

ABSTRACT

Meagan Lupton. THE NEEDS OF MILITARY-CONNECTED STUDENTS WITHIN THE NORTH CAROLINA PUBLIC SCHOOL SYSTEM. (Under the supervision of Jeannie A. Golden, Ph.D.) Department of Psychology, June 2016.

The present study assessed how the mental health needs of military-connected students are addressed within public schools in the state of North Carolina, particularly how aware and comfortable school staff are regarding issues common to military-connected students and what trainings have been offered to them. Participants were 71 school personnel (i.e. principals, school counselors, & teachers) from Camden County, Craven County, Cumberland County, and Richmond County schools. These participants also represented schools that serve families from all five branches of the armed forces (i.e. Air Force, Army, Coast Guard, Marine Corps, & Navy). The ability of these personnel to identify issues highly correlated with military-connected students was assessed via an eighteen item electronic survey. This survey also addressed which related training programs participants have attended, as well as which related services schools currently have in place. Findings indicated that more than half of participants were unable to identify the needs common to military-connected students. Also, more than half (80.00%) of participants had not received any training related to the needs of military-connected students. Those participants who had received formal training perceived themselves as more confident in their abilities to serve this population of students than did their colleagues who had not. Funding for those training programs was predominantly financed by a branch of service or a military-connected organization (52.38%), followed by individual school districts (38.10%). Lastly, findings indicated that many schools are using a related service (i.e. welcome packet, buddy system, support groups) designed to assist their military-connected student population.

THE NEEDS OF MILITARY-CONNECTED STUDENTS WITHIN THE NORTH
CAROLINA PUBLIC SCHOOL SYSTEM

A Thesis Presented to
the Faculty of the Department of Psychology
East Carolina University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in School Psychology

By
Meagan E. Lupton

2016

THE NEEDS OF MILITARY-CONNECTED STUDENTS WITHIN THE NORTH
CAROLINA PUBLIC SCHOOL SYSTEM

by

Meagan E. Lupton

APPROVED BY:

DIRECTOR OF THESIS

Jeannie A. Golden, Ph.D.

COMMITTEE MEMBER

Christy M. Walcott, Ph.D.

COMMITTEE MEMBER

Lori Curtindale, Ph.D.

CHAIR OF THE

DEPARTMENT OF PSYCHOLOGY

Susan L. McCammon, Ph.D.

DEAN OF THE

GRADUATE SCHOOL

Paul Gemperline, Ph.D.

ACKNOWLEDGEMENTS

This thesis would not have been possible without the contributions of the following people:

I would like to express my sincerest gratitude to my thesis chair, Dr. Jeannie Golden, for her time, guidance, patience, and understanding.

I would also like to thank my committee members, Dr. Christy Walcott and Dr. Lori Curtindale, for their time, guidance, and constructive criticism. Thank you so much for your participation in this study.

I am especially grateful to the superintendents and staff of Camden County Schools, Craven County Schools, Cumberland County Schools, and Richmond County Schools. I cannot expression how grateful I am for the wonderful responses I received during a very busy portion of the school year.

I would also like to express my thanks and appreciation for the unending support provided by my husband and family. I cannot thank you enough for the love and motivation you have provided me.

TABLE OF CONTENTS

LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
CHAPTER I: INTRODUCTION.....	1
Statement of the Problem.....	1
Significant of the Study.....	2
Aims and Hypotheses of the Present Study.....	3
CHAPTER II: REVIEW OF THE LITERATURE.....	5
Academic Decline.....	5
Social Connectedness.....	6
Physical Wellbeing.....	8
Psychological Morbidity.....	10
Summary.....	12
CHAPTER III: METHOD.....	15
Participants.....	15
Instrumentation.....	20
Procedures and Data Analysis.....	23
CHAPTER IV: RESULTS.....	25
Descriptive Statistics.....	25
Testing of Hypothesis I.....	26
Testing of Hypothesis II.....	29
Testing of Hypothesis III.....	29

Testing of Hypothesis IV.....	32
Testing of Hypothesis V.....	32
Summary.....	33
CHAPTER V: DISCUSSION.....	35
Limitations.....	38
Future Research.....	39
Conclusion.....	40
REFERENCES.....	42
APPENDIX A: ECU IRB APPROVAL.....	47
APPENDIX B: LETTERS TO SUPERINTENDENTS.....	49
APPENDIX C: LETTER TO PRINCIPALS.....	51
APPENDIX D: LETTERS TO ALL PARTICIPANTS.....	53
APPENDIX E: QUESTIONNAIRE.....	57

LIST OF TABLES

1. Detailed Base/School Information.....	18
2. Demographic Information.....	26

LIST OF FIGURES

1. Map of Bases by County.....	17
2. Academic Success.....	27
3. Attendance.....	28
4. Common Disorders.....	28
5. Weapon Carrying.....	29
6. Training Programs.....	31
7. Sources of Funding.....	32
8. Related Services.....	33

CHAPTER I: INTRODUCTION

Statement of the Problem

Military-connected families face many challenges unique to their affiliation with military life. Not only does this demanding lifestyle require frequent moves, these families also deal with the challenges of extended work hours, financial burdens, extended family separations due to deployment, and unique challenges associated with childrearing and childcare. According to the most recent Department of Defense Demographics Report, the total active duty and ready reserve military force number is approximately 2.5 million men and women (*2014 Demographics Report: Profile of the Military Community*, 2014). Of these service members, approximately 42.7% have children and 55.5% of those children are between the ages of 6 and 18 years old. Since the start of the multiple military operations following the terrorist attacks of September 11, 2001, more than 1.5 million active-duty military and reserve forces have been deployed overseas, with approximately one-third having served at least two tours of duty (Military Child Education Coalition & AACTE, n.d.). Out of the 1.2 million children of military families in the United States, 700,000 have experienced the deployment of at least one parent (Military Child Education Coalition & AACTE, n.d.). Due to the increased length of military tours and the occurrence of multiple deployments, the mental health of these children has become of more concern to schools and Department of Defense organizations, as a growing number of military-connected children are being referred for academic and psychological services. Specifically, between 2005 and 2006 the number of mental and behavioral health visits for military children increased by 11%, the diagnosis of behavioral disorders increased by 19%, and the diagnosis of stress disorders increased by 18% following the deployment of a parent (Gorman et al., 2010). Between 2007 and 2008, the number of children of active duty troops hospitalized for emotional

and behavioral health services increased by 20% (Esposito-Smythers et al., 2011). Therefore, there is a significant number of military-connected students who may be at-risk for various mental-health and school-related challenges.

Significance of the Study

As it relates to the specific population of school-aged children, the current body of literature has found multiple detrimental outcomes related to the experience of parental deployment over several broad categories. These include academic decline, social connectedness, physical wellbeing, and psychological morbidity. In regard to academic decline, it has been found that military-connected students who have experienced at least one parental deployment are likely to experience a decline in grades, a lack of interest in subject material and school activities, difficulty maintaining concentration, and a decrease in scores on standardized measures of academic achievement (Huebner et al., 2007; Chandra et al., 2010; Flake et al., 2009; Richardson, 2011). In regard to social connectedness, researchers have found that the frequent moves associated with the military lifestyle leave students with feelings of disconnection from their school community, weak or tense relationships with teachers, weak social networks, and discrimination from school groups, especially sports teams (Flake et al., 2009; Mmari et al., 2010; Bradshaw et al., 2010). This lack of social connectedness leads many military-connected students to engage in risk-taking behaviors such as weapon carrying and drug and alcohol use (Gilreath, 2013; Gilreath, 2014). The physical wellbeing of many military-connected students is not only impacted by risk-taking behaviors, but also the stress associated with the concerns of having a deployed parent (i.e. concerns for their safety) and with the additional responsibilities many students take on at home (Barnes, Davis, & Treiper, 2007). Lastly, in relation to psychological morbidity, many students experience symptoms of anxiety,

depression, grief, and impulsivity, all of which are related to and impacted by the three factors previously discussed (De Pedro et al., 2011; Chandra et al., 2009; Huebner et al., 2007; Flake et al., 2009).

Aims and Hypotheses of the Present Study

The current study was based on the four broad areas of concern exposed by previous research and examined the training middle and high school personnel of schools with large military-connected student populations receive in regard to supporting the academic success and mental wellbeing of these students. An online survey was used to gather demographic information on each participant and ask questions regarding their ability to identify and address the academic and mental health needs of military-connected students in their school. The goal of the study was to look specifically at the abilities of school personnel to identify the needs of their students and to determine which training programs have been used by military-connected schools in the state of the North Carolina. Additionally, the study questioned how confident personnel consider themselves to be within these areas of concern as a result of their training or due to a lack thereof. Lastly, the closing survey questions presented several programs that have been shown to help military-connected students adjust to the climate of their new school or to succeed academically following frequent moves and parental deployment. Participants were asked to select which, if any, of these programs their school is using at the time of the survey with the goal of identifying the number of schools with support programs already in place.

It was hypothesized that more than half of the participants would report that they are unable to identify the needs of their military-connected students (Hypothesis I). Also, it was hypothesized that more than half of the participants had not received any training regarding the mental health or academic needs of military-connected students (Hypothesis II). It was

hypothesized that participants more confident in their abilities to serve military-connected students had participated in a training program provided by a specific branch of service or related organization (Hypothesis III). There was also the question of whether the funding available for these programs was made available by the branch of service providing the training or by the school district. It was hypothesized that the majority of the funding provided comes from a branch of service or related organization rather than by the school district or individual participant (Hypothesis IV). In terms of military-connected student related services, it was hypothesized that less than half of the schools surveyed would be using at least one military-connected student related service, whether an existing program or one developed by the school or school district (Hypothesis V). The overarching goal of this study was to expose the need for training for military-connected schools that focuses on the unique and complex needs of military-connected students, and to expose the possible need for this training by sharing the results with participating districts.

