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Academic Performance and Educator Efficacy in Supporting Military-Connected Adolescents among High Schools in a Georgia School District

Megan Louise Jones

Academic Performance and Educator Efficacy in Supporting Military-Connected Adolescents among High Schools in a Georgia School District

by
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Dedication

When I made the decision to pursue a career in education, I was encouraged to be the educator who sets an example for students both personally and professionally. As a believer in lifelong learning, pursuing the terminal degree in my discipline was the logical step. The opportunity to obtain my doctorate would not be possible without my parents: Dr. Robert and Mrs. Nancy Wilkeson. Your encouragement, support, and counsel are constant. I am eternally grateful for the opportunities you have afforded me. While I will never be able to repay you, I hope this accomplishment demonstrates the lengths of my devotion to making the world a better place and my appreciation of you and your steadfast commitment to me.

To my husband, Colton, whom I had the privilege of pursuing this degree alongside: I trust you are (not) reading this dedication and thinking "Mr. and Dr. Jones has a nice ring to it, but 'the Drs. Jones' will be better." With heartfelt gratitude: thank you for being my constant during this process while also pursuing your doctorate. Your reliability and consistency are hallmark tenets I love so much about you; you reassure me and love me so well. I have zero intent to conduct future research, but I cannot help but wonder how many couples decide to pursue doctorates together, stay married through the process, welcome a baby midway through the prospectus phase and somehow grow deeper in love. Thank you for always supporting me. I love you the most, CP.

To my sons, Carson and Clark: you will forever have a waffles-with-love chef, homework-checker, advocate, and fan club in your Mama. I love you, my precious boys, you make me so proud. And finally, to my Bear: you took every virtual class with me, slept through most of my drafting and revisions, and you are lying beside me as I type this dedication. You deserve to be CSU's first cat to earn an honorary doctorate and will work on this honor next.

Acknowledgements

This accomplishment would not be possible without the devotion, humor, and support of my committee chair, Dr. Jennifer Lovelace. While I'm certain Dr. Lovelace is a robot who never sleeps, her commitment to her family, students, and Columbus State University is beautifully human and I'm better for knowing and working with her. To Dr. Acharya, thank you for lending me your brain, insight, and an understanding of mixed methods research to be able to explain concepts to me again and again… and again. Having you serve as my methodologist was an honor and blessing – thank you. To Dr. Lauren Neal, thank you for working with me to ensure my success with your attention to detail in my revisions as well as your expertise in my survey development and execution. The faculty and staff of Columbus State University provided an experience I am incredibly grateful for enduring. I am proud to obtain a doctorate from my hometown university – Go Cougars!

My dearest Fall 2020 C&I Cohort: you are a brilliant, funny, encouraging group of professionals that I loved getting to know and side-bar via text during Zooms throughout our coursework. The ability for our cohort to mesh so well despite the separation that Covid created is indicative of the (sort-of-trauma) bond we will share forever. To my husband, who is also part of the previously mentioned C&I cohort: I love you and I'm proud of you. To my family, friends, and colleagues: I look forward to being more available and tolerable. Thank you for validating my feelings, supporting me through this test of endurance and loving me along the way. To my students: "It's actually Dr. Jones." I'm honored to join this class of seniors as a member of the Class of 2024.

Curriculum Vita

Megan L. Jones

A teacher leader who is dedicated to students' discovery of their potential as productive citizens through social and emotional development, academics, and extra-curricular experiences.

Instructional Experience

Veterans High School	Kathleen, Georgia
English Instructor	2011- Present
Central Georgia Technical College	Warner Robins, Georgia
Adjunct Instructor, English Department	2023 - Present

Educational Experience

Columbus State University	Columbus, Georgia
Doctor of Education, Curriculum & Instruction	2020-2024
Valdosta State University	Valdosta, Georgia
Educational Leadership, Add-on to Educational Specialist	2016-2018
Georgia College & State University	Milledgeville, Georgia
Educational Specialist, Education/Curriculum	2013-2014
Georgia College & State University	Milledgeville, Georgia
Master of Education, Secondary English Education	2011-2013
The University of Georgia	Athens, Georgia
Bachelor of Science in Education, Language and Literacy Education	2007-2011

Leadership Experience

Veterans High School	Kathleen, Georgia
Gifted Lead Teacher	2016 - Present
Houston County Board of Education	Perry, Georgia
Leadership Development Program	2017

Certifications

Curriculum & Instruction	2024 - Active
Educational Leadership, Tier II	2018 - Active
Teacher Support / Coaching Endorsement	2016 - Active
Reading Endorsement	2013 - Active
Gifted In-Field	2013 - Active
English (6-12)	2011 - Active

Abstract

The effects of a parent's military service on their children are well-researched in the post-9/11 era, particularly for elementary-aged students. However, research involving adolescents is much narrower, despite 25% of all military dependents ranging between 9th and 12th grade. These students are already enduring major changes as adolescents, but military-connected adolescents are also navigating the many stressors of their family's military affiliation. These students are oftentimes burdened by frequent moves, parental deployment, and acclimation to their circumstances. While the military family is acutely aware of the heightened stressors that potentially create chaos among the family unit, teachers' awareness of these students and their issues in the secondary classroom is not prioritized. The military-affiliated subpopulation of student is not one easily recognized, as these students do not have a defining trait that makes them stand out compared to civilian peers, but their circumstances and subsequent needs are unique, warranting proactive attention from the public school systems. The researcher's purpose is to learn about the unique needs of military-connected adolescents how their lifestyle impacts their academic, social, and emotional well-being. Through comparison of military-connected and non-military students' academic performance on the Measures of Academic Progress (MAP) Growth Reading 6+ and Math K-12 assessments, the researcher determines whether military-connected students outperform their non-military peers. Additionally, high school educators are surveyed to determine their understanding of the military-connected adolescent as well as the efficacy of teachers to support these students.

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Chapter I: Introduction

Since the start of Operation Iraqi Freedom, the United States has seen its largest, sustained deployment of military members, dramatically affecting their dependents, who have potentially been separated from their service member parents or, at a minimum, affected by the nature of their family's work (Cozza & Lerner, 2013). As of 2012, the Office of the Deputy Assistant Secretary of Defense Military for Community and Family Policy reports that there are nearly two million military children in the United States and while it may be assumed that these military-connected children are attending Department of Defense schools, more than 80% are attending local, public schools (Military Community and Family Policy [MCFP], 2013). Considering the percentage of students educated in civilian, public schools, educators should be privy to the needs of military students (Garner et al., 2014). Numerous years of research have appropriately focused on examining the repercussions of traumatic experiences encountered by service members during their military service. However, there is a crucial need to understand the impact of such arduous work on the family unit, potentially engendering a stressful environment for spouses and dependents across various age groups. This need is especially pertinent for contemporary military-connected adolescents, necessitating increased scholarly consideration (Classen et al., 2019; Cozza & Lerner, 2013; Darling-Hammond et al., 2005; Stites, 2016; Tsai & Pietrzak, 2017).

Background of the Problem

Military-connected children are children who have a parent, guardian, or close family member whose military service takes place at any point their childhood (Cramm et al., 2019). These children can face unique challenges, including frequent moves and prolonged absences of a parent due to deployments, which can lead to feelings of uncertainty, instability, and anxiety

(Chandra et al., 2010). Whether the servicemember is stationed at home or abroad, their line of work impacts their dependents' social and emotional well-being, compounded with stressors associated with school for children (Chandra et al., 2011). Military-connected students' experiences, such as frequent moves, parental deployment, and lack of continuity and access to resources, may affect their ability to function normally in school in academic and social settings (Finkelstein et al., 2017; Scott et al., 2014; Stites et al., 2016). Research has also shown that military-connected children may be at an increased risk for behavioral and emotional difficulties, as well as academic problems, including gaps in curriculum during transitions between schools, varying quality of schools, issues with credits transferring, insufficient resources, and concerns with support for students with special needs (Bradshaw et al., 2010). The research efforts for military-connected children have been predominantly focused on elementary-aged students with situations involving deployment, relocation, integration, and trauma suffered due to injury or loss of a military parent and the impact these events have in the academic and social-emotional settings (Cozza & Lerner, 2013).

Teacher perceptions of military-connected students in civilian public schools can vary depending on the educator's personal beliefs and experiences (Sherbert, 2018). Teachers' understanding of these students are often influenced by learned experiences in favor of direct instruction or training of military students' traits (Sherbert, 2018). Some teachers may view these students as disciplined, respectful, and mature due to the structure and values they may have gained from military life while others may perceive these students as challenging to work with due to the potential impact of frequent moves, family separations, inconsistencies among curriculum, and exposure to trauma (McKinney & Renk, 2011; Padden & Connors, 2014). High school teachers may view their students, regardless of military affiliation, in terms of ease and

difficulty to work with, but military-connected students' behaviors are shaped by circumstances outside of their control (De Pedro et al., 2018). Enhancing our understanding of the requirements of military-connected students will foster a learning environment that benefits all students.

Due to the volume of students on high school teachers' rosters, certain aspects of students' lives that may be helpful to understanding learning situations are not readily communicated to their teachers, such as military affiliation, access to reliable internet, behavior referral data, and free-and-reduced lunch status (Smith et al., 2019). This information is often kept at the administrative level, not for teachers' use or access, but if teachers are being equipped with this information at the start of the school year, the teachers' relationship with students and their instructional and classroom management approaches could be tailored to suit students' needs in a more proactive manner (Means et al., 2009). While military-connected students are identified through system indicators and school-level learning management systems (LMS), this information is not transparently communicated to the teachers of records, maintaining a greater level of risk for these students if needs go unidentified and unaddressed (Barnes et al., 2007; Bradshaw et al., 2010; Gilreath et al. 2013, 2014; Huebner and Mancini, 2005; Pressley et al., 2012; Rosen et al., 1993; Turner et al., 2017; Wooten et al., 2019). When teachers are not informed of certain aspects of students' lives that can be barriers to learning, students may feel unsupported in addition to being challenged by their circumstances (Scott et al., 2014; Stites et al., 2016; Vannest et al., 2021).

With more transparent communication, teachers can prepare for the challenges of military children by increasing their awareness and understanding of the unique needs and experiences of military families, recognizing the impact of frequent moves and deployments on the social and emotional well-being of military children, as well as understanding the importance of building a

supportive classroom community (Vannest et al., 2021). Teachers can also familiarize themselves with resources available to military families and work collaboratively with school support staff and military organizations to provide the necessary support and services to military children (National Military Family Association, 2021). Positive traits often associated with military-connected adolescents such as resilience and maturity overshadow the need for consistency and intervention (De Pedro et al., 2018; Easterbrooks, 2018). When high school teachers are not properly informed of students' military affiliation, there can be unintended consequences that negatively impact social, emotional, and academic realms (Smith, et al., 2019; Vannest et al., 2021)

There is limited research regarding studies that address high school educators' interactions with military-connected students while navigating their family's service and related challenges (Garner et al., 2014). Elementary teachers, working with a smaller student population each year compared to their secondary counterparts, often benefit from increased parental involvement and more frequent communication with families. This closer connection allows them to be more informed about potential barriers affecting children's academic performance and social-emotional well-being in the classroom compared to high school teachers (Smith et al., 2019). There is an opportunity for school culture, environment, and community to respond accordingly to be conducive for learning and overall well-being of the military-connected adolescent (Garner et al., 2014; Levy, 2016; National Military Family Association, 2021). Schools often support military-connected students through counselors and promoting comradery, the military-connected support systems vary across the country (Davis et al., 2012). This study aims to address the lack of consistent identification of military-connected students among high school teachers, highlighting the importance of identification for overall student well-being and

to reinforce the need of effective professional development for educators to. The primary aim of this dissertation is to address the significance of educators being cognizant of the distinctive experiences and requirements of military-connected students. It also aims to highlight the social, emotional, and academic support that may be necessary to facilitate military-connected students' success. (Blaisure et al., 2016).

Statement of the Problem

As the United States military continues to respond to situations both domestic and abroad and holds relatively consistent numbers of service men and women, the plight of the military child is an issue that will not be dictated by our nation's involvement or lack of involvement in conflict (Chandra & London, 2013; De Pedro et al., 2011; Macdermid Wadsworth et al., 2017). This issue creates an opportunity for school districts in military communities to be better educated on the needs of the military-connected student and respond accordingly (Garner et al., 2014). Military families can experience unique stressors that sets them apart from civilian families; the servicemember's military career can create upheaval among family members (Daigle, 2013). The research surrounding military families focuses extensively on three developmental periods: 0-2, 3-5, and 6-10 years of age (Wadsworth, 2016). Younger children undoubtedly deserve attention and support as they navigate their formative school years alongside the delicate and often tumultuous lifestyle of a military family. Recognizing that the impact of military life extends to adolescents as well, research should be emphasized for this population, as they are entitled to careful considerations within the school community to foster development (Lucier-Greer et al., 2015; Moeller et al., 2015).

Research suggests that military-connected students may need additional support to optimize their social, emotional, and academic well-being, but if teachers are not provided with

direct identification of the military-connected students in their classrooms, they become a population that is difficult to serve with fidelity (Joining Forces: Education, 2017; Stites, 2016; Trimillos, 2018). Teachers are the critical element that influences student well-being and achievement, facilitating the learning that occurs in schools (Darling-Hammond et al., 2005). If learning is interrupted by often silent inhibitors, teachers are the first lines of intervention, making them essential contributors to any program designed to support military dependents (Stites, 2016). The assumption that school staff is aware of all students with military connections threatens potential support and possibly denies outreach (Cederbaum et al., 2014; Chandra et al., 2012; Flake et al., 2009). Failure on the part of the school or larger school system to intentionally identify these students to teachers stifles the supports available to students (Garner et al., 2014; Lester et al., 2010). The teachers who interact with military-connected students should be informed and equipped with training to strengthen what community programs and military liaisons may be unable to reach to ensure social, emotional, and academic growth of students (Blaisure et al., 2016; Garner et al., 2014; Trimillos, 2018).

Purpose of the Study

The purpose of this mixed-methods study is to examine the perceived self-efficacy of educators with military-connected high school students in their classrooms and to consider the academic implications of military-connected students. Specifically, the research study will focus on high school educators' knowledge relative to supporting their military-connected students and their needs arising from issues facing military families. Additionally, military-connected students and non-military affiliated students' academic achievement percentiles on Measures of Academic Progress (MAP) Growth assessment will be compared in both Reading and Mathematics, which are norm-referenced assessments utilized by school systems across the

United States, providing data relative to achievement and individual student growth. MAP Growth assessments are standards-based, serving over 13 million students in the United States that measure achievement of every student even when standards change (Northwest Evaluation Association, 2023). Research suggests military-connected adolescents are at a greater disadvantage academically than their civilian counterparts, given challenges stemming from higher rates of mobility, parental absences, realistic understanding of their military parent's potential danger and subsequent concern about the family member's safety, and increased responsibilities or stress at home (De Pedro et al., 2011; Engel et al., 2006; Garner et al., 2014). The potential challenges impacting military-connected adolescents' academic performance warrant examination to determine if military-connected students are at an overall disadvantage compared to their civilian peers and if proactive interventions can close any gaps that may exist between the military-connected population and civilian students.

The present study will contribute to the support and stability of military families as it seeks to understand educators' perceptions about their military-connected population, consequently building agency in teachers to support these students academically, socially, and emotionally. Through a survey of high school teachers and non-teaching staff, including counselors and military liaisons, the researcher seeks to gain information about educators' knowledge of military-connected students' needs. Based on responses, recommendations for appropriate professional development can be determined. Additionally, the researcher seeks to identify potential discrepancies in academic performance between military-connected students and civilian peers while highlighting the lifestyle of the modern military family, including advantages and challenges that may affect dependents' social, emotional, and academic outcomes.

Research Questions

The study's research questions center on the examination and comparison of the academic performances of military-connected and civilian students, utilizing achievement scores from the MAP Growth Reading and Mathematics assessments. The researcher seeks to learn the perceptions of high school teachers and selected non-teaching staff regarding military-connected students, along with their understanding of the support systems available for this distinct population.

Research Question 1: What are the differences in overall achievement scores on the MAP Growth Reading 6+ assessment of high school military-connected students compared to the non-military connected counterparts?

Null Hypothesis 1: There are no differences in academic scores on the MAP Growth Reading 6+ assessment among military-connected students compared to non-military-connected students to a statistically significant degree.

Alternate Hypothesis 1: There are differences in academic scores on the MAP Growth Reading 6+ assessment among military-connected students compared to non-military-connected students to a statistically significant degree.

Research Question 2: What are the differences in overall achievement scores on the MAP Growth Math K-12 assessment of high school military-connected students compared to the non-military connected counterparts?

Null Hypothesis 2: There are no differences in academic scores on the MAP Growth Math K-12 assessment among military-connected students compared to non-military-connected students to a statistically significant degree.

Alternate Hypothesis 2: There are differences in academic scores on the MAP Growth Math K-12 assessment among military-connected students compared to non-military-connected students to a statistically significant degree.

Research Question 3: What are high school educators' perceptions of military-connected students' needs?

Research Question 4: What knowledge do high school educators have regarding professional resources relative to military-connected students?

Theoretical Framework

Vygotsky's contributions to sociocultural theory emphasize the role of the community environment on learning, which shapes the individual's cognitive development (Mahn & John-Steiner, 2012; Shabani, 2016; Vygotsky, 1978; Wertsch, 1991). Vygotsky notes the dialectical relationship between individual and social processes, recognizing learning as a social activity that takes place within a community, which encompasses all aspects of culture (Mahn & John-Steiner, 2012; Vygotsky, 1997). The community upholds shared aspects, including language or specific jargon, practices, routines, and beliefs, offering a platform for learning to occur (Lewis et al., 2007; Vygotsky, 1978). For example, language is a crucial cognitive tool that is acquired through social interaction with others, that reflects the cultural values, beliefs, and practices of that community (Lewis et al., 2007). As such, the community environment provides the cultural resources that shape the development of language and other cognitive tools (Lewis et al., 2007).

School, therefore, is a community built on social origination cultivated by educators, students, parents, policymakers, and other stakeholders and the school environment influences the student's cognition and development (Shabani, 2016). If school is to serve the needs of all students, including those whose individual cultures and characteristics may deviate from the

collective norm, the community must be evaluated for readiness and awareness (Mahn & John-Steiner, 2012).

The school environment can influence students' expectations, attitudes, and behaviors through perceptions or collective social constructions of those who are participants in the environment (Mahn & John-Steiner, 2012; Strange & Banning, 2015). Presented in this framework, three characteristics are said to greatly influence behavior: social climate, environmental press, and campus culture (Strange & Banning, 2015). Social climate is characterized by three social-environmental domains, each with dimensions that contribute to the makeup of the environment: relationships, personal growth and development, and system maintenance and system change (Moos, 1979). These domains guide the understanding of key facets of social climate and will be utilized to organize relevant extant literature on military-connected students. Vygotsky's framework suggests that the community environment plays a critical role in shaping the development of cognitive tools such as language, problem-solving strategies, and mental representations of the world (Vygotsky, 1978). In this framework, learning occurs because of social interaction and collaboration with more knowledgeable others, who can include parents, teachers, peers, and other members of the community (Mahn & John-Steiner, 2012; Strange & Banning, 2015). The community environment also provides the cultural context that shapes the development of cognitive tools (Penuel & Wertsch, 1995; Strange & Banning, 2015). Vygotsky's theory that understanding is connected by way of the community's environment is furthered by Rogoff (2003), who suggests human development hinges upon a person's active role in cultural communities. The study of a community and the practices inherent in the community, therefore, are essential for deriving meaning and understanding, given that humans learn via social interactions (Miller, 2011; Rogoff, 2003; Wenger, 2009).

Teachers of military-connected students must be acutely aware of these students' needs to provide a community supportive of student development (Knox & Stevens, 1993; Mahn & John-Steiner, 2012).

While Vygotsky made several contributions to educational theory, his emphasis on the environment's role for special needs' populations is relevant to the present study, as military-connected students are a community with unique needs and the community within a school setting affects and constructs meaning for those enrolled (Knox & Stevens, 1993; Mahn & John-Steiner, 2012). Military-connected students are a less visible subpopulation within the public school community, as these students may be identified by primary indicators like race or socioeconomic status. While interventions are in place to address inequities and gaps certain populations of students, the school may not be designed to serve the military-connected student's unique needs or equipped to handle potential issues as they arise (Mahn & John-Steiner, 2012).

Methodology Overview

The research design for the present study is a mixed-methods approach following a convergent parallel model (Creswell, 2014; Creswell et al., 2003; Creswell & Plano Clark, 2017). This design features two quantitative phases of data collection and analyses that will occur alongside qualitative phase of data collection and analysis, with a final integration that links the data from quantitative and qualitative (Creswell, 2014; Creswell et al., 2003; Creswell & Plano Clark, 2017). The researcher will retrieve MAP Growth achievement data for 9th and 10th grade students within the district and will disaggregate the data by assessment – reading and math – as well as the students' status as military-connected or not. The researcher will conduct a survey of high school educators, including teachers, counselors, and military liaisons, within a district that is home to a military base to determine their perceptions of military-connected

students, their challenges, and the issues they may face along with the professional resources available to support military-connected students. The researcher will not preface the survey with any information about military-connected students in hopes of gauging honest understanding among educators. The survey will provide a series of statements regarding educators' awareness of military-connected students, their unique traits and needs as well as gauge the educators' perception of military-connected students and their professional development surrounding work with military-connected students. The quantitative questions will be designed on a Likert scale. Additionally, the survey will feature structured, open-ended questions related to teacher familiarity and understanding of military-connected students. The survey will have identifying questions about the participant, including number of years in the classroom and whether the teacher comes from a military background, through a prior connection as a dependent in their childhood, through service, or by way of a spouse or significant other. Participants will be asked questions stemming from the literature, including the issues surrounding military-connected adolescents and the impact of military service on school-aged children, including potential social, emotional, and academic ramifications. This survey will be sent via email to high school teachers, counselors, and school military liaisons who are employed across five high schools in a school district, along with information regarding the volunteer nature of participation, anonymity, and IRB statements.

Participants for the survey will be teachers of academic contents, including English, science, social studies, world languages, and mathematics given the consistencies of their classroom makeup. Excluded from the survey are fine arts, physical education, and Career, Technical, and Agricultural Education (CTAE) course instructors, as their classrooms are often substantially more populated than an academic classroom and conducted in non-traditional

formats, therefore subjecting the data collection. These educators may have less opportunity to learn about their individual students beyond state and Federal requirements or the involvement in that teacher's extracurricular activity or club, considering the class sizes and added workload of these teachers. Furthermore, select non-teaching staff members including counselors and military liaisons will be surveyed, as their roles are pivotal to easing transitions for military-connected students and their families.

The participants' survey responses will be gathered via Qualtrics and analyzed for validity and trends in SPSS. From the survey which will feature structured, open-ended response questions, the researcher will designate themes that present themselves in data regarding the educators' perceptions of military-connected students, their needs, and the issues they may encounter due to their family's military affiliation and the potential life-altering situations they may face as a result.

Additionally, the researcher will compare achievement data among 9th and 10th grade students who have taken the Measures of Academic Progress (MAP) Growth assessments in Reading and Mathematics. Academic performance assessment data will be collected from a sample of military-connected and non-military students enrolled in the 9th and 10th grade across five high schools that vary in size, socioeconomic status, demographics, and proximity to the military installation located in the county. The students will be segregated by their military-affiliation and the achievement scores on the Math and Reading to determine if any statistically significant differences exist between the academic performances of civilians and the military-connected student on both assessments.

These students' identity will not be revealed beyond an identification number within the student information system that will classify students as military-connected or not. The groups

will be stratified based on their status as military-connected or not and further disaggregated by the subject area tested. To prevent outliers disrupting the data results, data points for MAP assessment scores will be selected around the 50th to 75th percentiles to determine if average and above-average performing military-connected students are at an academic disadvantage compared to their civilian peers.

Independent samples t-tests in SPSS will be used to compare the Reading and Math MAP assessment scores between military and non-military students. The independent variable will be the student's classification as military-connected or not military-affiliated and the dependent variables will be the subject assessments: MAP Growth Reading 6+ and MAP Growth Math 6+. The t-tests will determine if a statistically significant difference exists between the scores of military-connected students and their civilian peers.

Delimitations and Limitations

A delimitation in this study involves the scope of the research, which is bound to one school district that is home to a military base. The way military-connected students and their support systems do not represent that of all public school districts that are home to a military base. Likewise, the relationship between the military base and the researcher's public school district is not indicative of all relationships. Additionally, the researcher's role as a high school teacher and a former military dependent presents an additional delimitation.

Within the study itself, the researcher is using MAP achievement data from 9th and 10th grade students in English Language Arts and Math across the county's five high schools. The nature of the researcher's school district and the MAP assessment data, which is being used to compare military-connected students' performance to their civilian counterparts, poses a limitation. The researcher's school district has five high schools, one of which serves the rural

parts of the county, two that are Title I nearest to off-base housing, and two that are also within city limits, but serve the more populous, middle-class areas of the county of approximately 166,829 residents (United States Census Bureau, 2021). The differences in school environment, culture, demographics, and school-improvement goals vary across the schools, which may primarily influence the distribution of MAP assessment scores. Additionally, larger districts within larger towns or cities that are home to a military installation may have more supports and individuals designated to support the needs of military families during their transitions to the area. Likewise, a small district may be closely tied to their military installation given the nature of the close-knit community. The researcher is therefore limited to the relationship and understanding of a single school district, which serves approximately 30,000 students over 39 campuses, with its nearby military installation (About the [Redacted] County School District, 2023).

A second limitation of this study involves the assessment being utilized to determine whether statistically significant academic discrepancies between military-connected students and their civilian peers exist. The MAP assessment evaluates students in academic growth and achievement in English Language Arts and Mathematics. The assessment adjusts itself in difficulty and ease based on student responses to questions to determine the Rasch Unit (RIT) score, which is then used to measure proficiency relative to like peers across the country as well as determine a student's growth between assessment administrations. The RIT score is an equal-interval measurement scale ranging from 100-350, with students enrolled in kindergarten through 12th grade eligible for the assessment (Northwest Evaluation Association, 2020). The district assesses students' academic performance through several assessments; MAP is one of the assessments. Hence, the decision to utilize MAP over end-of-course state assessments or via data

from SAT or ACT scores is a limitation, as academic performance cannot be defined singularly through one assessment.

An additional limitation for the teachers who participate in the survey is the potential bias they may hold with regards to military service. The researcher's county is home to the fifth largest school district in Georgia and while the base is the single-largest employer in the area, the school district is second. The prevalence of the military in the researcher's district with regards to employment of both military and civilians increases the connectedness a participant may feel, which can bias their input. Educators who are military-connected may have a predisposition toward the sensitivities of military-connected students as they reflect on their personal experiences as a military child or consider the impact of military service on their own personal children. In a military town, civilians are often immersed in the culture of military service through friends, neighbors, and experiences of the community. The participating teachers may have strong feelings about the military experience independent of their workplace, either through observation of the community in which the teachers work or their personal experiences, if they have been or are currently connected to military personnel as a dependent, spouse, or parent of a military-connected child.

The final limitation of this study is the possibility of social desirability bias (SDB) affecting honest input within the survey. This phenomenon arises because respondents seek approval, especially within their place of employment and occurs within surveys wherever there is a potentially right or more acceptable answer (Brace, 2018). SDB can manifest itself both in stated behavior and in the attitudes that they express toward a subject, resulting in under or over-reporting data (Brace, 2018; Sudman & Bradburn, 1982). Within the researcher's district, which is home to a large military base, expressing negative thoughts about military families and

students, or expressing a lack of preparation to serve military connected students would not necessarily be a desirable response and participants may feel more inclined to speak positively than is true.

