Question 4 involved examining the Part I Likert-scale rating items in terms of demographic factors from Part III. Part II of the survey included open-ended questions which were analyzed using qualitative data coding.

**Question 1: What are principals' perceptions of the influence, if any, of the JROTC curriculum on the social development of the student cadet?**

Principals responded to six item stems related to their perceptions of the influence of the JROTC curriculum on the social development of the cadet. The items addressed JROTC teaching of: (1) citizenship, (2) leadership, (3) self-discipline, 4) self-confidence, (5) teamwork, and (6) respect for authority. Participants were instructed to select a number from 1 to 4 for each item stem ranging from 1 Strongly Disagree to 4 Strongly Agree with the statement. A Chi Square analysis was conducted to compare expected outcomes to observed data. Results for Research Question 1 are found in Table 4.
Table 4

Research Question 1 Chi Analysis of JROTC Influence on Cadet Social Development

<table>
<thead>
<tr>
<th>Cadet Social Development</th>
<th>Frequency of Participant Responses</th>
<th>Chi Square Statistic</th>
<th>p level obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizenship N=491</td>
<td>Strongly Disagree (6, 1.2%)</td>
<td>948.9</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Disagree (3, .6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree (67, 13.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree (415, 84.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership N=487</td>
<td>Strongly Disagree (8, 1.8%)</td>
<td>990.0</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Disagree (1, .2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree (58, 11.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree (420, 86.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Discipline N=491</td>
<td>Strongly Disagree (8, 1.8%)</td>
<td>905.7</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Disagree (5, 1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree (70, 14.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree (408, 83.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Confidence N=490</td>
<td>Strongly Disagree (8, 1.8%)</td>
<td>848.2</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Disagree (2, .4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree (84, 17.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree (396, 80.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamwork N=491</td>
<td>Strongly Disagree (8, 1.6%)</td>
<td>1,011.7</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Disagree (3, .6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree (54, 11.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree (426, 86.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect for Authority N=491</td>
<td>Strongly Disagree (7, 1.4%)</td>
<td>981.8</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Disagree (4, .8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree (59, 12.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree (421, 85.7%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significance attained at the p<0.05 level.

Significance at the p < 0.05 was found for every item in Part I of the survey. The category of Strongly Agree produced the largest number of responses. The significant differences appear to have occurred between Strongly Agree and the three remaining categories of Agree, Disagree, and Strongly Disagree for all of the social development categories.

**Question 2: What are principals’ perceptions of the influence, if any, of the JROTC program on the behaviors of the student cadet?**

Principals responded to six item stems related to their perceptions of the influences of participation in JROTC on the behaviors of the cadets. The survey items asked if participation in JROTC helped cadets to: (1) develop an appreciation for physical fitness, (2) resist temptation to use drugs and alcohol, (3) attend school regularly, (4) demonstrate a positive work ethic, (5)
graduate from high school, and (6) demonstrate critical thinking skills. Participants were
instructed to select a number from 1 to 4 for each item stem ranging from 1 *Strongly Disagree* to
4 *Strongly Agree* with the statement. A Chi Square analysis was conducted to compare expected
outcomes to observed data. Results for Research Question 2 are found in Table 5.

Table 5

*Research Question 2 Chi Analysis of JROTC Influence on Cadet Behaviors*

<table>
<thead>
<tr>
<th>Cadet Behaviors</th>
<th>Frequency of Participant Responses</th>
<th>Chi Square Statistic</th>
<th>p level obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree n (%)</td>
<td>Disagree n (%)</td>
<td>Agree n (%)</td>
</tr>
<tr>
<td>Appreciation for Physical Fitness N=491</td>
<td>7 (1.4%)</td>
<td>21 (4.3%)</td>
<td>232 (47.3%)</td>
</tr>
<tr>
<td>Resistance to Temptation of Drugs and Alcohol N=491</td>
<td>5 (1.0%)</td>
<td>22 (4.5%)</td>
<td>262 (53.4%)</td>
</tr>
<tr>
<td>Regular School Attendance N=490</td>
<td>6 (1.2%)</td>
<td>11 (2.2%)</td>
<td>197 (40.2%)</td>
</tr>
<tr>
<td>Positive Work Ethic N=490</td>
<td>6 (1.2%)</td>
<td>5 (1.0%)</td>
<td>184 (37.6%)</td>
</tr>
<tr>
<td>Graduation from High School N=490</td>
<td>6 (1.2%)</td>
<td>3 (.6%)</td>
<td>145 (29.6%)</td>
</tr>
<tr>
<td>Critical Thinking Skills N=490</td>
<td>6 (1.2%)</td>
<td>26 (5.3%)</td>
<td>239 (48.8%)</td>
</tr>
</tbody>
</table>

* Significance attained at the p<0.05 level.
Significance at the p < 0.05 was found for every item in Part I of the survey. The categories of *Strongly Agree* and *Agree* produced the largest number of responses. The significant differences appear to have occurred between *Strongly Agree /Agree* and *Disagree/Strongly Disagree*.

**Question 3**: What are principals’ perceptions of the influence, if any, of the JROTC program on the public school environment as a whole?

Principals responded to six item stems related to their perceptions of the influence of a JROTC program on the overall school environment. The items asked about the influence of JROTC to: (1) promote positive character education, (2) foster a safe learning environment, (3) stress community service, (4) provide positive extracurricular activities, (5) help students feel connected to school, and (6) reduce discipline referrals. Participants were instructed to select a number from 1 - 4 for each item stem ranging from 1 *Strongly Disagree* to 4 *Strongly Agree* with the statement. A Chi Square analysis was conducted to compare expected outcomes to observed data. Results for Research Question 3 are found in Table 6.

Table 6

*Research Question 3 Chi Analysis of JROTC Influence on School Environment*

<table>
<thead>
<tr>
<th>Public School Environment</th>
<th>Frequency of Participant Responses</th>
<th>Chi Square Statistic</th>
<th>p level obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Character Education N=490</td>
<td>Strongly Disagree n (%) Disagree n (%) Agree n (%) Strongly Agree n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 (1.2%) 2 (.4%) 96 (19.6%) 386 (78.8%)</td>
<td>801.8</td>
<td>.000*</td>
<td></td>
</tr>
<tr>
<td>Safe Learning Environment N=491</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Significance at the p < 0.05 was found for every item in Part I of the survey. The category of Strongly Agree produced the largest number of responses. The significance appears to have occurred between Strongly Agree and the three remaining categories of Agree, Disagree, and Strongly Disagree.

**Question 4:** What are the differences in principals’ perceptions of the JROTC program due to demographic factors such as: the school’s national location, socioeconomic status, community status, school enrollment, minority population of student enrollment, proximity of school to a military base, school’s JROTC sponsoring branch, duration of JROTC program in the public school, principal’s length of school administrative experience, principal’s experience with military, principal’s age, principal’s race, and principal’s sex?

The final research question relies on demographic data. A Mann Whitney U test was administered to compare the mean ranks of groups of two independent factors of ordinal data. The Mann Whiney U was used to look at the differences in principals’ perceptions from Part 1 of the survey items based on the principals’ veteran status and sex. No significant differences in perceptions were found for these two demographics for any of the survey items.
A Kruskal-Wallis test was used to compare the mean ranks of groups from more than two independent factors of ordinal data. The Kruskal-Wallis was used to look at the differences in principals’ perceptions from Part 1 of the survey items based on these demographics: duration of JROTC, minority population, principals’ participation in JROTC, principals’ race, proximity of school to a military base, and geographic region. Significance was found at the p < 0.05 level for 16 indicators of the dependent variables: social development, cadet behaviors, and school environment. The results are illustrated in Table 9.

One demographic with more than two independent factors was geographic region. Respondents from 49 of the fifty states and the District of Columbia replied to the survey. Data for each individual state was not analyzed due to the wide range of JROTC unit distribution. For example, several states have fewer than ten JROTC units, which limited the ability to secure an adequate sample size. Data was therefore analyzed by the factors of geographic region. The United States Census Bureau (2016) identifies four regions. Those regions and the states in each region are summarized in Figure 1. Table 7 illustrates the geographic distribution of JROTC units by sponsoring branch.

Figure 3: Census Regions of the United States.
Table 7

National Geographic Distribution of JROTC Units by Sponsoring Branch of Military

<table>
<thead>
<tr>
<th>GEOGRAPHIC REGION</th>
<th>Air Force</th>
<th>Army</th>
<th>Marine</th>
<th>Navy</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEST</td>
<td>145</td>
<td>203</td>
<td>48</td>
<td>103</td>
<td>499</td>
<td>15.40%</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>82</td>
<td>167</td>
<td>25</td>
<td>40</td>
<td>314</td>
<td>9.69%</td>
</tr>
<tr>
<td>SOUTH</td>
<td>518</td>
<td>1104</td>
<td>126</td>
<td>352</td>
<td>2100</td>
<td>64.80%</td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>100</td>
<td>122</td>
<td>39</td>
<td>67</td>
<td>328</td>
<td>10.12%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>845</td>
<td>1596</td>
<td>238</td>
<td>562</td>
<td>3241</td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.07% 49.24% 7.34% 17.34%</td>
</tr>
</tbody>
</table>

The responses from this study correspond with the national levels of geographic distributions of JROTC units based on sponsoring military branch. This serves to illustrate that the population for the survey matches the population for the national distribution. Table 8 provides a summary of responses returned for this study. Figure 4 provides an illustrated comparison.