CHAPTER II

REVIEW OF EXISTING LITERATURE

Academic Decline

The current body of research on academic decline as experienced by military-connected students with deployed parents reveals several issues that arise due to the absence of the deployed parent. In a study conducted by Huebner and colleagues (2007), which utilized self-report measures of military-connected teens, results indicated that many students were likely to be distracted from a given lesson due to concern for their deployed parent and/or worry related to their increase in responsibilities at home. In an additional study evaluating academic success as one of several factors, participants were selected from the National Military Family Association 2008 Operation Purple applicant pool, a summer camp for military-connected children ages 7 to 17 (Chandra et al., 2010). Of the original applicant pool, 1,697 families participated in the study with children ranging in age from 11 to 17 years old. Though participants were sampled to match the national deployment numbers of the time, there was a smaller population of Marines due to the lack of representative families within the applicant pool. The method of this study included a 30-minute interview with the at-home caregiver followed by a 20-minute interview with the child. The analysis then conducted was chosen to show how military-connected children function with respect to academics, in addition to three other factors. Looking primarily at academic engagement, which was determined using a six-item scale on tardiness, readiness, and other factors, the results showed that academic engagement became worse with increasing age (Chandra et al., 2010). The results of a study by Flake and colleagues conducted in 2011 looked exclusively at the psychosocial effects of deployment on military connected children and

found that 14% of the sample population had experienced school-related problems due to decreased interest and teacher conflict. This particular study employed parent report measures and involved a population of children ranging in age from 5 to 12 years old. Lastly, in an extensive study conducted by Richardson (2011), researchers looked at the effects of parental deployment on the academic success of military-connected students exclusively within the school setting. Participants included families and school staff from both North Carolina and Washington, states chosen due to the population sizes of the Army bases present in both, giving the researchers a large sample with which to work. The researchers conducted detailed interviews with both at-home caregivers and school personnel from twelve schools chosen based on the high number of deployments experienced by their students. In addition to these interviews, students were administered academic achievement assessments to monitor changes in scores over the course of a parental deployment to determine the effects of deployment on academic success over time. The results of this study revealed that military-connected students experiencing a parental deployment are less likely to complete homework assignments and more likely to have repeated school absences than are military-connected students not experiencing a deployment or civilian peers. Also, these students showed modest but academically significant declines in standardized achievement test scores when their parent had been deployed for 19 months or more.

Social Connectedness

Most military-connected students will move six to nine times during their preschool through twelfth grade education due to transfers (Military Child Education Coalition and AACTE, n.d.). In addition to these moves, many families with a deployed parent will move to areas with stronger familial and/or social connections (Flake et al., 2009). These frequent moves

have been shown to lead to discrimination toward and weak social networks for military-connected students. In a study conducted by Mmari and colleagues (2010), focus groups of military-connected families and school staff were utilized to assess the impacts of the feeling of social connectedness of military-connected youth on development and adjustment. For the purposes of this study, social connectedness was defined as “a feeling of closeness, a perceived bond between others, and a sense of belonging with one’s family members, peers, and community (p. 354).” Eleven focus groups were assembled from eight bases in Colorado, Kansas, New York, North Carolina, and Texas with representatives from the Air Force, Army, Marines, and Navy. Four of these groups were restricted to adolescents only ($n = 39$), three to parents only ($n = 24$), and four to school staff only ($n = 35$), with a collective total of 98 participants. The results revealed frequent moves to be one of the biggest stressors for youth and as having the largest impact on feelings of social connectedness. Also, the results of the study exposed discrimination against military-connected students by sports coaches, as many participants reported the hesitancy of coaches to include military-connected students on sports teams, particularly in starting positions, out of concern for disrupting the team or losing a starting player due to a military-related move. Lastly, the results of this study revealed that many parents blame school personnel for contributing to their children’s feelings of social disconnect as they believe school personnel do not know how to handle parental deployment and its effects on youth.

In an additional study on social connectedness, researchers studied the effects of frequent moves on the abilities of military-connected adolescents to adapt to normative development stressors, such as puberty and peer relationships, in conjunction with the stress of frequent relocations (Bradshaw et al., 2010). From their literature review, these researchers found that

33% of military families relocate each year and these highly mobile students typically report having fewer close friends and weaker social networks. These students are also more likely to join deviant peer groups, experience academic decline due to school maladjustment, and are likely to experience mental health problems. Participants in this study, as in the previously discussed study, were placed in one of 11 focus groups from eight different military bases. Participants represented the Air Force, Army, Marines, and Navy branches of service, as well as the Reserves and the National Guard. The results of the study found several stressors resulting from frequent moves including strained peer relationships, difficulty adapting to a new school environment, poor student/teacher relationships, and less involvement in extracurricular activities, all of which impact a military-connected student's feelings of social connectedness.

Physical Wellbeing

The current body of research on the physical wellbeing of military-connected students is divided into two broad areas: physical wellbeing related to stress and physical wellbeing as a result of delinquent behavior. In terms of physical wellbeing related to stress, the primary methods of data collection have been surveys/questionnaires and measures of heart rate and blood pressure. In a study conducted by Barnes and colleagues (2007), participants were evaluated at the start of Operation Iraqi Freedom in 2003 and again two months later, following the declaration of the end of "major hostilities." Accounting for height and weight differences, the researchers measured the blood pressure and heart rates of each participant, and administered a questionnaire used to evaluate their perceived stress levels. As there were few validated instruments examining child affective and cognitive reactions to war, the questionnaire was developed using two self-report instruments recommended by the Office of Behavioral and Social Science Research of the National Institutes of Health. At pre-test, the population of

participants included 51 civilian students, 64 military-connected students with a non-deployed parent and 34 with a deployed parent. At post-test, 28 families had moved resulting in a final population of 121 including 48 civilians, 53 military-connected students with a non-deployed parent, and 20 with a deployed parent. The mean age of the population was 15.8 ± 1 year. Compared to the other two groups, the military-connected students with at least one deployed parent had the highest blood pressure and heart rate ratings regardless of ethnicity. Information on the results of the questionnaires completed by the participants was not included or discussed within the article.

In relation to physical wellbeing as a result of delinquent behavior, researchers have found that military-connected students are more likely to develop relationships with older and/or delinquent peers and are more likely to engage in risk-taking behaviors as a result of these relationships. A leader in this area of research, Tamika Gilreath, has worked in association with colleagues in this specific area. In one such study, Gilreath and colleagues employed the 39-item military-module of the California Healthy Kids survey to evaluate participants in Southern California schools (Gilreath et al., 2013). Their total population of 14,149 included civilian students (86.5%), military-connected students by parent (9.2%), and military-connected students by sibling (4.3%). Of their military-connected population, the majority had experienced more than one deployment. The results of this study indicated that youth who reported multiple deployments had the highest prevalence of substance abuse and that higher numbers of deployments were associated with higher levels of lifetime tobacco and other drug use as determined by follow-up data. Specifically related to lifetime drug use, a higher number of family member deployments resulted in a 14% increase in the likelihood of lifetime drug use, with up to a 25% increase.

A more recent study conducted by Gilreath and colleagues (2014) then looked beyond drug use to weapon carrying among military-connected students as compared to nonmilitary-connected students. Participants in this study were again from Southern California schools in six military-connected districts but were selected exclusively from grades 7, 9, and 11. The final population totaled 14,512 and again included civilians (86.5%), military-connected students by parent (9.2%), and military-connected students by sibling (4.3%). Also as before, the majority of the military-connected population had experienced more than one deployment. The results of this study suggest that military-connected students experience higher rates of physical victimization, including being pushed or shoved in school, than do their civilian peers and that of this population, military-connected by parent students experience more physical victimization than do students who are military-connected by sibling. Also, military-connected students were found to be more likely to bring a weapon to school, specifically knives over firearms, than their civilian peers. And again, when those military-connected students were connected by parent, they exhibited higher rates of weapon-carrying than those students who were military connected by sibling.

Psychological Morbidity

In relation to the final of the four broad areas of concern related to military-connected students, psychological morbidity is arguably the area of most concern to health care providers, parents, and school personnel in the call for research related to this population. In a review of the current research, De Pedro and colleagues (2011) found that military-related life events, such as parental deployment and frequent transfers, lead to an increase in mental health issues that can negatively impact academic, social-emotional, and physiological outcomes. Several additional studies have found that, throughout the deployment cycle, military-connected children

experience stressors related to parental separation, redistribution of household responsibility, stress and anxiety of the at-home parent, and geographical relocation (Huebner et al., 2007; Chandra et al., 2010; Weber & Weber, 2005). The behaviors that manifest as a result of these stressors can be related to either externalizing or internalizing disorders and can impact academic success.

In a study conducted by Chandra and colleagues (2010), researchers examined the emotional difficulties and school-, peer-, and family-related difficulties associated with parental deployment. Controlling for family and service member characteristics (i.e. living in a rented house), the results of the study showed that 30% of the sample had a level of anxiety requiring additional evaluation. The population of this study included 1,697 children between the ages of 11 and 17 years old. In an additional study, Huebner (2007) conducted a focus group study with the purpose of identifying behavior changes following the deployment of a parent. Participants for this study included 107 adolescents ranging in age from 12 to 18 years old selected from summer camps for military youth. Participants were divided into 14 focus groups and asked a series of questions related to changes in their behavior following their parent's deployment. The results were that these children largely expressed a lack of interest in previously enjoyed activities, exhibited social withdrawal, changes in sleeping and eating habits, sadness, crying, and worry about their deployed parent's safety. The results also indicated an increase in the irritability of the participants as well as in disrespectful behavior at home and at school.

Also in the study conducted by Huebner and colleagues (2007), researchers looked at the uncertainty and feelings of ambiguous loss associated with parental deployment. The results showed that most participants used negative terms to describe their deployment related feelings and displayed feelings of ambivalence in that many noted they were both proud of and angry

with their deployed parent (Huebner et al., 2007). Additional feelings of ambiguity came from unclear boundaries at home as their roles and expectations in the home changed following deployment. Participants also reported several signs consistent with depression including a loss of interest in regular and previously enjoyed activities, feelings of isolation, changes in sleep and eating habits, and expressed sadness and crying. In relation to anger and impulsivity, participants noted that, following parental deployment, they were more likely to “lash out” at others for things that would not normally upset them.

In another study looking at the psychosocial effects of deployment on military-connected students, 116 spouses with a deployed service member and a child between the ages of 5 and 12 years old completed a deployment packet of demographic information and psychosocial questions (Flake et al., 2009). The results of the study found that 32% of children exceed the cutoff score for the classification of “high risk” psychosocial morbidity, which is 2.5 times the national norms. Of this 32%, 39% were at high risk for externalizing symptoms, 29% for internalizing symptoms, and 13% for attention concerns. Many of these children had trouble sleeping and experienced school-related problems such as dropping grades, decreased interest, and teacher conflict. In summary, this study revealed that one in every three school-aged military-connected children is at risk for psychosocial morbidity during a wartime deployment of a parent (Flake et al., 2009).