Definition of Terms

Deployment: defined as the movement of armed forces from their current duty station to an alternate location, oftentimes outside of the United States for a period of time in support of a mission (DoDEA, 2022).

GI Bill: The Servicemen's Readjustment Act of 1944 is a law that provided a range of benefits for returning World War II veterans. The original GI Bill expired in 1956, but the term "GI Bill" is still used to refer to programs created to assist US military veterans. GI Bill benefits help Veterans pay for college, graduate school, and training programs. Since 1944, the GI Bill has helped qualifying Veterans and their family members get money to cover all or some of the costs for school or training (Military Child Education Coalition, 2020).

MAP Growth Assessment: Measures of Academic Progress (MAP) are assessments given in reading and mathematics to measure student growth and proficiency (Northwest Evaluation Association, 2020).

Military: refers to the U.S. Armed Forces (Lygothe, 2022)

Military and Family Life Counseling (MFLC, pronounced m-flack): supports service members, their families, and survivors with non-medical counseling worldwide. Trained to work with the military community, MFLC counselors deliver valuable face-to-face counseling services, briefings, and presentations to the military community both on and off the installation (Military Child Education Coalition, 2020).

Military-connected children/youth/student: any child attending school, from pre-kindergarten through institutions of higher education whose parent or guardian is listed as active duty or a member of reserve components of any branch of US military. These students have a single degree of separation from their military sponsor, which can be biological, adoptive, or through foster care (DoDEA, 2022).

Professional Resources: Professional learning resources are the various means and supports needed to enhance the growth of educators and the academic and non-academic growth of students. Resources include funding, people, time, technology, and materials that are presented over development and training sessions, usually guided by a previously trained individual in the content to promote enhancements in educator practice, which, in turn, advance student outcomes (Georgia Department of Education, 2023).

Rasch Unit (RIT): The RIT scales are consistent and equal interval scales, utilizing individual item difficulty values to assess student achievement without being influenced by grade levels. In the context of these scales, "equal interval" signifies that the score differences remain constant regardless of whether a student is positioned at the top, bottom, or middle of the RIT scale. Additionally, "stable" implies that scores on the same scale, obtained from different students or the same students at different times, can be directly compared, despite variations in the sets of test items administered. Importantly, a RIT score maintains the same interpretation irrespective of the student's grade or age (NWEA Connection, 2023).

Servicemember: refers to the members of the U.S. Armed Forces (Lythgoe, 2022)

Title I: designated by the Elementary and Secondary Education Act (ESEA) from 1965, federal funds are authorized to support instructional equity through materials, professional learning, and the promotion of parental involvement (Zascavage, 2010). Title I schools educate children from

low-income households and funds are designed to close the academic achievement gap between students of a low socioeconomic status and students who attend schools in more affluent areas (Jeffrey, 1978; Paul, 2016).

Significance of the Study

This study is important to educators across the country who serve our nation's military-connected youth, as over 80% of these students attend their local, public school operated by a local education agency (Esqueda et al., 2012; Military Community and Family Policy [MCFP], 2013). Since the start of Operation Iraqi Freedom, the United States has seen its largest, sustained deployment of military members, dramatically affecting their dependents, who have potentially been separated from their service member parents or, at a minimum, affected by the nature of their family's work (Cozza & Lerner, 2013). As a result of the transitory nature of military-connected children, negative adjustments such as troublesome behavior and lack of engagement, are recognized alongside beneficial characteristics like independence, maturity, and resiliency (Risberg et al., 2014; Wadsworth et al., 2016; Williams, 2013). Research additionally recognizes the influence of the military lifestyle and the servicemember's work on the family unit, often creating a stressful environment for spouses and dependents of all ages and needs attention for the modern military-connected youth (Lester et al., 2010; Lucier-Greer et al., 2014; Milburn & Lightfoot, 2013; Mmari et al., 2009; Tsai & Pietrzak, 2017). When appropriate support is implemented for military-connected students intentionally, military-connected students can flourish in the academic and social settings and perhaps exceed non-military students (Blaisure et al., 2016; Davis et al., 2012).

However, public school educators, specifically at the high school level, are neither routinely made aware of military-connected students' needs nor trained to support them, creating

an opportunity for this research to benefit pre-service and in-service educators and the students they instruct, counsel, and support (Risberg et al., 2014; Stites, 2016). In addition to teachers' perception, this study also accounts for the perspectives of counselors, liaisons, and other support staff who work with military students. As social and emotional needs evolve for students entering adolescence and the landscape of military service is ever-changing, this research can better prepare teachers, counselors, military liaisons, administrators, and other stakeholders for the unique needs of our military-connected students (Blaisure et al., 2016; Garner et al., 2014; Trimillos, 2018). This study will be significant for improving positive student outcomes through the observed traits among their adolescent students and the potential academic disparities that exist between military-connected students and their civilian counterparts. While this research will focus on high school educators' perceptions of military-connected students and their needs, educators of all grade levels and duties within education can benefit from the insight gained through the outcomes of the survey and the presentation of data that quantitatively compares the academic performance of military and civilian students.

The use of the convergent parallel mixed-methods research design will ensure robust methods, contributing to the significance of the study. Data will be collected quantitatively and analyzed through two means: comparing MAP assessment data between military-connected and non-military students and through a Likert scale survey for high school educators, which will also feature qualitative questions for further elaboration and theme development. Through data triangulation and bias due to common method variance, results will be more detailed and provide a clearer understanding of the study, as the data will be substantiated through both quantitative and qualitative means (Podsakoff et al., 2003).

Summary

Military adolescents, or teenagers with a parent or close relative who is or has been a member of the military, often face unique challenges including mobility, parental absence, reintegration, exposure to trauma, and academic struggles (Finkelstein et al., 2017; King et al., 2010; Scott et al., 2014; Vogt et al., 2008). Military adolescents often experience frequent moves and changes in schools, which can lead to feelings of instability, social isolation, and lacking a sense of belonging (Vogt et al., 2008). Prolonged absences of a parent or parental figure during deployments can have a significant impact on the mental health and overall well-being of military children, but adolescents are often burned with additional responsibility to support the non-deployed adult and any younger siblings in the household (Chandra et al., 2011). Military adolescents yield higher experiences of anxiety, depression, and feelings of abandonment and resentment (Davis et al., 2012; De Pedro et al., 2011; De Pedro et al., 2018; Flake et al., 2009). Reintegrating with a parent who has been deployed can be challenging, as feelings of abandonment do not evaporate upon the parent's return and the adolescent may have trouble adjusting to the new family dynamics (King et al., 2010). Similarly, the parent may have changed during deployment or potentially suffer from post-traumatic stress (Astor et al., 2013; Cozza & Lerner, 2013). Military adolescents may be exposed to trauma through their parent's experiences and their own experiences as a military dependent, including academic struggles during a parent's deployment or because of high mobility (Astor et al, 2013; Cozza & Lerner, 2013). Subsequently, military adolescents may face challenges in academic performance, including difficulty adapting to new schools, teachers' expectations, and the cultural climate of the new school, while working through disruptions in their education that can potentially result in lower grades and standardized test scores (Scott et al., 2014).

To address these challenges, military adolescents' support systems and resources should be readily available through counseling services, peer support groups, and academic tutoring (Finkelstein et al., 2017). With proper training and awareness, teachers can serve as support beyond the academic scope, anticipating needs and providing resources to students before disruptions and the challenges of military life affect a student negatively. Schools and communities can play a role in advocacy for the well-being of military adolescents through the promotion of an inclusive environment and by way of creating opportunities for these students to connect with other military youth and raise awareness among civilian students (Vogt et al., 2008).

Military-connected students neither have instantly noticeable needs nor an identifying trait that characterize them as a military child, but to promote the growth of these students, educators must be made explicitly aware of who these students are in their classrooms, the potential stressors placed upon them because of their family situation, and subsequently trained on students' needs in response to these stressors. Related findings that stem from studies conducted with early childhood educators near large military bases, as Arnold, Garner, and Nunnery (2014) indicate, suggest future research could be done to expand the study to include all ages of military-connected youth. The existing research demonstrates the importance of personal connections between military students and their civilian peers and for teachers to support their social-emotional needs. Additionally, the significance of flexibility among teachers with regards to academic expectations of school districts across the country proves essential for the growth of the military adolescent (Arnold et al., 2014).

Chapter II: Literature Review

Military-connected children face a unique set of challenges and possess positive attributes that set them apart from their civilian peers (Chandra et al., 2011). Some of the challenges include frequent relocations, separation from parents, exposure to trauma, and uncertainty (Finkelstein et al., 2017; King et al., 2010; Scott et al., 2014; Vogt et al., 2008). Positive attributes often associated with military-connected students include resilience, multiculturalism, independence, and a strong sense of community (Risberg et al., 2014; Wadsworth et al., 2016; Williams, 2013). Military culture and its values of hierarchical structure, the importance of the mission, and the inward nature of the military deviates significantly from civilian culture, affecting how military children experience and value school's rituals and expectations (Hall, 2013). Military-connected adolescents endure the stressors of teenage years with pivotal cognitive, social, and emotional development but have the added element of military affiliation which exposes them to previously stated potential outcomes in education (Faran et al., 2004).

Lev Vygotsky contributes to education through theories on social development and learning (Moll et al., 1992; Shabani, 2016). Vygotsky believes that children learn and develop through social interaction, and that the social environment and cultural context in which they grow up plays a crucial role in shaping their cognition and understanding of the world (Mahn & John-Steiner, 2012; Shabani, 2016; Vygotsky, 1978; Wertsch, 1991). Sociocultural theory explains the intersection of individuals, culture, environment, and history as tenets of learning (Kelly, 2007). Understanding military-connected students' norms and values, along with the potential challenges they face is critical to this study, given the disconnect between the culture and the environment created by public schools.

Military children experience change, adapting to new schools, friend groups, and experiences with each relocation, potentially subjecting these students to added stressors beyond the average adolescent (Esqueda et al., 2012; Faran et al., 2004; Lester & Flake, 2013; Lucier-Greer et al., 2016). The circumstances surrounding military-connected students are unique and the effects can detrimentally impact their academic performance and social and emotional well-being.

Theoretical Framework

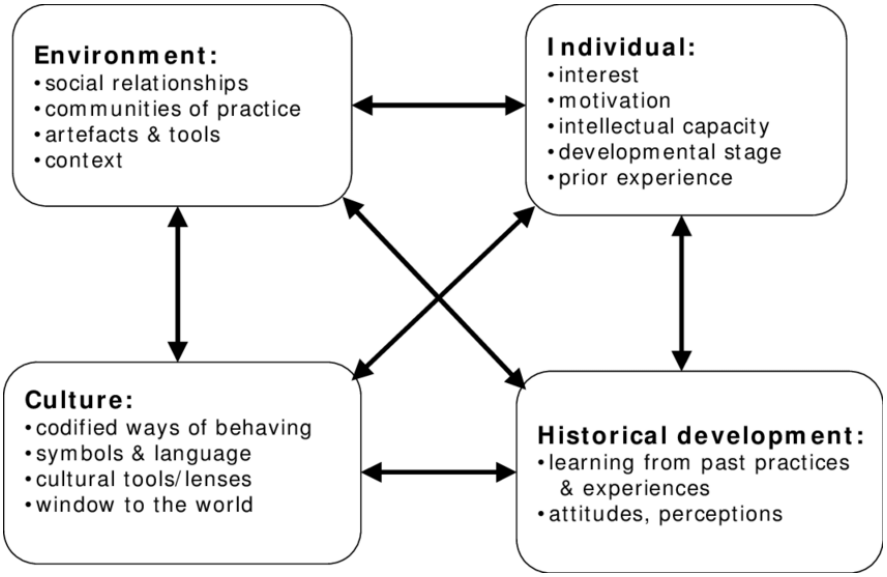
Sociocultural theory is an important framework for understanding the relationship between society and education, and how cultural and social factors impact learning and development, providing insights into how the environment and cultural context influence the learning experiences of children (Moll et al., 1992). Sociocultural theory, grounded in the cultural nature of human development, is cultivated by cognitive theorists dating back to Vygotsky (1978), who emphasizes that learning is a socially mediated process where all learners are jointly responsible for their learning, recognizing the importance of social constructs as a vehicle for understanding and meaning. Vygotsky's theory is further developed by his colleagues and students, who apply his writing to extend sociocultural theory's reach in educational psychology (Arievitch, 2003; Arievitch & Haenen, 2005). Learning is situated within a series of social contexts, defining both who we perceive ourselves and the perception of the world we inhabit (Falk & Dierking, 2000). The theory understands the unplanned intersection of individuals, culture, environment, and history as the foundation for every learning context and event (Hansman, 2001; Kelly, 2007; Schauble et al., 1997).

Kelly (2007) explains sociocultural theory as the interconnectedness of the individual, culture, historical developments, and the environment to learning processes and the mutual

influence they have on learning. The theory is grounded in the idea that human activities take place in cultural contexts through social interactions, mediated by language and shaped by individuals' historical development (Ash, 2003; Kelly, 2007; Matusov & Rogoff, 1995; Sedzierlarz, 2003).

Figure 1

Sociocultural Theory



Note. The figure was created to demonstrate the interconnectedness of the tenets of sociocultural theory. From *The Interrelationships between adult museum visitors' learning identities and their museum experiences* (p. 56), 2007, University of Technology, Sydney.

While knowledge and learning are individualized processes, the social context provided at the time contribute to what is learned and why, based on the individual person's interests, motivation, and intellectual capacity (Kelly, 2007; Wenger, 1998). Culture is the intrapersonal framework through which life is formed through customary way of behaving (Falk & Dierking, 2000; Ogbu, 1995). Environment encompasses the physical context of sociocultural theory in addition to social relationships within a community (Kelly, 2007; Lave & Wenger, 1991;

Matusov & Rogoff, 1995). The historical development aspect of sociocultural theory is embedded in cultural practices and learned experiences within multiple communities, emphasizing prior knowledge and interests that shape attitudes and communities (Kelly, 2007; Ogbu, 1995; Roschelle, 1995). In their applications of Vygotsky's theory, Galperin and Rogoff understand that humans develop by their active role in cultural communities (Arievitch & Haenen, 2005; Kozulin et al., 2003; Rogoff, 2004). The study of a community and the practices inherent in the community, therefore, are essential for understanding, as social interactions create learned experiences (Miller, 2011; Rogoff, 2003; Wenger, 2009).

In sociocultural theory, learning is a social activity that occurs through interactions with others and the environment, meaning that learning is influenced by the social and cultural context in which it takes place (Vygotsky, 1978). Teaching and learning have been connected to Vygotsky's contributions to sociocultural theory, through the belief that development occurs during activity via social interactions (Arievitch & Haenen, 2005; Moll, 1993). As a student of Vygotsky, Galperin contributes to sociocultural theory by developing the theme that development is driven by instruction and associated learning, and that educational programs and social participation can affect the development of new abilities (Arievitch, 2003; Arievitch & Haenen, 2005; Ceci, 1990). Vygotsky's sociocultural theory provides theoretical foundation for understanding students' unique developmental paths and the cultural experiences that guide their learning processes (Moll et al., 1992).

Vygotsky's sociocultural theory offers a profound framework for comprehending the interconnectedness of one's historical development, the individual, culture, and environment influence teachers, their classrooms, and how these classrooms fit within the school overall (Kozulin, 2004; Smagorinsky, 2007). Within this context, students' cognitive growth is

intertwined with their social interactions and the cultural practices in which students participate. Vygotsky's perspective suggests that students do not develop in isolation, but within a social and cultural matrix that influences their thinking, values, and learning processes (Arievitch, 2003; Arievitch & Haenen, 2005; Davydov, 1995). An educator's historical development, including their personal experiences and pedagogical approaches, influences the classroom environment, including the instructional practices, assessment styles and delivery models, in addition to the physical layout of the classroom and the materials utilized for instruction (Smagorinsky, 2007). Additionally, the cultural norms and values of the community and broader society are present within a school through the students and staff members, who are also embodying the school and district mission and vision statements (Kozulin, 2004). By valuing and leveraging the interplay of these elements of sociocultural theory, the potential for educators to cultivate more inclusive and effective learning environment is present.

Based on sociocultural theory, public schools and the community setting construct meaning for all students (Rogoff, 1993). For example, children with special needs or circumstances may face social and cultural barriers that impact their ability to learn and participate in the classroom (Mahn, 1999). Given that children learn appropriate behaviors and social norms within their environment and culture, a student whose environment and culture frequently changes poses a threat to learning outcomes (Lave & Wenger, 1991; Matusov & Rogoff, 1995; Ogbu, 1995). For populations such as military-connected students, who may be primarily identified by commonly used indicators such as race or socioeconomic status, the community and school units may not be considerate of their unique needs.

Within the context of military-connected adolescents, sociocultural theory illustrates the importance of the military family experience on their development. These adolescents, who often

encounter unique challenges associated with the military lifestyle are influenced by their immediate familial environment, the military community, as well as the historical context of military operations that shape interactions among these students with their school environment (Lave & Wenger, 1991; Matusov & Rogoff, 1995; Ogbu, 1995). When military families are impacted by a duty, assignment, relocation, or engagement in conflict, the military-connected adolescent is influenced as an individual through their social, emotional, and academic development (Riggs & Riggs, 2011). The historical and cultural influences of military life add additional layers to the development of military-connected adolescents, shaping their unique perspectives and coping mechanism (Lucier-Greer et al., 2014; Lucier-Greer et al., 2015). Physical environment changes, including new homes and schools, inevitably influence the student's educational journey and social interactions (Lave & Wenger, 1991; Lucier-Greer et al., 2014; Lucier-Greer et al., 2015; Mancini et al., 2018). The interconnectedness of these aspects is pivotal for educators, families, and support systems of these students to promote a nurturing and culturally aware environment that promotes growth and success (Mancini et al., 2018). This study will demonstrate how sociocultural theory explains the importance of educator awareness and training in cultivation of a supportive school community, which is essential for military-connected students' benefit and well-being.

Historical Overview

Nearly four million children have a parent listed as active duty, National Guard, or Reserve; of those children, two million have experienced parental deployment to Iraq or Afghanistan, potentially several times (De Pedro et al., 2018). Of that figure, 25% of these children are between 11 and 18 (Davis et al., 2012). The optimal function of the military family is essential to the overall readiness of military operations, as servicemembers experience high-

stress situations that require their undivided attention (Conforte et al., 2017). The ideal function of families extends to include the community in which the family is a part (e.g., school) (Darling-Hammond et al., 2005; Gilreath et al., 2016). Military students are subject to different stressors than civilian adolescents (Lucier-Greer et al., 2014; Milburn & Lightfoot, 2013; Mmari et al., 2009); for those students, support systems are needed in public schools (Morgan & Ross, 2013). Military-connected students relocate, on average, 4.89 times throughout their K-12 educational career (Weber & Weber, 2005). Military-connected students may be a less recognized demographic compared to a student's race or socio-economic status, but the school environment should support their unique needs, which raises the overall well-being of the military family (Astor et al, 2013; Morgan & Ross, 2013). While research identifies how the stressors of a parent or guardian's military service impacts their children's development (see Esqueda et al., 2012; Kranke et al., 2019; Lester et al., 2010; Lucier-Greer et al., 2014; Milburn & Lightfoot, 2013; Mmari et al., 2009; Tsai & Pietrzak, 2017), studies that address public high school educators' awareness of military-connected students, their behaviors, needs, and academic performance compared to those of their civilian peers are missing. Military-connected adolescents make up only 11% of children who have a parent or guardian in service (Clever & Segal, 2013) and while research identifies the barriers facing military-connected students, the potential maladaptive behaviors, the benefits of the military lifestyle, and how the school community influences the well-being of military-connected students (see De Pedro et al., 2014; De Pedro et al., 2018; Easterbrooks et al., 2013; Faran et al., 2004; Flake et al., 2009; Hanna, 2020; Marchant & Medway, 1987; Milburn & Lightfoot, 2013; Mmari et al., 2010; Moeller et al., 2015; Risberg et al., 2014; Weber & Weber, 2005). This study will contribute to the literature by highlighting military-connected students' needs to inform the educators that serve them.

Legislative Background

Military service members and their families have been supported through various legislation in response to circumstances and needs as they arise but are geared more toward supporting young children and military-connected students in a post-secondary setting. The GI Bill provides an opportunity for service members to obtain a college education through financial support (Barr, 2015; Humes, 2006). The bill's benefits expanded in 2011 by awarding Purple Heart recipients full benefit eligibility without the previously required three-year service commitment, expanding support for veterans pursuing STEM degrees, additional tuition benefits for National Guard members and reservists, and by removing the 15-year time limit that benefits must be utilized (Barr, 2015; Humes, 2006; Steele et al., 2010). Educational opportunities are often passed from the service person to a family member, creating options for military-connected students adolescents for in-state and out-of-state education funded through the legislation to provide an added incentive for military service (Barr, 2015).

For military-connected students enrolled in their local public school rather than a Department of Defense (DOD) school, additional considerations are made to protect the adjustment of students who may feel the impact of their family's transient lifestyle (DoDEA, 2022). The Military Interstate Compact Commission promotes compliance among participating states to ensure a smooth transition with minimal barriers for a positive experience (Atuel et al., 2011; Esqueda et al., 2012). At its onset in 2011, the Military Interstate Compact was implemented in 39 states but expanded to include all 50 states plus the District of Columbia (DoDEA, 2022). This legislative compact provides a uniform policy platform dedicated to anticipating and resolving challenges faced by military-connected students (Atuel et al., 2011; Esqueda et al., 2012; DoDEA, 2022). To anticipate the transitions needed for the military family,

who is subjected to move three times more than the average non-military family, the Compact ensures children of military families will be afforded the same opportunities for educational success, not being delayed or penalized as a result of inconsistencies among districts and inflexible bureaucratic practices (DoDEA, 2022). In the high school setting, this Compact protects students from changes in graduation requirements that may vary from state to state and facilitate transfers of transcript records and subsequent course placement (Esqueda et al., 2012). For students who receive services such as gifted education, a 504, or an individualized education plan (IEP), those records are reciprocated in the new school to make transitions easier for parents and students alike.

The National Military Family Association (NMFA), founded in 1969, is a non-profit organization that provides support and advocacy for military families (National Military Family Association, 2023b). Military spouses who recognized the need for a support system for families of military personnel created a mission to strengthen and protect the families of those who serve our country, including active duty, retired, and wounded service members (National Military Family Association, 2021). The NMFA provides resources and services to help military families cope with the challenges of military life, such as deployments, frequent moves, and separations (National Military Family Association, 2023a). The NMFA also conducts research on issues affecting military families and provides policy recommendations to lawmakers and military leaders working closely with the Department of Defense, Congress, and other organizations to ensure that military families receive the support they need (National Military Family Association, 2023b).

Military Child Education Coalition (MCEC) is a non-profit organization that focuses on providing support, resources, and advocacy for military-connected children (Hulsey, 2011). The

MCEC was established in 1998 to address the unique challenges that military children face, such as frequent moves and deployments of their parents (Military Child Education Coalition, 2020). The MCEC provides training and resources for educators, school administrators, and parents to help them better understand the unique needs of military-connected children (Hulsey, 2011). The organization also advocates for policies and programs that support military children's education, including the Interstate Compact on Educational Opportunity for Military Children (Atuel et al., 2011; Esqueda et al., 2012; Military Child Education Coalition, 2020). The MCEC also conducts research on issues affecting military-connected children and provides training and consultation services to schools and organizations that work with military families, playing a critical role in supporting the education and well-being of military-connected children and their families (Military Child Education Coalition, 2020)

Launched in 2011 by then First Lady Michelle Obama and Dr. Jill Biden, Joining Forces is a White House initiative to support military families, with programs in employment, military child education, and health and well-being to support servicemembers, veterans, caregivers, dependents, and survivors (The United States Government, 2022). Operation Educate the Educators is a Joining Forces program designed to support military-connected children in classrooms through teacher education, although its reach only extends to just over 100 institutions with pre-service teacher programs (Biden, 2016).

Despite the efforts of such idealistic and supportive legislation, the social and emotional impact of a military family's often transient lifestyle cannot be entirely protected by federal legislation or White House initiatives (Bradshaw et al., 2010). With variances in school culture, environment, personnel, social circles, and extracurricular offerings, students need more than the reassurance that their previously taken coursework and status from a previous school will be

protected. When a student changes school districts that vary in size and geographical location, students may be deprived of activities, sports, and clubs they previously enjoyed at school (Bradshaw et al., 2010; Morgan & Ross, 2013). Military-connected students also may be gaining new opportunities, but navigating new teachers, school culture, and finding new friends still pose challenges to these students. Understanding the value that extracurricular involvement and social connections bring to adolescents, the researcher hopes to bring these challenges forward for more proactive anticipation of military-connected students' needs rather than reactively relying on legislation to ease a student's transition.

Military Norms and Identity

The norms of US military life can vary depending on the branch of the military, the specific unit or base, and the servicemember's rank (Atuel et al., 2011; Dunivin, 1994; Hall, 2013). Hall (2013) consolidates military culture into three overarching elements: hierarchical structure, the importance of the mission, and the inward focus of the military. There are some commonalities and norms across most branches and units, including discipline, chain of command, professionalism, sacrifice, and readiness all in support of the given mission while recognizing the support role of the military family (Dunivin, 1994; Hall, 2008; Hall, 2012; Hall 2013; Lygothe, 2022).

The military operates on a hierarchical chain of command, with officers and non-commissioned officers (NCOs) supervising lower-ranking members (Hall, 2013). Servicemembers who enlist in the military progress through the lowest pay grades and have less influence compared to those who may eventually become an NCO. However, an individual entering the military as an officer, likely with a college degree, trumps any NCO in pay grade, power, and authority (Hall, 2013; Wertsch, 1991). The military emphasizes discipline and

following orders, meaning that military members are expected to be punctual, obedient, and respectful to their superiors (Dunivin, 1994; Hall, 2013). Military servicemembers are expected to follow orders and respect the authority of those in higher rank, even outside of their unit as part of discipline expectations (Hall, 2013; Military Culture, 2008). The hierarchical structure, along with discipline and enforced etiquette creates an authoritarian environment to maintain order, minimize confusion, and ritualized (Hall, 2013). Additionally, the norms of military service extend to off-duty situations, in which professionalism and appropriate behavior are always expected (Military Culture, 2008). These ideals include standards of dress and personal grooming, avoiding inappropriate behavior, and representing the military in a positive light (Hall, 2012; Military Culture, 2008). The expectations of decorum visually demonstrate the importance of the military to civilian society, reminding civilians of the military's commitment to service and protection (Hall, 2012). These patterns extend to the servicemember's family: how the family unit is managed, interactions between families of different ranks, and the expectation to uphold the military's values in daily interactions (Hall, 2013). Children often internalize the expectations of military culture, recognizing their "rank" in the home and the level of authority the parents have may be more apparent as a result (Hall, 2013). The more stressors placed on the family due to individual experiences, children may fall out of line with the traditional norms and values (Military Culture, 2008).

The importance of the mission and the total commitment is expected of military servicemembers and their families (Hall, 2013; Martin & McClure, 2000). The focus on the mission at hand creates a corporate identity situated in knowledge and control for servicemembers and feelings of cohesion and collectivistic mentality for the families (Hall, 2013; Military Culture, 2008). This aspect of military culture is felt strongly by the military

family, who is subject to the effects of their servicemember's absence, the conflict between importance of the individual family and the mission, and the constant preparation for conflict and disaster (Faber et al., 2008; Hall, 2013; Wertsch, 1991). Additionally, servicemembers commit to the tenets sacrifice and camaraderie, values which prove necessary for a career in the Armed Forces and for families who support the servicemember's mission, even if that means placing the family in a secondary role (Hall, 2013; Wertsch, 1991). Children of military servicemembers are often unaware of a life outside of military service, so the culture is somewhat of a lifestyle immersion (Barker & Berry, 2009). While unique to each family, children's understanding of the potential implications of military service mostly increase as they enter adolescence, however research indicates that the more stressors a military-family faces, the more behavior problems and attachment issues are present among children (Barker & Berry, 2009).