Table 8

Geographic Distribution of JROTC Units by Sponsoring Branch of Military

<table>
<thead>
<tr>
<th>GEOGRAPHIC REGION</th>
<th>Air Force</th>
<th>Army</th>
<th>Marine</th>
<th>Navy</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEST</td>
<td>17</td>
<td>39</td>
<td>11</td>
<td>15</td>
<td>82</td>
<td>17.30%</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>15</td>
<td>29</td>
<td>9</td>
<td>10</td>
<td>63</td>
<td>13.29%</td>
</tr>
<tr>
<td>SOUTH</td>
<td>60</td>
<td>150</td>
<td>21</td>
<td>43</td>
<td>276</td>
<td>58.23%</td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>13</td>
<td>24</td>
<td>5</td>
<td>13</td>
<td>55</td>
<td>11.60%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>105</td>
<td>242</td>
<td>46</td>
<td>81</td>
<td>474</td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22.15% 51.05% 9.70% 17.09%</td>
</tr>
</tbody>
</table>
Figure 4: Comparison of National Data with Study Data.

Table 9

Research Question 4 Kruskal-Wallis Analysis: Influence of Demographics on Principals’ Perceptions

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Duration of JROTC</th>
<th>Minority Population</th>
<th>Principals’ Participation in JROTC</th>
<th>Principals’ Race</th>
<th>Proximity of School to Base</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>Study</td>
<td>National</td>
<td>Study</td>
<td>National</td>
<td>Study</td>
<td>National</td>
</tr>
<tr>
<td>Air Force</td>
<td>Army</td>
<td>Marine</td>
<td>Navy</td>
<td>West</td>
<td>Midwest</td>
<td>South</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principals’ perceptions of Social Development</th>
<th>Kruskal-Wallis Analysis</th>
<th>p level obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizenship</td>
<td></td>
<td>.011</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td>.037</td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>.034</td>
<td></td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>.017</td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td>.049</td>
<td>.033</td>
</tr>
<tr>
<td>Authority</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principals’ perceptions of Cadet Behaviors</th>
<th>Kruskal-Wallis Analysis</th>
<th>p level obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Fitness</td>
<td></td>
<td>.029</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
<td>.044</td>
<td>.035</td>
</tr>
<tr>
<td>Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Ethic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>.004</td>
<td></td>
</tr>
</tbody>
</table>
Means rank results for items showing statistical significance using the Kruskal-Wallis test are presented in Table 10.

Table 10

*Research Question 4 Kruskal-Wallis Results with Mean Ranks*

<table>
<thead>
<tr>
<th>Citizenship perceptions due to Region</th>
<th>Social Development</th>
<th>Leadership perceptions due to Region</th>
<th>Self-Discipline perceptions due to region</th>
<th>Self-Confidence perceptions due to Minority Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Ranks</td>
<td>p level obtained</td>
<td>Mean Ranks</td>
<td>p level obtained</td>
<td>Mean Ranks</td>
</tr>
<tr>
<td>NE</td>
<td>203.89</td>
<td>.011*</td>
<td>Leadership perceptions due to base</td>
<td>223.45</td>
</tr>
<tr>
<td>S</td>
<td>242.18</td>
<td></td>
<td>0-49 miles</td>
<td>213.10</td>
</tr>
<tr>
<td>MW</td>
<td>243.41</td>
<td></td>
<td>50-99 miles</td>
<td>195.73</td>
</tr>
<tr>
<td>W</td>
<td>251.26</td>
<td></td>
<td>100-149 miles</td>
<td>231.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≥150</td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td>208.58</td>
<td>.033*</td>
<td>Leadership perceptions due to base</td>
<td>223.46</td>
</tr>
<tr>
<td>S</td>
<td>237.89</td>
<td></td>
<td>0-24%</td>
<td>232.69</td>
</tr>
<tr>
<td>MW</td>
<td>247.33</td>
<td></td>
<td>25-49%</td>
<td>215.24</td>
</tr>
<tr>
<td>W</td>
<td>247.32</td>
<td></td>
<td>50-74%</td>
<td>248.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≥75%</td>
<td></td>
</tr>
<tr>
<td>Teamwork perceptions due to region</td>
<td>Mean Ranks</td>
<td>p level obtained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td>207.31</td>
<td>.014*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>241.89</td>
<td></td>
<td></td>
<td></td>
</tr>
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School Environment

Community Service perceptions due to Region

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School Connections perceptions due to Proximity of School to Base

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Discipline Referrals perceptions due to Proximity of School to Base

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*Significance attained at the p<0.05 level

Significance

Social Development

The largest number of significant findings related to demographics is located in the first six items of the survey designed to measure social development. There were significant differences in principal perceptions for citizenship, leadership, and self-discipline based on geographic region. Significance was found for leadership based on the school’s proximity to a military base. Significance was found on the measure for self-confidence based on the
percentage of minority enrollment in the school. Finally, significance was found for the measure of respect for authority based on the length of the JROTC program in the school.

Four items measuring social development were significant based on geographic region. Mean rank comparisons showed significance as follows where higher ranks refer to Strongly Agree and Agree responses and lower ranks refer to Disagree and Strongly Disagree responses. For citizenship, significance occurred where principals from the south and the west chose higher ranks than those from the northeast. For leadership, significance occurred where principals from the west chose higher ranks than principals from the northeast. For self-discipline, significance occurred where principals from the west chose higher ranks than principals from the northeast. For teamwork, significance occurred where principals from the south and the midwest chose higher ranks than principals from the northeast. Principals from the northeastern section of the United States tended to give a lower rank overall to survey items. This implies that principals from the northeast perceived the JROTC program to be less influential on the development of citizenship than principals from the south and the west. In terms of the development of leadership and self discipline, principals from the northeast ranked these items significantly lower than principals from the west. Principals in the midwest perceived the influence of the JROTC to influence teamwork more so than principals from the northeast.

Significance was found for leadership based on the school’s proximity to a military base. Significance occurred where principals in schools located more than 150 miles from the nearest military base ranked leadership higher than did principals from schools located 100-149 miles from the nearest military base. Additionally, significance occurred where principals in schools located less than 50 miles from the nearest military base ranked leadership higher than did principals from schools located 100-149 miles from the nearest military base.
Significance was found on the measures for self-confidence, self-discipline, and respect for authority, based on the percentage of minority enrollment in the school. Significance occurred in schools where principals reported a minority population of 75% or more and for those reporting a minority population of 25% or less. Principals in these schools rated self-confidence higher than did principals from schools who reported minority populations of 50-74%. In schools where principals reported a minority population of 75% or more, self-discipline was ranked higher than it was from principals who reported a minority population of 50-75%. In schools where principals reported a minority population of 75% or more and for those who reported a minority population of less than 25%, respect for authority was ranked higher than it was from principals reporting minority populations of 50-74%.

Finally, significance was found for the measure of respect for authority based on the length of the JROTC program in the school. Significance occurred in schools where principals reported having a JROTC unit for more than 20 years rated respect for authority higher than did principals who reported having a JROTC unit for 10-19 years.

**Cadet Behavior**

The second set of items on the survey was designed to measure the cadets’ behaviors. Significance related to demographics was found in four areas. Regular attendance in school was ranked significantly higher by principals based on the principals’ race and on the length of the JROTC program in the school. Principals who had participated in JROTC when they were in high school ranked the ability to resist drugs and alcohol significantly higher than principals who had not participated in JROTC. Finally, significance was found for the item measuring critical thinking based on the minority enrollment of the school.
Two demographic items, the principals’ race and the duration of the JROTC program in the school, produced statistical significance for regular school attendance. Asian principals reported the highest mean rank while those identifying their race as “multiple ethnicity/other” reported the lowest mean rank. Only 5 of the 466 principals (1%) identified themselves as Asian. Due to the small sample, caution must be taken in generalizing this finding to the larger population. In regards to the length of the JROTC program in the school, a mean ranks comparison did not point to specific areas of significance. Schools reporting having a JROTC for twenty or more years produced the highest mean ranks for the item measuring regular attendance while principals in schools having a JROTC unit in place for 10-19 years produced the lowest mean ranks.

Significance related to demographics occurred in schools where principals, who reported that they had participated in JROTC as high school students, rated the resistance to drugs and alcohol higher than did principals who reported that they had not participated in JROTC as high school students. Only 11 (2.24%) of the principals responding to this survey indicated that they had participated in JROTC as high school students. The small sample warrants caution for any attempts to generalize findings to the larger population. Finally, significance occurred in schools where principals who reported a minority population of 75% or higher ranked critical thinking higher than did principals who reported minority populations of 50-74% and 25-49%.

**School Environment**

The final set of six items on the Principals’ Perceptions of JROTC Survey were designed to measure the perceived influence of the program on the overall school environment. Significance related to demographics was found in three areas. Significance was found for the promotion of community service based on geographic area. Significance was found on the
development of school connections and on the reduction of discipline referrals based on proximity of the school to a military base.

For the promotion of community service, significance occurred where principals from the midwest chose higher ranks than principals from the northeast. The items measuring school connections and discipline referrals were significant based on the proximity of the school to a military base. Significance occurred where principals in schools located 150 or more miles from the nearest military base ranked school connections higher than did principals from schools located 100-149 miles from the nearest military base. For the item, measuring discipline referrals, significance occurred with principals in schools located less than 50 miles from the nearest military base and for those located more than 150 miles from the nearest military base. They provided higher ranks than did principals in schools located 100-149 miles from the nearest military base.

In general, principals in schools located between 100-149 miles from base tended to rate leadership, school connection, and discipline referrals lower than principals in other schools. One might expect that schools closer to military bases would have principals with stronger perceptual beliefs but findings from this study do not support that belief.

Open-Ended Responses

Part II of the questionnaire continued the examination of principals’ perceptions of the effectiveness of the JROTC program with three open-ended questions. Those questions are described below. Categories emerged based on text analysis through a tool in Survey Monkey. The researcher was able to discern repeated words and phrases and recognize patterns that led to organizational categories. The Selected principal responses are included for each question.
Advantages

Principals were asked to respond to Question 1: Regarding student outcomes, discuss what you believe to be the most significant advantage for having JROTC in the school schedule. Four hundred thirty nine (439) principals responded to question 1. Categories and percentage of responses are illustrated in Figure 5.