Summary

Research conducted in reference to the mental health of military-connected students has grown in the years since 2001 as parental deployments have increased in both length and frequency. This research has shown that these deployments not only impact a student’s home life but also their school life, including difficulties or deficits related to academic decline, social

connectedness, physical wellbeing, and psychological morbidity. However, this research is not without its limitations; the studies conducted have been almost exclusively qualitative in design. Also, they have primarily used military-connected families and/or children recruited through non-random means. Few have utilized a control group and none referenced to inform this study included Coast Guard connected individuals. This study stands in contrast to these because it is quantitative in design, the population chosen is exclusively school personnel, and representatives from all five armed forces were included. It was the goal of this study to understand how the needs of military-connected students are being met by middle and high schools within the public school system of North Carolina. It is believed that this information is necessary to inform the need for related trainings for school personnel and for schools to provide related services.

A study conducted by Richardson (2016) found that interventions and activities that provide social support for military-connected students can lead to positive outcomes. These programs have been found to facilitate more supportive relationships and promote well-being (Huebner et al., 2007; Lucier-Greer et al., 2014). In an additional study conducted by Esposito-Smythers and colleagues (2011), researchers found that school support groups worked as appropriate prevention services for military-connected students with a deployed parent. Most other research available states that few studies have examined the effects of related services for military-connected students, and that there is a significant shortage of evidence-based programs for students within military-connected schools (Guzman, 2014). In 2011, the National Association of Secondary School Principals worked in collaboration with the National Association of School Psychologists to recommend strategies for supporting students from military families. These strategies include maintaining communication with the at-home parent,

considering classroom or school wide initiatives (i.e. pen pals, buddy system, support groups), and staff participation in related trainings.

CHAPTER III

METHOD

Participants

Participants were teachers, administrators (i.e. principals), and school counselors employed at schools with a large military-connected student population (determined by their proximity to an armed forces base). Based on the schools identified by the later explained criteria, the total number of possible participants was 2,604. This number was obtained via the staff directories available on the websites of each school and is an approximation as information on some positions was not available. Also, one school, New Bridge Middle of Onslow County, did not have a staff directory available on their website, so their staff is not included in this number. As this is a voluntary survey, a response rate of 15% or less is expected as this is common for electronic survey research (Fryrear, 2015).

Prior to identifying the schools that would be contacted in regard to survey participation, it was necessary to determine the age range of the students that would be referenced in the study. As the body of supporting research has looked primarily at adolescents, specifically children ages 12 to 18 years old, the same age range was selected for this study. The next step, then, was to determine if the study would include exclusively middle schools, high schools, or both. To increase the likelihood of a moderate response to the survey, it was decided that all identified middle and high schools would be asked to participate.

This study looked exclusively at schools located within the state of North Carolina, as this state is unique in that it houses bases for each branch of service, including the National Guard. To identify possible participants, the *Report to the Joint Legislative Education Oversight Committee* (2012) developed by the North Carolina State Board of Education was used to

identify the counties with the largest military-connected student populations. A general internet search was then conducted to identify the location of each military base by county. Two Air Force bases, two Army bases, one Coast Guard base, three Marine Corps bases, and one Navy base were identified with numerous schools serving the students of each base. A map of the state of North Carolina is presented as Figure 1. This figure identifies the location of each base by county and is color-coded to denote the branch of the armed service housed there. A key is provided in the bottom right-hand corner of the figure. National Guard bases are identified for the sole purpose of noting locations of possible training programs as this study restricted the population to only active duty military-connected students. There are two notes in the bottom left hand corner of the map, each providing information related to North Carolina's military-connected population as it compares to that of the other states in the country. Following Figure 1 is Table 1 which identifies the name of each base as well as its corresponding county and schools.

Inclusion criteria for identified schools were that they must either be a middle school serving grades sixth through eighth or a high school serving grades ninth through twelfth, and that they must have a military-connected student population from one of the identified military bases. Schools were excluded if they served a grade level outside of the stipulations previously identified. This specifically applied to middle schools that serve fifth grade students (eight schools), schools that serve grades kindergarten through eighth (one school), and schools that serve grades sixth through twelfth (three schools). Early Colleges (seven schools), night class programs (three schools), and other alternative schools were also excluded, including schools that operate on a year-round calendar (two schools) and those that solely serve special needs (four schools) or academically gifted students (three schools). The goal of excluding schools

based on the aforementioned criteria was to have each school comparable to the next in terms of the age range of the student body, the curriculum offered, and the school calendar/timeline.

Figure 1 – Map of Bases by County

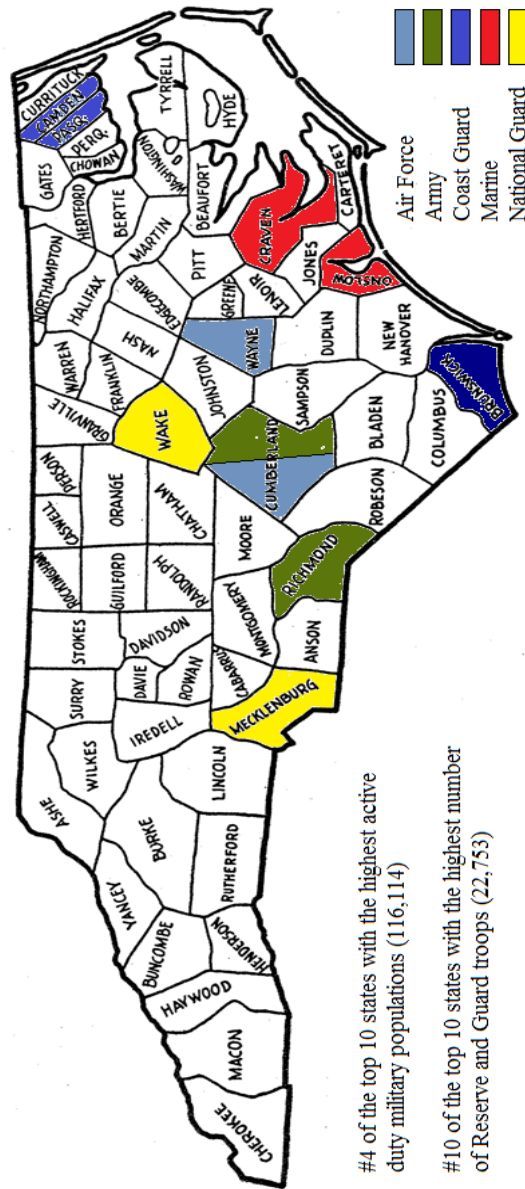


Table 1 – Detailed Base/School Information

Name	County	Middle Schools	High Schools
Air Force Bases			
Pope AFB	Cumberland	Douglas Byrd Gray's Creek Hope Mills Ireland Drive John Griffin Lewis Chapel Luther Nick Jeralds Mac Williams Max Abbott New Century Int. Pine Forest Seventy-First Classic. Spring Lake South View Westover	A.B. Wilkins Cape Fear Douglas Byrd E.E. Smith Gray's Creek Jack Britt Pine Forest Ramsey Street Seventy-First South View Terry Sanford Westover
Seymour Johnson AFB	Wayne	Eastern Wayne Norwayne Rosewood	Charles B. Aycock Eastern Wayne Goldsboro Rosewood Southern Wayne Spring Creek
Army Bases			
Camp Mackall	Richmond	Ellerbe Hamlet Rockingham Rohanen	Richmond County Ninth Grade Academy Richmond Senior

Name	County	Middle Schools	High Schools
Fort Bragg	Cumberland	Douglas Byrd Gray's Creek Hope Mills Ireland Drive John Griffin Lewis Chapel Luther Nick Jeralds Mac Williams Max Abbott New Century Int. Pauline Jones Pine Forest Seventy-First Classic. Spring Lake South View Westover	A.B. Wilkins Cape Fear Douglas Byrd E.E. Smith Gray's Creek Jack Britt Pine Forest Ramsey Street Seventy-First South View Terry Sanford Westover
Coast Guard Bases			
Air Station Elizabeth City	Pasquotank & Camden	Elizabeth City River Road Camden	Pasquotank County Northeastern Camden County
Marine Corps Bases			
Camp Lejeune & MACAS New River	Onslow	Dixon Hunters Creek Jacksonville New Bridge Northwoods Southwest Swansboro Trexler	Dixon Jacksonville Northside Richlands Southwest Swansboro White Oak

Name	County	Middle Schools	High Schools
Marine Corps Bases			
MCAS Cherry Point	Craven	Grover C. Fields H.J. MacDonald Havelock Tucker Creek West Craven	Havelock New Bern West Craven
Navy Bases			
Military Ocean Terminal Sunny Point	Brunswick	Cedar Grove Leland Shalotte South Brunswick	North Brunswick South Brunswick West Brunswick

A letter to the superintendents of each school district identified was drafted to inform them of the purpose of the study and to request their participation (Appendix B).

Instrumentation

An eighteen item questionnaire was used to obtain information that addressed each of the five hypotheses (Appendix E). This questionnaire was also used to obtain demographic information related to each participant and their school. Completion of the survey was completely anonymous.

The questionnaire was developed based on information obtained from the literature review and based on the hypotheses of the study. The first six questions were developed to obtain demographic information from the participants. Specifically, these questions asked for the number of years each participant had held their current position, the number of years they have worked in a military-connected school district, the branch or branches of service associated

with their school, the number of students they oversee (including both civilian and military-connected students), and for an estimation of the percentage of military-connected students represented within the student body.

Questions eight through twelve were developed to assess how well school personnel are able to identify the unique needs of military-connected youth. Development of these questions was based on several areas of previous research which found that: military-connected youth are likely to be distracted in class, experience a loss of interest and increased teacher conflict, and experience a decline in grades and in standardized test scores (Huebner et al., 2007; Chandra et al., 2010; Flake et al., 2009; Richardson, 2011), that military-connected student absences may increase during the deployment of at least one parent (Richardson, 2011), that many military-connected students experience symptoms of anxiety, depression, grief, and impulsivity (De Pedro et al., 2011; Chandra et al., 2010; Huebner et al., 2007; Flake et al., 2009; Huebner, 2007), and that military-connected students are likely to have a high prevalence of substance use, an increased likelihood of lifetime drug use, and are more likely to carry a weapon to school (Gilreath et al., 2013; Gilreath et al., 2014). Questions seven and eight asked participants to compare military-connected students to their civilian peers in terms of academic success and number of absences. Questions nine, eleven, and twelve were True/False questions related to transitioning, weapon carrying, and injury in sports. Question twelve was not based on the current body of research but was included as a non-example question for comparative purposes. Question ten was a select all that apply question related to common mental-health issues experienced by military-connected students. The answer choices available for this question included disorders more prevalent among military-connected students but also other disorders

and conditions not linked to higher-incidence among military-connected students to provide both example and non-examples of high incidence conditions.