In response to the call to prioritize the mission, servicemembers' focus is cast inward to the military rather than a more community-focused, outward perspective, affecting their families through an external locus of control (Hall, 2013; Lefcourt, 1991; Shabazz, 2008). Frequent loss and transition issues, such as changing schools, communities, and friend groups, parental absence, and isolation are experienced among families who have almost no control over where and how often they are subject to move, understanding that the military system determines the best use of personnel based on the mission at hand (Hall, 2008; Hall, 2013; Reger et al., 2008; Shabazz, 2008). For military-connected children who attend public school in the US, students are moving every two to three years, with adolescents moving three times more often than civilian students, creating a source of tension between military and civilian students and attachment issues within the military family (Hall, 2012; Hall, 2013). Military-connected students experience a higher frequency of bullying for being different and often embrace the familiarity of

military cultural values in place of help-seeking, which can be perceived as a sign of weakness (Kranke, 2019). The inconsistency of a parent or spouse's presence and consequently unstable role in the family unit can cause negative effects and consequences detrimental to the servicemember and their family (Basham, 2008; Hall, 2013). Families and servicemembers are expected to demonstrate control over emotions and exhibit stoicism, a critical component of military commitment, along with other mission-first mentalities, placing children in a complicated position of conflicting feelings and responsibilities (Hall, 2008; Hall, 2013; Kranke, 2019). Compliance, secrecy, and the denial of individual preferences and freedoms are additional principles of military culture, complicating military families' relationships with civilian culture, often beyond the scope of a child's understanding (Hall, 2013). Positive tenets of military service, such as serving the country and greater good, following or establishing a family tradition, and learning skills that can transfer to a civilian career often eclipse the cultural aspects that may seem like detriments, which civilians may not understand. As public school culture and environment are civilian-designed and centered, teachers' awareness of the military culture and building capacity in cultural competence is essential to properly support military-connected students through their adjustments (Atuel & Castro, 2018; Hall, 2013; Meyer et al., 2016).

Educators' Perceptions of Military-Connected Students

For those without military exposure from their personal experiences, teachers report a vague knowledge of ideas and concepts relative to the diverse lived experiences of military-connected students (Garner et al., 2014). The knowledge is often limited to their personal experiences with military affiliation, if applicable, and if the school location is near to or within a military community (Garner et al., 2014; Sherbert, 2018). Teachers comfortably identify federal recognition programs designated for military awareness, such as Veterans Day and Military

Child week but knowledge does not often extend beyond such national holidays (Garner et al., 2014). Teachers are cognizant of students' experiences that shape them as learners and how students' backgrounds influence the collective classroom environment, but teachers' understanding of military-connected students is indicative of a lack of understanding about this population of students and the resources that are available to serve them; most teachers report a need for professional development relative to military-connected students and their needs (Capp et al., 2017; Garner et al., 2014; Sherbert, 2018). A perceived awareness of cultural context for military-connected students is evident, but limited, leaving educators unable to facilitate school connectedness and support for this population of potentially at-risk students (Garner et al., 2014).

Educators in public schools often feel unprepared because they are not familiar with or understand military culture and norms, along with the challenges associated with being a military-connected student (Kranke, 2019). Distanced from counselors and administrators, teachers have limited knowledge relative to student identification and resource awareness and may to defer to counselors and administrators for support when they are unable to recognize student needs (Garner et al., 2014). Where administrators, counselors, and military liaisons are likely more prone to identify military-connected students, only 27% of teachers noted any knowledge of resources to support military-connected students (Garner et al., 2014). Feeling prepared and competent to teach military-connected students is important, as an educator often serves as a first line of support in identification and recommendations for students and the proper services they may need (Kranke, 2019). The interconnectedness among public schools, education preparatory programs, and military-affiliated support agencies is important for the social, emotional, and academic growth of military-connected students and their families (Capp et al., 2017; Chandra et al., 2009; De Pedro et al, 2011; Garner et al., 2014).

The Military-Connected Adolescent

Adolescence is characterized by hallmark tenets that double as stressors: personal and physical changes that coincide with identity development and the acquisition of skills to prepare for adulthood (Faran et al., 2004; Lucier-Greer et al., 2016). In addition to the stresses of normal adolescence, military-connected adolescents face context-specific demands that can detrimentally affect their well-being and development (Faran et al., 2004). Military adolescents' lives, even those considered routine, are marked by constant change and the need to adapt to new situations, including school and social settings (Esqueda et al., 2012; Faran et al., 2004; Lester & Flake, 2013; Lucier-Greer et al., 2016). Susceptible to adverse mental health outcomes due to their family's military affiliation, military-connected youth are subjected to several stressors that often arise within the context of a military dependent (Capp et al., 2017; Cederbaum et al., 2014; Gilreath et al., 2015; Park, 2011; Sullivan et al., 2019). Factors such as lengthy and unpredictable periods of separation, heightened financial stress, the anxiety of the left-behind parent, and exposure to the traumatic repercussions of war can negatively affect military-connected youth and their perceptions of the family structure (Chandra et al., 2010; Chartrand & Seigel, 2007; Hoshmand & Hoshmand, 2007; Heubner et al., 2009; Lester & Flake, 2013). The impact of deployment and lack of stability that derives from the transient nature of military life and deployment may be overshadowed by the resilience and maturity often displayed by military-connected adolescents, who may face barriers in adjustment in the academic and social realms.

Impact of Deployment on the Stability of Home Environment

Children with a deployed parent have significantly greater physical, emotional, and psychosocial challenges than their civilian counterparts that can be detrimental to the family's stability (Chandra et al., 2010; Flake et al., 2009). The deployment cycle is a three-stage process,

conceptualized by Lester and Flake (2013). Beginning with the anticipation of deployment, the first phase involves the notification of the servicemember of their impending deployment and the preparations the family makes to adjust in the parent's absence. The deployment is the second phase, and the final phase occurs when the servicemember reintegrates into the family, all stages of which pose challenges that affect the family unit. For military youth, deployment is associated with feelings of ambiguous loss, behavior problems, and physical and mental health risk factors, including higher levels of stress, lower quality of life, suicidal ideations, psychosocial morbidity, and anxiety (Barker & Berry, 2009; Barnes et al., 2007; Chandra et al., 2010; Chartrand et al., 2008; Flake et al., 2009; Lester et al., 2010). The changing roles among military family members experience during deployment, including shifts in household responsibilities, can compound with the unique emotional toll deployment takes on each family member, causing strain (Lucier-Greer et al., 2014). The family members of the deployed service member and their fluctuating well-being can upset the family balance, creating stress and jeopardizing the family's optimal function; the well-being is a significant contributing factor in mental health factors like suicidal ideation and depressive symptoms (De Pedro et al., 2018). Employment that involves long separations from family challenges optimal family functioning, particularly because the separations result in ongoing challenges during the absence and upon reunification, relative to role confusion (Moeller et al., 2015; Orthner and Rose, 2009; Zvonkovic et al., 2005).

Stressors specifically surrounding parental deployment adversely affect the mental health of military-connected adolescents, thus impacting social and academic well-being due to elevated stress and worry (Cozza et al., 2014). During deployment, mental and behavioral health visits increase by 11%, behavioral disorders rise by 19%, and stress disorders by 18% among military-connected youth with a deployed parent (Gorman, Eide, & Hisle-Gorman, 2010).

Unavailability of Parental Support in the Home Environment

The dynamic of a family unit changes drastically when a parent is absent for an extended period, with reverberating psychological and emotional effects across all members of the family (De Pedro, 2018; Kelley & Jouriles, 2011). This situation does not exclusively apply to military-connected students; parental absence or the feeling of absence can also affect students who have parent whose career may require travel or the demands placed on a single parent household. Across all age groups, deployment of a parent may be related to increased emotional and behavioral difficulties for children during the parent's absence, including higher rates of healthcare visits for psychological problems (Creech et al., 2014). During a parent's absence, a sense of loss and anxiety can overshadow a previously stable family unit and lead to isolation for the service member from the family's children (Rodriguez & Margolin, 2011). Adolescents are often perceptive to the remaining parent's sense of sadness and worry and often attempt not to be a source of additional strain despite their worry or anxiety about the situation, allowing efforts to be concentrated on younger siblings (De Pedro et al., 2018; Rodriguez & Margolin, 2011). Without as strong a sense of parental availability and support, adolescents can yield to more mature factors associated with parental absence: self-sacrifice, self-discipline, and self-reliance, but many do not respond ideally to the stresses associated with an adjustment of family support (Rodriguez & Margolin, 2011).

Recent studies on adolescents in military-connected families indicate these students face higher levels of stress and anxiety linked to depression and suicidal ideation, victimization within the school environment, and negative mental and physical health (Cederbaum et al., 2014; De Pedro et al., 2018; Gilreath et al., 2014a; Moeller et al., 2015). These stressors are beyond the student's control and in times of challenge, strain the family unit, manifesting in suboptimal

academic performance and behavioral challenges (Baptist et al., 2015; Chartrand et al., 2008). When made aware, school staff can respond to heightened anxiety associated with parental absence, including increased responsibilities and strained mental and emotional health of the nondeployed parent, serving as a support system for the family's children (Chandra et al., 2010). Even upon the deployed parent's return, the reintegration phase can create confusion within the family's roles compounded with added emotional instability depending on the military parent's experiences while deployed and their mental health upon return (Dansby & Marinelli, 1999; Marek & D'Aniello, 2014). A disconnect exists between the status of the military family and the school due in part to the lack of proactive training and awareness of the faculty and staff. A military family may feel that the stages of deployment are their own burden to bear, and schools are not doing enough to share the responsibility of student support.

Positive Attributes of Military Life on Youth

Common military-related stressors can yield positive student outcomes such as resilience, confidence, maturity, adaptability, and a developed sense of empathy (Chan et al., 2014; Chandra et al., 2010; Hanna, 2020; Meyer et al., 2016). These traits manifest themselves in the classroom in positive behaviors such as self-reliance and responsibility (Bradshaw et al., 2010; Hernandez et al., 2018). When students exhibit self-sufficient behaviors at school, assumptions may be made about the support these students need from the school and community. However, high levels of stigma are associated with help-seeking among military families and self-reliance is a byproduct of this barrier (Becker et al., 2014).

The culture of the military community encourages resilience and promotes a sense of pride in belonging to a military family (Meyer et al., 2016). Adolescents may feel shame in seeking support when challenges contradict the positive connections associated with military life,

so building a culture of support among school and community is essential for military-connected students (DePedro et al., 2014). While research suggests that there is no statistical significance among adolescents, regardless of military affiliation, and their tendencies to internalize symptoms and externalize problems behaviorally and emotionally (Card et al., 2011; Huebner et al., 2007), military-connected adolescents have higher levels of stress and anxiety reported than their civilian counterparts (Cederbaum et al., 2014; De Pedro et al., 2018; Gilreath et al., 2014a). Adolescents, however, are more likely to mask their internal struggles with the military lifestyle through positive reactions and behaviors not to catch the attention of an already stressed parent while maintaining the military family's expectations of sacrifice for the greater good (Huebner et al., 2007). An open dialogue of support is essential through school and other community systems for students to properly engage with their feelings that may be sheltered from the military-connected adolescent's family unit. Alternatively, some studies indicate that the military lifestyle benefits adolescents, who are put in positions to grow and engage in new experiences, fostering a sense of resilience and independence (Bradshaw et al., 2010; De Pedro et al., 2018; Weber & Weber, 2005).

Adjustment to the New School Environment

Military life can be challenging for families, as they are often separated and move multiple times with little input or respect for the family's choice, moving on average every 2.9 years (Cozza et al., 2014; De Pedro et al., 2011; Esqueda et al., 2012; Lester & Flake, 2013). School transitions, then, occur an average of four times between initial school enrollment in kindergarten and high school graduation and are often met with challenges in adjustment, one's social support system, and complications within curricular and extracurricular realms (Bradshaw et al., 2010; Bradshaw & Sechrest, 2010). Highly mobile youth, including civilian and military-

connected adolescents, report adjustment problems with a higher frequency of drug use, academic failure, lower academic performance, health risk and somatic complaints (Bradshaw & Sechrest, 2010). Over 50% of military-connected youth are enrolled between kindergarten and 5th grade and are the primary recipients of literature relative to adjustment and a more concerted effort for proper support system implementation. However, the near 30% of high school-aged military-connected adolescents face challenges that can impact and limit their potential beyond the secondary education setting and into early adulthood and are equally deserving of interventions for support through the various facets of adjustment they face in the new school environment (Bradshaw et al., 2010; Bradshaw & Sechrest, 2010; Mmari et al., 2010; Mmari et al., 2009).

Social Adjustment

In addition to the challenges adolescent students face, such as increasing academic demands and navigating peer and familial relationships, additional stressors affect military students including frequent relocation and deployment (Astor et al., 2013; Bradshaw et al., 2010; Bradshaw & Sechrest, 2010; Kranke et al., 2019; Milburn & Lightfoot, 2013). During adolescence, individuals undergo tremendous physical and emotional changes and, when compounded with military affiliation, can result in frequent moves that require adjustment (Williams, 2013). Relocations can inhibit a student's ability to maintain stable relationships, which is a critical component of adolescent development and subsequently affect students' attitudes and academic performance in school (Bradshaw et al., 2010; Gilreath et al., 2016). Students who frequently transition must leave friends behind and assimilate into new social groups, a problem elevated when the move happens during an established school year as friend groups and networks have been established (Williams, 2013). As a result, military-connected

adolescents face challenges creating meaningful, lasting peer relationships, which can negatively impact multiple aspects of school life (Bradshaw & Sechrest, 2010). Military-connected students will, in turn, seek out other military students, who are generally more receptive and welcoming, empathizing with the new student's potential challenges in adjustment (Bradshaw et al., 2010; Williams, 2013).

School Personnel and Curricular Adjustment

As military-connected students are three times more likely than civilian students to experience a school transition, understanding the adjustment process pertaining to academics and relationships students have with the school personnel who support them is essential (Bourg & Segal, 1999; Bradshaw et al., 2010; Williams, 2013). Adolescents are not actively seeking companionship with a teacher or counselor, but when needs are anticipated and proactively managed by a school, they can serve the student well. A mentorship program can be coordinated through a counselor or military liaison, through which parents and community members who understand the challenges of military life can support students, who may be seeking a trusted role model during a challenging time in their lives (Bowen et al., 2003; Williams, 2013). With academic challenges presented to military-connected students in response to an unfamiliar curriculum or matriculation process, school personnel can support students through tutoring programs with the needs of highly mobile students in mind to combat learning gaps that can exist (Bradshaw et al., 2010; Williams, 2013).

The adjustments military-connected students make due to changes in curriculum and school personnel should factor challenges associated with moving to a new school. Due to the unique challenges military-connected adolescents face, schools should receive training in both awareness and sensitivity to understand the needs and experiences of this population in addition

to educating the civilian staff and student population about the military lifestyle and its potential challenge, such as irregular attendance due to family obligations that may warrant additional time to make-up missing assignments and unique supports during times of educational pressure (Bowen et al., 2003). Curricular adjustments may be challenging due to the confines of local and state curricular decisions, but support systems for transitions should be intentionally implemented. (Ruff & Keim, 2014).

Adjustment to Extracurricular Activities

Another issue facing military-connected students is access to extracurricular activities, such as student organizations, clubs, fine arts outlets, and sports. Military parents often feel their child is not afforded the same opportunities as non-military students due to circumstances beyond the student's control: moving in during the middle of a season or activity, the student's possible disruption to the unity of a preexisting club, sport, or activity, and the likelihood of not making leadership roles due to a lack of familiarity between the student and their peers or teammates (Bradshaw et al., 2010). While a military-connected student may be allowed to try out or join a new team or club, if the transition occurs during the middle of the season or year, the student may be subtly discouraged from joining by sponsors, coaches, or peers (Williams, 2013).

Huebner et al. (2007) identifies an issue regarding military students' extra-curricular involvement may suffer due to a lack of transportation or time for the supporting parent, especially during deployment. Additionally, military-connected students may be reluctant to join an extra-curricular activity due to increased responsibilities at home (Williams, 2013). School-related support groups can facilitate issues like transportation to build opportunities for military-connected students to become involved in activities of interest while becoming acquainted with

the new school and the families whose children are also involved in the same club, activity, or sport.

Impact of Military Influence on Social, Emotional, and Academic Well-Being

Vygotsky (1978) recognizes the influence one's environment has on their learning. Considering the time a student spends in school, this environment is often examined closely to ensure the school is operating in such a manner that is conducive to student success in academics as well as socially and emotionally. Military-connected students have unique cultural needs that necessitate school and community intervention (De Pedro et al., 2014). Despite the adaptability humans present when facing new environments, a school that provides proactive engagement and vocal military support provides a more normalized life and reduces the impact of negative stressors for military families (Lucier-Greer et al., 2014). Training teachers and support staff to recognize military students' needs while promoting a culture of support contributes positively to the adaptive functioning of military-connected students (Ohye et al., 2020). Through an open line of communication between military families and the schools that serve their students, teachers can be an added layer of positive support to ensure this population of students remains visible.

Responsibility of Public Schools to Military-Connected Students

Civilian public schools lack awareness of military-connected students, their families, and the unique challenges they may face (De Pedro et al., 2014.) Less than 10 percent of public school educators report being trained to work with military-connected students and almost 50 percent of public school staff report their school never or minimally educates staff about military families (Garner et al., 2014; Kranke 2019). Military parents hold public schools in a more negative light compared to non-military families, due in part to the lack of educational resources for military families, the degree of understanding the school staff demonstrates toward their

needs, and the responsiveness of the school's administration to concerns (Berkowitz et al., 2014; De Pedro et al., 2014). Educators, counselors, school social workers, and psychologists need more training regarding the culture of military life and the needs of military-connected students and their families (Berkowitz et al., 2014). Public schools should support the success of all students who enroll, and any shortcomings become responsibility of the school systems to equip their schools and their educators to support the success of all students. Challenges arise when populations are less visible, such as the military-connected student. Atuel et al. (2011) offer four bureaucratic yet practical recommendations for transforming public school systems to be an emotional and learning-conducive environment for military-connected students: utilize Impact Aid to fully fund eligible districts that serve at least 3% or 400 military-connected students, work through gaps in understanding and properly implement the Interstate Compact, adopt nationally common academic standards for continuity across states, and create a large-scale data system that districts can utilize to identify military-connected students and their needs. While institutional changes through the legislature are in place to support military families and the public schools that serve them, the responsibility for meaningful and appropriate implementations ultimately falls on the public school districts, their schools, and educators to be proactive in their efforts to support these students appropriately (Kranke, 2019).

School System and the Military-Connected Student

The school climate influences student outcomes in social, emotional, and academic capacities, and while some districts are making concerted efforts to make schools welcome military students, the institution of public schools can better prepare schools and educators for serving our military-connected students (Bradshaw et al., 2010; De Pedro et al., 2010; De Pedro et al., 2018; Mmari et al., 2008). School districts and other civilian community programs can

better inform schools about the military-connected population who can then supply teachers with relevant data and information regarding students' needs (Booth & Crouter, 2001). Especially when a deployment is involved, school districts and administrators must inform these students' teachers, who are working with them on a daily or frequent basis (Fitzsimons & Krause-Parello, 2009; Macdonald, 2017).

Educators and the Military-Connected Student

While military-connected children's academic progress and health outcomes are strained during parental deployment and during times of transition, teachers often feel they cannot support students properly (Macdonald, 2017). School staff members have reported struggling to identify adolescent students' social and emotional needs among military-connected families and the challenges facing the modern military family (De Pedro, et al., 2018). Difficulties arising from a lack of specific military knowledge and understanding of the deployment experience hinder the ability to support students adequately without training (Chandra et al., 2010; Conway & Schaffer, 2017; Huebner et al., 2007; Mmari et al., 2009; Macdonald, 2017). De Pedro (2011) suggests reform of the public school sector to be more accommodating to military-connected students' needs through training and transparency in identifying these students.

Teachers with high self-efficacy believe in their abilities to impact students' development; they seek to understand experiences and challenges faced by their students, solicit knowledge and training in areas that need improvement, collaborate and communicate regularly with parents and other stakeholders, advocate for their students, and adapt teaching strategies to optimally serve students (Guskey, 1988; Shahzad & Naureen, 2017; Tschanne-Moran & Hoy, 2001; Woolfolk, 1998). Teacher self-efficacy plays a significant role in enhancing teachers' awareness of military-connected students and the challenges they may endure, such as frequent

relocations, family separations, deployment, and acclimation to changing circumstances (Brendel et al., 2014). With military-connected students, teachers empathize with unique circumstances to build a supportive classroom environment that acknowledges, addresses, and celebrates the specific needs of these students. Additionally, teachers with high levels of self-efficacy are motivated to acquire skills and knowledge, actively pursuing professional development opportunities, or engaging in independent research to learn about the military lifestyle, deployment-related challenges, and their potential impact on student well-being and academic performance, understanding the influence teachers have (Ashton & Webb, 1986; Trimillos, 2018). Teacher self-efficacy influences the effectiveness of communication between teachers and their families, aiming to establish positive relationships and promote open dialogue (Walker et al., 2021). By forging these relationships proactively, teachers can better support military-connected students, tailoring instruction and support as needed. Advocacy is another trait of teachers with high-self efficacy, and this aspect benefits military-connected students within the school community by collaborating with counselors and school personnel, advocating for resources and programs that address these students' unique challenges (Trimillos, 2018). Lastly, the potential for disruptions to military-connected students' academic performance and well-being can be addressed positively by a teacher with high self-efficacy, who will demonstrate resiliency and adaptability in their teaching approaches to meet students' needs. For military-connected students who have moved to a new school, teachers understand they may need additional support to mitigate the emotional and academic impact of the transition and proactively anticipate needs, enabling teachers to problem-solve and adjust instructional and classroom management practices to meet the diverse needs of students (Chandra et al., 2010; Huebner et al., 2007; Mmari et al., 2009; Macdonald, 2017). For pre-service, novice, or veteran

teachers who are not familiar with military culture or may not demonstrate self-efficacy, training specific to the needs of military-connected children and their potential academic, social, and emotional barriers will be beneficial to support these teachers in advance of their working with military-connected students (Astor et al., 2012b; Conway & Schaffer, 2017).

Summary

Military-connected adolescents face challenges like ordinary teenagers: physical, emotional, and psychological changes that impact academic performance, developing alongside individual interests and values. When the unique stresses of military life are added to an already difficult time of life in adolescence, a greater strain is placed on the child with the potential to affect overall well-being detrimentally. Issues like frequent relocation, a parent experiencing deployment, and changes in the school environment, including social, curricular, personnel, and extra-curricular adjustments can create burdens that manifest themselves through internalization of symptoms of anxiety and depression, and often externalized through struggles in the classroom academically and behaviorally. Public schools are responsible to the military family and their children to ensure their needs are recognized, their issues are validated, and their children are properly and appropriately supported for the benefit and stability of the military family unit. Primarily, teachers need to be aware of the military-connected students they teach, privy to the issues they may face, and be proactively trained to recognize when a student is struggling and support them as they would any other student with a need.

Chapter III: Methodology

Military-connected students have unique circumstances compared to their non-military peers that may affect their social and emotional development as well as their academic performance (Lucier-Greer et al., 2014; Milburn & Lightfoot, 2013; Mmari et al., 2009). These students may require additional support to thrive socially, emotionally, and academically during times of strain during parental deployment and the transitions often associated with military life. As a result, educators often feel they cannot support students properly (Macdonald, 2017). School personnel have reported difficulties in recognizing the social and emotional needs of adolescent students within military-connected families and addressing the unique challenges faced by modern military families (De Pedro, et al., 2018). The lack of specific military knowledge and understanding of the deployment experience poses challenges, hindering the capacity to adequately support students without appropriate training (Chandra et al., 2010; Conway & Schaffer, 2017; Huebner et al., 2007; Mmari et al., 2009; Macdonald, 2017). This study utilized a convergent parallel mixed-methods design to identify educators' understanding about military-connected high school students while also comparing academic achievement in math and reading among military-connected and non-military affiliated students.

In this chapter, the convergent parallel mixed-methods research model is detailed along with the specific research designs utilized for both the quantitative and qualitative aspects. The sample characteristics and data collection measures for both quantitative and qualitative strands are explained. The last section in the chapter discusses the quantitative and qualitative data analysis procedures and mixed methods data integration techniques employed in this research study.

Research Design

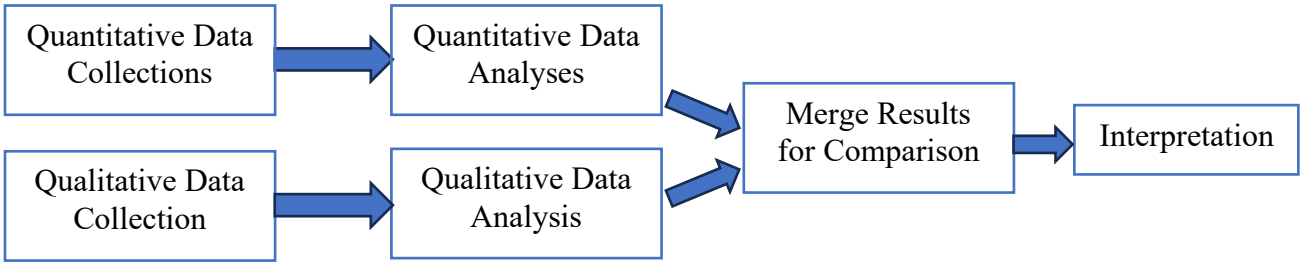
This study used a mixed methods approach, which is a methodology for the collection, analysis, and integration of both quantitative and qualitative data during the research process to understand the research problem and phenomenon under investigation more clearly (Creswell, 2014). Quantitative data serve to establish a relationship and qualitative data answer the how and why the relationship is occurring (Creswell, 2014). A mixed methods design provides a detailed understanding of the problem's complexities that quantitative data and qualitative data cannot accomplish adequately on their own (Creswell, 2014; Green et al., 1989; Tashakkori & Teddlie, 1998). Three issues should be considered when designing a mixed methods study: priority, implementation, and integration (Creswell et al., 2003). The priority refers the emphasis on either quantitative or qualitative data, the implementation is determining if data collection occurs sequentially or concurrently, and the integration phase is the utilization of methods to combine the quantitative and qualitative data to synthesize conclusions that are derived from both data strands. (Creswell et al., 2014). This research prioritizes quantitative data, using qualitative data as additional support and the data collection occurred concurrently. The primary benefit of the convergent parallel design of mixed methods research was to enhance the validity and reliability of the research, offering a deeper and more comprehensive understanding of the topic and the research questions (Onwuegbuzie & Collins, 2007).

The convergent parallel methods design occurs when quantitative and qualitative data are collected separately yet concurrently, the results are then merged for comparison before interpretation occurs (Creswell, 2014; Creswell et al., 2003; Creswell & Plano Clark, 2017). This study's design, indicated by Figure 2, was conducted by two quantitative phases of data collection and analyses alongside the qualitative data collection, with a final integration that

merges the data from quantitative and qualitative strands of data collection (Creswell, 2014; Creswell & Creswell, 2017; Creswell & Plano Clark, 2017; Fetters et al., 2013).