![Advantages of JROTC](image)

**Figure 5: Advantages of JROTC.**

Providing students with a sense of belonging was the most frequently identified advantage of JROTC. One hundred forty principals, (33.41%) identified the building of a sense of belonging as a key advantage of the program. Several principals commented that the program provided a “niche” for students and helped them to feel a connection to the school. Others replied that participation in JROTC helped students to get involved and created a sense of ownership in the school. The development of leadership was the second most identified advantage of JROTC. Eighty-seven principals (20.76%) selected this attribute as an advantage.
of the program. One principal described leadership demonstrated by cadets as being “contagious” and influencing others to become leaders. Sixty principals (14.32%) identified discipline as an advantage of JROTC. Principals commented on the overall improvement of discipline within the school as well as an increase of self-discipline observed in student cadets.

The development of citizenship and positive character was another identified advantage of JROTC. Forty-six principals (10.98%) stated that the program enhanced the development of character and citizenship. One principal commented, “I believe that the JROTC program teaches strong character and accountability. These students are not perfect but take responsibility for their actions. They are very positive members of our school and local community.” Service to the community was highlighted under the development of citizenship. Principals noted that students in JROTC engaged in community service at high rates. One principal commented that the participation in community service helped to “develop students that are a benefit to the school and well prepared for either college or career.” Many of the principals identified positive benefits. Thirty-seven principals (8.51%) selected positive benefits as a fundamental advantage of the JROTC program. Most of those benefits were related to the student and included intangible attributes such as motivation, self-efficacy, self-esteem, structure, pride, and purpose. One principal summarized, “Students of all abilities can find a measure of success based on the various roles within the team dynamic.” Other benefits were related to the school and included increased attendance, improved grades, and better graduation rates.

Disadvantages

Principals were asked to respond to Question 2: Regarding student outcomes, discuss what you believe to be the most significant disadvantage for having JROTC in the school schedule. Four hundred twenty-six principals responded to this question. When asked to
identify the most significant disadvantage of JROTC, the large majority of respondents (over 60%) answered “none”. Categories and frequency of responses are illustrated in Figure 6.

![Disadvantages of JROTC](image)

**Figure 6**: Disadvantages of JROTC.

Five categories emerged from the survey responses. Two hundred fifty-nine principals (60.80%) identified no disadvantage of sponsoring a JROTC program. Several principals elaborated with positive comments related to the program. One principal commented, “There is not one. It is an awesome component and integral part of our school.” Another principal shared, “There is not a disadvantage. I would hate to think what our school would be like if we did not have a JROTC program.”
Forty-nine principals (11.50%) cited scheduling conflicts as a significant disadvantage to having a JROTC program. Principals noted that often students had to choose between JROTC and other electives. In smaller schools, there is usually one section of each JROTC course offered during a semester. This creates scheduling difficulties including conflicts. There may be times when a student could not take JROTC because of the period in which it was offered. In discussing scheduling difficulties, one principal reflected on federal requirements connected to the program. For example, “units must maintain a certain size.” Scheduling issues appeared to be more problematic in smaller schools.

A lack of funding and space was another identified disadvantage of the program, and one that is connected to federal regulations. Forty-eight principals (11.27%) commented on this issue. Principals noted that the program required a tremendous amount of space. Units must have dedicated space for physical training, instruction, and storage. Principals further noted that the program requires a minimum of two instructors. One principal commented about the expense of the program related to required instructors and school staffing formulas. Other principals noted that the limits on class size and cost of the program excluded some students from participation in JROTC. One principal listed a disadvantage of “not having enough funding for additional instructors to grow the program.”

Two smaller categories emerged from the responses to the open-ended question related to program disadvantages. Twenty principals (4.69%) commented on instructors or instruction as a disadvantage of the program. Most of these comments were directed at the lack of instructors or a need for more instructors. A couple of comments were focused on curriculum. One principal cited as a disadvantage, “Military supplied curriculum that may or may not coincide with local curriculum.” Other principals claimed that with the right instructors, there were no
disadvantages. One principal noted as a disadvantage a conflict when “military leaders forget they are under the school leaders’ authority.”

Public perception appeared as another minor category for program disadvantages. Misconceptions or negative perceptions can make it difficult to maintain enrollment numbers and expand the program to a diverse population of students. Twenty principals (4.69%) commented on negative beliefs or misunderstandings related to JROTC. Most of the comments related to public perception addressed the misconceptions about JROTC and military involvement. Several principals commented that many people still viewed the program as a direct link to military service or as a recruitment tool. One principal stated, “It is hard for some parents to understand that the JROTC is not a direct connection for their child joining the military.” Another principal noted that parents often think that participation in JROTC means that their child will “automatically go into the armed forces when graduating.” Such a mistaken conviction, he argued, means the school must “fight that belief to keep enrollment up.” Also related to public perception was the belief that the program was designed for “at-risk” students. One principal noted that some held a “misconception that ROTC will ‘fix’ my hellion child.”

Additional Comments

Principals were asked to respond to Question 3: Additional Comments. This was an opportunity for principals to add any remarks. One hundred eighty-seven principals responded to this question. Four categories emerged to organize these responses. A summary of the categories appears in Figure 7.
Figure 7: Additional Comments about JROTC.

Statements of accolades and praise composed the largest category. Eighty-three principals (44.39%) left positive comments about the program. Many of these comments were simply a single word or phrase. Eleven principals (6.01%) used the word “love” when talking about their JROTC program. Others referred to the program as “awesome” and 32 principals (17.49%) described the program as being “great”.

Another category included comments about JROTC instructors. Thirty-three principals (17.65%) noted the role of the instructor. Principals overwhelmingly noted that the success of the program was due to the strength of the instructor. With the exception of one principal, who noted that JROTC instructors needed to recognize the principal as “commander in chief” of the building, all comments related to instructors were commendations. Many principals referred to their instructors as “dedicated”, “role models,” and “leaders”. A few principals listed their instructors by name.

A third category to emerge included comments about school improvement. Twenty-eight principals (14.44%) commented about the role of JROTC on school improvement. Like the
comments aimed at instructors, most comments were complimentary. Principals stated that the program improved the overall school atmosphere. One principal claimed that the program was “integral to our overall campus success and is a program all staff respect regardless of direct involvement.” Others noted that they believed all schools should have a JROTC program. One referred to the program as a “critical necessity” in high school.

Finally, thirteen principals (6.95%) referred to the school environment or culture when responding to the third open-ended question. One principal referred to cadets as “ambassadors” of the school and several principals noted that the program was a positive influence on the school and the community.

**Summary of Findings**

For Research Question 1, the results from the statistical tests for all six indicators: citizenship, leadership, self-discipline, self-confidence, teamwork, and respect for authority, were significant at the p<0.05 level. Significance appeared to occur where the principals’ rankings of Agree and Strongly Agree were chosen more frequently than Disagree and Strongly Disagree for all six items designed to measure cadet social development.

For Research Question 2, the results from the statistical test for all six indicators: appreciation of physical fitness, resistance to drugs and alcohol, regular school attendance, positive work ethic, graduation from high school, and critical thinking skill, were significant at the p<0.05 level. Significance appeared to occur where the principals’ rankings of Agree and Strongly Agree were chosen more frequently than Disagree and Strongly Disagree for all six items designed to measure cadet behaviors. Significance was not as robust at this level as it was for the perceived influence of the program on social development. Frequency of responses under the Disagree column reached double-digits. Several principals disagreed that JROTC
helped promote an appreciation for physical fitness (21), resistance to drug and alcohol use (22), or the demonstration of critical thinking (26).

For Research Question 3, the results from the statistical tests for all six indicators: positive character education, safe learning environment, community service, positive extracurricular activities, connection to school and reduction of discipline referrals were significant at the p<0.05 level. Significance appeared to occur where the rankings of Agree and Strongly Agree were chosen more frequently than Disagree and Strongly Disagree for all six items designed to measure influence over the public school environment.

This study used The Mann-Whitney U test to examine differences in principal perceptions of the influence of JROTC on cadets’ social development, the cadets’ behaviors, and the overall influence on the public school environment based on the demographic variables of sex and veteran status. No significance was found. Therefore, it is concluded that the principals’ sex and veteran status do not influence their perceptions on the effectiveness of the influence of JROTC on cadets’ social development, cadets’ behaviors, or the overall public school environment.

The Kruskal-Wallis test was used to examine differences in principal perceptions of the influence of JROTC on social development of the cadet, behaviors of the cadet, and public school environment due to demographic variables ascribed to the principal. These demographics included principals’ participation in JROTC, principals’ participation in ROTC, principals’ administrative experience, principals’ administrative experience in the current school, principals’ age, and principals’ race. Additionally, the Kruskal-Wallis test was used to examine differences in principal perceptions of the influence of JROTC on social development of the cadet, behaviors of the cadet, and overall school environment due to demographic variables describing the school.
These included school enrollment, percentage of minority students enrolled, community status, socioeconomic status, geographic region, proximity to military base, sponsoring branch for the JROTC, and duration of the JROTC program.
CHAPTER FIVE: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This chapter reviews the purpose, demographic data, and methods used in the study. Conclusions, organized by the four research questions, follow a summary of the findings. The chapter ends with implications, recommendations for further study, and concluding remarks.

Purpose of the Study

The purpose of this study was to examine principals’ perceptions of the effectiveness of the Junior Reserve Officers’ Training Corps (JROTC) programs. In addition, this study sought to determine differences in principals’ perceptions based on demographic data related to the principal and to the demographic data reported for the school. Principals’ comments generated additional data to aid in the exploration of perceptions held regarding the JROTC program. The overarching issues to be explored were “What are the perceptions of principals regarding the effectiveness of the JROTC program? And, do the principals perceive JROTC as a worthwhile program?” Four research questions guided the study:

1. What are principals' perceptions of the influence, if any, of the JROTC curriculum on the social development of the student cadet?