Question thirteen addressed whether or not the participant had attended a course or training program related to the needs of military-connected students. If so, questions fourteen through seventeen addressed the type of course or program attended, the branch of service or organization that offered the training, the way in which their participation was funded, and how confident they were in their abilities to serve their military-connected student population as a result. These questions were developed to determine whether or not military-connected courses and training programs are being utilized by school personnel, which branch of service or related organization is most associated with training programs, whether or not school districts are providing funding for these programs, and how effective they are perceived to be in helping school personnel serve their military-connected student populations. Participants who reported they had not participated in a related training program were directed to question seventeen which asked participants to rate their confidence in serving the mental-health needs of military-connected students. This question was developed to aid in determining the perceived effectiveness of training programs as a point of comparison.

Question eighteen was developed to obtain information on the related services made available to military-connected students by the school to aid in their adjustment and feelings of social connectedness. This question was developed based on the research suggesting that military-connected students experience weak social ties to their school and peers (Flake et al., 2009; Bradshaw et al., 2010).

A nineteenth question was also found on the survey; however, this item was solely related to the raffle entry. This item explained that if participants would like to participate in the

raffle to win one of three \$15 Amazon gift cards, they were to follow the link provided which would direct them to an additional survey. On this one-item survey, participants were asked to provide their first and last names, as well as their school email address. Winners received an electronic version of their gift card following the close of the survey.

Procedures and Data Analysis

Approval for human subject research was obtained from the East Carolina University Institutional Review Board (ECU IRB) (Appendix A). Following ECU IRB approval and superintendent approved participation, the survey was disseminated to the aforementioned schools via school principal or principal investigator e-mail. The principal for each school was provided with instructions for dissemination of the survey (Appendix C) as well as pre-written email content directed toward teachers and support staff that may be copied and pasted into an email for those recipients if they chose to disseminate the survey themselves (Appendix C). A separate email was drafted in the event principals chose the principal investigator dissemination method (Appendix D). The survey was available for three weeks with reminder e-mails sent out at the two week remaining mark and the one week remaining mark (Appendix D). An incentive to complete the survey was offered in the form of a chance to win one of three \$15 Amazon gift cards, as previously discussed.

To address Hypothesis I (knowledge of the needs of military-connected students) the number of participants who accurately and inaccurately identify the needs of military-connected students in each area is reported. Related to Hypothesis II (participation in training programs related to military-connected students), the percentage of participants who have had formal training related to working with military-connected students is reported. To address Hypothesis III (confidence in serving military-connected students with or without training), average

confidence ratings in all areas are reported for descriptive purposes. Using t-tests, confidence ratings were compared between those who have and have not reported formal training on working with military-connected students. Also, the branch of service or related organization associated with the most highly participated in training program is provided. To address Hypothesis IV (funding is likely provided by a branch of service or related organization rather than the school district or individual participant), the most frequently selected answer choice is provided. The percentage of participants whose schools were using at least one of the programs listed in the survey is reported for descriptive purposes (Hypothesis V).

CHAPTER IV

RESULTS

Of the eight districts contacted, four superintendents agreed to their district's participation in this study (Camden County, Craven County, Cumberland County, and Richmond County Schools). Five-hundred-seven emails were sent to the appropriate staff members and 139 surveys were initiated, resulting in a response rate of 27.42%. Of the 139 individuals who began the survey, 105 completed all items. The remaining 34 participants formally initiated the survey but either did not complete any items or only completed up to 25% of the items presented. The responses provided by those participants were omitted to provide an accurate representation of military-connected school personnel within the North Carolina public school system. Based on the initially identified population of 2,604, the resulting population makes up approximately 4% of those personnel.

Descriptive Statistics

A total of 5 principals, 17 school counselors, and 83 teachers completed the study; no assistant principals chose to participate. At the time of the survey, participants had worked in their current position for an average of 12.82 years with a range of 1 to 38 years. Participants had also worked in a military-connected school for an average of 12.21 years. This information is provided in Table 2 along with information related to the number of students overseen by each participant. The majority of participants represented schools serving families of the Marine Corps ($n = 76$), followed by the Navy ($n = 53$), Army ($n = 40$), Air Force ($n = 24$), and Coast Guard ($n = 23$). The majority of these participants estimated that military-connected students make up less than 25% of the student body ($n = 42$). Others estimated between 25% and 49% ($n = 28$) or between 50% and 75% ($n = 5$). Thirty participants (28.57%) were unsure of the

percentage of military-connected students within their school’s student body. This low percentage of participants indicating they are unsure of the number of military-connected students within their school’s student body was not anticipated as research has shown that the majority of school personnel cannot identify their military-connected students (Mmari et al., 2010; De Pedro et al., 2014). As accurate information on the number of military-connected students from each school was unavailable, it is possible that participants inaccurately selected the percentage of military-connected students represented within their student body.

Table 2 – Demographic Information

		Years in Position	Years at Military-Connected School	Number of Students Overseen
N	Valid	105	105	105
	Missing	0	0	0
Mean		12.8190	12.2095	242.7619
Median		13.0000	12.0000	90.0000
Mode		6.00*	13.00	75.00*
Range		37.00	36.00	2990.00
Minimum		1.00	1.00	10.00
Maximum		38.00	37.00	3000.00

* Multiple modes exist. The smallest value is shown

Testing of Hypothesis I

The first hypothesis examined how well school personnel are able to identify the unique needs of military-connected students. It was predicted that more than half of participants would not be able to correctly identify these needs when comparing military-connected students to their civilian peers. Of the 6 related questions asked, more than half of all participants provided incorrect answers for 4 questions. Few participants were able to correctly identify that (1)

military-connected students are more likely to earn predominantly below average or failing grades than are their civilian peers (.98% correct, 99.02% incorrect), (2) that military-connected students are likely to miss more days than their civilian peers (16.51% correct, 83.49% incorrect), (3) that attachment disorder, eating disorders, autism, and learning disorders are no more prevalent among military-connected students than their civilian peers, (4) or that military-connected students are more likely to bring a weapon to school than are their civilian peers (1.98% correct, 98.02% incorrect). For information on all answer choices, refer to Figures 2 through 5. The majority of participants correctly identified that military-connected students experience difficulty transitioning to a new school (74.76% correct) and correctly answered the non-example question by identifying that military-connected students are no more likely to become injured in sports than their civilian peers (95.00% correct).

Based on these data, hypothesis I is supported as more than half of participants were not able to correctly identify the needs of military-connected students when comparing them to their civilian peers.

Figure 2 – Academic Success (*n* = 105)

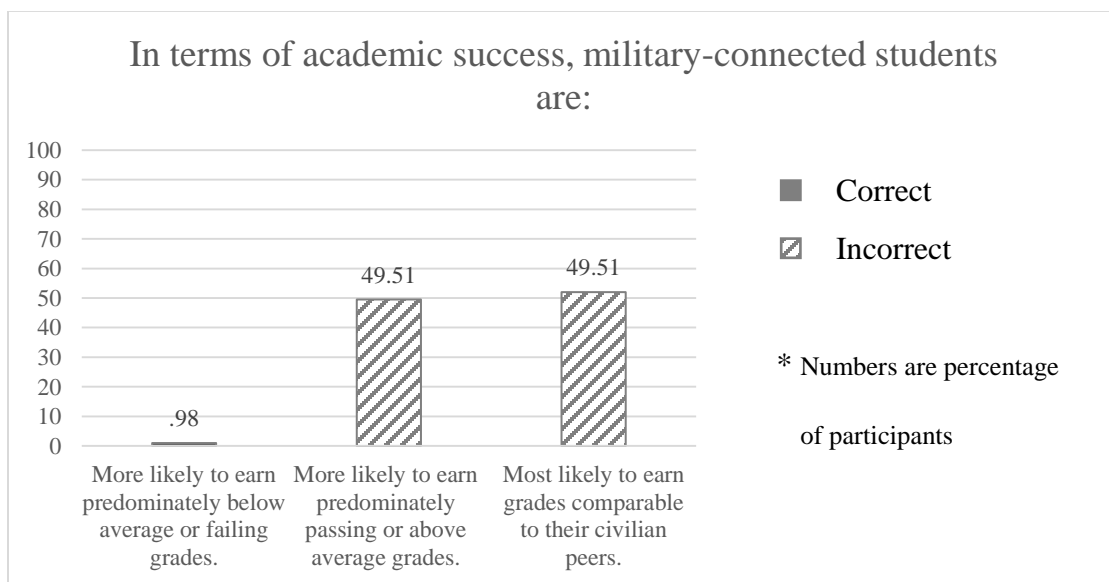


Figure 3 – Attendance (n = 105)

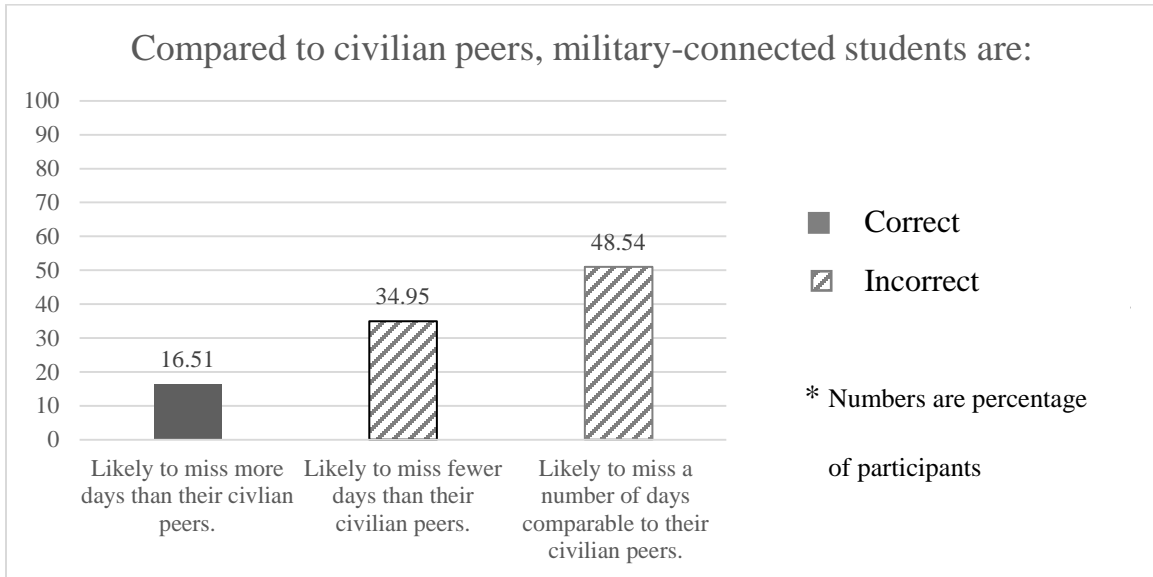


Figure 4 – Common Disorders (n = 105)