Figure 2

Convergent Parallel Mixed Methods Design



The causal-comparative research design was implemented to examine the differences between military and non-military students based on MAP English and Math achievement scores. This design is a methodological approach that investigates the relationships between variables when it is not feasible to manipulate them experimentally (Schenker & Rumrill Jr., 2004). The groups occur in natural settings and the researcher has no control over assignment of participants in different groups. This design is particularly suitable when the researcher wants to examine differences in dependent variable based on the groups subsumed within the independent variable and has no control over the formation of these groups as they are naturally occurring at the research site (Bellini, 2017; Schenker & Rumrill Jr., 2004). The grade level and military status of students are the two independent variables which have groups that are already existing before the researcher conducted the study. (Bellini, 2017). In a causal-comparative study, the researcher identifies and selects pre-existing groups or conditions that differ naturally in the independent variable of interest and then compares their outcomes on the dependent variable

(Schenker & Rumrill Jr., 2004). Causal-comparative research involves the observation of naturally occurring differences (Bellini, 2017; Schenker & Rumrill Jr., 2004).

A phenomenological research design was utilized for the qualitative strand. Phenomenology is a type of educational qualitative research that is utilized when the research problem requires a profound understanding and articulation of human experiences common to a group of people (Creswell, 1998; Padilla-Diaz; 2015). The surveyed group of educators for this research share common human experiences, as they are all employed within the same school district that is home to a military base and work at the high school level. The perceptions and experiences of teachers, counselors, and military liaisons toward military-connected students may vary, but the research questions will best be answered through these lived and shared experiences of educators as shared via open-ended survey questions that allow for elaboration and personal input, enhancing the value of the survey.

This study sought to answer the following questions:

Research Question 1 (RQ1): What are the differences in overall achievement scores on the MAP Reading 6+ assessment of high school military-connected students compared to the non-military connected counterparts?

Research Question 2 (RQ2): What are the differences in overall achievement scores on the MAP Math K-12 assessment of high school military-connected students compared to the non-military connected counterparts?

Research Question 3: What are high school educators' perceptions of military-connected students' needs?

Research Question 4: What knowledge do high school educators have regarding professional resources relative to military-connected students?

Role of the Researcher

The researcher is employed as a teacher in the same school district in which the research was conducted, located in Georgia. The researcher has been a classroom teacher for 13 years at the same high school within the district, which is home to a military base. The researcher requested participation from high school faculty and support staff within the confines of the researcher's school district. The participants were made aware of the purpose of the study and how their input would be used to inform administrators and central office staff members of professional development needs and trends surrounding military-connected students that stem from their survey responses. The researcher's role as facilitator should not influence the school staff's participation or input in the survey (Avgitidou, 2009). As facilitator, the researcher was responsible for guiding and supporting the study's participants, ensuring that data was collected and analyzed effectively (Avgitidou, 2009). As the researcher collected survey data, confidentiality of participants' responses and security of the research results were prioritized.

Additionally, the researcher collected and analyzed testing data from the school district's school effectiveness department. The researcher requested achievement data from the Winter 2023-2024 administration of the Measures of Academic Progress (MAP) assessment for high school students to be sorted by subject areas: reading and math. The data further disaggregated by military affiliation or non-military status. Data collected from the MAP tests did not identify students by name, gender, or student identification numbers, rather the data indicated two aspects: achievement percentiles on the MAP reading and math assessments and whether that student was military-connected.

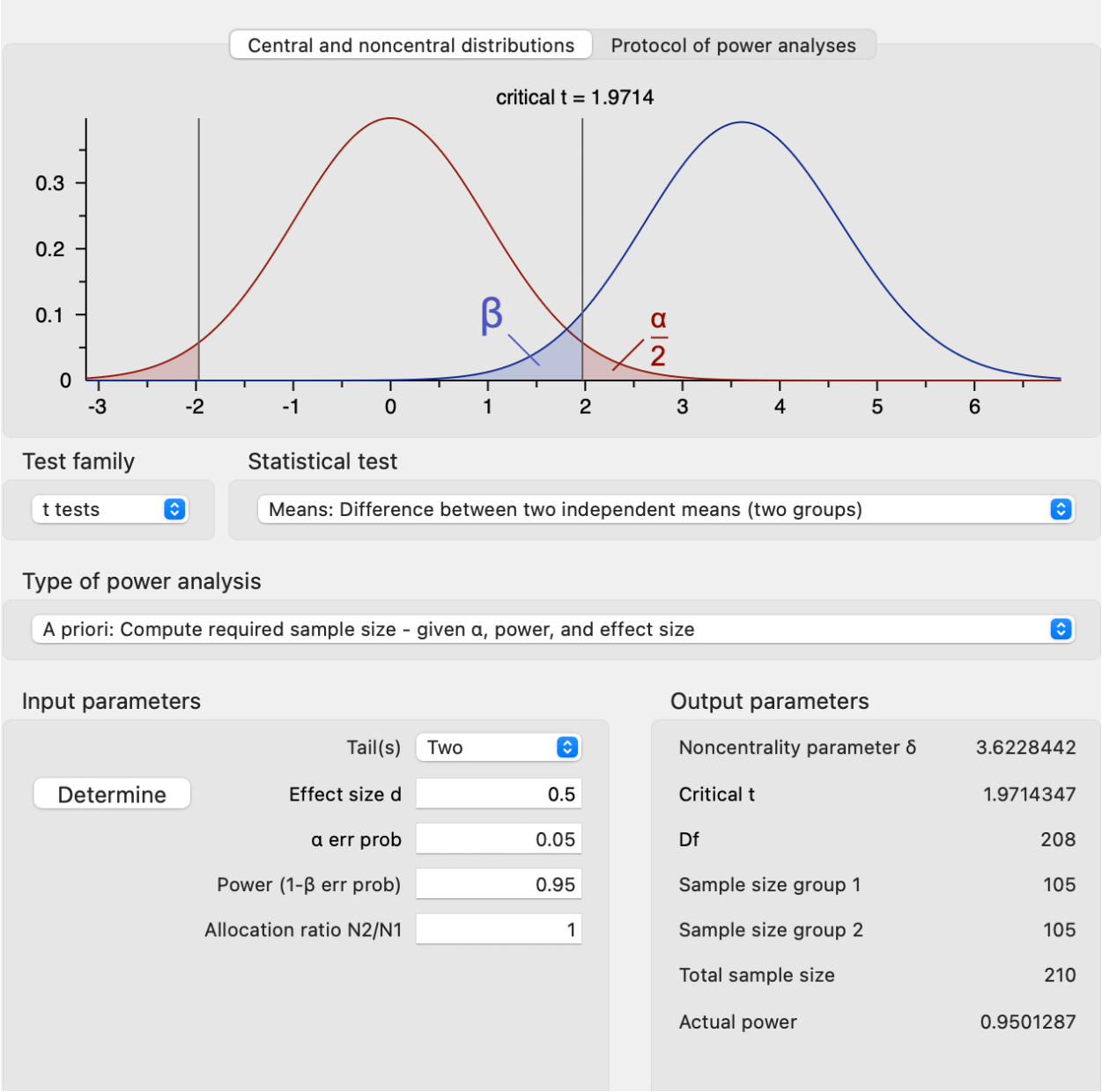
Participants

The information collected from surveyed participants and through student achievement data were used solely for the purpose of this study. In addition to the school district's policies regarding research and communication with district employees, the researcher followed all policies and regulations of both the Institutional Review Board (IRB) and Columbus State University. The researcher supported the ethical principles for protection of human subjects as indicated in the Code of Federal Regulations and the Belmont Report: respect for persons, beneficence, and justice (Belmont Report, 2014; U.S. Department of Health, Education, and Welfare, 1979).

Sampling is the process of selecting a portion or segment that is representative of the whole population under investigation (Onwuegbuzie & Collins, 2007). The participants for the quantitative strand include both the educators and students. The educators consist of teachers, counselors, and military liaisons. The educator data came from the self-reported surveys. The participants in qualitative strand were a sub-set of the educators who responded to the survey. Hence, the educators were common in both quantitative and qualitative strands. Surveyed participants were not made aware of the student testing data that was collected to address two of the four research questions. The retrospective MAP Reading 6+ and MAP Math K-12 achievement scores serve as the student data. Referenced in Figure 3, the G-Power analysis showed a minimum of 210 participants for two-tailed hypothesis testing with a 0.95 power for t-test analysis reinforced by Onwuegbuzie and Johnson (2004).

Figure 3

G-Power Calculations for Sample Size



A purposeful sampling method was implemented as a causal-comparative design was used. Given that there are imbalanced populations among military-connected and civilian students within the researcher's school district, a purposeful sampling method had to be considered to ensure valid and reliable results. After retrieving the raw data, 221 military-

connected students took the MAP Reading 6+ assessment in Winter 2023-24. These students were sorted by gender and ethnicity as reported by the school district to determine how to sample the non-military connected student sample.

The preliminary analysis of MAP scores for Reading and Math showed that majority of the assessed 9th and 10th grade students had scores between 50th and 90th percentile. The researcher did not want to include data points below 50th percentile and above 90th percentile scores as this would have led to outliers and skewness in the data. From the 221 military-connected students who took the MAP Reading 6+ assessment, 161 were between the 50th and 90th percentiles. The decision to isolate scores within the 50th and 90th percentiles is to retrieve sampling that is representative of the developing and proficient achievement standards for the state end-of-course assessments. Table 1 shows the number of students that were retrieved from the data set once sorted by military affiliation, gender, ethnicity, and the subject assessed between 50th and 90th percentile achievement scores for a total of 161, for a total sample population of 322 for the Winter 2023-24 MAP Reading 6+ assessment.

Table 1

Winter 2023-2024 MAP Growth Reading 6+ Assessment Distribution by Military-Connected Status

Ethnic Group	Asian	Black	Hispanic	Multi-ethnic	White	Total
Female		12	9	5	36	62
Male	3	19	21	3	53	99
						161

Note. The table represents the 9th and 10th grade military-connected students who scored between the 50th and 90th percentiles.

As indicated in Table 2, there were 98 total military-connected students who scored between the 50th and 90th percentiles on the Math assessment.

Table 2

Winter 2023-2024 MAP Growth Math K-12 Assessment Distribution by Military-Connected Status

Ethnic Group	Asian	Black	Hispanic	Multi-ethnic	White	Total
Female		7	8	5	23	43
Male	1	12	12	3	27	55
						98

Note. The table represents the 9th and 10th grade military-connected students who scored between the 50th and 90th percentiles.

This strategy of sample selection facilitated a balanced representation of military and non-military students in the sample across gender and ethnicity. The demographic breakdowns by gender were duplicated for the non-military population in both reading and math to generate a balanced representation of non-military students. For the non-military connected population, a random number generator was utilized to extract the rows of data that corresponded with the demographics.

Instrumentation

Quantitative Instruments

Quantitative data was collected using appropriate methods, and subsequent statistical analysis allowed for a nuanced understanding of relationships and patterns between the student groups (Onuwuegbuzie & Collins, 2007; Palinkas et al., 2015). The findings derived from this approach enhance the generalizability of results to the entire population, offering a more robust and comprehensive insight into the research questions (Onuwuegbuzie & Collins, 2007; Palinkas et al., 2015). This study featured two quantitative measures: MAP scores disaggregated by military and non-military affiliation and the quantitative items in the staff survey. The results of the military-connected students' achievement scores compared to the civilian students'

achievement scores on the reading and math MAP tests and the survey's results were analyzed to address the four research questions.

MAP assessments are standards-based, norm-referenced exams that measure achievement of every student even when standards change, serving over 13 million students in the United States (Northwest Evaluation Association, 2023). In the researcher's district, students undergo assessments in reading and mathematics three times annually, beginning in kindergarten and continuing through 10th grade. The assessments cover both reading and mathematics and aim to determine academic achievement percentiles compared to nationwide cohorts. Additionally, they showcase students' personal growth, as the assessment is evaluated on a Rasch-unit scale. The achievement data from the researcher's district were obtained from the county's Department of School and District Effectiveness. Specifically, achievement results from the Fall 2023 MAP Growth Reading 6+ and MAP Growth Math K-12 tests for 9th and 10th grade students were collected. These results were then disaggregated by military affiliation and subject area to investigate whether an academic advantage in literacy and math exists for civilian students compared to their military-connected peers.

The nation's largest, continuous school public health surveillance system is the California Healthy Kids Survey (CHKS) that was developed in conjunction with the California Department of Education (CDE). This collection of surveys promotes accountability and data-driven decision making to meet the federal requirements one set forth by Title IV of No Child Left Behind (Gilreath et al., 2014b). WestED, a nonprofit research organization, and the CDE implement the data collection plan for the CHKS and revise surveys in a continuous effort to obtain transparent assessment of California schools.

California School Climate, Health, and Learning Surveys (CalSCHLS) are written with different stakeholders in mind: students, staff, and parents (CalSCHLS, 2023). The Military Module survey features three separate sub-surveys, designed to survey parents, students, and teachers (CalSCHLS, 2023). The Military Module was created by University of Southern California researchers, the eight military-connected schools near San Diego and WestEd, that provides school stakeholders and policymakers with valuable information on military-connected student trends and school climate relative to this subpopulation (Astor et al., 2012a). The San Diego area is home to five different military bases hosting primarily Navy and Marine forces: Camp Pendleton Marine Corps base, Naval Base Coronado, Marine Corps Air Station Miramar, Naval Base Point Loma, and the Space and Naval Warfare Systems Commands Systems Center Pacific (Astor et al., 2012a). Along with 35 military-connected school experts, select representatives from the Department of Defense Education Activity (DoDEA), the U.S. Department of Education, WestEd, researchers, students, parents, teachers, and principal advisory boards were also involved in survey development, pre-testing, and pilot testing. (Gilreath et al., 2014b).

The survey was validated by a USC School of Social Work team led by Dr. Ron Avi Astor and was evaluated by an independent evaluation team from Bar-Ilan University in Israel led by Dr. Rami Benbenishty and Dr. Alana Siegel (Gilreath et al., 2014b). The survey showed both content validity and predictive validity utilizing data and analytic strategies to evaluate the psychometric properties of the survey (Hanson & Kim, 2007). Two mutually exclusive analytic samples – a main sample and a validation sample – were drawn from an aggregate data file containing all Healthy Kids Survey (HKS) data processed between spring 2003 and spring 2005 administrations. For secondary school analysis, separate samples were drawn for each grade on

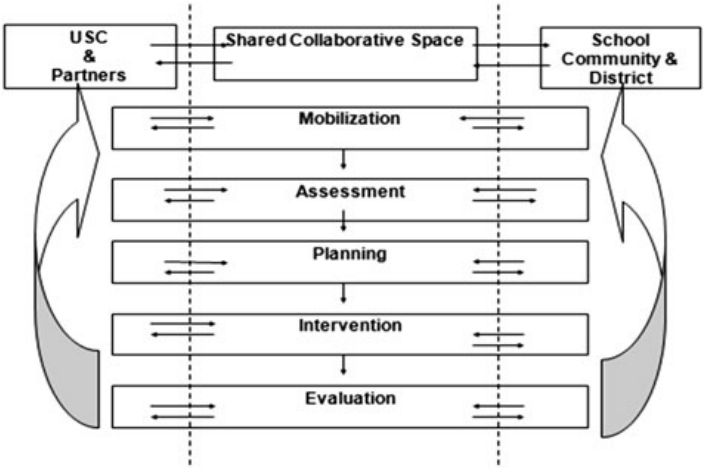
student-facing surveys, gender and ethnicity for parent and staff-facing surveys, with 500 randomly sampled respondents per cell. Equal numbers were used for each gender and ethnic group to avoid bias in models not adjusting for gender/ethnic differences in the sample (Hanson & Kim, 2007). Empirical analyses were conducted to assess the resilience instrument's factor structure alignment with current usage and its conceptual model. Exploratory and confirmatory factor analysis models were fitted for each sample and subsample to establish the measurement structure. Criteria, including fit indices, scree plots, eigenvalues, conceptual clarity, and simplicity, guided factor retention decisions in exploratory factor analyses (EFAs). The EFA results informed nested confirmatory factor analysis (CFA) models, where model fit, latent construct correlations, and factor-loading patterns influenced decisions. This process was repeated for the identifying subsamples, main sample, and validation sample. Muthén and Muthén's Mplus statistical modeling program (2006) was employed for EFA and CFA model estimation. Due to the ordinal nature of resilience asset measures, Muthén's (1984) approach for ordinal indicators was applied in analyzing resilience asset measures. Measurement equivalence across demographic subgroups was examined through confirmatory factor analysis models with covariates, employing multiple-indicator, multiple-cause structural equation models (MIMIC) for differential item functioning across school grade, gender, and ethnicity. Recommendations for item changes were based on substantial group differences in measurement intercepts (± 0.20 standard deviations) in both the main and validation samples. Internal consistency reliability adhered to Nunnaly's (1978) criterion of 0.70 for secondary school surveys.

Construct validity was evaluated by examining relationships between resilience scales and related constructs, utilizing correlations from confirmatory factor analysis models in the main and validation samples. Polyserial correlations were presented to accommodate the mix of

continuous latent constructs and dichotomous or ordinal criterion variables (Bedrick & Breslin, 1996). In the latest report of "Welcoming Practices," Benbenishty and Siegel (2016) stated that the response rate dropped after the third year of using the survey. The response rate does not affect the present study as this survey was intended for single use by the researcher. The data provided by the survey will be used to inform administrators and central office school personnel to determine interventions based on the perceptions of school climate. Each stage holds certain tasks, goals, and products through a set of activities and processes that interact with objectives. These stages, represented in Figure 4, demonstrate processes of gathering data, making use of the data, creating plans of action, implementing the plans, reassessing the progress made by these programs, and continuing the cycle (Gilreath et al., 2014b).

Figure 4

Use of Data-monitoring System to Change School Climate



The data points were primarily obtained from the California Healthy Kids Survey, Staff Survey of Military Connected Schools Module as shown in Appendix A. The survey's questions were addressed via a five-point Likert scale asking educators to identify their awareness of military-connected students, their perceptions of school and peer support for their parents' role in the military, and to indicate professional development needs. The awareness of military-

connected students domain features a sixth point on the Likert scale for participants to select if they do not know about the items within the section. Permission was sought and obtained by the researcher to the WestEd Corporation for use of their survey. The licensing agreement for survey use from WestEd is shown in Appendix F.

The survey was amended to add respondent identification questions before it was uploaded in Qualtrics. These additional questions were added to identify and separate teacher responses from non-teaching school staff, such as guidance counselors, school psychologists, and military liaisons. Respondent qualifiers were also included: age, sex, race, ethnicity, staff member's years of employment, educational level, if the staff member taught a content that is assessed by a MAP test, and if the staff member has personal military-affiliation. These indicators protected respondent anonymity, but the results, once sorted by educator role or military affiliation, may demonstrate a need to be further developed into thematic statements by qualitative questions.

The four primary domains of the staff survey are the evaluation of the respondent's (1) awareness of the presence of military-connected students presented over 2 items, (2) military-connected students' school perceptions, needs, and assets presented over 10 items, (3) school activities, services, and policies related to military-connected students and parents presented over 11 items, and (4) the need for educator training and other supports to respond to military-connected students presented over 9 items. Lastly, a qualitative question derived from the four domains of the survey was written and included at the conclusion of each section of the survey to further develop themes based on respondents' in-depth responses. The items, sorted by domain, are indicated in Table 3.

Table 3

Quantitative Survey Items, Organized by Domain with Question Stems

Domain	Stem	Item
(1) Military-Student Awareness		Do you have students in your school who have at least one parent or guardian who is serving in the military? Do you teach or have contact with students from military families (military students)?
(2) Military-Student School Perceptions	Based your experience, how many military families…	Feel supported by their peers? Feel supported by their teachers? Have additional educational needs? Face financial difficulties? Have additional emotional and psychological needs? Have additional strengths due to their family circumstances? Feel that others may not appreciate their families' sacrifice for the nation? Feel that others may discriminate against them because they are military students? Feel isolated in the school? Are proud of their parents and families' contributions to our country's security?
(3) School Activities, Services, Policies for Military Families	This school…	Provides a welcoming environment to military students and their families. Has additional services for students whose parents are deployed. Has additional services for students who experience loss and trauma. Makes additional efforts to help involve military parents. Has visual displays (e.g., bulletin boards, pictures) rituals, activities, artwork, murals, and ceremonies to honor military families. Works with community organizations to provide educational support to military students. Works with community organizations to provide after school activities and support military students.

		Educates staff and students on what life is like for military families, and some of the special circumstances that come with military life. Assists military students in transitions between schools. Works with military liaisons to take advantage of additional military educational resources.
(4) Educator Preparedness and Training Needs	I need professional development to…	
		Understand military culture. Understand the effects of deployment cycles. Learn how to work with military students who have experienced loss or other trauma in the family. Learn how to work with students who have a parent currently deployed. Learn how to address the needs and circumstances of military parents. Learn how to create a school climate that is welcoming to military students and families. Learn about community organizations that provide support for military students and families. Learn how to help parents deal with additional responsibilities during deployment. Learn about the resources available to support military students and families.

Qualitative Instrument

Qualitative questions were developed based on the questions from the four domains in the quantitative survey. The lived experiences of this surveyed population added value to the survey by providing deeper understanding of the quantitative results (Onwuegbuzie & Collins, 2007). The survey's four domains served as grounds for further exploration of trends in conjunction with academically influenced questions that may be addressed by the MAP testing data. Educators were asked about to detail the academic habits and performances of military-connected students. The educators were also asked questions to elaborate on their perceptions of military-connected students' educational, emotional, and social challenges and whether they feel these students are adequately supported by peers and staff. Additionally, educators were asked to

reflect on their personal extracurricular sponsorship or coaching duties and consider military-connected students' acclimation and inclusion into those programs. Finally, educators were asked to discuss their past experiences with professional development relative to military culture and military-connected students.

Table 4

Qualitative Survey Items, Organized by Domain with Question Stems

Domain	Stem	Item
(1) Military-Student Awareness		Describe your experiences with military-connected high school students, including your observations of classroom interaction and engagement, academic-learning styles, interaction with other students, testing, behavior, absenteeism, and tardiness compared to their civilian counterparts.
(2) Military-Student School Perceptions	Based your experience, how many military families…	
		Based on your experience, how do military-connected students differ from civilian students? Consider academic, social, and / or emotional aspects of the students in your response. How do you cope with or handle these differences when teaching both military and civilian students in same classroom?
(3) School Activities, Services, Policies for Military Families	This school…	
		Based on your knowledge, what resources and / or personnel are available to support military-connected students in your school? How does your school prioritize assistance for military-connected students, encompassing various forms of support like financial aid, counseling, and academic resources such as tutoring and mentoring? Share insights on how your school's support systems for military-connected students are put into practice, communicated, and perceived by those students within the military community.

(4) Educator Preparedness and Training Needs	I need professional development to…	What kind(s) of training (workshops, events, seminars, or other opportunities) have you participated in to support military-connected students and their families? Explain your understanding of supports through federal/state government, support staff for military-connected students.

The responses to the qualitative questions were thematically organized to provide further clarification of the quantitative survey, providing a greater depth to the California Healthy Kids Survey and the academic achievement data of military-connected students compared to civilian students on the MAP Reading and MAP Math assessments. The qualitative survey responses were critical for thematic development, providing additional insights that could not fully be extrapolated by quantitative research alone (Creswell & Creswell, 2017).

Data Collection

The school district and CSU approved the research and submitted to IRB for approval. Upon receipt of approval, the data collection began to collect both educator self-reported survey and interview data as well as students' MAP achievement scores on English and Math. There are more civilian students than military-connected students within the researcher's district. G-Power provided a set minimum sample size of 210, which was split into two equal halves of 105 students each for military and non-military student groups. The researcher selected only those students in both groups where the MAP achievement scores were within the 50th and 90th percentile range, as this range parallels the State Department of Education's Level II and Level III learners who are deemed developing and proficient. The quantitative data collection process began by requesting data from the researcher's Central Office level employee who oversees

district and school-level effectiveness. The researcher asked for the Winter 2023-2024 MAP achievement scores for reading and math for all high school students, disaggregated by the student's military affiliation and the subject area tested. The total number of MAP assessments for English and Math were counted for Winter 2023-2024. The tests were then segregated based on military and civilian students. The 50th and 90th percentiles of MAP achievement scores for English and Math were used to select military and civilian students so that the two groups were comparable and reduce the possibility of outliers. The total number of military-connected students were used to select the same number of civilian students to have a balanced group design for both the reading and math assessments.

For the survey portion of the study, educators were contacted by the researcher via email to solicit participation across the county's high schools. Participants received the survey with instructions and the assurance of confidentiality. The survey in its entirety is listed in Appendix A. The risk to participants was minimal, as confidentiality was maintained during the survey's quantitative and qualitative phases. The researcher was neither related to participants nor in a supervisory position to participants to influence their responses or cause coercion. No identifying information was given about participants, the schools at which they are employed, or the school district other than its general geographical location with proximity to a United States military base.

The CHKS was used to collect data on educator's perceptions of military-connected students in high schools based on the four domains described in instrumentation section. The Staff Survey: Military-Connected Schools Module was adapted with permission from the survey's developer, WestEd, to include some indicators for staff identification, including staff member military affiliation, years of service within the researcher's district, and highest level of

education obtained along with the respondent's sex, race, ethnicity, and age. The survey was developed and uploaded into Qualtrics and is provided in Appendix A. Respondents were reached via email through their principals after the researcher gained district approval, provided in Appendix G. The high school principals authorized the researcher to recruit the educators (teachers, counselors and military liaisons) who worked with the military-connected students. The email requesting principals to authorize research within their building is available in Appendix B. An email was sent to the educators which provided information about the research, confidentiality agreement, and survey link. The letter is provided in Appendix B. The initial email to prospective participants which introduced the research purpose and requested their participation in the surveys is in Appendix C and the follow-up email reminding participants to take the survey is in Appendix D. The survey questions were available for two weeks in the Qualtrics survey platform. All prospective participants were reminded of the survey's closure and encouraged participants to provide responses to assist the researcher in the development of themes and deeper findings via the convergent parallel design, a mixed methods approach to conducting research (Creswell & Plano Clark, 2017; Gunby, & Schutz, 2016). A final thank-you email was sent to the principals for supporting and encouraging staff input relative to their work with military-connected students. This email is stated in Appendix E.

Data Analysis

The MAP scores were retrieved and disaggregated to compare military-connected students' academic achievement to their civilian peers on both the reading and math MAP Growth 6+ assessments. SPSS was utilized for the independent samples t-tests and the results compared the performance between the military-connected students and the non-military students on the MAP Growth 6+ Reading and MAP Growth Math K-12 assessments were

revealed. Once the data selections were complete, the data was input into SPSS for analysis. The dependent variables, the achievement scores for both reading and math assessments, were labeled to sort by subject. Additionally, that student was identified as either military-connected (MC) or non-military connected (NMC) to represent the independent variable. Independent samples t-tests were conducted in SPSS, separated by subject assessed.

The survey was issued to educators. Upon completion of the survey's quantitative data collection, the questions were coded based on their domain and input into SPSS to gather a mean score for each domain, sorted by whether the respondent was a teacher or a non-teaching staff member, which influenced the qualitative questions for the survey. The categories were coded as follows: (1) Staff identifiers – SI (2) awareness of the presence of military-connected students – MCF, (3) military-connected students' school perceptions, needs, and assets – MCS, (4) school activities, services, and policies related to military-connected students and parents – EE, and (5) the need for training and other supports to respond to military-connected students – PD. The Likert scale for military-connected students' perceptions, needs, and assets ranged from almost none, few, some, most, nearly all, and don't know. The Likert scale for school activities, services, and policies related to military-connected students ranged from not at all true, rarely true, sometimes true, usually true, and don't know. The Likert scale from the section over training and supports to respond to military-connected schools ranged from not a need, little need, need, major need, and don't know. The "don't know" response was excluded when calculating mean scores.