2. What are principals’ perceptions of the influence, if any, of the JROTC program on the behaviors of the student cadet?

3. What are principals’ perceptions of the influence, if any, of the JROTC program on the public school environment as a whole?

4. What are the differences in principals’ perceptions of the JROTC program due to demographic factors such as: the school’s national location, socioeconomic status, community status, school enrollment, minority population of student enrollment, proximity of school to a
military base, school’s JROTC sponsoring branch, duration of JROTC program in the public school, principal’s length of school administrative experience, principal’s experience with military, principal’s age, principal’s race, and principal’s sex?

Participants

The sample taken from the population of 3062 high school principals in public high schools across the United States with active JROTC programs for this study included 491 high school principals who voluntarily responded to the anonymous three-part survey sent through Survey Monkey. With the exception of Montana, principals responded from all states and the District of Columbia.

Methods

This study used both qualitative and quantitative methods. The three-part Principals’ Perceptions of JROTC Survey was sent out to 3062 principals in public high schools across the United States with active JROTC programs. Four hundred ninety one (491) of these public high school principals returned a usable survey. Part I of the survey included a Likert-Scale inventory assessing the principals’ perceptions of the influence of the JROTC program on the cadet’s social development and behaviors, and on the school’s overall environment. Six items were used to measure each of the three categories. Participants were asked to respond using a four-point scale to indicate their level of agreement from 1= Strongly Disagree to 4= Strongly Agree. Part II of the survey consisted of three open-ended questions designed to collect qualitative data. Principals were asked to discuss perceived advantages and disadvantages of the program. A third question asked for other comments related to the study. Part III of the survey collected demographic data related to the principal and to his or her school.
Conclusions of Findings

The data collected as part of this study support the following summary of findings and conclusions related to each of the research questions:

**Research Question 1: What are principals’ perceptions of the influence, if any, of the JROTC curriculum on the social development of the student cadet?**

The data analysis of Research Question 1 of this study showed that principals *Agree* or *Strongly Agree* that the JROTC program influences the indicators used to measure social development: citizenship, leadership, self-discipline, self-confidence, teamwork, and respect for authority. Previous studies that examined the effectiveness of JROTC related to three social development goals of leadership, citizenship, and self-reliance (Flowers, 1999; Hawkins, 1988; Roberts, 1991; & Sieverling, 1973) produced mixed results. However, findings from this study indicate agreement with studies that suggest the length of participation in JROTC is strongly influential and positively correlates with measures of character and academic development (Pema & Mehay, 2010 & Rivas, 1995). In addition, two studies by Schmidt (2001, 2003) used the Personal Development Test to compare cadets to non-cadets in terms of personal development. Items on the test include traits such as self-esteem, caring, coping skills, conformity, and sympathy. In the first study (2001), Marine JROTC cadets scored higher than non-cadets on all twelve areas of the test. Significance was found in favor of the cadets in eight of the twelve areas. The second study (2003), found statistical significance for the cadet for every measure on the Personal Development Test except for items measuring team membership and self-esteem.
Research Question 2: What are principals’ perceptions of the influence, if any, of the JROTC program on the behaviors of the student cadet?

The data analysis of Research Question 2 of this study showed that principals Agree or Strongly Agree that the JROTC program influences the indicators used to measure cadet behaviors: appreciation of physical fitness, resistance to drugs and alcohol, regular school attendance, positive work ethic, graduation from high school, and critical thinking skills. Responses were not as robust towards the Strongly Agree and Agree levels as it was for the perceived influence of the program on social development, as a larger frequency of responses appeared in the disagree level. Several principals disagreed that JROTC helped promote an appreciation for physical fitness, resistance to drug and alcohol use, or the demonstration of critical thinking.

Relative to the findings of this study, Weaver (2012) surveyed 570 JROTC cadets in Mississippi. Cadets came from units sponsored by the Air Force, Army, and Navy. Respondents were asked to rate their level of agreement regarding their opinion of whether cadets had better school attendance than non-cadets. Mean ranks were high for all three military sponsored branches. Air Force cadets provided the highest mean ranks for attendance but there was no statistical difference between the branches. Results from other studies show JROTC programs help to reduce discipline referrals and positively affect regular attendance for participating cadets (Minkin, 2014; Taylor, 1999).

Peinhardt (1998) relied on High School and Beyond (HSB) data from three major cities (Washington, D.C., El Paso, Texas, and Chicago, Illinois) to compare Army JROTC cadets with non-cadets. Results from the study showed that cadets had more self-discipline and a higher school attendance rate than did non-cadets. Additionally, the study showed that cadets had a
3.9% higher graduation rate than non-cadets and had 6.9% few discipline infractions. Colonel Kenneth P. Green, Coordinator of Junior ROTC and Military Programs for Broward County, Florida recently confirmed this type of result. Colonel Green, who contacted this researcher at the request of his principal, reported a 99% graduation rate for cadets who complete four years in a JROTC program. Moreover, he shared that the success they were experiencing with the program in Broward County has led to requests for the program at the middle school level (Colonel Kenneth P. Green, personal communication, January 25, 2016).

**Research Question 3: What are principals’ perceptions of the influence, if any, of the JROTC program on the public school environment as a whole?**

The data analysis of Research Question 3 of this study showed that principals *Agree* or *Strongly Agree* that the JROTC program influences the indicators used to measure influence on the school environment: positive character education, safe learning environment, community service, positive extracurricular activities, connection to school, and reduction of discipline referrals.

In relation to these findings, it appears that one of the most substantial benefits of the JROTC program is its positive influence on character education. One study (Bulach, 2002) compared character traits between Army JROTC cadets and non-cadets. Bulach surveyed approximately 500 students from the Atlanta, Georgia area in grades 9-12. The survey produced marked differences in favor of cadets in all 16 measures of character including traits that are specific to the JROTC curriculum such as self-respect, self-discipline, cooperation, accountability, and citizenship. Additionally the survey showed superior scores for the cadets for 94 of the 96 behaviors measured. Results from another study in North Carolina (Morris,
2003) concurred that principals were pleased with the benefits the program provided to the school and to the community.

A good citizen reflects positive character. All JROTC programs have a general goal of promoting citizenship. The Army JROTC lists its mission “to motivate young people to be better citizens” (United States Army Junior Reserve Officers’ Training Corps, n.d.). Therefore, it seems logical that cadets would demonstrate positive character traits. It also seems likely that cadets would model those traits to peers. In an ex-post facto study comparing Army JROTC cadets to non-cadets in several counties in Alabama (Hicks, 2000) cadets scored significantly higher than non-cadets for citizenship. Since the JROTC was “designed to promote the characteristics of leadership and citizenship” (Hawkins, 1988, p.4) it is reasonable to assume that the presence of a JROTC program would positively influence the overall school environment.

**Research Question 4: What are the differences in principals’ perceptions of the JROTC program due to demographic factors such as: the school’s national location, socioeconomic status, community status, school enrollment, minority population of student enrollment, proximity of school to a military base, school’s JROTC sponsoring branch, duration of JROTC program in the public school, principal’s length of school administrative experience, principal's experience with military, principal’s age, principal’s race, and principal’s sex?**

Data analysis of this study showed no significance when comparing principal perceptions of cadets’ social development, the cadets’ behaviors, and the overall influence on the public school environment based on the demographic variables of sex and veteran status.

When comparing principal perceptions of cadets’ social development, the cadets’ behaviors, and the overall influence on the public school environment based on the demographic variables ascribed to the principal, the data analysis of this study revealed intermittent
significance among some of the dependent variable indicators. These demographics included principals’ participation in JROTC, principals participation in ROTC, principals’ administrative experience, principals’ administrative experience in the current school, principals’ age, and principals’ race. Additionally, the data analysis of this study showed intermittent significance among some of the dependent variable indicators when comparing principal perceptions of cadets’ social development, the cadets’ behaviors, and the overall influence on the public school environment based on the demographic variables ascribed to the school environment. These variables included school enrollment, percentage of minority students enrolled, community status, socioeconomic status, geographic region, proximity to a military base, the sponsoring branch for the JROTC, and duration of the JROTC program.

In general, a few notable conclusions related to the demographic data collected for this survey are worth mentioning. First of all, the principals’ prior military experience did not appear to predispose the principals toward a stronger perceptual view of the JROTC. One might assume that principals with prior military experience would hold either strongly positive or strongly negative views but that was not the case. Also noteworthy is that demographics related to the school (location, minority, population, proximity to base, and length of JROTC program) produced significance for more indicators than did demographics related to the principal (race, participation in JROTC).

Non-Significance

Over half of the demographic variables showed no significance in any of the dependent variable elements. These include principals’ participation in ROTC, principals’ age, principals’ administrative experience, principals’ administrative experience in the current school, school
enrollment, socioeconomic status, community status, and military branch sponsoring the JROTC program.

The possibility of age influencing principals’ perceptions seemed likely. Principals who were older may have been required to participate in ROTC in college. Also, older principals may have been influenced by the anti-military culture which emerged as a result of the Vietnam War. On the other hand, younger principals may have friends or family who are recent veterans or who are currently enlisted. Close affiliations with military culture could have created a bias in perceptions.

This study, however, produced no significance for four demographic factors that might have produced bias related to the military, including principals’ ages, length of administrative experience, length of administrative experience in the current school, or participation in ROTC.

No significance was found in terms of sponsoring military branch. Studies which took an indepth look at the program of instruction for each military sponsored branch of the JROTC (Kern, 2003; Taylor, 1999; & Walls, 2003) compared various aspects of the JROTC programs based on sponsoring military branch. Like Morris (2003) they affirm that all programs are quality programs. Results from this study reflect the same attitude.