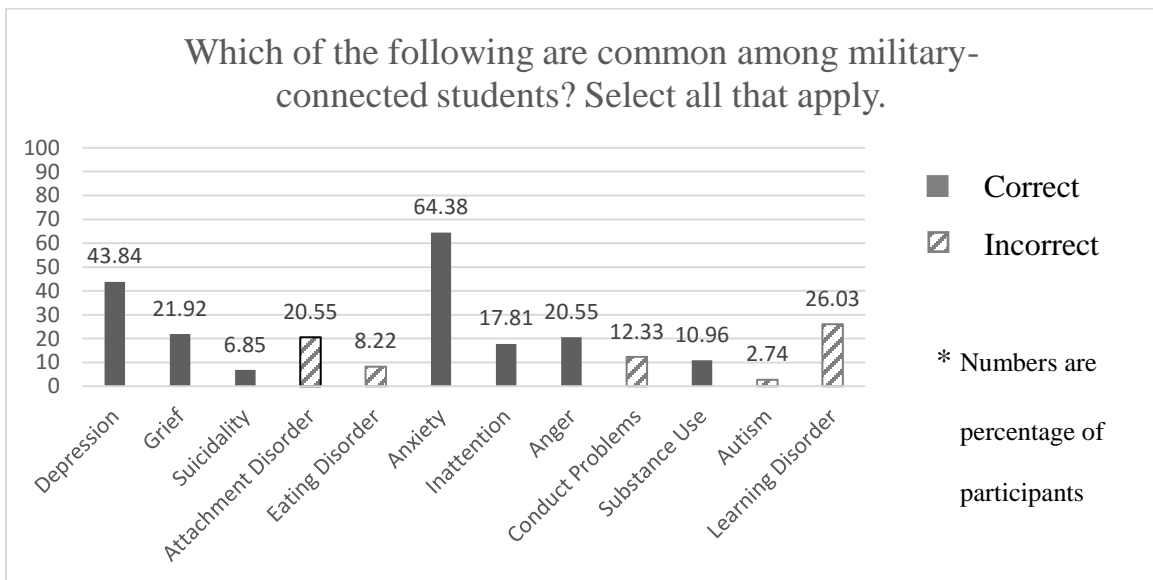
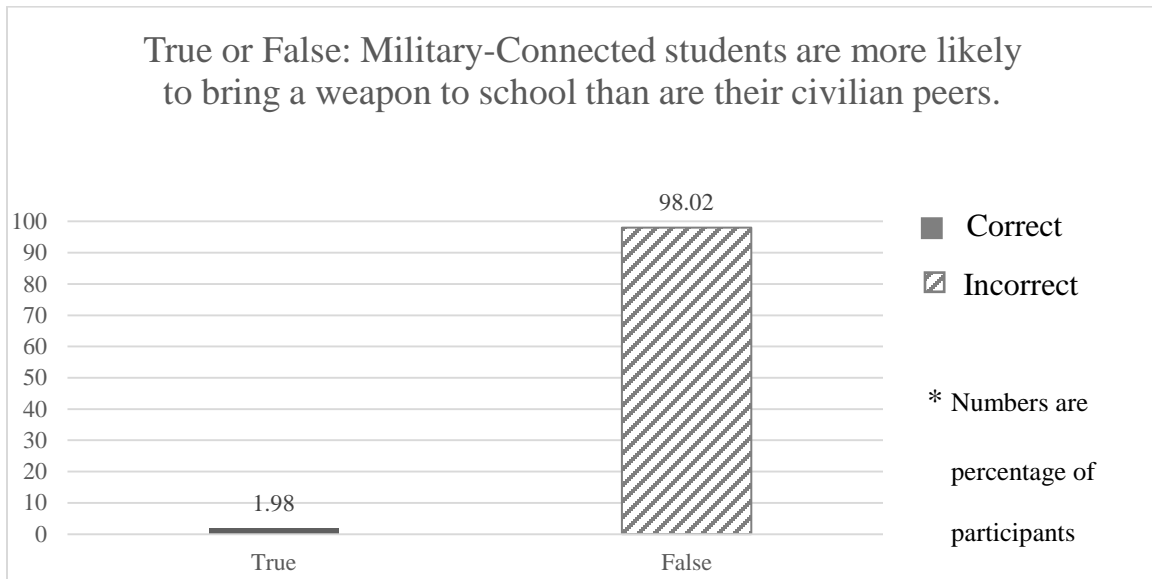


Figure 5 – Weapon Carrying (*n* = 105)



Testing of Hypothesis II

Hypothesis II examined the number of participants who have received training related to the mental health or academic needs of military-connected students. It was predicted that more than half of participants had not received any training related to these needs. The results revealed that more than half (80.00%) of participants had not participated in a military-connected student related training program. Of the 20% of participants who had participated in a related training program, 61.90% had worked in a military-connected school for at least 14 years while the remaining 38.10% had worked in a military-connected school for 6 years or fewer. Therefore, hypothesis II was supported as more than half of participants had not received any training related to the needs of military-connected students.

Testing of Hypothesis III

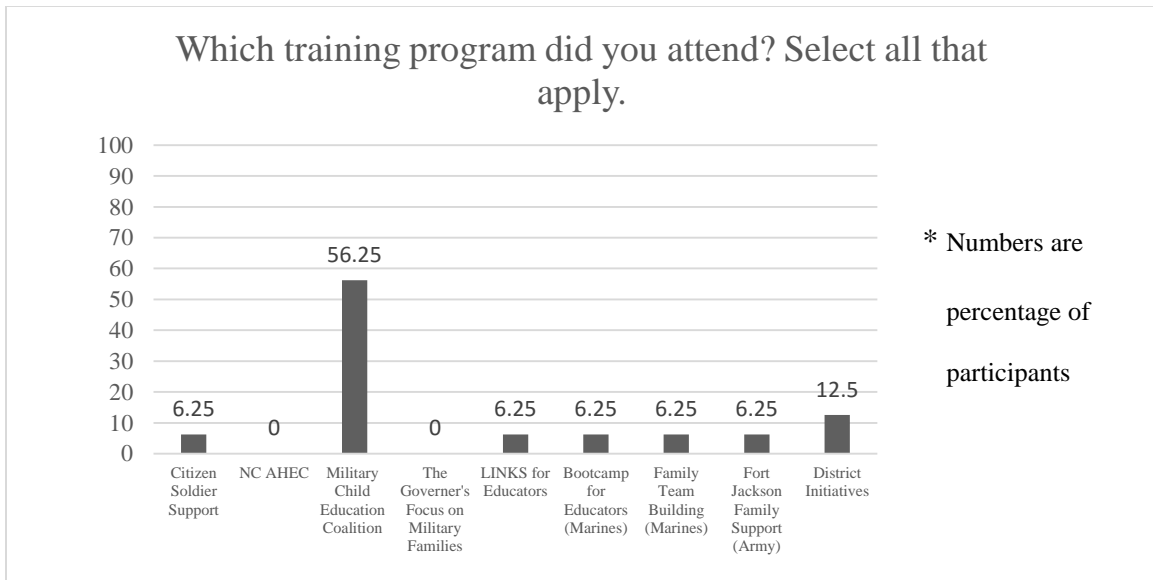
Hypothesis III examined how confident participants are in their abilities to address the mental health needs of military-connected students as a result of their training or due to a lack thereof. It was predicted that participants more confident in their abilities to address the needs of

these students will have participated in a related training program and that the program most attended would be that offered by a branch of service or related organization rather than by the school or school district. A single sample t-test was conducted to determine if a statistically significant difference existed between participants who had received formal training and participants who had not in each of the eight mental health areas identified as prevalent among military-connected students by the literature review. Participants who had completed a formal training program reported that they perceive themselves as more confident in their abilities to serve military-connected students with depression ($M = 4, SD = .79$) than participants without formal training, $t(103) = 10.117, p < .0001$. In terms of grief, participants who had completed a formal training program again reported that they perceive themselves as more confident in their abilities to help military-connected students ($M = 3.8, SD = 1.06$) than participants without formal training, $t(103) = 6.328, p < .0001$. Participants with formal training also reported that they perceive themselves as more confident in their abilities to help military-connected students exhibiting suicidality ($M = 3.75, SD = 1.07$) than participants without formal training, $t(103) = 8.799, p < .0001$. In terms of anxiety, participants who had completed a formal training program reported that they perceive themselves as more confident in their abilities to serve military-connected students ($M = 4.2, SD = .696$) than participants without formal training, $t(103) = 11.795, p < .0001$. Again, in terms of inattention, participants who had completed a formal training program reported that they perceive themselves as more confident in their abilities to serve military-connected students ($M = 2.63, SD = 1.34$) than participants without formal training, $t(74) = 2.129, p < .037$. Participants with formal training also reported that they perceive themselves as more confident in their abilities to help military-connected students experiencing anger ($M = 3.85, SD = .933$) than participants without formal training, $t(103) =$

7.379, $p < .0001$. In terms of conduct problems, participants with formal training reported that they perceive themselves as more confident in their abilities to help military-connected students ($M = 4.05$, $SD = .76$) than participants without formal training, $t(103) = 11.263$, $p < .0001$. Lastly, in terms of substance use, participants with formal training again reported that they perceive themselves as more confident in their abilities to help military-connected students ($M = 3.60$, $SD = 1.14$) than participants without formal training, $t(103) = 7.146$, $p < .0001$.