The research questions, the technique used to address each research question, and how the results were evaluated are displayed in Table 5.

Table 5

Data Analysis Table

Research Question	Data Analysis Technique	How the results were interpreted
What are the differences in overall achievement scores on the MAP Reading assessment of high school military-connected students compared to the non-military connected counterparts?	Independent samples t-test	$\alpha = 0.05$
What are the differences in overall achievement scores on the MAP Mathematics assessment of high school military-connected students compared to the non-military connected counterparts?	Independent samples t-test	$\alpha = 0.05$
What are high school educators' perceptions of military-connected students' needs?	Data transformation Descriptive coding	Quantified results Themes from Qualitative results
What are high school educators' understanding of professional resources relative to military-connected students?	Data transformation Descriptive coding	Quantified results Themes from Qualitative results

Quantitative Data Analysis

MAP assessment data for both reading and math achievement scores were exported to SPSS software, Standard GradPack 29 (IBM Corp, 2022). Both descriptive (mean, variance, range, standard deviation), and inferential analysis (t-tests) were conducted. Frequency analysis of demographic data was conducted for both students and educators. The assumptions for the independent sample t-tests were systematically evaluated in accordance with established criteria: (1) the dependent variable scores were continuous, (2) observations were independent, (3) variances in the dependent variable scores were homogeneous, (4) distribution was normal, and

(5) the absence of significant outliers. Assessment of normality utilized the Kolmogorov test and the Shapiro-Wilk's test. Homogeneity of variance assumption was determined through the Levene's test. A non-significant result ($p > .05$) indicated conformity with the variance assumption, whereas a statistically significant outcome ($p < .05$) signified non-conformity x (Field, 2013).

Cronbach's alpha was used as a measure of reliability to determine the internal consistency of survey items. An acceptable level of internal consistency in a scale is indicated by a Cronbach's alpha greater than .70 (Cronbach, 1951). The homogeneity or interrelatedness of survey items within a scale contributes to a higher Cronbach's alpha value (Cronbach, 1951). A scale with high Cronbach alpha demonstrates that survey items measuring the attributes of a specific construct will share a high correlation with each other and low correlations with other items that represent the traits of another construct (Cronbach, 1951; Gross-Portney & Watkins, 2000). A Cronbach's alpha value approaching .90 is considered high, signifying the reliability of the scale (Gross-Portney & Watkins, 2000).

The survey questions were analyzed in SPSS to determine mean scores by domain and further disaggregated by the respondents' roles status as military-connected or non-military to analyze educators' perceptions of military-connected students, their families, the educational environment, and professional development. Comparable mean scores across classroom teachers, counselors, and military liaisons indicated consistency across items within the domains, but where mean scores diverged, a gap in understanding about military-connected students, their families, the experiences, the comfort of working with military-connected students, and the professional development needs to work with for military-connected populations is assumed and further extrapolated by open-ended responses.

Qualitative Data Analysis

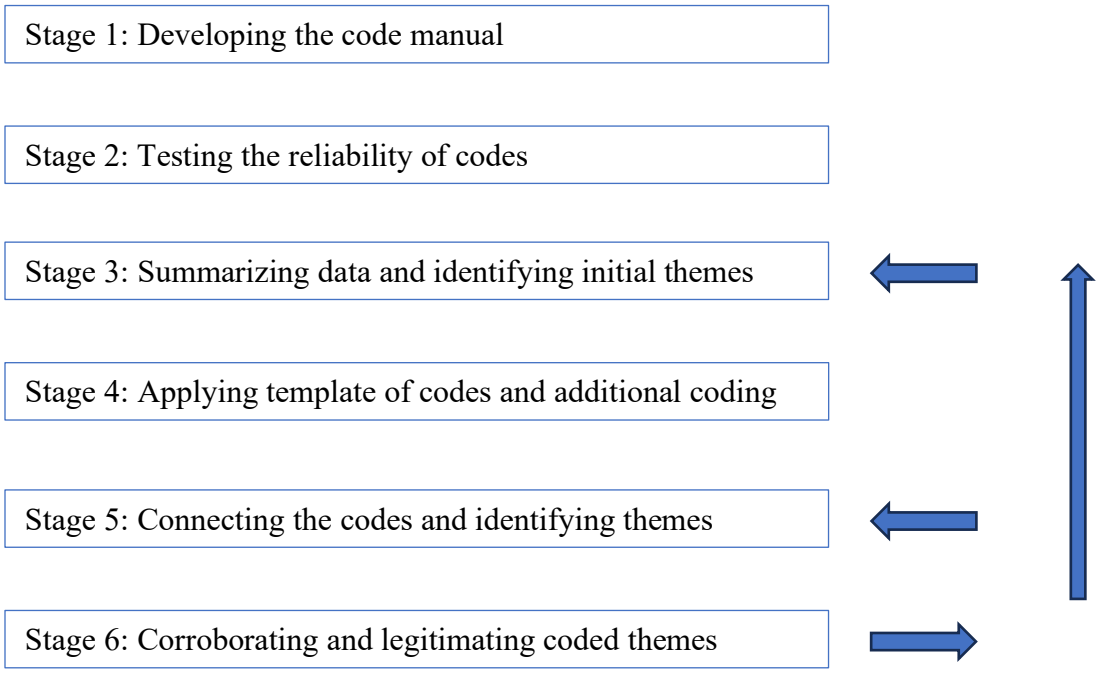
The qualitative questions were embedded throughout the survey, with an open-ended question derived from the domain of that section's quantitative questions. In most qualitative analyses, the process involves constructing a coding frame to capture analytically significant features of the data. The responses coding of the data involved a multistage, cyclical approach (Boyatzis, 1998; Crabtree & Miller, 1999; Rogers, 2018). The coding frame, typically a list of codes organized into higher-order code categories, is accompanied by code definitions and example data segments (O'Connor & Joffe, 2020). This coding frame serves as the analytic instrument, facilitating the reduction, classification, and synthesis of raw data into a more conceptual framework (Gaskell, 2000). Once developed, the coding frame is systematically applied to the data, involving segmentation into data units labeled with codes that index their analytically relevant content. The calculation of intercoder reliability (ICR) during the coding phase assesses the robustness of the coding frame and its application. The coding process is illustrated in Figure 5 (Gaskell, 2000; O'Connor & Joffe, 2020).

The first phase of coding aimed to create a comprehensive code list elucidating the issues, aspects, phenomena, and themes identified in the data (Fereday & Muir-Cochrane, 2006; Rogers, 2018; Saldaña, 2016). This process involved naming and contextualizing them in terms of similarities and differences (Rogers, 2018). The result was a structured code list that underwent further refinement through additional cycles of memo creation until all data were coded, and the coding schema were fully developed. For the second cycle coding, selective coding and intermediate coding were employed, drawing on the methodology outlined by Skjott and Korsgaard (2019). The utilization of selective coding and intermediate coding was reiterated in the second cycle (O'Connor & Joffe, 2020; Skjott & Korsgaard, 2019).

To ensure the credibility, confirmability, dependability, and trustworthiness of the qualitative codes, interrater reliability techniques were applied by the utilization of a second coder (O'Connor & Joffe, 2020; Smith & McGannon, 2018). This process encourages dialogue among the research team, as any inconsistencies in the ICR process must be discussed to clarify the conflicting interpretation (O'Connor & Joffe, 2020). The use of a second coder ensured the researcher's coding was clear, as the researcher's immersion in the literature, theoretical framework, and data could affect interpretation by those unfamiliar with the research (O'Connor & Joffe, 2020). These discussions created a more explicit and well-defined frame, which was essential to analyze the data effectively.

Figure 5

Coding Process for Qualitative Results Interpretation



Note. Representation of the stages undertaken to code the data (adapted from Boyatzis, 1998; Crabtree & Miller, 1999; Fereday & Muir-Cochrane, 2006).

Integration

Integration of mixed-methods research occurs at three levels: design, method, and interpretation and reporting (Fetters et al., 2013). At the design level, mixed-methods research involved planning the overall structure of the study, addressing the research questions or hypotheses from both qualitative and quantitative perspectives (Creswell & Creswell, 2017). The mixed methods design primarily takes form as explanatory sequential, exploratory sequential, or convergent parallel design (Creswell & Creswell, 2017). This study followed the convergent parallel design, which occurred when the quantitative and qualitative data were collected and analyzed simultaneously and the results were merged and compared for convergence and divergence (Creswell & Creswell, 2017), At the method level, researchers selected and implemented the specific qualitative and quantitative methods for data collection and analysis, which may involve the inclusion of surveys, experiments, interviews, observations, or content analysis (Creswell & Creswell, 2017). The researcher utilized content analysis of student achievement data and a survey with quantitative and qualitative items, connecting the sample participants of the survey and merging the qualitative and quantitative data for greater understanding (Creswell & Plano Clark, 2018; Fetters, Curry, & Creswell, 2013).

The interpretation and reporting stage is where researchers bring together findings from both qualitative and quantitative strands of the study, accomplished via collaborative displays, data transformation, and narration (Fetters et al., 2013). This process involved comparing, contrasting, and synthesizing the results to provide a more comprehensive understanding of the research problem (Creswell, 2014; Creswell & Creswell, 2017). A secondary level of integration occurred within the earlier stages of tool development, a method of integration recognized by

Teddlie and Tashakkori (2009), as this research enhanced its quantitative survey with the addition of qualitative questions.

A collaborative display involves visually combining qualitative and quantitative data, exemplified in this study by the creation of a table that analyzed survey items' mean response scores and thematic statements from the teachers and non-teaching staff surveyed. This research integrated at the results point, which involved gathering the results of the quantitative data in advance of the qualitative data and presenting it via joint display (Fetters et al., 2013). A joint display that lists the qualitative and quantitative findings and an integrative statement was used to facilitate this process (Morse & Niehaus, 2009). During this stage, the researcher addressed any inconsistencies or contradictions between the two sets of data and offer a cohesive interpretation. This comparative analysis aimed to shed light on educators' comfort levels surrounding military-connected students and their needs along with areas of possible growth via professional development.

Data transformation refers to the conversion of qualitative data into quantitative data or vice versa (Fetters et al., 2013). In this research, quantitative data was analyzed by the mean differences within the subsections of the survey while the qualitative, open-ended survey questions transformed the quantitative, numeric values into thematic statements for further understanding of two research questions.

Narration elaborates on the analytical process and the arrangement of quantitative and qualitative segments in the analysis section (Fetters et al., 2013). Contiguous narration was employed to separately explain the quantitative results in consecutive sections during the data analysis phase for Research Questions 1 and 2 (Fetters et al., 2013; Miller et al., 2014). Weaving narration was utilized in Research Questions 3 and 4 when qualitative and quantitative data from

the survey were interwoven within survey subsections, a technique applied in the mixed-methods interpretation phase (Fetters et al., 2013; Miller et al., 2014). This weaving approach was implemented by presenting the quantitative analysis followed by an explanation of a qualitative quote aligning with the quantitative result.

Quantitative and qualitative data were merged through methodological and data triangulation. Methodological triangulation involved the use of both causal-comparative and phenomenology research methods for the quantitative and qualitative aspects, respectively. Data triangulation involved utilization of both quantitative and qualitative data collection methods (Denzin, 2012). Furthermore, such integration may prompt additional research questions if disparities emerge between the quantitative and qualitative data (Creswell and Plano Clark, 2018; Fetters et al., 2013).

Summary

In this mixed methods research study, which employed a convergent parallel design, the researcher conducted a causal-comparative quantitative study to investigate relationships between academic achievement of high school military-connected and civilian students on the MAP Growth 6+ Reading and MAP Growth 6+ Math assessments. This quantitative phase involved systematically selecting and analyzing participants based on predetermined criteria, followed by statistical analysis to identify patterns that address two of the research questions. Additionally, the researcher utilized a survey to further understand military-connected students, their family, needs, and the preparedness to work with such students as perceived by educators. Mean scores from the Likert score input were gathered for the quantitative questions from each of the domains of the survey and those scores were compared based on the educators' role in the school as a teacher or a non-teaching staff member to determine discrepancies among educators

and their work with military-connected students. Simultaneously, a qualitative phase using a phenomenological approach was undertaken to explore the lived experiences and subjective perspectives of the surveyed educators within the identified patterns (Creswell, 1998; Padilla-Diaz; 2015). Through the open-ended questions, qualitative data was collected, and thematic analysis was applied to uncover underlying themes and meanings that stemmed from the quantitative survey results. The integration of quantitative and qualitative findings in the final interpretation enriched the overall understanding of the research problem, offering a comprehensive and nuanced exploration of both statistical relationships and the lived experiences of participants, accomplished via collaborative displays, data transformation, and narration (Fetters et al., 2013; Miller et al., 2014). This convergent parallel mixed methods design provided a more holistic perspective, bridging the gap between quantitative patterns and qualitative nuances in addressing the research questions (Creswell & Creswell, 2017).

Chapter IV: Findings

The researcher conducted a mixed-methods study that followed a convergent parallel research design. The research featured a causal-comparative quantitative study to investigate relationships between academic achievement of high school military-connected and civilian students on the MAP Growth 6+ Reading and MAP Growth 6+ Math assessments. A survey was utilized to further understand military-connected students, their family, needs, and the preparedness to work with such students as perceived by educators. The survey featured Likert scaled questions along with open-ended response items. The qualitative phase utilized a phenomenological approach where the open-ended survey questions sought to determine the lived experiences and subjective perspectives of the educators who actively worked with military-connected students. Research has found that military-connected high school students have unique social and emotional needs that could potentially impact their academic progress, social development, and mental health (De Pedro et al. 2018). The study was conducted in Spring 2024 from the Winter 2023-2024 testing period. Quantitative data were used to compare the academic achievement of military-connected students and their civilian peers on both the MAP Growth Reading 6+ and MAP Growth Math K-12 assessments. Qualitative data was used to develop trends that highlight educators' experiences with military-connected high school students. Study participants were in-service teachers, counselors, military liaisons, and other non-teaching staff and the MAP Growth Reading 6+ and MAP Growth Math K-12 data from 9th and 10th grade students. Chapter 4 discusses the findings for each research question and an overall summary of the results. The following research questions were addressed:

Research Question 1 (RQ1): What are the differences in overall achievement scores on the MAP Growth Reading 6+ assessment of high school military-connected students compared to the non-military connected counterparts?

Research Question 2 (RQ2): What are the differences in overall achievement scores on the MAP Growth Math K-12 assessment of high school military-connected students compared to the non-military connected counterparts?

Research Question 3: What are high school educators' perceptions of military-connected students' needs?

Research Question 4: What knowledge do high school educators have regarding professional resources relative to military-connected students?

Participants

Student Demographic Data

Students enrolled in the 9th and 10th grade took the Winter MAP assessments and made up the retrospective data that were retrieved from the district's office of school effectiveness. At the time of data collection, 30,800 students were enrolled in PreK-12 across 39 campuses in the school district. The district had 15,045 (48.85%) female students and 15,755 (51.15%) male students. The ethnic group demographics were 866 (2.81%) Asian, 12,608 (40.94%) Black or African American, 3,680 (11.95%) Hispanic or Latino, 2,194 (7.12%) Multi-ethnic, 11,357 (36.87%) White, and 95 (.31%) classified as other. The district comprised of 1,682 (5.46%) military-connected students and 29,118 (94.54%) non-military-connected students. Of the military-connected population, 784 (46.61%) were female students and 898 (53.39%) were male students. Among the military-connected population, 905 (53.80%) were White, 303 (18.01%) were Black or African American, 264 (15.70%) were Hispanic or Latino, 174 (10.34%) were

Multi-ethnic, 26 (1.55%) were Asian, 9 (0.54%) were classified as American Indian, and 1 (.05%) were Pacific Islander.

Given the imbalanced populations among military-connected and civilian students within the researcher's school district, a random sampling method was utilized to ensure valid and reliable results. The raw data was retrieved for 221 and 217 military-connected students in the 9th and 10th grades who took the MAP Growth Reading 6+ assessment and the MAP Growth Math K-12 assessment respectively in Winter 2023-2024. The issue of potential outliers was minimized by only including achievement percentile scores that were representative of how the Georgia State Department of Education defines developing and proficient learners, defined between the 50th and 90th percentiles. This narrow percentage achievement window influenced the number of students who were included in the study. A total of 161 and 98 military-connected students were selected for the MAP Growth Reading 6+ assessment the MAP Growth Math K-12 assessment, respectively. These students were then organized by gender and ethnicity as reported by the school district and reflected in Tables 6 and 7. The non-military sample was created by using a random number generator based on these specific student demographics in both gender and ethnic identification. The numbers selected by the generator corresponded with rows reflecting non-military student achievement percentiles on both the MAP Growth Reading 6+ and the MAP Growth Math K-12 assessments.

Once the researcher identified the demographics of the entire population, the data was then compared to the demographics of the 9th and 10th grade students who took the MAP in Winter 2023-2024 to ensure the study was representative of the student population level characteristics in the school district. The use of a random generator to select all non-military students made the sample representative of the district's population so the study could be a

meaningful part of the larger implications toward district effectiveness. Given the demographics of the studied sample, the use of a random generator to select all the sampled non-military population made the studied sample representative of all students enrolled in a high school MAP Growth Reading 6+ and MAP Growth Math K-12 assessed course.

Table 6 shows demographics of the selected participants who took the Winter 2023-2024 MAP Growth Reading 6+ assessment. The population was comprised of 124 (38.5%) female and 198 (61.5%) male students. The ethnic group demographics for female students were 72 (58%) White, 24 (19.4%) Black or African American, 18 (14.5%) Hispanic or Latino, and 10 (8%) Multi-ethnic. The ethnic group demographics for male students were 106 (53.5%) White, 42 (21.2%) Hispanic or Latino, 38 (19.2%) Black or African American, 6 (3%) Asian, and 6 (3%) Multi-ethnic.

Table 6

MAP Growth Reading 6+ Demographics by Gender and Ethnicity

	Male	Female
Asian	6 (3%)	0 (0%)
Black	38 (19.2%)	24 (19.4%)
Hispanic	42 (21.2%)	18 (14.5%)
Multi	6 (3%)	10 (8%)
White	106 (53.5%)	72 (58%)
Total	198 (61.5%)	124 (38.5%)

Note. The numbers in parentheses represent percentages.

The demographic data of students who took the Winter 2023-2024 MAP Growth Math K-12 assessment is represented in Table 7. There were 86 (43.8%) female and 110 (56.2%) male students. There were 46 (53.5%) White, 28 (16.3%) Black or African American, 16 (18.6%) Hispanic or Latino, and 10 (11.6%) Multi-ethnic students. There were 54 (49%) White, 24 (21.8%) Black or African American, 24 (21.8%) Hispanic or Latino, 6 (5.4%) Multi-ethnic, and 2 (1%) Asian students.

Table 7

MAP Growth Math K-12 Demographics by Gender and Ethnicity

	Male	Female
Asian	2 (1%)	0 (0%)
Black	24 (21.8%)	28 (16.3%)
Hispanic	24 (21.8%)	16 (18.6%)
Multi	6 (5.4%).	10 (11.6%)
White	54 (49%)	46 (53.5%)
Total	110 (56.2%)	86 (43.8%)

Note. The numbers in parentheses represent percentages.

Educator Demographic Data

The researcher contacted the educators via email after receiving consent from the school buildings' supervisors. The educators who participated in the current study had diverse demographic characteristics in terms of race, ethnicity, years of service, educational level, and personal military connection reflective of the diversity within the researcher's school district in a military community. All respondents were high school employees within the researcher's school district; however, the military support staff may have served additional schools outside of their high school assignments.

At the time the survey closed, 137 educators began the survey, 136 participants attempted the survey, and 102 people completed the survey. The demographics shown in Table 8 is representative of the 102 individuals who completed the survey. The demographics were comparable to the 136 participants who initially engaged with the survey. There were 95 (93.1%) teachers, 4 (3.9%) identified as non-teaching staff, which included military support staff, and 3 (2.9%) staff members identified as counselors.

Table 8

Demographic Characteristics of Survey Participants

	N	Percentage
Teacher	95	93.1%
Non-Teaching Staff	4	3.9%
Counselor	3	2.9%

Table 9 shows the work experience of the survey participants: 33 (32.4%) with 0-5 years of experience in the district, 18 (17.6%) with 6-10 years, 20 (19.6%) with 11-15 years, and 31 (30.4%) with 16 or more years of experience within the researcher's district.

Table 9

Work Experience of Survey Participants

Years of Experience	*N*	Percentage
0-5	33	32.4%
6-10	18	17.6%
11-15	20	19.6%
16+	31	30.4%

Table 10 shows the education level of certified professionals who participated in the survey. A district military liaison is not employed by the school district, rather employed by Magellan Federal, organized by the Department of Defense. A college degree is not required to serve as a Military & Family Life Counselor (MFLC). The educators who were surveyed represented the district's requirement to have at least a bachelor's degree and to be certified by the Georgia Performance Standards Commission. The majority of respondents hold at least a master's degree. There were 49 (48%) of participants having a master's degree, 37 (26.5%) an Educational Specialist degree, 13 (12.7%) a bachelor's degree, 12 (11.8%) a Doctorate degree, and 1 (1%) having a high school diploma or equivalent.

Table 10

Education Level of Survey Participants

Level of Education	*N*	Percentage
Doctorate Degree	12	11.8%
Educational Specialist Degree	37	26.5%
Master's Degree	49	48%
Bachelor's Degree	13	12.7%
High School Diploma	1	1%

Table 11 shows the job-specific roles of survey participants. There were 39 respondents who taught MAP Growth Reading 6+ or MAP Growth Math K-12 courses, 16 who taught English Language Arts (ELA) or Math, but not a MAP assessed course, and 72 teachers who taught outside ELA and Math. The purpose of sorting participants by job-specific roles was to consider the academic achievement scores from MAP assessments and the influence the scores may have on educators' attitudes toward these students. Most survey participants (71%) did not have access to student MAP achievement data; therefore, the educators' responses were not likely to be influenced by MAP scores.

Table 11

Job-Specific Roles of Survey Participants

Role	*N*	Percentage
Do not teach MAP content	72	53%
Teach MAP Assessed Course	39	29%
Teach MAP Content, Not Assessed	16	12%
Not in Classroom	7	6.9%

Table 12 indicates both the respondents' identification as male, female, or intersex, Table 13 reflects the respondents' self-reported race, and Table 14 reports respondents' ethnicity. There were 98 (72%) of respondents were female and 38 (28%) reported as male. There were 118 (87%) White, 15 (11%) Black or African American, 2 (1%) American Indian or Alaskan Native,

and 1 (1%) Asian educators. Additionally, 130 (96%) educators were not of Hispanic, Latino, or Spanish origin, and 6 (4%) reported to be either Hispanic, Latino, or of Spanish origin.

Table 12

Gender of Survey Participants

	N	Percentage
Female	98	72%
Male	38	28%
Intersex	0	0%

Table 13

Race of Survey Participants

Race	*N*	Percentage
White	118	87%
Black	15	11%
American Indian / Alaskan Native	2	1%
Asian	1	1%

Table 14

Ethnicity of Survey Participants

Ethnicity	*N*	Percentage
Non-Hispanic	130	96%
Hispanic	6	4%

Respondents provided their age range, as shown in Table 15, with 42 (31%) of them between 45-54 years, 37 (27%) between 35-44, years, 32 (24%) between 25-34 years, 20 (15%) aged 55 years or older, and 5 (4%) between 18-24 years. Table 16 represents the surveyed respondents' personal military affiliation. Their personal connection could be their own service, a spouse, parent, or child's service, and their role could be active duty or retired. There were 79 (58%) respondents were personal military connected and 57 (42%) of respondents reported that they were not personally military-connected.

Table 15

Age of Surveyed Educators

	N	Percentage
45-54	42	31%
35-44	37	27%
25-34	32	24%
55+	20	15%
18-24	5	4%

Table 16

Personal Military Affiliation of Survey Participants

	N	Percentage
Military-Connected	79	58%
Not Military-Connected	57	42%

These students took their Winter 2023-2024 MAP assessments in Math and Reading the week of December 4, 2023. The schools were left to determine how administration was conducted within their buildings, within the testing window that was honored. The data that addresses Research Questions 1 and 2 reflected the selective grouping for the Winter 2023-2024 administrations of the MAP Growth Reading 6+ and MAP Growth Math K-12 tests.

Quantitative Findings

Research Question 1

An independent sample *t*-test was conducted to determine how military-connected students compare to civilian counterparts on the MAP Growth Reading 6+ assessment. The test was conducted by using a P-value alpha level of .05. The null hypothesis is that there are no statistically significant differences in MAP Growth Reading 6+ assessment scores between military-connected and non-military students. The null hypothesis is symbolized as follows:

$$H_0 : \mu_1 - \mu_2 = 0$$

The research hypothesis is that are statistically significant differences in MAP Growth Reading 6+ assessment scores between military-connected students and non-military students. The research hypothesis is symbolized as follows:

$$H_1 : \mu_1 - \mu_2 \neq 0$$

The assumption of normality was tested. After conducting the Shapiro-Wilk's test, the result was statistically significant ($p < .001$) indicating that the normality assumption was not met. The analysis of box plots and Q-Q plots indicated that normality is a reasonable assumption for the sampled students who took the MAP Growth Reading 6+ assessment. Review of the box plots indicated no significant outliers and normality was assumed for the MAP Growth Reading 6+ across genders, ethnic group, and military-connected status as the outputs demonstrate in Figures 6, 7, and 8.

Figure 6 shows the distribution of MAP Reading 6+ scores by gender. The plots show that females (M= 72.06) had a higher MAP Reading score than male students (M=70.7) and scores had the minimum range (50) and maximum range (90) among gender for the MAP Growth Reading 6+ assessment. The median score for female students was higher than male students, at 73 and 72 respectively. The box plot indicates slight skewness for females (-0.24) and males (-0.23), but not departure from normality.