Some are not so kind toward toward the JROTC program. Ayers (2006) and Berlowitz (2000) view JROTC as a threat to democracy and argue that the program exploits disadvantaged youth. Berlowitz (2000) stated that JROTC units are deliberately placed in schools with at-risk populations, especially low socioeconomic and large urban schools. Data from Johnson (1999) reveals that the students most likely to participate in JROTC were male, lower socioeconomic status, and African American. Taylor (1999) studied cohort groups in large urban schools in El Paso, Texas, Washington, D.C. and Chicago, Illinois. In Washington, D.C. cadets had lower
drop out rates and higher grade point averages than non-cadets. In Chicago, JROTC cadets showed improvement in attendance and grade point averages over the four years of the study. Additionally, cadets had higher grade point averages than non-cadets for three of the four years studied. Taylor (1999) argues that the establishment of units in urban areas, which ceased in 1995, reflected a change in national demographic trends. Results from this study show that principals do not view the demographic variables of school enrollment, socioeconomic status, or community status as being significantly influential.

**Significance**

Six demographic variables did show significance for some of the indicators in the categories of social development, cadet behaviors, and overall public school environment. Those variables included principals’ participation in JROTC, principals’ race, geographical location, the proximity of the school to a military base, the minority population of the school, and duration of the JROTC program in the school. Caution is used when discussing the intermittent significance that occurred throughout the dependent variable indicators for the general categories of cadet social development, cadet behaviors, and school environment. When only a few of the indicators within a category showed significance and others did not, it cannot be substantially concluded that the demographic variables influenced principals’ perceptions throughout the full general dependent variable category. However, where significance did occur, it is worth investigating as presented below.

**Social Development:** The indicators measuring the influence of JROTC on the cadets’ social development showed the highest concentration of significance. Four items measuring social development were significant based on geographic region: citizenship, leadership, self-discipline, and teamwork. Principals from the northeastern section of the United States tended to
give a lower ranks to survey items. These findings imply that principals from the northeast perceive the JROTC program to be less influential on the development of the cadets’ social skills than do principals from other regions of the country.

These findings seem surprising in light of of the prestigious military academies and traditions tied to the founding of the nation. One such tradition held that every able-bodied man was expected to be a citizen-soldier and attached high esteem to the position of officer (Bateman, 2007).

One explanation for these results is the comparatively recent expansion of JROTC in the northeastern section of the county. Operation Young Citizen, active from 1992-1995, ambitiously set out to improve geographic distribution of the program by establishing units in underrepresented areas, particularly New England (Corbett & Coumbe, 2001). Another explanation might be the socio-political climate, heavily influenced by some of the nation’s most elite campuses of higher education, which have only recently become receptive to a return of a military presence (Downs, 2011).

The demographic variable for the percentage of minority population within the school correlated significantly regarding three indicators measuring social development: self-discipline, self-confidence, and respect for authority. Significance was between Strongly Agree and Disagree/Strongly Disagree; with the overwhelming responses being reported as Strongly Agree. In each circumstance of significance, principals in schools with a minority population between 50-74% ranked items lower than all other principals. The study found significance for the indicator of self-discipline between schools with a minority population of 50-74% and those with a minority population of 75% or higher. A pairwise comparison did not indicate specific categories for the items measuring self-confidence or respect for authority. Schools with a
minority population of 50-74% produced the lowest mean rank (215.24) regarding self-discipline. Schools reporting a minority population of 75% or higher produced the highest mean ranks for the indicators that were statistically significant.

The findings of this study show that principals in schools with the highest percentage of minority populations Strongly Agree/Agree that the JROTC program influences self-discipline, self-confidence, and respect for authority. Several studies argue that the JROTC benefits minority students (Bartlett & Lutz, 1998; Boykins, 1992; Johnson, 1999 and Pema & Mehay, 2010). What remains to be seen is an explanation. Why do principals in schools with a large minority population rank these items higher than do principals in schools with lower minority populations?

In search of answers, we turn to prior research. When we consider the results of this study in terms of needs satisfaction, it makes sense that principals in schools with high minority populations would perceive JROTC as an opportunity and resource capable of helping cadets meet human needs as identified by Maslow and others. At least three studies confirm this premise. Boykins (1992) conducted a study in a large urban Arizona high school with a 75% minority population, the largest minority population in any Arizona high school at the time. He described the school as an inner-city school with high dropout rates and gang activity. In examining JROTC as a leadership program, Boykins attempted to discover how the development of leadership and empowerment advanced the educational achievement of black students. What he found were numerous opportunities for cadets to experience success. Successful leadership application, even in small matters, empowered students, which translated to empowerment within other areas. Regarding human motivation, instructors were assisting students in accessing
level four of Maslow’s hierarchy, which is the need for self-esteem characterized by confidence, respect, and achievement.

Bulach (2002) studied a population in which 95% of the students were Africa-American. Findings revealed that the JROTC program influenced the development of character traits associated with good citizenship. The development of such traits allows students to meet needs of belonging (Glasser, 1998; Maslow, 2014).

Finally, Machir (1991) examined the concepts of self-esteem, dogmatism, and personality type. After comparing Navy JROTC cadets with non-cadets in a predominantly black inner city school in Detroit, he found no statistical differences between the two groups. However, a closer examination of the results from the Piers –Harris Children’s Self Concept Scale used to measure self-esteem showed statistical significance for the cadets in the cluster measuring “happiness and satisfaction.”

Two additional indicators of social development produced statistical significance: leadership and respect for authority. Results from this study showed that the school’s proximity to a military base produced significance for the social development indicator of leadership. Principals in schools located 100-149 miles from a military base ranked the development of leadership lower than did other principals; however, a pair-wise comparison did not point to statistical significance. In terms of respect for authority, significance occurred between those schools, which had a JROTC program for 10-19 years, and those, which had a JROTC program for twenty or more years. Therefore, this study demonstrated that the longer and more established the JROTC program the more principals Strongly Agreed/Agreed that the program influences the development of the respect for authority.


Cadet Behavior: Survey items measuring the JROTC influence on cadet behavior produced a small concentration of demographics that showed significance. Four items measuring cadet behavior were significant but unlike the items measuring social development, significance occurred in isolation. Statistical significance was found for three items, which measured the cadet’s behaviors: regular school attendance, resistance to drugs and alcohol, and critical thinking.

Two demographic items, the principals’ race and the duration of the JROTC program in the school produced statistical significance for regular school attendance. Race produced significant results with Asian principals reporting the highest mean rank and those identifying their race as “multiple ethnicity/other” reported the lowest mean rank. Only five of the 466 principals (1%) identified themselves as Asian. Due to the small sample, caution must be taken in generalizing this finding to the larger population. In regards to the length of the JROTC program in the school, a pairwise comparison did not point to specific areas of significance. Schools reporting having a JROTC for twenty or more years produced the highest mean ranks for the item measuring regular attendance.

Principals who had participated in JROTC produced significant results for the test item measuring resistance to drugs and alcohol. Those who had participated Strongly Agreed/Agreed that the program influenced resistance to drugs and alcohol. Again, the sample size warrants caution in making generalizations. Only 11 of the 481 principals (2.24%) reported that they had participated in JROTC as high school students. It seems likely that those who did participate recalled a curricular emphasis on remaining drug- and alcohol-free.

This study also showed significance for the item measuring critical thinking based on the minority population. Significance was found between schools with a minority population of 50-
74% and those with a minority population of 75% or higher. Principals from schools with the higher percentage of minority students *Strongly Agreed/Agreed* that JROTC promoted critical thinking. The findings of this study show that principals in schools with the highest percentage of minority populations *Strongly Agreed/Agreed* that the JROTC program positively influences self-discipline, self-confidence, and respect for authority and critical thinking.

For insight regarding the influence of participation in JROTC on the development of critical thinking in minority students, we turn to studies that examine achievement as an indirect performance indicator. Bulach (2002) found that the JROTC program was capable of changing behavior. Improved behavior and reduced discipline issues often translate into higher academic achievement. Similarly, Boykins (1992) found that opportunities to experience success and practice leadership empowered African American cadets.

**School Environment:** Survey items measuring the JROTC influence on the overall school environment showed the fewest number of significant demographic variables. The study showed significance for only three items: community service, school connections, and discipline referrals.

For the item measuring community service, significance was found based on geographic region. Principals in the northeast perceived the JROTC program to be less influential in promoting community service than did principals in the midwest. The location of the school appeared to produce the largest number of significance for items designed to measure the influence of the JROTC program on the overall school environment. Geographic location produced significance for the item measuring the influence on community service.

Proximity to the nearest military base produced statistical significance for items measuring school connections and discipline referrals. An obvious expectation would be a
positive correlation between the proximity of a school to the nearest military base and the ranking assigned to items measuring influence of the JROTC program. Results from this study, however, did not show that principals in schools closest to military bases perceive the JROTC program to be more influential than principals in other schools in terms of school connections and discipline referrals. In general, principals in schools located between 100-149 miles from base tended to rate leadership, school connection, and discipline referrals lower than principals in other schools.

There are a few logical explanations for results related to the proximity of the school to a military base. It might be that estimates of proximity to base were inaccurate. This development could also be the result of incomplete or missing data in this survey field. Several principals responded in terms of “hours” instead of miles. Others replied that they “did not know.” Finally, comments from principals revealed that there might have been some confusion as to the definition of military base. Some principals gave the distance of their school to the nearest National Guard unit or other military facility.

**Implications**

Implications of the study are discussed in two sections. The first section reviews conclusions of this study in light of the theoretical framework of human motivation theory put forth in Chapter 2. The second area of discussion explores the conclusions of this study in terms of curriculum and instruction.