The majority of participants (56.25%) who had received formal training related to the needs of military-connected students reported that they participated in trainings offered by the Military Child Education Coalition. For information on all answers provided, refer to Figure 6.

Figure 6 – Training Programs ($n = 21$)

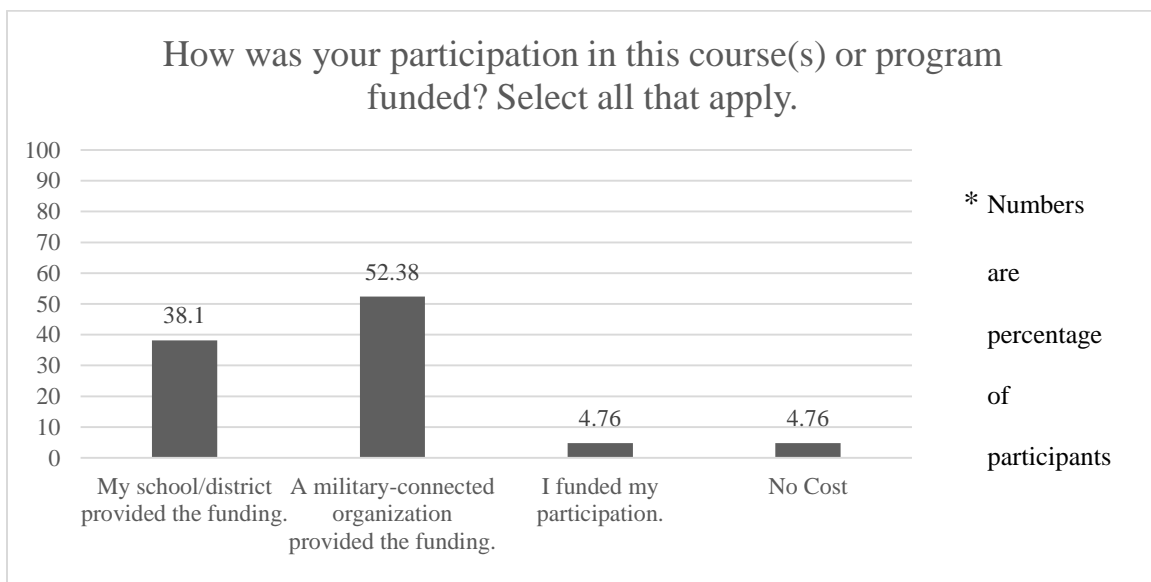


Based on these data, hypothesis III was supported as participants more confident in their abilities to address the needs of military-connected students had participated in a related training program, and as the most attended program was that offered by the Military Child Education Coalition, a military-connected organization.

Testing of Hypothesis IV

The fourth hypothesis examined the source of funding participants received in order to participate in their training program. It was predicted that funding would be provided by a branch of service or related organization rather than by the school district or individual participant. The results revealed that funding primarily came from a branch of service or related organization (52.38%), followed by the school district (38.10%) (See Figure 7). Therefore, hypothesis IV was supported.

Figure 7 – Sources of Funding

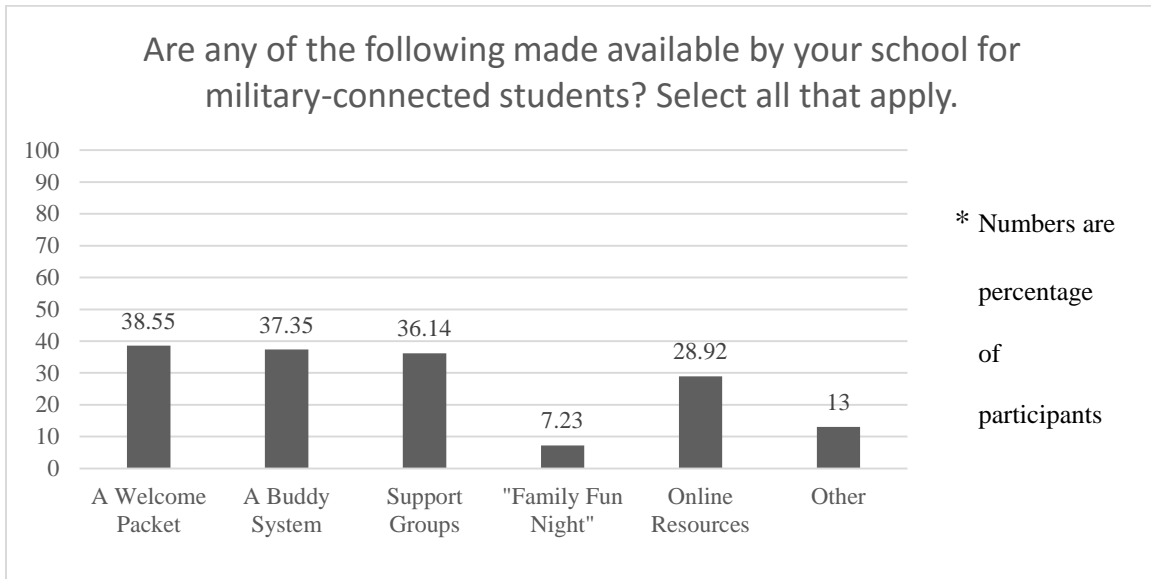


Testing of Hypothesis V

The final hypothesis examined the percentage of participants whose schools were using at least one military-connected student related service at the time of the survey. It was predicted that less than half of the schools represented would be using at least one program. The results revealed that more than half (76.19%) of the schools represented were reported to be using at least one related service at the time of this study. These programs included welcome packets, a

buddy system, support groups, family nights, online resources, and other programs not specified (see Figure 8). Based on these data, hypothesis V was not supported.

Figure 8 – Related Services



Summary

Of the eight districts initially identified as possible participants in this study, four agreed to participation, resulting in a total possible population of 507 school personnel. Of this 507, 105 individuals completed the survey, representing principals, school counselors, and teachers of military-connected schools within the state of North Carolina. Based on the data obtained, less than half of participants were able to identify the unique needs of military-connected students and also had not received any training related to those needs. Also, participants more confident in their abilities to serve this population of students had participated in a related training program, one that was offered by a branch of service or military-connected organization rather than by their school or school district. Funding for these programs were primarily offered by a branch of service or military-connected organization. Contrary to what was anticipated, more

than half of the schools represented were reported to be using at least one military-connected student related service.

CHAPTER V

DISCUSSION

The purpose of this study was to determine the abilities of school personnel from public schools in the state of North Carolina with large military-connected student populations to recognize the needs of military-connected students, and to determine their perceived confidence in their abilities to serve this population of students as a result of their training or due to a lack thereof. This study was conducted in light of the limited body of research currently available related to military-connected students and sought to provide information specifically related to school personnel. It was the goal of this study to expose the need for school personnel to participate in trainings related to the unique and complex needs of military-connected students.

As anticipated, more than half of the participants were unable to identify the needs of military-connected students and had not participated in any related training programs. This lack of knowledge related to both the needs of these students and to addressing those needs has been shown to have serious implications for military-connected students, including increased academic difficulties, a lack of engagement in school culture and increased behavior problems (i.e. fighting) (De Pedro et al., 2014). Specifically, the present study found that school personnel were unaware of the differences between military-connected students and their civilian peers. The fact that they were unaware of these differences could seriously affect both the school and student body as previous research has shown that military-connected students who have experienced at least one parental deployment are likely to experience a decline in grades, a lack of interest in subject material and school activities, difficulty maintaining concentration, and a decrease in standardized test scores (Huebner et. al., 2007; Chandra et al., 2010; Flake et al., 2009; Richardson, 2011). Also, these students are more likely to bring a weapon to school, to

engage in substance use, and to develop anxiety, depression, grief, and impulsivity (Gilfreath 2013; Gilreath, 2014; De Pedro et al., 2011; Chandra et al., 2009; Huebner et al., 2007; Flake et al., 2009). Lastly, military-connected students are likely to experience feelings of disconnection from their school community, weak or tense relationships with teachers, weak social networks, and discrimination from their school community (Flake et al, 2009; Mmari et al., 2010; Bradshaw et al., 2010). Research has shown that schools can protect military-connected students from long-term negative social, emotional, and psychological outcomes by fostering an understanding school environment (De Pedro et al., 2014). To this effect, school administrators play a significant role in defining their school's mission and are ultimately responsible for encouraging and/or establishing their school's involvement in military-connected training programs. Researchers Astor, Benbenishty, and Estrada (2009) found that school administrators can engage school personnel to create a school climate that addresses challenges, such as those presented by a large population of military-connected students. Development of an understanding and inclusive school environment comes from encouraging participation in related training programs, seeking appropriate funding for these trainings (i.e. branch or related organization funded programs, applying for related grants), and by providing support programs for students (i.e. buddy systems, welcome packets, support groups, etc.). In a study conducted by Mmari and colleagues (2010), many youth cited that one of the best strategies to help them transition and feel included in a new school was to develop a 'meet and greet' and buddy system program. Several additional studies support the findings that school administrators have a significant impact on altering their school's organizational and instructional state to become more inclusive of military-connected students and their unique needs: Moolenaar, Daly, and Slegers, 2010; Tanner and Dennard, 1995; and Whalstrom and Louis, 2008.

Again as anticipated, those participants who had received formal training related to the needs of military-connected students rated themselves as more confident in their abilities to serve those students than did those participants who had not received formal training. At the time of this study, there was no research examining the correlation between the impact of school personnel training participation and military-connected student success (i.e. academic success, social connectedness, psychological health, etc.). However, training participation, by its nature, introduces school personnel to the unique needs of military-connected students, therefore increasing their awareness of these needs within their school. Their confidence in their abilities to serve these students also increases the likelihood that they will attempt to help these students by providing support or seeking support from more appropriate sources. A show of support in general promotes a positive school environment for military-connected students. In contrast, a lack of confidence and/or knowledge base related to the needs of military-connected students likely prevents school personnel from adequately serving these needs and from fostering a supportive and inclusive school environment. This likely leads to an adverse impact on military-connected student functioning.

In terms of training funding, the results were as anticipated; programs were largely funded by a specific branch of service or related organization (52.38%), followed by individual school districts (38.10%). It is unknown the number of schools aware of and applying for grants provided by the Department of Defense Education Activity (DoDEA). Since 2008, this organization has had the authority to share resources with military-connected public schools across the country. From 2009 to the time of this study, Education Partnership Program grants have reached over 1.5 million students in over 2,000 schools. Additionally, over 321 grants have been awarded, totaling over \$400 million in LEAs serving military-connected students. Data

collected by the DoDEA has shown that this funding and its application have resulted in significant improvements in student achievement, an increase in professional development for teachers, and enhanced social and emotional support (DoDEA, n.d.).