Figure 6

Boxplots of MAP Growth Reading 6+ Scores by Gender

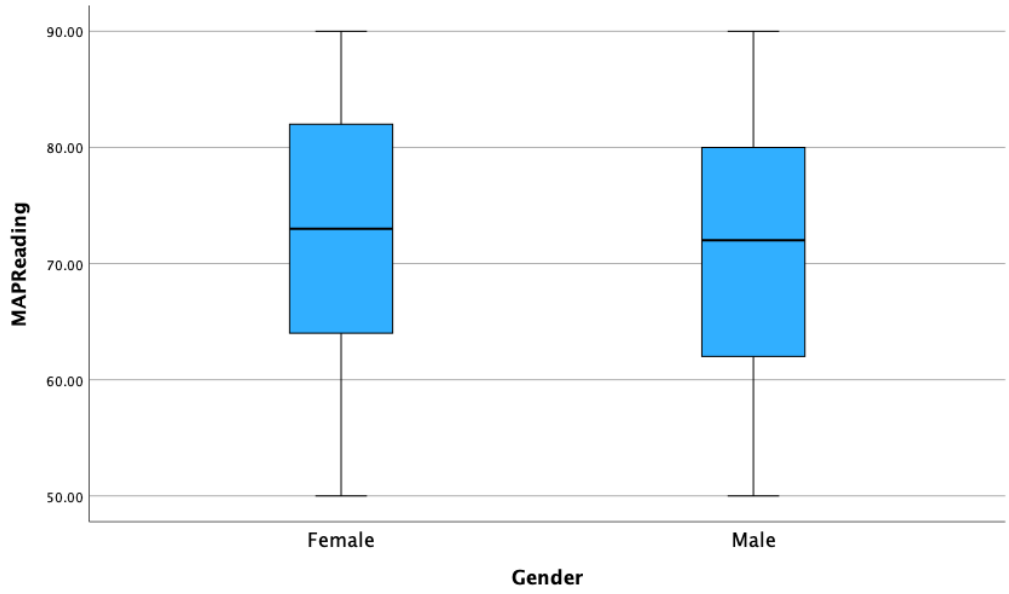


Figure 7 shows the MAP Growth Reading 6+ achievement percentiles by ethnicity. Irrespective of ethnicity, the mean score for the MAP Reading 6+ assessment is (*M*=71.22). The plots show that Hispanic students (*M*=72.95) had the highest MAP Growth Reading 6+ score, followed by White students (*M*=72.43), Asian students (*M*=69.5), Multi-ethnic students (*M*=69.19), and Black students performed the lowest (*M*=66.77). The mean values are relatively close across ethnic groups. However, the distributions of Hispanic, White, and Multi-ethnic students are negatively skewed which indicates that scores are slightly better than the mean MAP Reading 6+ score overall. The median values for Hispanic, White, and Multi-ethnic students are 74.5, 74, and 72, respectively. The slightly positive skew for Asian and Black students indicates the mean values are slightly lower, with median scores of 66 for both populations. Not all ethnic groups reported scores within the full range (minimum value = 50, maximum value = 90). White students range from 50th to 90th percentile scores (range = 40) with the highest number of

participants (*N*=178), and Asian students have the lowest range (24) and the lowest number of participants (*N*=6).

Figure 7

Box Plots of MAP Growth Reading 6+ Scores by Ethnicity

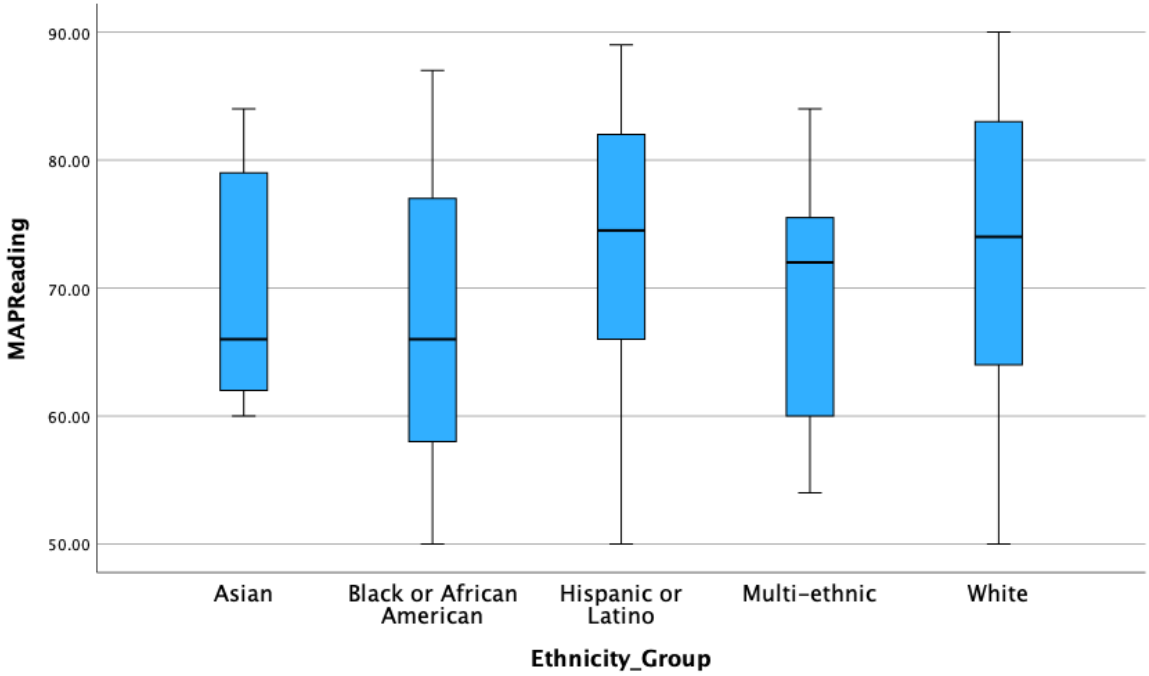
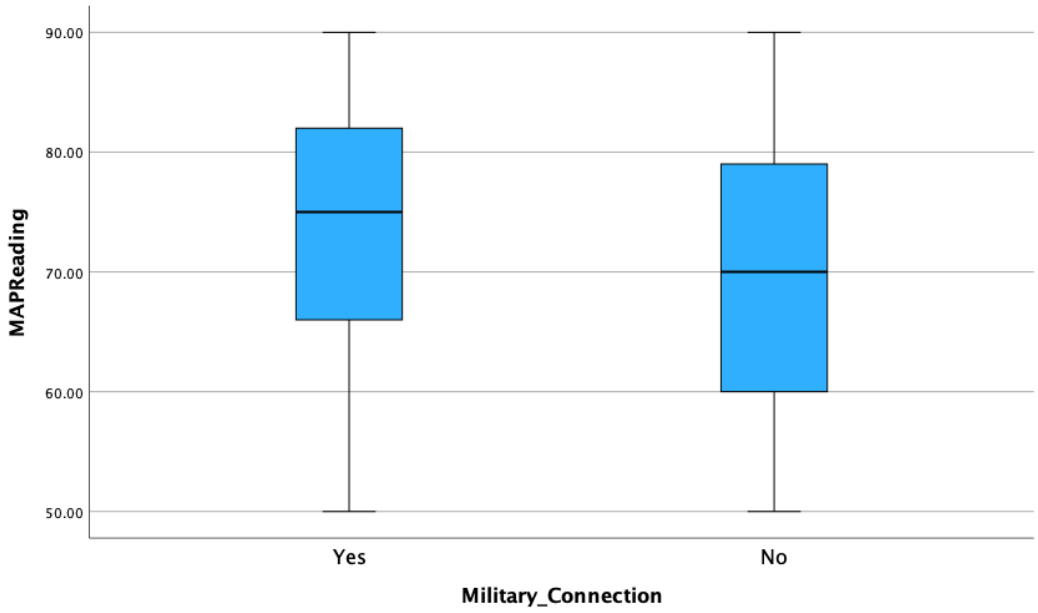


Figure 8 compares the MAP Growth Reading 6+ scores by military-connected status. The box plots show that military-connected students (*M*= 72.68) had a higher MAP Growth Reading score than non-military affiliated students (*M*=69.76). The median values for military-connected students were higher than non-military student at 75 and 70, respectively. The minimum score is 50 and the maximum score is 90 for both military-connected and civilian students for the MAP Growth Reading 6+ assessment. The box plot indicates slight skewness, but not departure from the normality.

Figure 8

Boxplots of MAP Growth Reading 6+ Scores by Military-Connection



Figures 9 and 10 show the Q-Q plots of MAP Growth Reading 6+ scores sorted by military-connected status. The Q-Q plot in Figure 9 indicates a few outliers at the higher end of the distribution, but most of the points lie along the straight line, which indicates a fairly normal distribution of military-connected students. The Q-Q plot in Figure 10 shows the distribution of MAP Growth Reading 6+ scores for non-military connected students. The plot shows that the majority of the scores are aligned close to the straight line, which indicates a normal distribution. The Q-Q plots for gender and ethnicity were not necessary because the box plots did not show any evidence of non-normality. Research Question 1 focused on comparing the academic performances of students based on military-connected status. Hence, the Q-Q plots for MAP Growth Reading 6+ military-connected and non-military connected students were included to offer an additional visual for proof of an approximate normal distribution.

Figure 9

Q-Q Plot of MAP Growth Reading 6+ for Military-Connected Students

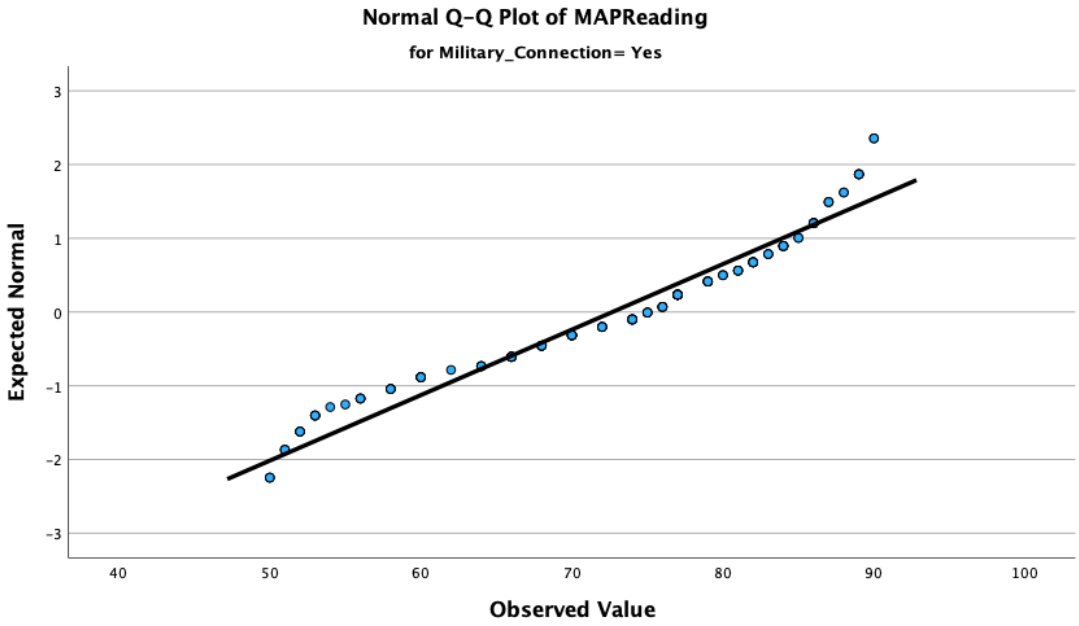
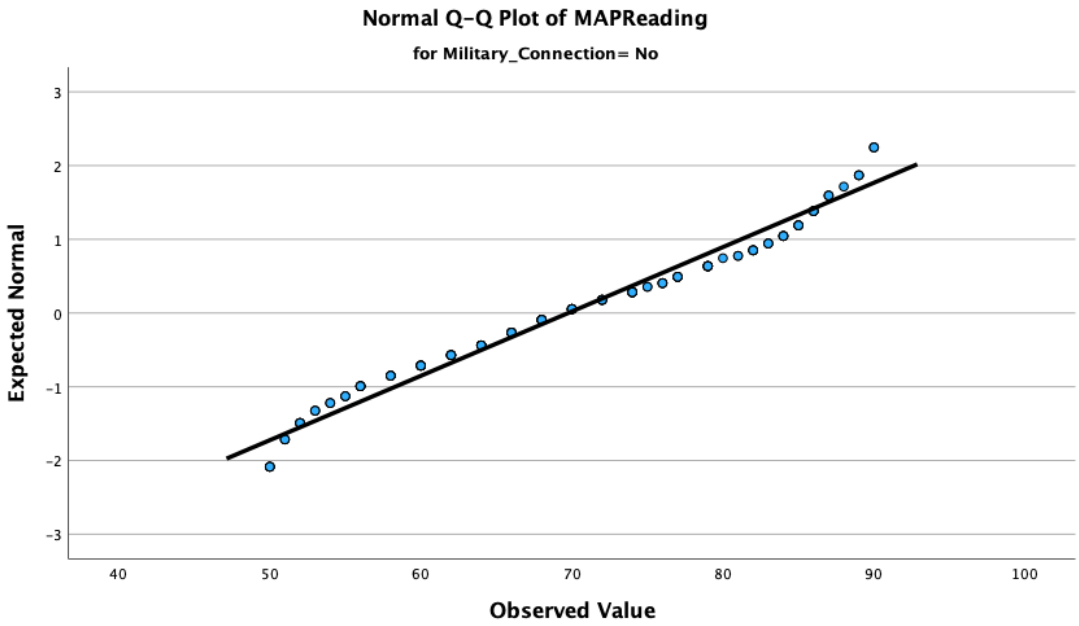


Figure 10

Q-Q Plot of MAP Growth Reading 6+ for Non-Military-Connected Students



Descriptive statistics were completed for the MAP Growth Reading 6+ assessment by military-connected status, gender, and ethnic groups as represented in Table 17. The skewness values ranged from -0.46 to -0.02 and kurtosis values ranged from -1.1 to -0.87 which indicated normality in MAP Growth Reading 6+ assessment scores based on military-connected status. The skewness values ranged from -0.24 to -0.23 and kurtosis values ranged from -1.1 to -1 which indicated normality in MAP Growth Reading 6+ assessment scores based on gender. The skewness values ranged from -0.49 to 0.66 and kurtosis values ranged from -0.69 to -1.64 which indicated normality in MAP Growth Reading 6+ assessment scores based on ethnicity.

Table 17

MAP Growth Reading 6+ Descriptive Statistics

Statistic		Mean	Variance	SD	MinV	MaxV	Range	Skewness	Kurtosis
Military-Connected	Yes	72.68	126.61	11.25	50	90	40	-0.46	-0.87
	No	69.76	131.21	11.45	50	90	40	-0.02	-1.1
Gender	Female	72.06	133.26	11.54	50	90	40	-0.24	-1
	Male	70.7	128.97	11.36	50	90	40	-0.23	-1.12
Ethnic Group	Asian	69.5	100.7	10.03	60	84	24	0.66	-1.64
	Black	66.77	122.34	11.06	50	87	37	0.06	-1.12
	Hispanic or Latino	72.95	116.05	10.77	50	89	39	-0.49	-0.69
	Multi-ethnic	69.19	79.76	8.93	54	84	30	-0.28	-1.03
	White	72.43	136.62	11.69	50	90	40	-0.312	-1.05

Note. SD is Standard Deviation, MinV is Minimum Value, and MaxV is Maximum Value.

Figures 11 through 19 show the distribution of MAP Growth Reading 6+ scores by military-connected status (Figure 11 and 12), gender (Figure 13 and 14), and ethnicity (Figure 15, 16 through 19). The mean MAP Growth Reading 6+ scores for military-connected students is 72.68 with a standard deviation of 11.25 (Figure 11). The histogram shows a normal distribution with a skewness and kurtosis value of -0.46 and -0.02 respectively for military connected students. The left tail is slightly skewed which indicates that MAP Growth Reading 6+ scores are better than the mean of 72.68.

Figure 11

MAP Growth Reading 6+ Military-Connected Students Normal Distribution

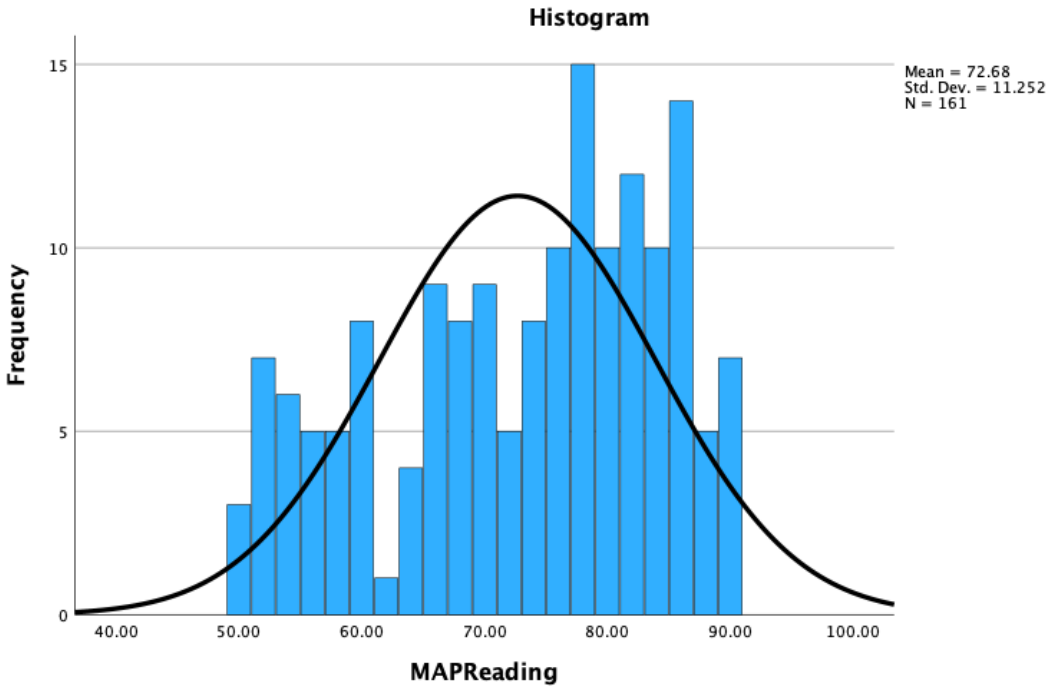


Figure 12 shows that the mean MAP Growth Reading 6+ scores for non-military connected students is 69.76 with a standard deviation of 11.45. The histogram shows a normal distribution with skewness of -0.02 and kurtosis value of -1.1. The spread of MAP Growth Reading 6+

scores is more normally distributed when compared for non-military students to military-connected students.

Figure 12

MAP Growth Reading 6+ Non-Military-Connected Students Normal Distribution

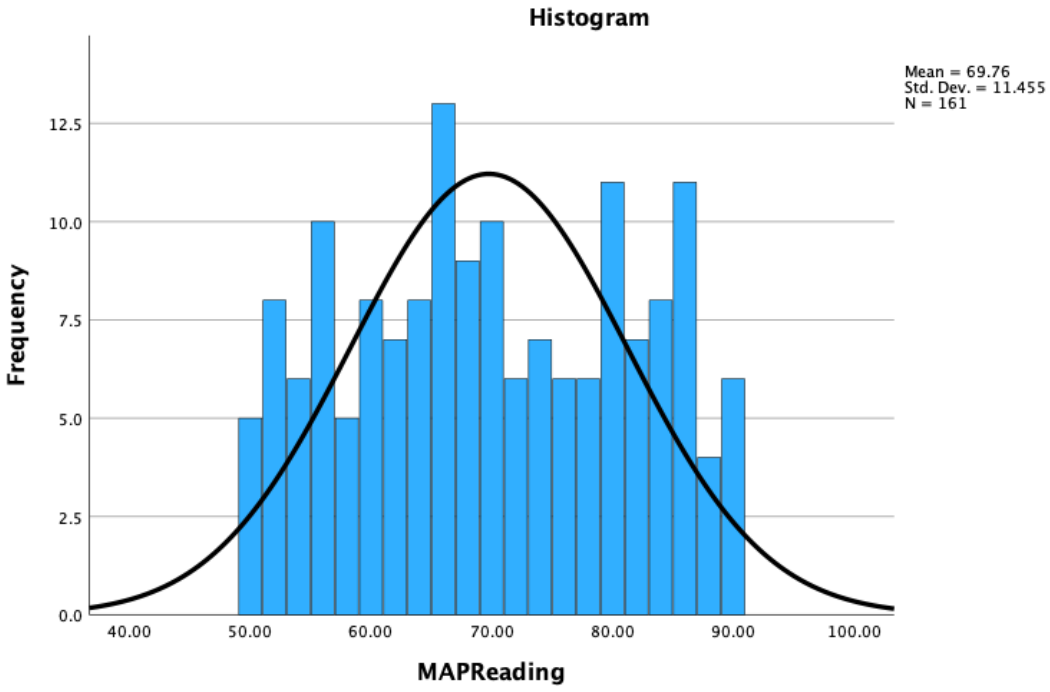


Figure 13 shows that the mean MAP Growth Reading 6+ scores for female students is 72.06 with a standard deviation of 11.54. The histogram shows a normal distribution with skewness of -0.24 and kurtosis value of -1. The left tail is slightly skewed which indicates that MAP Growth Reading 6+ scores for females are better than the overall mean (*M*= 71.22).

Figure 13

MAP Growth Reading 6+ Female Students Normal Distribution

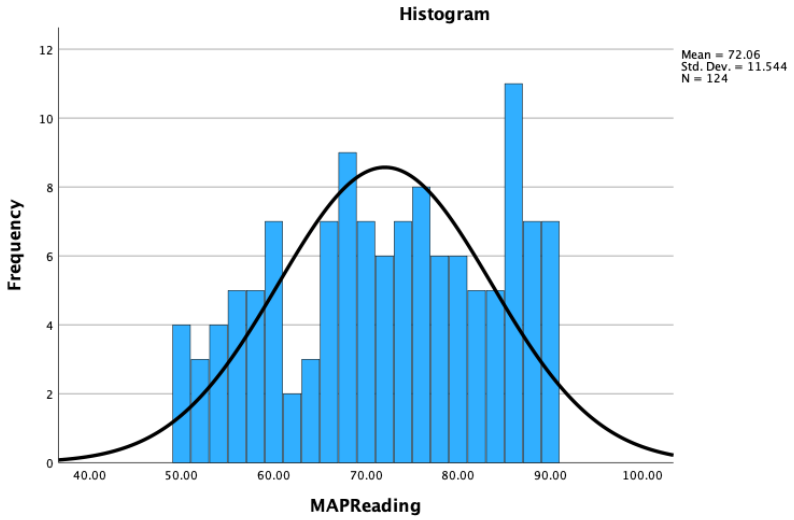
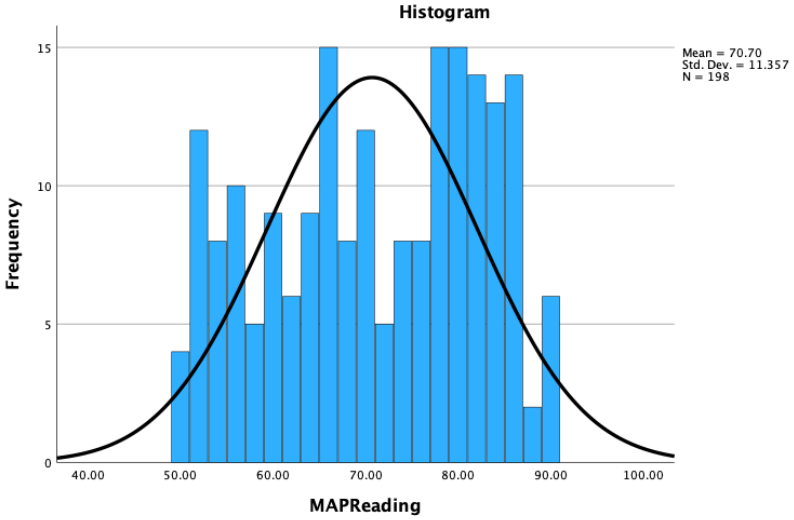


Figure 14 shows that the mean MAP Growth Reading 6+ scores for male students is 70.70 with a standard deviation of 11.35.

Figure 14

MAP Growth Reading 6+ Male Students Normal Distribution

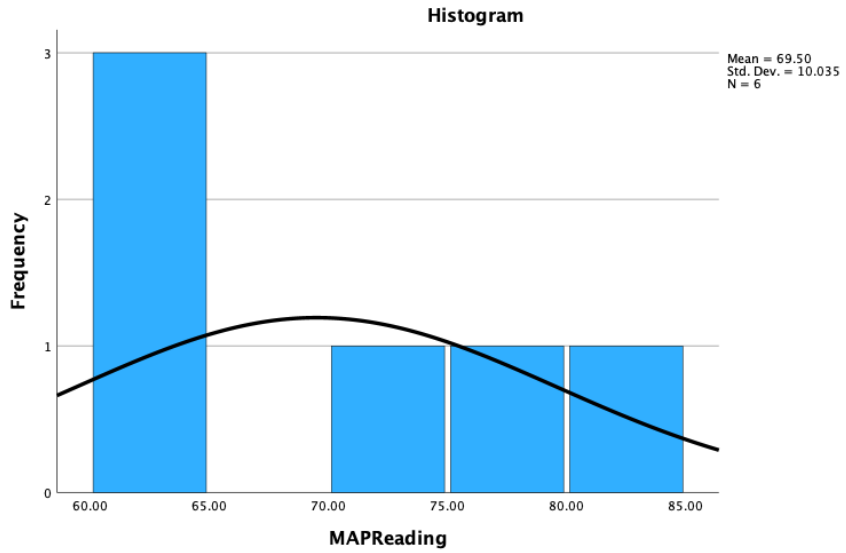


The histogram shows a normal distribution with skewness of -0.23 and kurtosis value of -1.12. The right tail is slightly skewed which indicates that MAP Growth Reading 6+ scores for males are worse than the overall mean (*M*= 71.22). Females performed better than male students on the MAP Growth Reading 6+ assessment.

The MAP Growth Reading 6+ scores of Asian students, represented in Figure 15 is the lowest and indicates a positive skew, which has the highest value across all ethnic groups. Figure 15 indicates that symmetry of the distribution is shifted towards the left and scores, in general are lower than the average of 69.50. The values for Skewness (0.66) and Kurtosis (-1.64) show a distribution in which the right tail is longer than the left tail, indicating that Asian students do not perform as well as other represented ethnic groups on the MAP Growth Reading 6+ assessment based on the mean scores.

Figure 15

MAP Growth Reading 6+ Asian Students Normal Distribution



Kurtosis is flattest compared to the other represented ethnic groups but is still considered normal due to the value being less than 2. The number of Asian students (*N*=6) included in this data set. The histogram reflects a lower standard deviation of 10.04 across the 6 students represented in this demographic and the histogram resembles more a bar graph.

Figure 16 shows that the mean MAP Growth Reading 6+ scores for Black or African American students is 66.77 with a standard deviation of 11.06. The histogram shows a normal distribution with skewness of 0.06 and kurtosis value of -1.12. The right tail is slightly longer than the left tail, indicating that Black or African American students' MAP Growth Reading 6+ scores are lower than the mean of 66.77 and well below the overall mean score of the MAP Growth Reading 6+ scores of 71.22.

Figure 16

MAP Growth Reading 6+ Black Students Normal Distribution

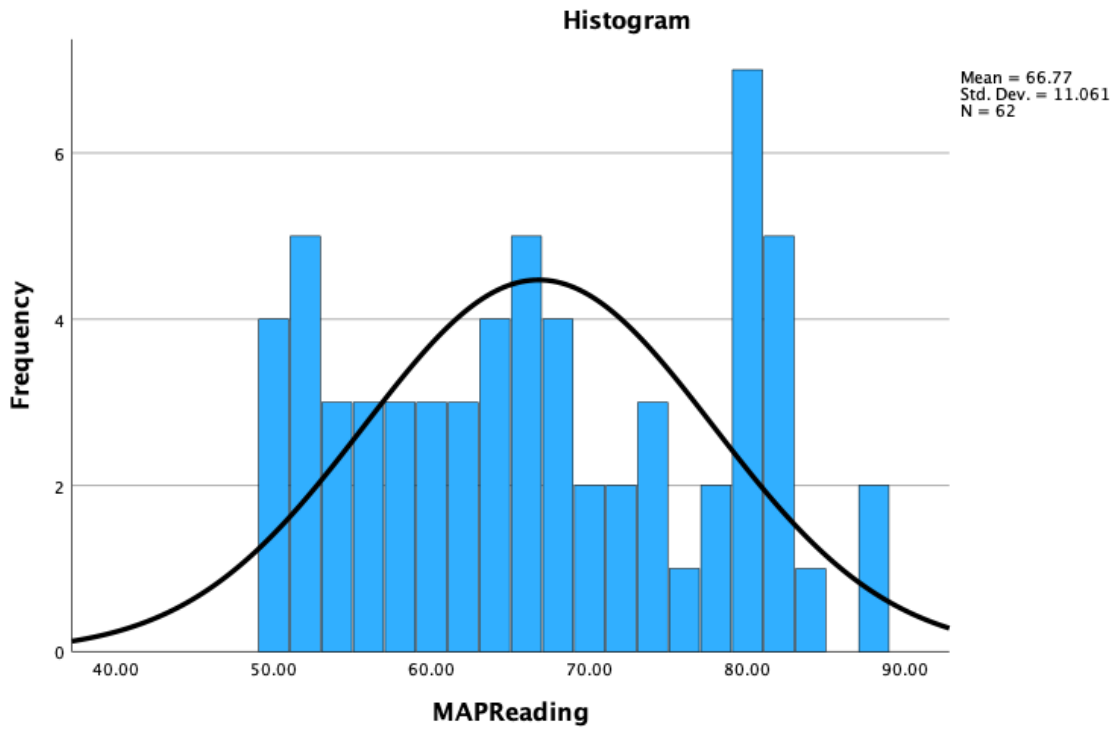


Figure 17 shows that the mean MAP Growth Reading 6+ scores for Hispanic or Latino students is 72.95 with a standard deviation of 10.77. The histogram shows a normal distribution with skewness of -0.49 and kurtosis value of -0.69. The left tail is slightly longer than the right tail with the highest skewness value when compared to other ethnicities, which shows that the symmetry of score distribution, in general, are higher than the average of 72.95. Hispanic or Latino students performed slightly better than White students and performed the best of all demographics who took this assessment.