**Human Motivation**

Abraham Maslow argues that humans are motivated to satisfy needs and that those needs are arranged in a hierarchy. At the tip of the hierarchical pyramid sits self-actualization which is characterized by creativity, purpose, and meaning. Ideally, all individuals continually strive
toward the satisfaction of needs. Immediately below self-actualization is the level for self-esteem, followed by love and belonging, then safety and security, and finally the base of the pyramid which represents physiological needs.

Results from Part I of *The Principals’ Perceptions of JROTC* Survey point to the satisfaction of needs for at least three of Maslow’s hierarchical levels. The level representing self-esteem is characterized by confidence, respect, and achievement. Item four in the survey measured self-confidence. A review of the descriptive statistics related to that survey item shows that 396 (80.8%) principals *Strongly Agreed* that JROTC promoted the development of self-confidence in cadets. Additionally, 84 (17.1%) *Agreed* that JROTC promoted the development of self-confidence. Graduation from high school is a traditional milestone achievement. Item 11 of the survey measured the principals’ perceptions related to the influence of JROTC on graduation rates. Only nine (1.8%) principals *Disagreed* or *Strongly Disagreed* with the notion that JROTC promoted graduation from high school. An overwhelming majority of 481 (98.2%) principals *Agreed* or *Strongly Agreed* that participation in JROTC promoted graduation. This is in contrast to a study by Biggs, (2010) which was unable to show statistical significance for the graduation rate of JROTC cadets as opposed to non-cadets in Missouri.

The level representing the human need for love and belonging is characterized by friendship, family, and connections. Item 17 of the survey measured principals’ perceptions of the program to influence positive connections. Descriptive statistics reveal that 417 (84.9%) principals *Strongly Agreed* that participation in JROTC promoted connections at school and 63 (12.8%) principals *Agreed* with this precept. These findings support a qualitative study of the NJROTC by Santora (2006). Further, these findings are affirmed by Corbett and Coumbe (2001) who argue that many students join JROTC for the sense of belonging it affords and by a
more recent study which reported that principals perceived participation in JROTC as “one way of building teamwork and a sense of belonging” (Minkin, 2014, p. 89).

Teamwork, another characteristic of belonging, was measured by Item Five of the survey. Regardless of age, race, sex or other demographic variable, principals were in almost universal agreement that participation in JROTC promoted teamwork. Of the responses, 426 (86.8%) principals Strongly Agreed with this statement and another 54 (11%) Agreed.

Finally, the level representing safety and security is characterized by health, property, and stability. Item 14 measured principals’ perceptions of the influence of JROTC in promoting a safe school environment. Responses were overwhelmingly positive. One hundred six (106) principals representing 21% of the participants agreed that JROTC had a positive influence on a safe school environment. The number of principals who Strongly Agreed with this statement was 374 (76.2%). Three additional survey items are considered indicators of safe schools and therefore fall under Maslow’s level for safety and security. The frequency of discipline referrals is still another indicator of a safe school environment. For the items measuring the perception of the reduction of discipline referrals, 136 (27.8%) principals Agreed that JROTC influenced the number of discipline referrals and 332 (67.9%) Strongly Agreed with this statement. In terms of descriptive statistics, 232 (47.3%) principals Agreed that participation in JROTC promoted physical fitness and 231 (47%) Strongly Agreed with this statement. Principals perceived participation in JROTC as promoting a resistance to drugs and alcohol. Principals who had participated in JROTC as a student in high school perceived this resistance at a significantly higher level than principals who had not participated in JROTC. The number of principals who Agreed with this item was 262 (53.4%) and the number who Strongly Agreed was 202 (41.1%).
From the literature review, we know that principals play a multitude of roles within the school (Chenowith, 2010; Hess, 2013; Trail, 2000, & Wiseman, Allen & Foster, 2013). Many of those roles are designed to facilitate a safe school environment where learning can occur. Once safety and security needs are met, students are free to progress up the hierarchy in an attempt to meet higher level needs such as belonging and self-esteem. The findings of this study have implications for educators and administrators. Simply put, education is a holistic endeavor. Educators need to look at programs and strategies designed to meet student needs across all levels. Students with unmet lower level needs cannot be expected to be successful in school when that success is measured by the attainment of goals indicative of higher level needs.

**Curriculum and Instruction**

This study examined principals’ perceptions of the JROTC program’s influence on the social development of the cadet, the behavior of the cadet, and on the influence of the JROTC program to the school environment. When looking at the JROTC program in terms of these areas, we need to look specifically at the curriculum and instructional component of the program.

A discussion of curriculum begins with a common understanding of the term. For the purposes of this study, curriculum is considered as both content and delivery of instruction. Mahan (1966) reminds us that at its inception, the primary military interest in JROTC was national security. The county needed a supply of officers to lead our military during times of war and the curriculum of JROTC was a reflection of that need.

As the country grew and changed so did the JROTC program. Arguments arose that the program modeled martial solution that countered school and district stances on non-violence and safety. Such criticism spurred the military to revise curriculums and to reduce the focus on weaponry by making weapons training an optional component of the program (Logan, 2000).
Curriculum revision in the 90s included a further shifting of the focus away from military training and toward a stronger emphasis on leadership, self-esteem, values, citizenship, communication, physical fitness, career exploration, and substance abuse prevention (Coumbe, Hartford, & Kotakis, 2010).

Beginning in 2001, the military initiated revision to the Program of Instruction (POI) encouraging JROTC program planners to address the needs of the 21st century learner. By adding approved textbooks to the program and aligning instruction with current standards, JROTC programs presented courses that were academically sound and merited core credit for portions of the program (Coumbe, et.al. 2008). Today, curriculum for JROTC is accredited through various agencies and programs rely on current technologies to engage students in interactive learning strategies.

The content of instruction for the JROTC program includes attention to goals common to all JROTC programs regardless of sponsoring branch of the military. According to Kern (2003) common goals include citizenship, leadership, self-discipline, and respect for authority. This study showed significance for all 18 items on the survey including those common goals identified by Kern. Findings of this study indicate that principals in schools with an active JROTC unit perceive the program as a positive influence on the social development of the cadet, on the cadet behavior, and on the general school environment.

Curriculum implications for collaborative efforts between schools and military resources are substantial. Dohle (2001) suggested that the social mission of the JROTC program justifies funding from government departments other than the Department of Defense. Increased funding would help establish and support more units. A number of studies show that principals hold
positive perceptions toward the JROTC program (Harrill, 1984; Logan, 2000; Marks, 2004; Morris, 2003).

One study in particular, Ameen, 2009, showed that even in the absence of data showing significance, administrators, instructors, teachers, students, and parents viewed JROTC as making a positive impact on the school. Ameen has argued that JROTC is a leadership development program. As such, it should not be expected to have a direct effect on academics. He urges schools and school districts to implement JROTC as a leadership program that teaches and develops skills and attitudes that lead to dropout prevention. Ameen (2009, p. 96) refers to the Air Force JROTC as a “tried and proven” program. His assessments as well as results from other studies show many educational leaders hold the program in high regard. One such leader is Hugh Price (2007) who suggests that public education make use of military resources. Price argues that military programs like JROTC can help students and schools meet needs and therefore have a positive impact on education. Results from a study by Kariuki and Williams (2006) support this idea. In a study examining the relationship between character traits and academic performance in Air Force JROTC at a high school in a middle class suburb of northeast Tennessee, the researchers found statistical significance. Significance was indicated in the subcategories of moral behavior, responsibility, honesty, and ethics.

Bulach (2002) noted that schools should expect improved character traits from cadets because the program’s mission is to develop good citizens. The development of positive character traits through JROTC influences success in other areas of life. The numerous qualitative comments collected by this study support this concept. One principal stated, “I believe the students of the JROTC program elevate the level of character on my campus.” In praise of the program, another principal commented that JROTC “is the single most important
program in our school. It has “saved” many at-risk students and built respect, responsibility, character, and leadership among our cadets.” There is overwhelming evidence and support that the curriculum supports the overall JROTC mission to build better citizens. The implication is that the focus and goals of the JROTC program should remain on citizenship and character development and that academic gains due to improvement in these areas should be considered as secondary, rather than primary aims.

As previously noted, this study defines curriculum as both content and delivery. Therefore, an examination of delivery requires careful consideration of both instruction and instructors. Prior to 1964, active duty personnel served as JROTC instructors. With the passage of the Reserve Officers’ Training Corps Vitalization Act (1964), the program was expanded to include all branches of the military service. Additionally, military retirees replaced active duty officers as instructors for JROTC and the military shared the cost of instruction with the hosting school system. Muholland (2005, p. 21) views the replacement of active duty officers with retired personal as “the best unintentional benefit” of the program reform of the 1960s. His reasoning is sound. He recognizes that retirees have knowledge of the military and respect for the military but their knowledge does not override their desire to make a difference in the lives of students. After all, retirees do not share the same military obligations as active duty personal.

Despite changes to the program in the 1960s, opponents of JROTC continued to criticize what they considered as the lack of quality instruction and the lack of sufficient oversight (Bartlett & Lutz, 1998). Machir (1991) explained that the sponsoring military branch for the JROTC program assumes responsibility for qualifying instructors as fit to teach JROTC. When considering the criterion for certification as a JROTC instructor, this criticism was justified. In
order to have highly qualified instructors, there must be a way of standardizing and measuring performance criteria.