In contrast to what was anticipated, more than half (76.19%) of participants reported that their schools are using at least one related service program designed specifically for military-connected students. A welcome packet (38.55%), buddy system (37.35%), and support groups (36.14%) were identified as the top three related services offered. These choices are supported by the research previously discussed which stated that many youth cited that one of the best strategies to help them transition and feel included in a new school was to develop a ‘meet and greet’ and buddy system program (Mmari et al., 2010). As many schools did not have links to these services on their website and as detailed information on these services was not gathered, it is unknown how comparable the services represented by the answer choice “other” are to those explicitly named as possible selections within the survey. Also, it is unknown how accurate participants were in identifying related services offered by their school. There is also the possibility that many of these services are offered to the entire student body and are not exclusive to supporting military-connected students.

Limitations

There were several limitations to this study. First, the survey used was developed specifically for this study and some item revisions may be necessary. Specifically, questions 14 and 19 should be reworded as these questions may not provide an accurate measure of the information intended. In terms of question 14, which asks about training programs participated in by respondents, participants were able to provide the name of a training program not listed in the question. These additional programs, though included in the results of this study, may not be

comparable to those listed in the survey in terms of curriculum or quality of instruction. In terms of question 19, which asks participants to select the related service(s) used by their school, participants were able to select “other;” however, they were not able to provide a text entry explaining this choice. Therefore, it is unknown whether or not these “other” programs are comparable to those explicitly named and provided as possible selections within the survey. Also, related to the limitations of survey use in general, participants had a limited selection of responses based on the scope of this research and what was perceived important during survey development. Participants were unable to report additional information they may have felt important related to serving military-connected students and families.

Second, the results of this study may have been skewed by social acceptability. Specifically, participants may have provided responses based on their desire to appear that they were not biased against military-connected students, not on what they knew or perceived to be true of these students.

Lastly, this study was conducted during an especially busy time of the school year when state-wide testing is being conducted. The four superintendents who denied their district’s participation did so due to the additional stress and time constraints placed on school personnel during the months of May and June. Had this study been conducted in September, October, and/or November, the number of schools participating as well as the number of responses received would have likely been higher.

Future Research

This survey was sent to school personnel within the state of North Carolina and therefore includes a limited sample from one state. The information provided by this sample may not be representative of that of other military-connected states. These personnel may be limited by

barriers specific to the state of North Carolina in terms of training programs available, distance to programs, and available funding for both training participation and military-connected student related services. Also, personnel in other states may have different perceptions regarding the importance and/or necessity of training programs related to the needs of military-connected students. Therefore, future research would be strengthened by using a larger, more representative sample from military-connected schools nationwide.

In terms of perceived confidence of participants who have received formal training, it would be beneficial to determine the most effective components of the training programs participated in by school personnel to improve upon the curriculum of existing programs and to inform the development of future programs. Research has found that there are few, if any, training programs designed for school personnel delivered within schools within the United States and as such, future research in this area would be greatly beneficial in the development of these programs. It would also be beneficial to determine the correlation between school personnel who have participated in training programs and military-connected student needs to determine how effective personnel are in applying their training. In terms of related services, it would also be beneficial to determine the most effective components of existing related services to inform the development of interventions as few evidence-based interventions related to military-connected students existed at the time of this study (Guzman, 2014).

Conclusion

As this study has shown that the needs of military-connected students are largely unknown by school personnel within the state of North Carolina, and as previous research has revealed the serious implications these students face, it is hoped that the results of this research will educate school leaders and personnel on the training programs and funding available to them

so that they may take advantage of them and better serve this unique population of students. It is also hoped that the results of this study will encourage the continued use of military-connected student related services and to inspire school leaders to foster school climates understanding and inclusive of military-connected students.

REFERENCES

- 2014 demographics report: Profile of the military community. (2014). ().Department of Defense.
- Astor, R. A., Benbenishty, R., & Estrada, J. N. (2009). School violence and theoretically atypical schools: The principal's centrality in orchestrating safe schools. *American Educational Research Journal*, 46(2), 423-461. doi:10.3102/0002831208329598
- Barnes, V. A., Davis, H., & Treiber, F. A. (2007). Perceived stress, heart rate, and blood pressure among adolescents with family members deployed in operation iraqi freedom. *Military Medicine*, 172(1), 40-43. Retrieved from <http://jproxy.lib.ecu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2007-00391-003&site=ehost-live>
- Bradshaw, C. P., Sudhinaraset, M., Mmari, K., & Blum, R. W. (2010). School transitions among military adolescents: A qualitative study of stress and coping. *School Psychology Review*, 39(1), 84-105. Retrieved from <http://jproxy.lib.ecu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2010-06305-007&site=ehost-live>
- Chandra, A., Lara-Cinisomo, S., Jaycox, L. H., Tanielian, T., Burns, R. M., Ruder, T., & Han, B. (2010). Children on the homefront: The experience of children from military families. *Pediatrics*, 125(1), 16-25. doi:10.1542/peds.2009-1180
- De Pedro, Kris M. Tunac, Astor, R. A., Benbenishty, R., Estrada, J. J., Smith, G. R. D., & Esqueda, M. C. (2011). The children of military service members: Challenges, supports, and

future educational research. *Review of Educational Research*, 81(4), 566-618. Retrieved from

<http://jproxy.lib.ecu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psych&AN=2011-26274-005&site=ehost-live>

De Pedro, K. T., Atuel, H., Malchi, K., Esqueda, M. C., Benbenishty, R., & Astor, R. A. (2014).

Responding to the needs of military students and military-connected schools: Perceptions and actions of school administrators. *Children & Schools*, 36(1), e18-e25.

doi:10.1093/cs/cdt047

DoDEA. The DoDEA grant program. Retrieved from

<http://www.dodea.edu/Partnership/grants.cfm>

Esposito-Smythers, C., Wolff, J., Lemmon, K. M., Bodzy, M., Swenson, R. R., & Spirito, A.

(2011). Military youth and the deployment cycle: Emotional health consequences and recommendations for intervention. *Journal of Family Psychology*, 25(4), 497-507.

doi:10.1037/a0024534

Flake, E. M., Davis, B. E., Johnson, P. L., & Middleton, L. S. (2009). The psychosocial effects

of deployment on military children. *Journal of Developmental and Behavioral Pediatrics*, 30(4), 271-278. doi:10.1097/DBP.0b013e3181aac6e4

Fryrear, A. (2015). Survey response rates. Retrieved from <https://www.surveygizmo.com/survey-blog/survey-response-rates/>

- Gilreath, T. D., Astor, R. A., Cederbaum, J. A., Atuel, H., & Benbenishty, R. (2014). Prevalence and correlates of victimization and weapon carrying among military- and nonmilitary-connected youth in southern california. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, *60*, 21-26. doi:10.1016/j.ypmed.2013.12.002
- Gilreath, T. D., Cederbaum, J. A., Astor, R. A., Benbenishty, R., Pineda, D., & Atuel, H. (2013). Substance use among military-connected youth: The california healthy kids survey. *American Journal of Preventive Medicine*, *44*(2), 150-153. doi:10.1016/j.amepre.2012.09.059
- Gorman, G. H., Eide, M., & Hisle-Gorman, E. (2010). Wartime military deployment and increased pediatric mental and behavioral health complaints. *Pediatrics*, *126*(6), 1058-1066. doi:10.1542/peds.2009-2856
- Guzman, C. V. (2014). School-age children of military families: Theoretical applications, skills training, considerations, and interventions. *Children & Schools*, *36*(1), 9-14. doi:10.1093/cs/cdt023
- Huebner, A. J., Mancini, J. A., Wilcox, R. M., Grass, S. R., & Grass, G. A. (2007). Parental deployment and youth in military families: Exploring uncertainty and ambiguous loss. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, *56*(2), 112-122. doi:10.1111/j.1741-3729.2007.00445.x
- Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly*, *68*(1), 94-101. doi:10.1093/poq/nfh006

Lucier-Greer, M., Arnold, A. L., Grimsley, R. N., Ford, J. L., Bryant, C., & Mancini, J. A.

(2014). Parental military service and adolescent well-being: Mental health, social connections and coping among youth in the usa. *Child & Family Social Work*, doi:10.1111/cfs.12158

Military Child Education Coalition, & AACTE. Who are military-connected students? Retrieved from https://secure.aacte.org/apps/rl/res_get.php?fid=1256&ref=rl

Mmari, K. N., Bradshaw, C. P., Sudhinaraset, M., & Blum, R. (2010). Exploring the role of social connectedness among military youth: Perceptions from youth, parents, and school personnel. *Child & Youth Care Forum*, 39(5), 351-366. doi:10.1007/s10566-010-9109-3

Moolenaar, N. M., Daly, A. J., & Slegers, P. J. C. (2010). Occupying the principal position: Examining relationships between transformational leadership, social network position, and schools' innovative climate. *Educational Administration Quarterly*, 46(5), 623-670. doi:10.1177/0013161X10378689

Report to the joint legislative education oversight committee: Behavioral health services for the military. (2012). (No. 15). Department of Public Instruction.