Figure 17

MAP Growth Reading 6+ Hispanic Students Normal Distribution

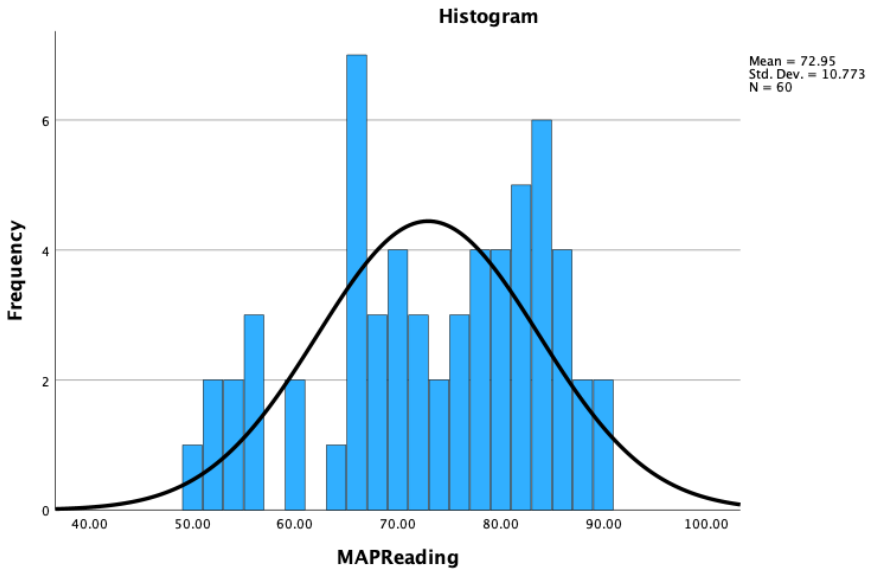


Figure 18 shows that the mean MAP Growth Reading 6+ scores for Multi-ethnic students is 69.19 with a standard deviation of 8.31. The histogram shows a normal distribution with skewness of -0.28 and kurtosis value of -1.03. The left tail is slightly longer than the right tail, which indicates that Multi-ethnic students' MAP Growth Reading 6+ scores are higher than the

mean of 69.19. The number of students in this demographic ($N = 16$) impact the standard deviation, which is the lowest number of all reported demographics.

Figure 18

MAP Growth Reading 6+ Multi-ethnic Students Normal Distribution

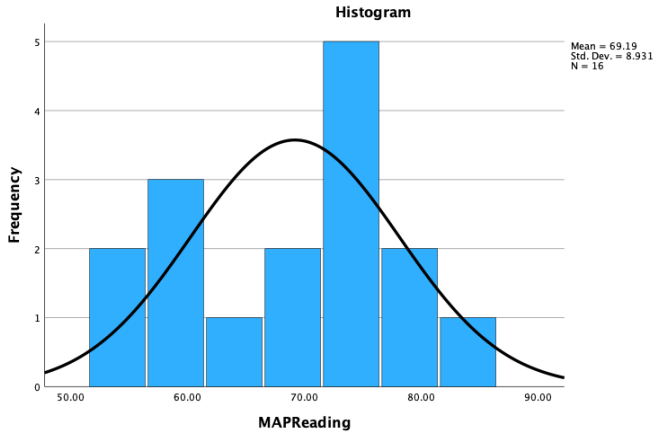
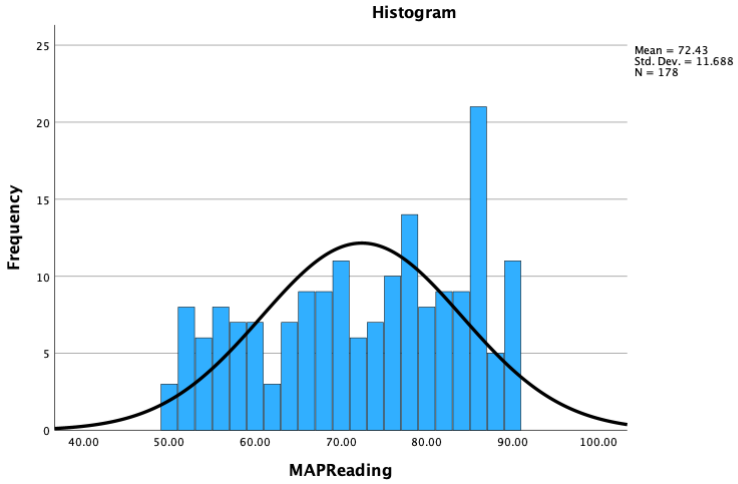


Figure 19 shows that the mean MAP Growth Reading 6+ scores for White students is 72.43 with a standard deviation of 11.69.

Figure 19

MAP Growth Reading 6+ White Students Normal Distribution



The left tail is slightly longer than the right tail, which indicates that MAP Growth Reading 6+ scores of multi-ethnic students are higher than the mean of 72.43. White students performed higher than the overall mean score (*M*= 71.22) on the MAP Growth Reading 6+ assessment, which is the second highest overall among ethnic groups and they are the largest sub-group (*N*=178). The histogram shows a normal distribution with skewness of -0.31 and kurtosis value of -1.05.

T-test Results for Research Question 1

The Levene's test indicated that the assumption of homogeneity of variances was met (*F*=.153, *p*=.696) as the results were statistically not significant. Random selection of non-military connected student data ensured the assumption of independence is met. Table 18 reflects the group statistics, where military-connected students perform better on average *(N* = 161, *M* = 72.683, *SD* = 11.252) than non-military connected students *(N* = 161, *M* = 69.758, *SD* = 11.455). The results of the independent t-test reflected in Table 19 show that there are statistically significant differences among military-connected and non-military-connected student achievement scores on the MAP Growth Reading 6+ assessment, *t* (320) = 2.312 , *p* = .021).

A t-test was conducted to answer Research Question 1 and to test the differences in MAP Growth Reading 6+ scores based on military status. The independent variable was military status with two groups (military-connected and non-military). The dependent variable is MAP Growth Reading 6+ achievement percentile scores. The results show that 95% confidence interval ranges from .436 to 5.415. The large gap between the lower bound and upper bound values shows less confidence in the model estimates. The high standard error (SE) values are indicative of larger standard deviation and variance which supports the wide range in MAP Growth Reading 6+ scores.

Table 18

Group Statistics for MAP Growth Reading 6+ by Military Connection

	MC	Non-MC
N	161	161
M	72.68	69.76
SD	11.25	11.46

Note. MC is military-connected, non-MC is not military-connected, and SD standard deviation

Table 19

Independent Samples t-Test Results for MAP Growth Reading 6+ with Equal Variances Assumed

		t-test for Equality of Means			
			95% Confidence Interval		
	Levene's Test	*p* Value	Lower	Upper	Standard Error
F	.153	.320	.436	5.415	1.265
Sig	.696	.021			

Note. *p* value is two-sided.

Cohen's *d* was used to calculate effect size, which was converted into Eta-squared (η^2) as a secondary indicator of effect size. Cohen's *d* value was .258 which indicates that 25.8% of the variance in the MAP Growth Reading 6+ scores was accounted for by whether the student was military-connected or not military-connected. This value was converted using the following formula:

$$\eta^2 = \frac{d^2}{d^2 + 4}$$

The Eta-squared value is $\eta^2 = 0.016$, which indicates a small effect size across both indicators. The results provide evidence to support the conclusion that a student's military affiliation does have an impact on their academic achievement as measured by MAP Growth Reading 6+ assessment. The null hypothesis is rejected.

Research Question 2

An independent sample *t*-test was conducted to determine how military-connected students compare to civilian counterparts on the MAP Growth Math K-12 assessment. The test was conducted by using a *p*-alpha value of .05. The null hypothesis is that there are no statistically significant differences in MAP Growth Math K-12 assessment scores between military-connected and non-military students. The null hypothesis is symbolized as follows:

$$H_0 : \mu_1 - \mu_2 = 0$$

The research hypothesis is that are statistically significant differences in MAP Growth Math K-12 assessment scores between military-connected students and non-military students. The research hypothesis is symbolized as follows:

$$H_1 : \mu_1 - \mu_2 \neq 0$$

The assumption of normality was tested. After conducting the Shapiro-Wilk's test, the result was statistically significant ($p < .001$) indicating that the normality assumption was not met. The analysis of box plots and Q-Q plots indicated that normality is a reasonable assumption for the sampled students who took the MAP Growth Math K-12 assessment. Review of the box plots indicated no significant outliers which indicated normality in the MAP Growth Math K-12 across genders, ethnic group, and military-connected status as the outputs demonstrate in Figures 20, 21, and 22.

Figure 20 shows the distribution of MAP Growth Math K-12 scores by gender. The plots show that male students (M= 72.8) had a higher MAP Growth Math K-12 score than female students (M=70.66). Scores ranged from 50 to 89 for male students and 50 to 90 for female students for the MAP Growth Math K-12 assessment. The median scores for both male and

female students was 73. The box plot indicates slight skewness for males (-0.32) and females (-0.13), but not a large departure from the normality.

Figure 20

Boxplots of MAP Growth Math K-12 Scores by Gender

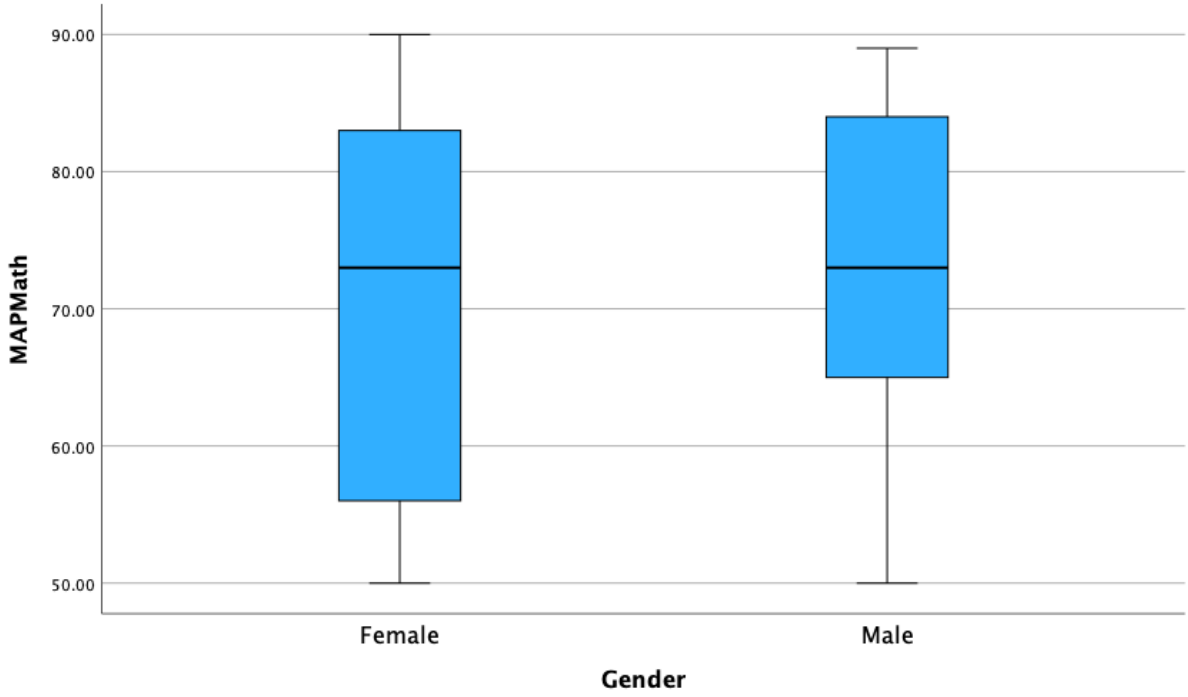


Figure 21 shows the MAP Growth Math K-12 achievement percentiles by ethnicity. Irrespective of ethnicity, the mean score for the MAP Growth Math K-12 assessment is (*M*=71.86). The plots show that White students (*M*=72.92) had the highest score, followed by Hispanic students (*M*=72.85), Black students (*M*=70.5), Multi-ethnic (*M*=67.19), and Asian students who performed the lowest (*M*=62.5). The mean values are relatively close across ethnic groups. The distributions of Black, Hispanic, and White students are negatively skewed which indicates that scores are slightly better than the overall mean score. The median values for Black, Hispanic, and White students are 72.5, 73, and 74, respectively. The slightly positive skew for Asian and Multi-ethnic students indicates the mean values are slightly lower, with median scores of 62.5 for

Asian students and 69 for Multi-ethnic students. All ethnic groups did not have scores within the range of 50 and 90. Black and White students' scores ranged from 50th to 90th percentile scores (range = 40), Asian students had the lowest range (17) and the lowest number of participants (*N*=2) and do not have scores across the full range. White students had the highest number of participants (*N*=178). The box plot indicates slight skewness, but not large departures from the normality.

Figure 21

Boxplots of MAP Growth Math K-12 Scores by Ethnicity

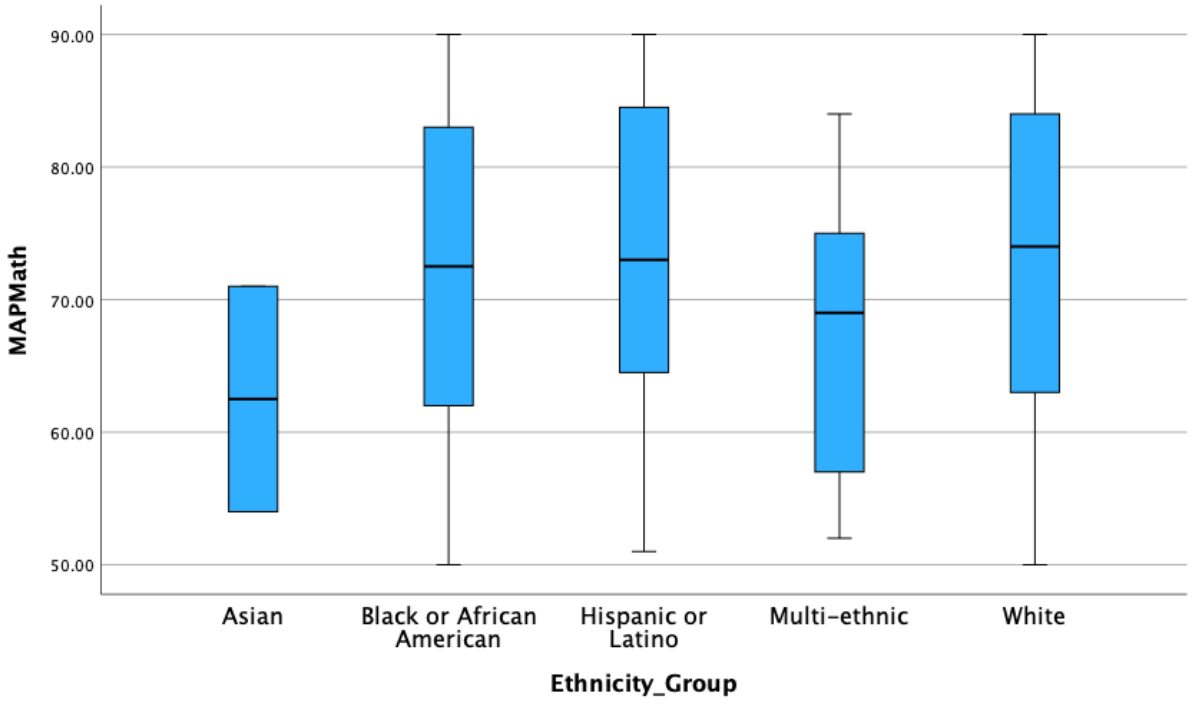
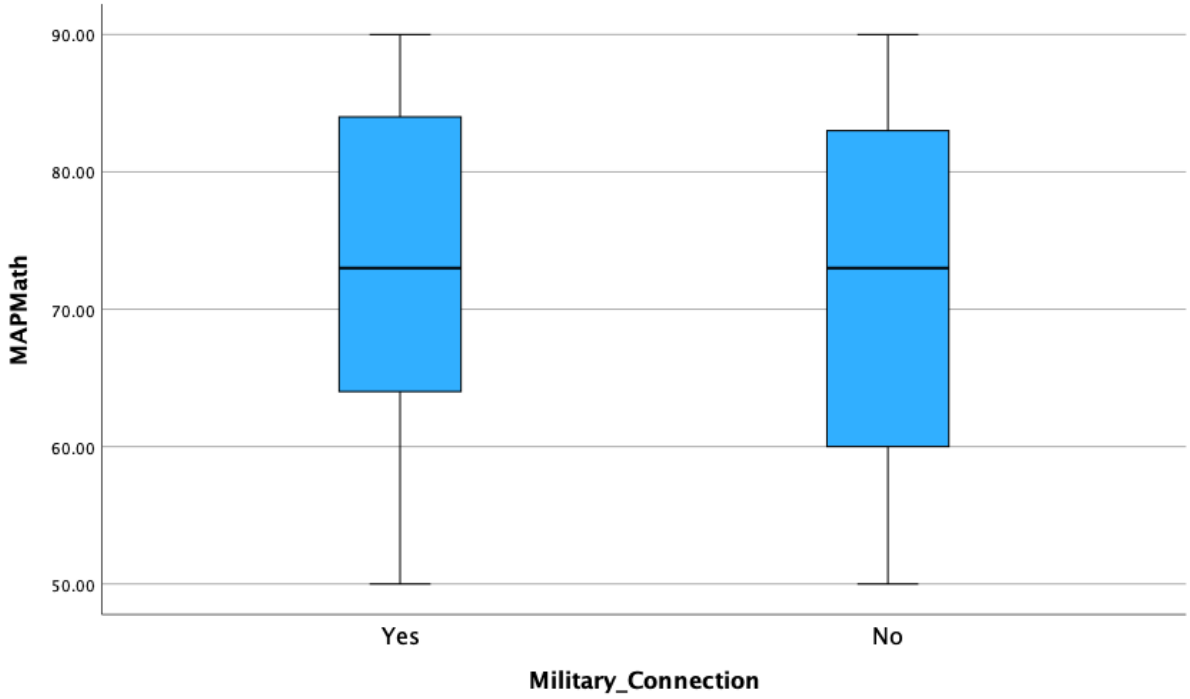


Figure 22 compares the MAP Growth Math K-12 scores by military-connected status. The box plots show that military-connected students (M= 72.72) had a higher MAP Growth Math K-12 score than non-military affiliated students (M=71). The median values for military-connected students and non-military students were both 73. The minimum score is 50 and the maximum

score is 90 for both military-connected and non-military students for the MAP Growth Math K-12 assessment. The box plot indicates slight skewness, but not departure from the normality.

Figure 22

Boxplots of MAP Growth Math K-12 Scores by Military-Connection



Figures 23 and 24 show the Q-Q plots of MAP Growth Math K-12 scores sorted by military-connected status. The Q-Q plot in Figure 23 indicates a few outliers at the higher end of the distribution, but most of the points lie along the straight line, which indicates a fairly normal distribution of military-connected students. The Q-Q plot in Figure 24 shows the distribution of MAP Growth Math K-12 scores for non-military connected students. The plot shows slight departure at the lower and upper end but the majority of MAP Growth Math K-12 scores lie along the straight line. The box plot of military-connected students in Figure 22 shows that there are not significant outliers which indicates a normal distribution occurred. Q-Q plots were not presented for gender and ethnicity as no outliers were indicated in the box plots. Research

Question 2 focused on comparing the academic performances of students based on military-connected status. Q-Q plots for MAP Growth Math K-12 military-connected and non-military connected students were included to offer an additional visual to demonstrate a fairly normal distribution of MAP Growth Math K-12 scores.

Figure 23

Q-Q Plot of MAP Growth Math K-12 for Military-Connected Students

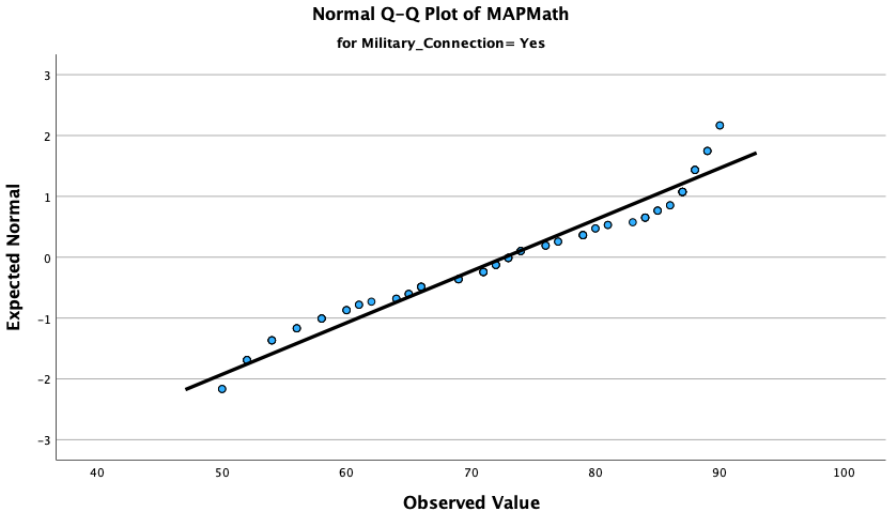
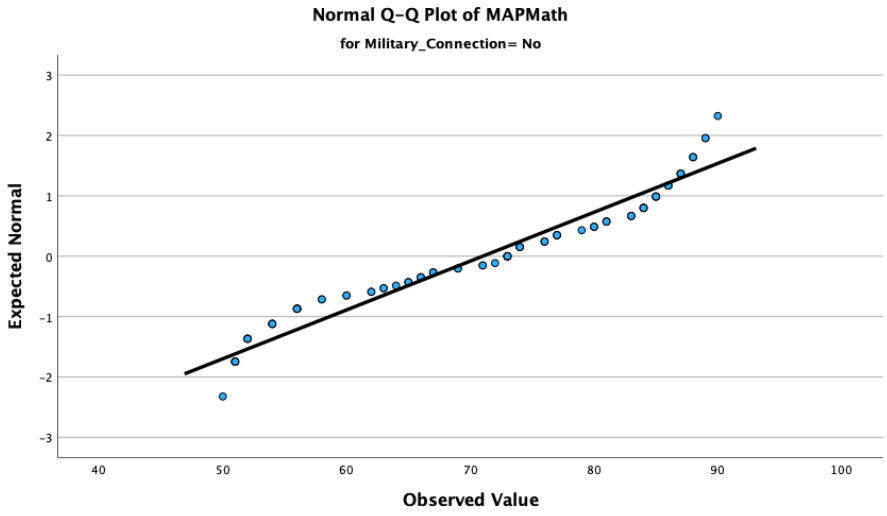


Figure 24

Q-Q Plot of MAP Growth Math K-12 for Non-Military-Connected Students



Descriptive statistics were computed for the MAP Growth Math K-12 assessment by military-connected status, gender, and ethnic groups as represented in Table 20. The skewness values ranged from -0.28 to -0.22 and kurtosis values ranged from -1.71 to -1.28 which indicated normality in the assessment scores based on military-connected status. The skewness values ranged from -0.32 to -0.13 and kurtosis values ranged from -1.33 to -1.04 which indicated normality in the assessment scores based on gender. The skewness values ranged from -0.39 to 0.05 and kurtosis values ranged from -1.44 to -1 which indicated normality the assessment scores based on ethnicity. Skewness and kurtosis values for Asian students was not calculated because of the low sample size ($N = 2$).

Table 20

MAP Growth Math K-12 Descriptive Statistics

Statistic		Mean	Variance	SD	MinV	MaxV	Range	Skewness	Kurtosis
Military-Connected	Yes	72.72	139.15	11.8	50	90	40	-0.28	-1.71
	No	71	152.84	12.36	50	90	40	-0.22	-1.28
Gender	Female	70.66	166.01	12.89	50	90	40	-0.13	-1.33
	Male	72.8	129.67	11.39	50	89	39	-0.32	-1.04
Ethnic Group	Asian	62.5	144.5	12.02	54	71	17	n/a	n/a
	Black	70.5	152.69	12.36	50	90	40	-0.13	-1.17
	Hispanic or Latino	72.85	137.36	11.72	51	90	39	-0.31	-1
	Multi-ethnic	67.19	104.43	10.22	52	84	32	0.05	-1.44
	White	72.92	151.57	12.31	50	90	40	-0.39	-1.15

Note. SD is Standard Deviation, MinV is Minimum Value, and MaxV is Maximum Value.

The distribution of MAP Growth Math K-12 scores by military-connected status (Figure 25 and 26), gender (Figure 27 and 28), and ethnicity (Figure 29, 30 through 33). The mean scores for military-connected students is 72.72 with a standard deviation of 11.80 (Figure 25). The histogram shows a normal distribution with a skewness and kurtosis value of -0.28 and -1.71 respectively for military connected students. The left tail is slightly longer than the right which indicates that the scores are better than the mean score of 72.72, which was due to the gap in scores between the 69 and 70 intervals and the tall bar toward the score of 90. This representation indicates that military-connected students performed better than non-military students.