Criticism was not wasted. Government officials addressed the standards and qualifications for JROTC instructors during the program restructuring in the 1990s. In response, a JROTC instructor orientation was developed and implemented (Coumbe, Hartford, & Kotakis, 2010). The JROTC School of Cadet Command was established in 1992 to train new instructors and the focus changed from the mechanics of management and program administration to the art of education. Further, the University of Colorado evaluated the program and decided to award college credit in curriculum and instruction for many of the instructional courses. Now, the senior instructor must possess a baccalaureate degree (Department of Defense Instruction, 2006). To respond to the issue of instructor training, specifically in terms of highly qualified teachers dictated through No Child Left Behind, new instructors took advantage of technology, including distance learning, to focus on educational strategies and student-centered learning. In 2006, the state board of education for Tennessee approved licensure for JROTC instructors (Coumbe, Kotakis, & Gammell, 2008). An emphasis on instructor credentialing continues to assure quality instructors. Several other studies focused on the quality of the instructor as a major determinate of program success (Bogden, 1984; Mahan, 1966; Marks, 2004; Morris, 2003; Santora, 2006).

Weaver (2012) framed his study of JROTC within the construct of mentoring. He argued that mentoring programs, like JROTC, lead to educational improvements. He surveyed JROTC cadets sponsored by the Army, Air Force, and Navy in 33 high schools in Mississippi. Weaver looked exclusively at their perceptions of JROTC as a mentoring program. A percentage of cadets named their JROTC instructor as a primary mentor in their lives.
Additionally, Weaver concluded that the cadets’ perceptions of the instructor as a mentor produced significant results for high school completion rates and academic achievement.

Qualitative comments collected during this current study support the magnitude of importance assigned to the role of JROTC instructor. Part II of the *Principals’ Perceptions of JROTC* Survey included one item that asked principals to submit additional comments about the JROTC program. One hundred eighty seven (187) principals supplied responses. Thirty-three (17.65%) of those responses included comments about the JROTC instructor. Some principals listed their instructors by name. Most of the comments praised the instructors. Principals referred to their instructors as “great role models” who were “active,” “dynamic,” “committed.” “phenomenal,” and “amazing.” Several principals noted that the program was “only as good as the instructors” and one principal went on to add that the JROTC was not “teacher-proof” and that a “stinker could sink it.” Further, these comments corroborate the stance taken by Master Sergeant John Wellman, an Air Force JROTC instructor in West Virginia. While noting the use of technology within the program, Wellman emphasized the importance of a good instructor and cautioned that technology could “never take the place of a teacher.” Instead, he argued that technology should be used as supportive enhancement in the classroom (Master Sergeant, John Wellman, personal communication, November 14, 2013).

The emphasis on the quality of the instructor has implications for the program and the school system. First, JROTC would do well to maintain high standards for those who seek acceptance into an instructional role. It seems clear that the program has demonstrated success and received widespread acceptance as a leadership and citizenship program. The emphasis should remain on teaching those skills and attitudes that help students realize and develop habits that lead to success in school and beyond.
Next, administrators need to support JROTC instructors. Most instructors did not receive a degree in education but have volunteered to serve our youth and do want to make a positive difference. If a standardized system for fair evaluation is not in place, it is essential that one be developed. Administrators need to welcome JROTC instructors as professionals on the staff and provide appropriate professional development and opportunities for advancing skills. One would be hard-pressed to find negative consequences to instructional improvements aimed at increasing the number of positive role models, committed leaders, and willing mentors in any school.

**Recommendations for Further Research**

This study investigated the perceptions of high school principals regarding the effectiveness of the JROTC program in three areas: the social development of the cadet, the behaviors of the cadet, and the influence of JROTC on the public school environment. As a national study, the *Principals’ Perceptions of JROTC* survey was sent to over 3,000 high school principals in public schools with an active JROTC unit. Open-ended questions collected comments that further enhanced understanding of the examined perceptions. The study compared the perceptions of principals related to the three categories against a number of demographic variables. The findings of this study give rise to the following recommendations:

1. This study returned 491 usable surveys. Many surveys were returned or rejected due to spam blockers and firewalls. Other schools declined participation due to district policy. An additional national survey attempting to increase the response rate and therefore the sample size would add to the knowledge base of current research related to JROTC. This might be accomplished through partnership with military liaisons.
2. This study maintained an exclusive focus on the perceptions of high school principals in public schools. A national study examining the perceptions of high school cadets would enrich the data related to the perceived effectiveness of JROTC.

3. Further investigation into the measures of success related to the JROTC program, as identified in prior research is warranted. Such measures could include high school graduation rates, dropout rates, and college enrollment data. A quantitative approach could yield stronger data.

4. This study produced areas of statistical significance. Further research into the influence of geographic region, school’s proximity to base, and the percentage of minority population might help answer why principals perceive the JROTC as they do.

5. A study exploring instructor characteristics, attitudes, and education could be beneficial in helping facilitate an understanding of the role quality instruction plays on the perceived success of the program.

6. A study replicating Boykins (1992) study regarding the effect of the JROTC on leadership, empowerment, and academic achievement should be conducted to update information and promote understanding of how the program benefits minority students.

7. A study to examine how the JROTC program helps students meets identified needs based on Maslow’s hierarchy would provide useful information for educators and military officials.

**Concluding Remarks**

It is my hope that the findings from this study will add to the knowledge base and promote a deeper understanding of the JROTC program. In the course of this study, both negative and positive factors emerged.
Negative factors were connected to data collection. One of the most frustrating aspects of the study was the attempt to secure accurate and current data. Previous studies have noted these same obstacles (Mulholland, 2005; Santora, 2006). Oversight and responsibility for the JROTC is fragmented. Numerous agencies including the local school systems, sponsoring military branches, the United States Department of Education, and the United States Department of Defense share administrative duties. No single comprehensive agency assumes responsibility for data collection. Numerous attempts to obtain information related to the demographics for JROTC yielded circuitous deflections and resulted in no information or in outdated and incomplete information. Written requests for data were non-productive. Several letters were ignored or returned unopened.

Another negative aspect, or frustration, included the lack of a valid and standardized instrument of measurement related to the program. Even though the goals for the program have a degree of variation based on the sponsoring military branch, there are a number of common goals. The lack of a common tool for program evaluation seems incomprehensible given the fact that JROTC has been in existence for a century and has served countless numbers of students during that time.

In comparison, positive factors related to the program outnumbered negative ones. In an interview, Lieutenant Colonel Russell Gallagher, Director of the JROTC programs for the Philadelphia School District, commented that the success of the program should be measured by “both tangibles and intangibles” (Mulholland, 2005, p. 6).

In the absence of a standardized tool of measurement, the numerous “intangibles” bear consideration. Indirect and peripheral benefits of the program include a sense of belonging, discipline, self-confidence, citizenship, self-esteem, and pride. Marks (2004) concluded that
principals and JROTC instructors viewed the program as an asset to the school in ways that were immeasurable. Rice (2006) correlated the service-learning component of JROTC with academic achievement and emotional intelligence. One researcher (Bogden, 1984, p.55) attributed “minor miracles” to the JROTC instructors at one school. Finally, Johnson (1999, p.155) contended that the true benefit of JROTC lies in its ability to improve “moral, character, and leadership” abilities in students.

Studies suggest that JROTC is a leadership and a life-skills course that prepares students for success in life in general (Ameen, 2009; Bartlett & Lutz, 1998). Results from this study support arguments that JROTC does more than merely prepare students for a successful military career. When asked to identify the most significant advantage to having a JROTC program, one principal’s comment provides a succinct summary:

It is hard to say what is the most significant advantage. However, our JROTC provides a positive environment for many students, one they might not have had without the program. The students leave the program with a sense of purpose, conviction, and a skill-set that will help them be successful no matter what they choose to do.

The endurance of the JROTC program for a century is a testament of the program’s importance. The continued praise it elicits from principals and other stakeholders speaks volumes. In 1984, Bogden observed that the greatest influence on how the JROTC program is perceived was found by recognizing whom the program served. Bogden’s popular premise has maintained its validity for more than three decades. Results from this current study merit an expansion to Bogden’s original observation. In addition to looking at whom the program serves, we should also look at how the program serves those students in terms of meeting their needs.
When basic needs are satisfied, intangible benefits such as motivation and integrity are inevitable. Such benefits support students in achieving higher-level needs and reaching advanced personal and societal goals, including those that forward the development of leadership, citizenship, and academic success. Simply put, JROTC serves students by serving a purpose: It helps students meet needs.
REFERENCES


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Carr, P. R., & Porfilio, B. J. (2012). *Educating for peace in a time of permanent war: Are schools part of the solution or the problem?* New York: Routledge.


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Dufour, R. (2007). In praise of top-down leadership. School Administrator, 64(10), 38-42.


Marks, L. N. (2004). *Perceptions of high school principals and senior Army instructors concerning the impact of JROTC on rates of dropout and transition to college* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (3120325).


Walls, T. (2003). Junior Reserve Officers’ Training Corps: A comparison with other successful youth development programs and an analysis of military recruits who participate in


Williams-Bonds, C. (2013). *A comparison of the academic achievement and perceptions of leadership skills and citizenship traits of JROTC, student athletes, and other students in an urban high school setting.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Masters Theses (3605517)

APPENDIX A: PILOT STUDY SURVEY

JROTC: PRINCIPALS’ PERCEPTIONS

PART I
To what extent do you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly Agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>citizenship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>self-discipline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>self confidence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>teamwork</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>respect to authority</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The JROTC curriculum strengthens student cadets’ social development of

- develop an appreciation for physical fitness.
- learn to resist temptation to use drugs.
- have a high attendance rate in school.
- develop a strong work ethic.
- have a high rate of graduation.
- develop critical thinking skills.

As a result of the public school hosting the JROTC program, the school helps all students by

- promoting positive character education.
- fostering a safe learning environment.
- stresses community service.
- providing positive extracurricular activities.
- helping students feel connected to the school.
- reducing discipline referrals in schools.
PART II

Please answer the following questions:

1. Regarding student outcomes, discuss what you believe to be the most significant advantage for having JROTC in the school schedule.