Richardson, A. (2011). Effects of soldiers' deployment on children's academic performance and behavioral health *RAND Corporation*,

Tanner, C. K., & Dennard, V. R. (1995). Leadership behavior of the high school principal and assistant principal for instruction. *The High School Journal*, 78(3), 172-182. Retrieved from

<http://jproxy.lib.ecu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psych&AN=1995-38851-001&site=ehost-live>

Wahlstrom, K. L., & Louis, K. S. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility. *Educational Administration*

Weber, E.G., & Weber, D. K. (2005). Geographic relocation frequency, resilience, and military adolescent behavior. *Military Medicine*, 170(7), 638-42. Retrieved from <http://search.proquest.com.jproxy.lib.ecu.edu/docview/217058776?accountid=10639>

APPENDIX A: ECU IRB APPROVAL

EAST CAROLINA UNIVERSITY

University & Medical Center Institutional Review Board Office



4N-70 Brody Medical Sciences Building · Mail Stop 682

600 Moye Boulevard · Greenville, NC 27834

Office **252-744-2914** · Fax **252-744-2284** · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB

To: Meagan Lupton

CC: Jeannie Golden

Date: 6/22/2016

Re: UMCIRB 16-000832

The Mental Health of Military-Connected Students

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 6/22/2016 to 6/21/2017. The research study is eligible for review under expedited category # 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
IRB Survey Letter.docx	Consent Forms
Letter to Superintendents.docx	Recruitment Documents/Scripts
Lupton_Thesis (1).docx	Study Protocol or Grant Application
Survey.docx	Surveys and Questionnaires

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418

IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

APPENDIX B: LETTERS TO SUPERINTENDENTS



Hello Superintendent [INSERT LAST NAME],

My name is Meagan Lupton and I am a school psychology MA/CAS student enrolled at East Carolina University. I am contacting you today to request the participation of your district in an online survey developed to assess the ways in which the public schools of North Carolina are serving our large military-connected student population. As I am sure you are aware, North Carolina has a large military population and is unique in that each branch of service is represented in our state. Our military-connected students experience many unique circumstances related to their proximity to the military lifestyle. As a result, these students have an increased risk of developing academic deficits, mental health issues and physical health problems, among other coping issues. The survey I have developed will address the types of related training programs participated in by school personnel, their confidence in their abilities to serve this population of students, and the services already provided by individual schools. The survey is eighteen questions long and takes approximately four minutes to complete. Given your consent, it will be disseminated to principals, assistant principals, school counselors, and general education teachers (including CTE personnel) via email. At the conclusion of the survey, participants will have the opportunity to enter a drawing to win one of three \$15 Amazon gift cards. I sincerely hope that your district will be able to participate and I look forward to hearing from you soon.

Take care,

Meagan Lupton
School Psychology MA/CAS Student
East Carolina University
luptonm10@students.ecu.edu



Hello Superintendent [INSERT LAST NAME],

Thank you for allowing your district to participate in the online survey. I am excited that your district's information will be represented in the data. The survey will be disseminated on May 17, 2016 to each school's principal by myself. The principal will then have the choice to disseminate the survey to the appropriate staff members themselves or ask that I do so on their behalf. Should they choose to disseminate it themselves, I will provide each principal with a script that they may copy and paste into their staff email. Participants will have three weeks to complete the survey, with reminder emails sent out at the two week remaining and one week remaining mark. Again, I am thrilled to have your participation and look forward to working with your district.

Take care,

Meagan Lupton
School Psychology MA/CAS Student
East Carolina University
luptonm10@students.ecu.edu

APPENDIX C: LETTER TO PRINCIPALS



Hello Principal [INSERT LAST NAME],

We are excited to share with you that your school has been approved by Superintendent [NAME] to participate in an East Carolina University School Psychology Program thesis research study developed to assess the ways in which the schools in North Carolina are serving our large military-connected student population. The survey takes approximately four minutes to complete and is to be completed by you, all assistant principals, school counselors, and core instruction teachers (including CTE instructors). You may choose to disseminate the survey yourself, in which case the paragraph below has been provided as a description of the survey that may be copied and pasted into the email to be sent to the appropriate staff members. The link you and all other staff members will use to reach the survey is also included. Alternatively, you may ask that I, as the principal investigator, disseminate the survey on your behalf. As incentive to complete the survey, participants may choose to enter a raffle for the chance to win one of three \$15 Amazon gift cards. If you have any questions please do not hesitate to ask. I greatly appreciate your school's participation and look forward to the opportunity to include your information in the data.

Hello Assistant Principals, School Counselors, and Teachers,

Our school has been chosen to participate in a thesis research study conducted by Meagan Lupton, a School Psychology graduate student enrolled at East Carolina University. This study was developed to assess the ways in which the schools in North Carolina are serving our large military-connected student population. The following link will take you to a survey which takes approximately four minutes to complete:

[LINK]

Following completion of the survey, you may choose to participate in a raffle to win one of three \$15 Amazon gift cards. Participation in the raffle requires you follow an additional link where you will provide your first and last names, as well as your school email address. This information cannot be tied to your completed survey information. The survey must be completed by June 3, 2016. Your participation is greatly appreciated.

Take care,

Meagan Lupton
School Psychology MA/CAS Student
East Carolina University
luptonm10@students.ecu.edu

APPENDIX D: LETTERS TO ALL PARTICIPANTS



Hello [COUNTY OR SCHOOL STAFF],

My name is Meagan Lupton and I am a School Psychology graduate student enrolled at East Carolina University. I am excited to share that your school has been approved to participate in a thesis research study developed to assess the ways in which the schools in North Carolina are serving our large military-connected student population. The following link will take you to a survey which takes approximately four minutes to complete:

[LINK]

Following completion of the survey, you may choose to participate in a raffle to win one of three \$15 Amazon gift cards. Participation in the raffle requires you follow an additional link where you will provide your first and last names, as well as your school email address. This information cannot be tied to your completed survey information. The survey must be completed by June 3, 2016. I know this a very busy time of year and your participation is greatly appreciated.

Take Care,

Meagan Lupton
School Psychology MA/CAS Student
East Carolina University
luptonm10@students.ecu.edu



Hello [COUNTY OR SCHOOL STAFF],

This is just a reminder to complete the Needs of Military-Connected Students study survey as approximately two weeks remain before it is closed. Again, the survey takes approximately four minutes to complete and your responses will remain anonymous. Also, you are invited to participate in a raffle to win of three \$15 Amazon gift cards as a 'thank you' for your participation. Participation in the raffle will require you to provide your first and last names, as well as your school email address; however, this information cannot be tied to your survey responses. Below you will find a link to the survey. Your participation is greatly appreciated, especially during this busy time of year.

[LINK]

Take Care,

Meagan Lupton

School Psychology MA/CAS Student

East Carolina University

luptonm10@students.ecu.edu



Hello [COUNTY OR SCHOOL STAFF],

This is just a reminder to complete the Needs of Military-Connected Students study survey as this is the final week the survey will be open for participation. Again, the survey takes approximately four minutes to complete and your responses will remain anonymous. Also, you are invited to participate in a raffle to win of three \$15 Amazon gift cards as a ‘thank you’ for your participation. Participation in the raffle will require you to provide your first and last names, as well as your school email address; however, this information cannot be tied to your survey responses. Below you will find a link to the survey. Your participation is greatly appreciated, especially during this busy time of year.

[LINK]

Take Care,

Meagan Lupton

School Psychology MA/CAS Student

East Carolina University

luptonm10@students.ecu.edu



Hello [COUNTY OR SCHOOL STAFF],

Thank you so much for completing the Needs of Military-Connected Students study survey. Your participation is greatly appreciated, not only due to the way in which your responses may go on to help this unique group of students but also due to the time you took during this very busy time of year to participate. Winners of the raffle will be notified via email later today. I wish all of you a wonderful summer, and again, thank you!

Take Care,

Meagan Lupton

School Psychology MA/CAS Student

East Carolina University

luptonm10@students.ecu.edu

APPENDIX E: QUESTIONNAIRE

THE NEEDS OF MILITARY-CONNECTED STUDENTS WITHIN THE PUBLIC SCHOOL SYSTEM: A NEEDS ASSESSMENT

Q1 In your school, which position do you currently hold?

- Principal
- Assistant Principal
- School Counselor
- Teacher

Q2 How many years have you worked as a teacher, counselor, or principal? (Total number of years you have worked in the position you currently hold.)

[TEXT ENTRY]

Q3 How many years have you worked in a military-connected school district? (Include time in all related districts over the course of your career.)

[TEXT ENTRY]

Q4 Which branch(es) of service is/are associated with your school? This includes the branches associated with your military-connected students but not school JROTC programs.

- Air Force
- Army
- Coast Guard
- Marine Corps
- Navy

Q5 How many students do you oversee?

[TEXT ENTRY]

Q6 What percentage of military-connected students makes up the student body? Please select the range closest to that percentage.

- Less than 25%
- 25% - 49%
- 50% - 75%
- More than 75%
- Unsure

Q7 In terms of academic success, military connected students are:

- More likely to earn predominately below average or failing grades
- More likely to earn predominately passing or above average grades
- Most likely to earn grades comparable to their civilian peers

Q8 Compared to civilian peers, military-connected students are:

- Likely to miss more days than their civilian peers
- Likely to miss fewer days than their civilian peers
- Likely to miss a number of days comparable to their civilian peers

Q9 True or False: Military-connected students do not experience difficulty transitioning to a new school.

- True
- False

Q10 Which of the following are common among military-connected students? Select all that apply.

- Depression
- Greif
- Suicidality
- Attachment Disorder
- Eating Disorder
- Anxiety
- Inattention
- Anger
- Conduct Problems
- Substance Use
- Autism
- Learning Disorder

Q11 True or False: Military-connected students are more likely to bring a weapon to school than are their civilian peers.

- True
- False

Q12 True or False: Military-connected students are more likely to become injured in sports.

- True
- False

Q13 Have you taken a course or training program related to the needs of military connected students?

- Yes
- No

If No Is Selected, Then Skip To End of Block

Q14 Which course(s) or training program did you attend? Select all that apply.

- Citizen Soldier Support
- NC AHEC
- Military Child Education Coalition
- The Governor's Focus on Military Families
- Other _____

Q15 How was your participation in this course(s) or program funded? Select all that apply.

- My school provided the funding
- A military-connected organization provided the funding (ex. The National Guard)
- I funded my participation
- Other _____

Q16 As a result of your training, rate your confidence in your abilities to help military-connected students in each of the following areas of need:

	1 - Not Confident	2	3	4	5 - Confident
Depression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grief	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suicidality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inattention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct Problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Substance Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 Having not participated in a related training program, rate your confidence in your abilities to help military-connected students in each of the following areas of need:

	1 - Not Confident	2	3	4	5 - Confident
Depression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grief	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suicidality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inattention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct Problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Substance Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 Are any of the following made available by your school for military-connected students?

Select all that apply.

- A welcome packet including items such as a map of the school, an ‘Important Persons’ contact list, extracurricular activity information, community information, etc.
- A buddy system through which the incoming military-connected student is shown around the school by another student
- Support groups
- “Family Fun Night” (may not specifically target military-connected students)
- Online resources
- Other _____

Q19 To participate in the drawing for one of three \$15 Amazon gift cards, please follow the link below. You will be directed to an additional survey which will allow you provide your first and last names, as well as your school e-mail address. Good luck!

[LINK]