2. Regarding student outcomes, discuss what you believe to be the most significant disadvantage for having JROTC in the school schedule.

Additional comments:

Part III

Please select the most appropriate response for each question.

Demographic Data

1. My school is located in the state of:

2. The socio-economic status of my school is best described as:

<table>
<thead>
<tr>
<th>Low SES</th>
<th>Moderate SES</th>
<th>High SES</th>
</tr>
</thead>
</table>

3. My school is best described as:

<table>
<thead>
<tr>
<th>Rural</th>
<th>Suburban</th>
<th>Urban</th>
</tr>
</thead>
</table>

4. My school enrollment is:

5. The percentage of minority students in my school is:

6. The military base closest to my school is approximately _______ miles away.

7. My JROTC is sponsored by:

<table>
<thead>
<tr>
<th>Air Force</th>
<th>Army</th>
<th>Marine</th>
<th>Navy</th>
</tr>
</thead>
</table>

8. My School has had a JROTC for:

<table>
<thead>
<tr>
<th>Less than 2 years</th>
<th>2-10 years</th>
<th>11-20 years</th>
<th>21-30 years</th>
<th>More than 30 years</th>
</tr>
</thead>
</table>

9. I have been an administrator for:

<table>
<thead>
<tr>
<th>Less than 2 years</th>
<th>2-10 years</th>
<th>11-20 years</th>
<th>21-30 years</th>
<th>More than 30 years</th>
</tr>
</thead>
</table>

10. I have been an administrator at this school for:

    | Less than 2 years | 2-10 years | 11-20 years | 21-30 years | More than 30 years |
    |-------------------|------------|-------------|-------------|-------------------|

11. I am a military veteran:

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Air Force</th>
<th>Army</th>
<th>Marine</th>
<th>Navy</th>
</tr>
</thead>
</table>

12. I participated in JROTC in high school:

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
</table>
The purpose of the pilot study is to check for understanding and validity. After completing the survey please reflect on and answer the following questions:

1. Are the survey instructions clear and easy to understand?
2. Are the questions clear and easy to understand?
3. Are the questions about social development appropriate in relation to the JROTC program?
4. Are the questions about cadet behaviors appropriate in relation to the JROTC program?
5. Are the questions about the program influence on the school environment appropriate in relation to the JROTC program?
6. Do you notice any problems or errors in any question? If so, which question(s)?
7. What are your opinions about the length of the survey?
8. What suggestions would you make to improve the survey?
9. Do you have any additional comments?
APPENDIX B: PERMISSION FOR PILOT STUDY

October 13, 2015

Patty Blake
4 Manhattan Dr.
Nitro, WV 25143

Dear Ms. Blake,

Kanawha County Schools has approved your request to conduct research for the project titled, “Principals’ Perceptions of the Effectiveness of JROTC Programs”. Please plan to implement the project within the dates and procedures set forth within your application. We wish you success with the study and promising completion of your academic program.

Sincerely,

[Signature]

Joni M. Duffy, Director of Counseling & Testing
Kanawha County Schools
**APPENDIX C: PRINCIPALS’ PERCEPTIONS OF JROTC SURVEY**

Please mark the correct response.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a principal in a public high school.</td>
<td></td>
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<tr>
<td>I have an active JROTC unit in my school.</td>
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<td></td>
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</tbody>
</table>

**PART I**

To what extent do you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly Agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The JROTC curriculum teaches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. citizenship</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. leadership</td>
<td></td>
<td></td>
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<tr>
<td>3. self-discipline</td>
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<tr>
<td>4. self confidence</td>
<td></td>
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<tr>
<td>5. teamwork</td>
<td></td>
<td></td>
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<tr>
<td>6. respect for authority</td>
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<tr>
<td>As a result of participation in JROTC, students</td>
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<tr>
<td>7. develop an appreciation for physical fitness.</td>
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<tr>
<td>8. better resist the temptation to use drugs and alcohol.</td>
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<tr>
<td>9. regularly attend school</td>
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<tr>
<td>10. demonstrate a strong work ethic.</td>
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</tr>
<tr>
<td>11. graduate from high school.</td>
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<td></td>
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<tr>
<td>12. demonstrate critical thinking skills.</td>
<td></td>
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<tr>
<td>Within the context of the public school, the JROTC program</td>
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<tr>
<td>13. promotes positive character education.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>14. fosters a safe learning environment.</td>
<td></td>
<td></td>
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<tr>
<td>15. stresses community service.</td>
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</tr>
<tr>
<td>16. provides positive extracurricular activities.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>17. helps students feel connected to the school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. reduces discipline referrals in schools.</td>
<td></td>
<td></td>
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</tbody>
</table>
PART II
1. Regarding student outcomes, discuss what you believe to be the most significant advantage for having JROTC in the school schedule.

2. Regarding student outcomes, discuss what you believe to be the most significant disadvantage for having JROTC in the school schedule.

Additional comments:

Part III
Demographic Data

1. My school is located in the state of: ____________________________________________________.

2. The socio-economic status of my school is best described as: Low SES Moderate SES High SES

3. My school is best described as: Rural Sururban Urban

4. My school enrollment is: ____________________________________________________________.

5. The percentage of minority students in my school is: ______________________________________.

6. The military base closest to my school is approximately ____________________________ miles away.

7. My JROTC is sponsored by: Air Force Army Marine Navy

8. My School has had a JROTC for: Less than 10 years 10-19 years 20 or more years

9. I have been an administrator for: Less than 10 years 10-19 years 20 or more years.

10. I have been an administrator at this school for: Less than 5 years 5-9 years 10 or more years.

11. Have you ever served in any branch of the United States Military or not: Yes No

   In which branch of the United States Military did you serve? Air Force Army Marines Navy

12. I participated in ROTC in college: Yes No

13. I participated in JROTC in high school: Yes No
Which branch sponsored your JROTC in high school:  Air Force   Army   Marines   Navy

14. Age:  

15. Race:  American Indian/Alaskan Native   Asian/Pacific Islander   Black/African American
         Hispanic   White/Caucasian   Multiple Ethnicity/Other

16. Sex:  Male   Female
From: Bruce Day, CIP <no-reply@irbnet.org>
Sent: Wednesday, October 14, 2015 3:03 PM
To: Edna Meisel; Patty Blake
Subject: IRBNet Board Action

Please note that Marshall University Institutional Review Board #2 (Social/Behavioral) has taken the following action on IRBNet:

Project Title: [812266-1] Principals’ Perceptions of the Effectiveness of the JROTC Program
Principal Investigator: Edna Meisel, Ed.D.

Submission Type: New Project
Date Submitted: October 14, 2015

Action: APPROVED
Effective Date: October 14, 2015
Review Type: Exempt Review

Should you have any questions you may contact Bruce Day, CIP at day50@marshall.edu.

Thank you,
The IRBNet Support Team

www.irbnet.org
APPENDIX E: ANONYMOUS SURVEY CONSENT

Anonymous Survey Consent

You are invited to participate in a research project entitled “Principals’ Perceptions of the Effectiveness of the JROTC Program” designed to analyze the perceptions held by public high school principals about the effectiveness of the JROTC (Junior Reserve Officers’ Training Corps). The study is being conducted by Dr. Edna Meisel and Patty Blake from Marshall University and has been approved by the Marshall University Institutional Review Board (IRB). This research is being conducted as part of the dissertation requirements for Patty Blake.

This survey is comprised of a three-part survey, which explores the principals’ perceptions regarding the effectiveness of the JROTC program. The survey also collects demographic data. We estimate the survey will take between 20-30 minutes to complete. Your replies will be anonymous, so do not type your name anywhere on the form. There are no known risks involved with this study. Participation is completely voluntary and there will be no penalty or loss of benefits if you choose to not participate in this research study or to withdraw. If you choose not to participate, you can leave the survey site. You may choose not to answer any question by simply leaving it blank. Once you complete the survey, you can delete your browsing history for added security. Completing the on-line survey indicates your consent for use of the answers you supply. If you have any questions about the study you may contact Dr. Edna Meisel at (304) 746-8983 or Patty Blake at (304) 722-3577.

If you have any questions concerning your rights as a research participant, you may contact the Marshall University Office of Research Integrity at (304) 696-4303.

By completing this survey you are also confirming that you are 18 years of age or older.

Please print this page for your records.

If you choose to participate in the study, you will find the survey at:

https://www.surveymonkey.com/r/blakeJROTC.
APPENDIX F: CURRICULUM VITA

Patty Blake
4 Manhattan Drive
Nitro, WV  25143
pblake@k12.wv.us


Education

Marshall University  Doctoral Candidate  January 2011 - Present
  Ed.S Curriculum and Instruction – May, 2014
  Certificate – Leadership Studies – May, 2010
  Master of Arts Degree  Counseling – May, 1995
West Virginia State University
  Bachelors of Science Degree  Education – June, 1985

Certification/Licensure

Professional Administrative Certificate  –Principal (PK-AD)
Professional Teaching Certificate
  Business Principals 7-AD
  Language Arts 7-9
Professional Student Support Certificate  – Counselor (PK-AD)

Employment

Putnam County Schools  - Counselor  - September, 2008 - present
West Virginia Junior College – Teacher – August 1985- January 1987

Presentations

“Taking a Virtual Leap”  – Presented with Margie Snyder and Dr. Edna Meisel at the West Virginia State Technology Conference, Morgantown, WV  Summer 2013.

“JROTechnology”  – Presented at the EdMedia International Conference, Tampere, Finland Summer 2014
“Understanding Adult Learners: Strengthening the Student-Teacher Experience” – Presented with Alyson Radenheimer at the Professional Development Schools Conference, Flatwoods, WV February 2015.


Publications


Professional Memberships

American School Counselor Association
West Virginia Professional Educators Association
Association for School Curriculum and Development
Phi Kappa Phi