Figure 25

MAP Growth Math K-12 Military-Connected Students Normal Distribution

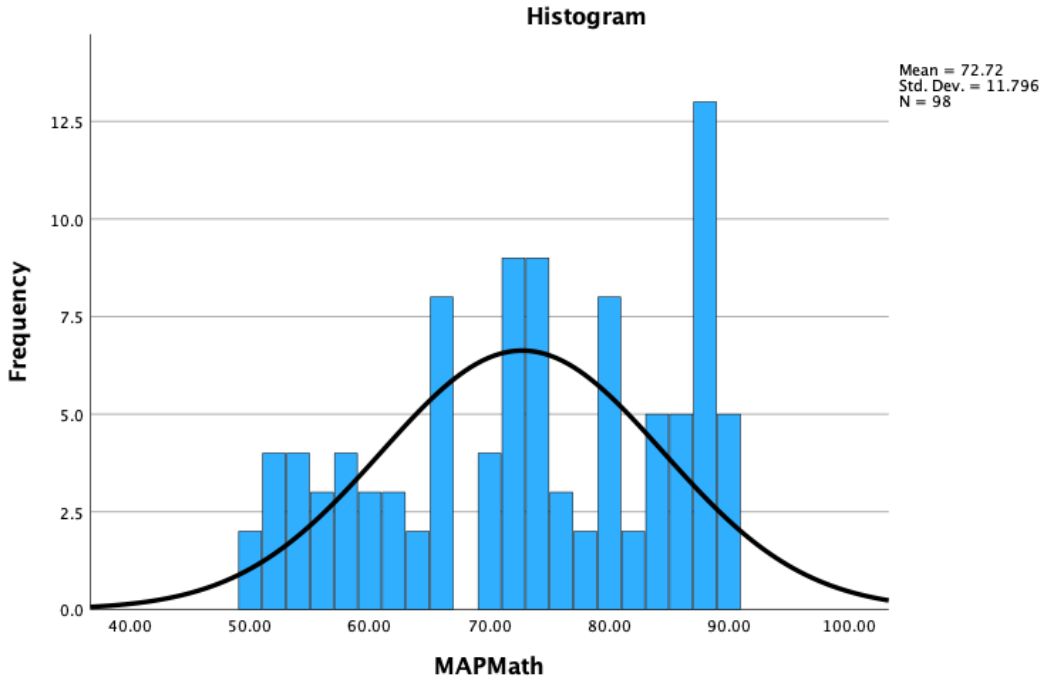


Figure 26 shows that the mean MAP Growth Math K-12 scores for non-military connected students is 71 with a standard deviation of 12.36. The histogram shows a normal distribution

with skewness of -0.22 and kurtosis value of -1.28. The spread of scores is more normally distributed for non-military students when compared to military-connected students. The left tail is slightly longer than the right tail, which indicates that the non-military students' MAP Growth K-12 scores are higher than the mean (N=71) and these students did not perform as well when compared to military-connected students.

Figure 26

MAP Growth Math K-12 Non-Military-Connected Students Normal Distribution

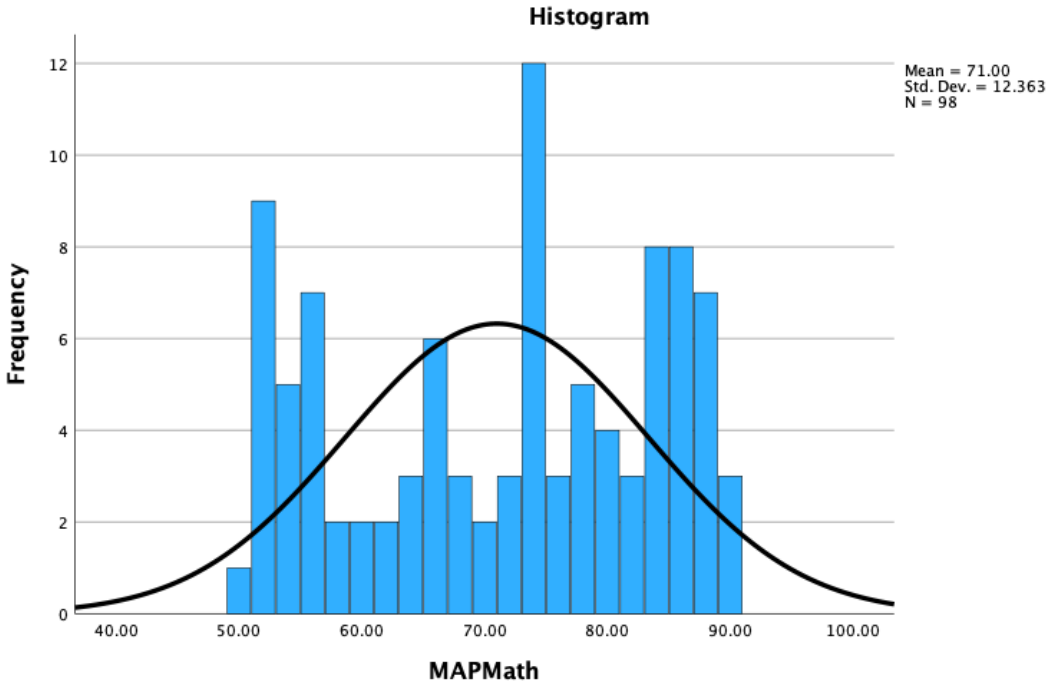


Figure 27 shows that the mean MAP Growth Math K-12 scores for female students is 70.66 with a standard deviation of 12.89. The histogram shows a normal distribution with skewness of -0.13 and kurtosis value of -1.33. The left tail is slightly skewed which indicates that scores for females are better than the overall mean (*M*= 70.66). The tallest bar among female students was 74 whereas male students had scores which commonly ranged between 86 and 88 (Figure 28).

Figure 27

MAP Growth Math K-12 Female Students Normal Distribution

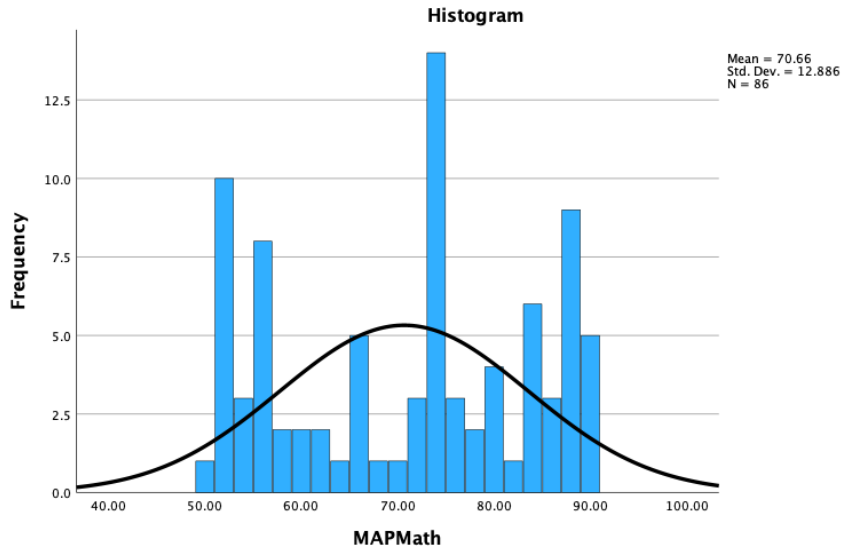
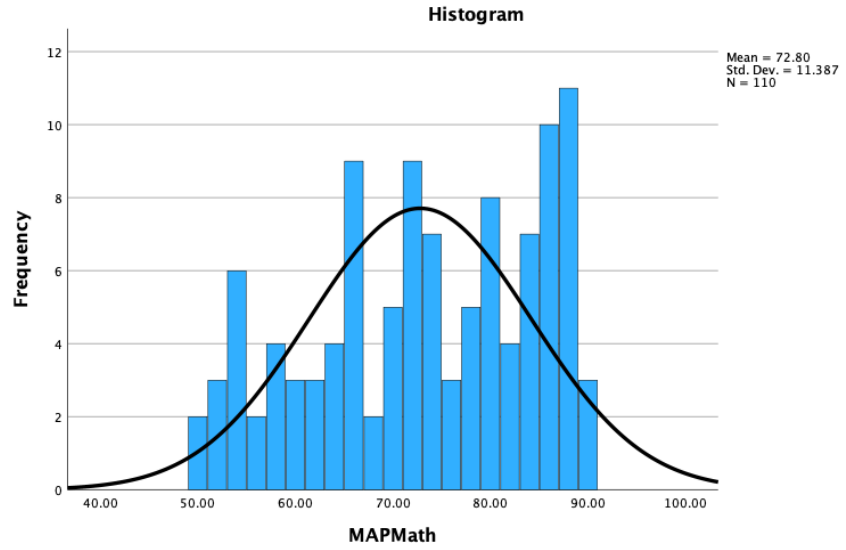


Figure 28 shows that the mean MAP Growth Math K-12 scores for male students is 72.80 with a standard deviation of 11.39.

Figure 28

MAP Growth Math K-12 Male Students Normal Distribution



The histogram shows a normal distribution with skewness of -0.32 and kurtosis value of -1.04. The left tail is slightly skewed which indicates that the scores for males are better than the overall mean (*M*= 72.80). Male students performed better than female students on the assessment, as indicated by the frequencies of scores which were above the mean, with the tallest bars for scores between 86 and 88.

Figure 29 shows that the mean MAP Growth Math K-12 scores for Asian students is 62.5 with a standard deviation of 12.02. The values for skewness and kurtosis are not reported for this demographic as only two students were in this data set.

Figure 29

MAP Growth Math K-12 Asian Students Normal Distribution

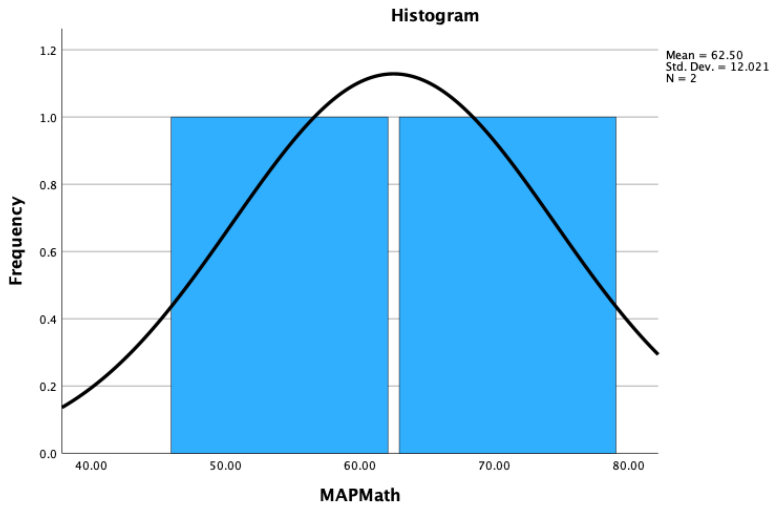


Figure 30 shows that the mean MAP Growth Math K-12 scores for Black or African American students is 70.5 with a standard deviation of 12.36. The histogram shows a normal distribution with skewness of -0.13 and kurtosis value of -1.17. The left tail is slightly longer than the right tail and the tallest bars in the histogram are around 75 and 85, which indicates that Black or African American students' scores are higher than the mean of 70.5.

Figure 30

MAP Growth Math K-12 Black Students Normal Distribution

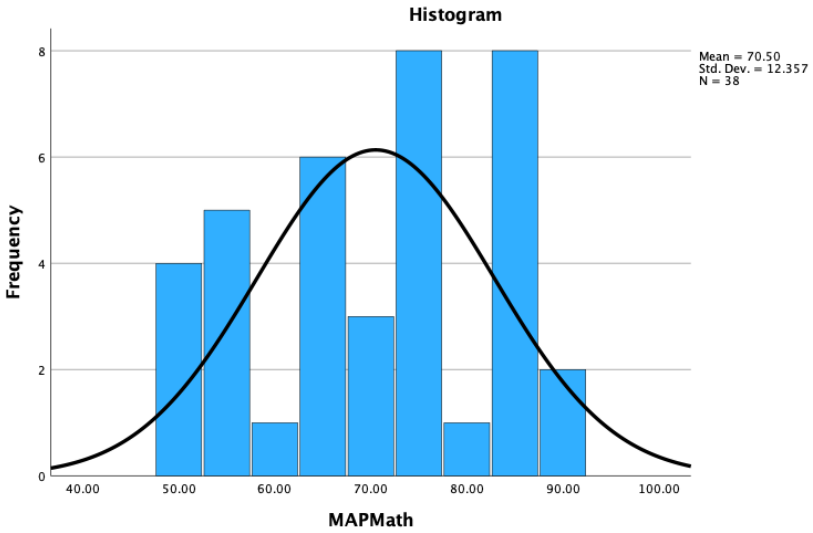
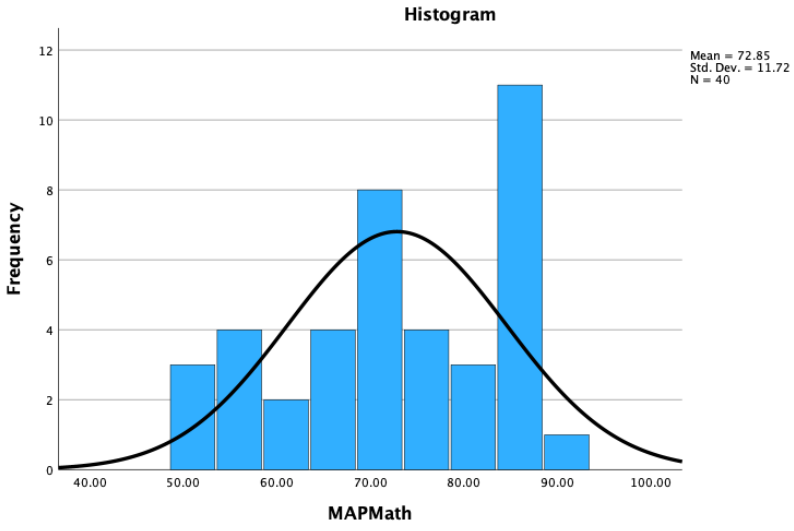


Figure 31 shows that the mean MAP Growth Math K-12 scores for Hispanic students is 72.85 with a standard deviation of 11.72.

Figure 31

MAP Growth Math K-12 Hispanic Students Normal Distribution



The histogram shows a normal distribution with skewness of -0.31 and kurtosis value of -1. The left tail is slightly longer than the right tail and the tallest bars in the histogram are around 85, which indicates that Hispanic students have higher scores than the mean of 72.85.

Figure 32 shows that the mean MAP Growth Math K-12 scores for Multi-ethnic students is 67.19 with a standard deviation of 10.22. The histogram shows a normal distribution with skewness of 0.05 and kurtosis value of -1.44. Multi-ethnic students are the only demographic with a positive skewness, in which the right tail is slightly longer than the left tail, which indicates that Multi-ethnic students' scores are lower than the mean of 67.19. Scores of multi-ethnic students performed the second lowest on the MAP Growth Math K-12 assessment.

Figure 32

MAP Growth Math K-12 Multi-ethnic Students Normal Distribution

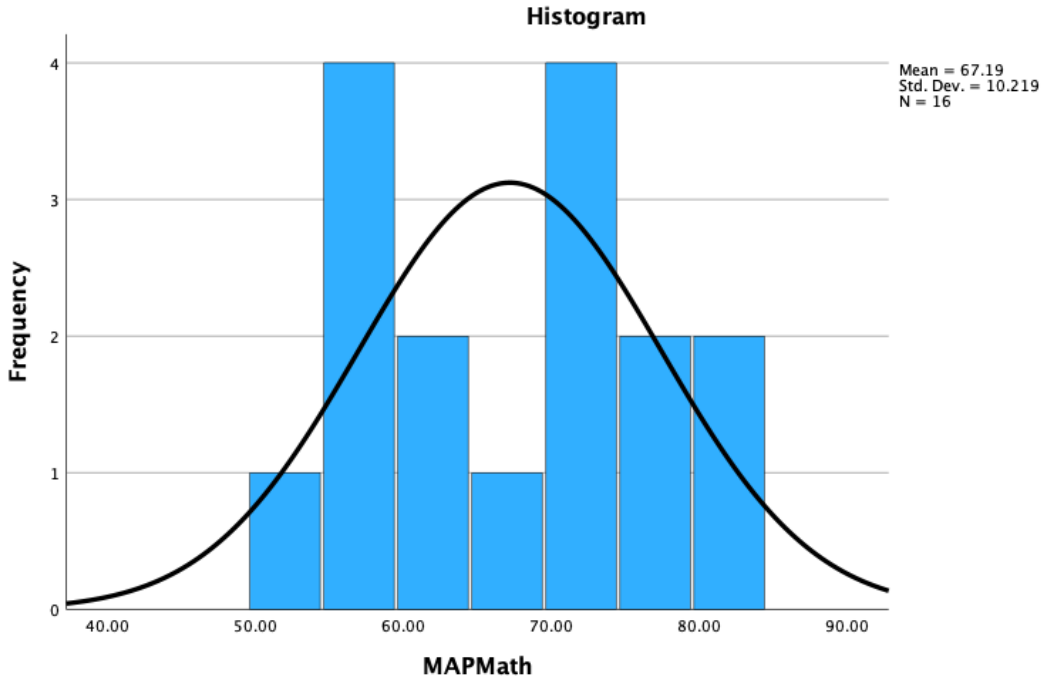
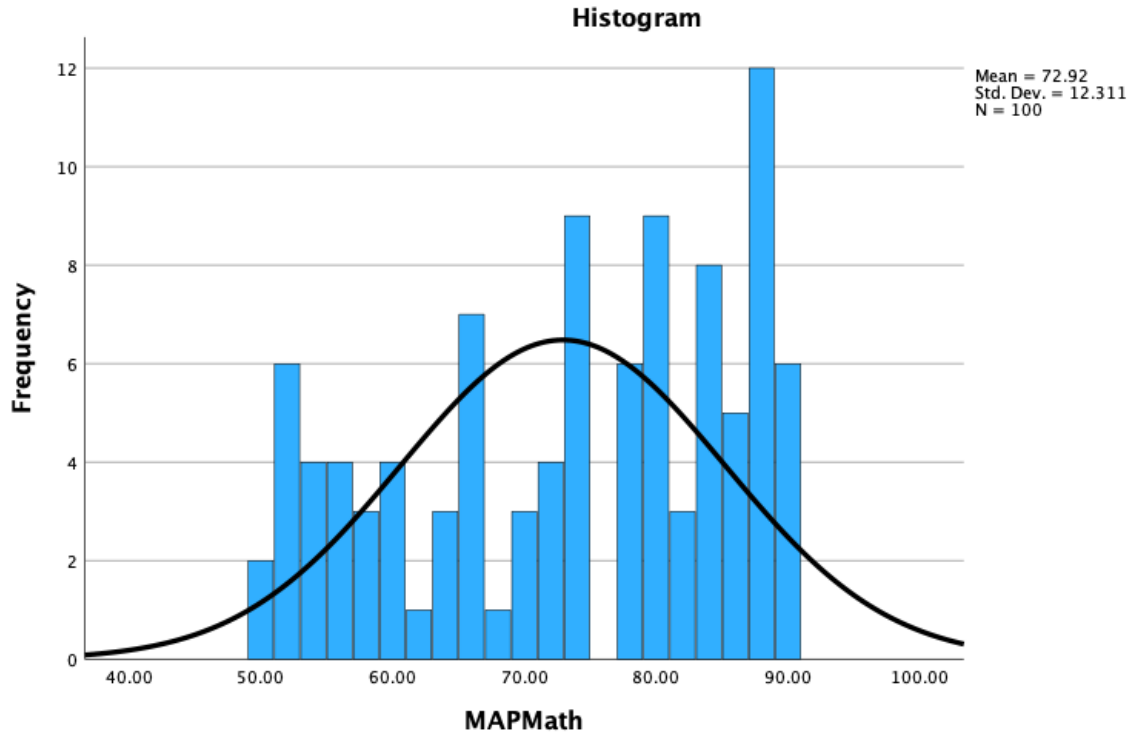


Figure 33 shows that the mean MAP Growth Math K-12 scores for White students is 72.92 with a standard deviation of 12.31. The histogram shows a normal distribution with skewness of -0.39

and kurtosis value of -1.15. The left tail is slightly longer than the right tail and the tallest bar in the histogram is at 88, which indicates that White students' scores are higher than the mean of 72.85. There is a gap between 75 and 80 in which no scores are reported, which attributes to the negative skew. White students performed the highest when compared to other ethnic groups.

Figure 33

MAP Growth Math K-12 White Students Normal Distribution



T-test Results for Research Question 2

The Levene's test indicated that the assumption of homogeneity of variance was met (F=.835, p=.362) as the results were statistically not significant. Random selection of non-military connected student data ensured the assumption of independence is met. Table 21 reflects the group statistics, where military-connected students performed better based on mean values (N = 98, M = 72.72, SD = 11.8) than non-military connected students (N = 98, M = 71, SD = 12.36).

The results of the independent t-test (Table 22) showed that there are not statistically significant differences among military-connected and non-military-connected student achievement scores on the MAP Growth Math K-12 assessment, t (194) = .999 , p = .321).

A t-test was conducted to answer Research Question 2 and to test the differences in MAP Growth Math K-12 scores based on military status. The independent variable was military status with two groups (military-connected and non-military). The dependent variable is MAP Growth Math K-12 achievement percentile scores. The results show that 95% confidence interval ranges from -1.68 to 5.13. The large gap between the lower bound and upper bound values shows less confidence in the model estimates. The high standard error (SE) values are indicative of larger standard deviation and variance which supports the wide range.

Table 21

Group Statistics for MAP Growth Math K-12 by Military Connection

	MC	Non-MC
N	98	98
M	72.72	71
SD	11.80	12.36

Note. MC is military-connected, non-MC is not military-connected, and SD standard deviation.

Table 22

Independent Samples t-Test Results for MAP Growth Math K-12 with Equal Variances Assumed

		t-test for Equality of Means			
			95% Confidence Interval		
	Levene's Test	*p* Value	Lower	Upper	Standard Error
F	.835	.320	-1.68	5.13	1.72
Sig	.362	.021			

Note. *p* value is two-sided.

Cohen's *d* was used to calculate effect size, which was converted into Eta-squared (η^2) as a secondary indicator of effect size. Cohen's *d* value was .143 which indicates that 14.3% of the variance in the MAP Growth Math K-12 scores was accounted for by whether the student was military-connected or not military-connected. This value was converted using the following formula:

$$\eta^2 = \frac{d^2}{d^2 + 4}$$

The Eta-squared value is $\eta^2 = 0.051$, which indicates a small effect size across both indicators. The results provide evidence to support the conclusion that a student's military affiliation does have an impact on their academic achievement as measured by MAP Growth Math K-12 assessment. The researcher fails to reject the null hypothesis.

Qualitative Findings

Research Question 3

High School educators' perceptions of military-connected students and their needs were evaluated through a survey with both Likert-scale questions and open-ended questions. The guiding questions in the survey asked participants to reflect on their experiences with military-connected students in addition to reflecting on their school's response to military-connected students and their families. There were 99 (97.1%) educators who agreed that students in their school were connected with at least one military-connected parent or guardian. There were 95 (93.1%) educators who agreed that they have taught or had contact with students from military-connected families. The survey then prompted respondents to consider their experiences with military-connected students in their school. Educators were asked to compare military-connected students to their civilian peers. They were also asked to reflect on their school environment and

its conduciveness in supporting military-connected students and their families. The final section of the survey addressed educators' professional development needs regarding military-connected students, which is separately addressed in Research Question 4. The items that utilized a Likert scale measure and addressed Research Question 3 were arranged in two sections and respondents selected a choice ranging from Almost None / Not at All True, Few / Rarely True, Some / Sometimes True, Most / Usually True, and Don't Know or Not Applicable. The survey items that addressed this research question, were sorted by the items' stems, and coded for continuity across tables are reflected in Appendix H.

Survey data was retrieved from Qualtrics and uploaded into SPSS. Mean values from each item were computed and are presented in Table 23. Then, the data was further disaggregated to evaluate the frequencies for each item by respondents' military-connected status to determine if there were any trends based on their military affiliation or lack thereof, as represented in Table 24 and Table 25.

Table 23

Military-Connected Students Items by Mean Values

Stem	Overall	MC Educator	Non-MC
MCS 1 - Feel supported by their peers	4.22	4.19	4.24
MCS 2 - Feel supported by their teachers	4.47	4.39	4.52
MCS 3 - Have additional educational needs	2.84	2.83	2.84
MCS 4 - Face financial difficulties	2.61	2.64	2.58
MCS 5 - Have additional emotional / psychological needs	2.90	3.00	2.83
MCS 6 - Have additional strengths due to family circumstances	3.83	3.90	3.78
MCS 7 - Feel that others may not appreciate their families' sacrifice	2.96	2.86	3.05
MCS 8 - Feel that others may discriminate against them because they are military students	1.56	1.61	1.51
MCS 9 - Feel isolated in the school	2.08	2.06	2.09
MCS 10 - Are proud of their parent(s) and families' contributions to our country's security	4.38	4.39	4.38

Note. Non-MC refers to non-military connected educator.

The mean values for the questions regarding military-connected students were mostly comparable among respondents. Military-connected educators and non-military educators both had higher ratings for the item about feeling supported by their peers (M = 4.22), teachers (M = 4.47). Educators who had military-connected background said students have additional strengths due to their family's circumstances (M = 3.83) and noted the pride military-connected students have toward their families' contributions to our country (M = 4.38). The lowest mean value across both groups was that of military-connected students who may be discriminated against due to their military status (M = 1.56) and educators agreed that they do not believe military connected students are isolated in school (M = 2.08). The greatest disparities between military-connected and non-military educators' responses stemmed from the appreciation of military-connected families' sacrifice (MC M= 2.86, Non-MC M =3.05) and the awareness of military-connected students' additional emotional and psychological needs (MC M = 3.00, Non-MC M =

2.83). Non-military educators reported a higher frequency of "don't know" to this item ($N = 9$) suggesting that military-connected educators rely on their lived experiences to provide a response. Military-connected educators felt appreciation for military families' sacrifices ($M = 2.86$), whereas non-military respondents more frequently responded that military-connected students may not feel appreciated ($M = 3.05$).

Table 24 shows the frequencies obtained from the Likert scale which are sorted by responses and personal military-connection of the surveyed educators. Non-military educators usually selected "don't know" or "not applicable" responses when compared to military-connected educators. The only question that showed consistency in response pattern between the two educator groups was MCS4, which asked if military-connected students faced financial difficulties. This information would most likely not be available to most respondents, as students' socioeconomic status is typically confidential information that is available only to administrators and select counselors. Both military-connected and non-military educators stated that most or nearly all military-connected students were supported by both their peers (MCS 1) and teachers (MCS 2). Most respondents reported that almost none or very few military-connected students felt discriminated against due to their military affiliation (MCS 8), but more non-military educators selected the "don't know" response.

Table 24

Frequency and Percent Values of the Military-Connected Students Items by Educator Military Affiliation

	Almost None		Few		Some		Most		Nearly All		Don't Know / NA	
	MC	Non-MC	MC	Non-MC	MC	Non-MC	MC	Non-MC	MC	Non-MC	MC	Non-MC
MCS 1	0 [0]	0 [0]	1 [2.4]	0 [0]	6 [14.3]	6 [10]	15 [35.7]	22 [36.7]	15 [35.7]	17 [28.3]	5 [11.9]	15 [25]
MCS 2	1 [2.4]	0 [0]	0 [0]	0 [0]	2 [4.8]	4 [6.7]	15 [35.7]	16 [26.7]	20 [47.6]	30 [50]	4 [9.5]	10 [16.7]
MCS 3	0 [0]	2 [3.3]	9 [21.4]	13 [21.7]	24 [57.1]	30 [50]	3 [7.1]	3 [5]	0 [0]	3 [5]	6 [14.3]	9 [15]
MCS 4	2 [4.8]	2 [3.3]	7 [16.7]	13 [21.7]	14 [33.3]	19 [31.7]	2 [4.8]	2 [3.3]	0 [0]	0 [0]	17 [40.5]	24 [40]
MCS 5	0 [0]	0 [0]	5 [11.9]	14 [23.3]	23 [54.8]	27 [45]	3 [7.1]	6 [10]	1 [2.4]	0 [0]	10 [23.8]	13 [21.7]
MCS 6	0 [0]	0 [0]	0 [0]	0 [0]	13 [31]	18 [30]	17 [40.5]	26 [43.3]	9 [21.4]	7 [11.7]	3 [7.1]	9 [15]
MCS 7	5 [11.9]	3 [5]	6 [14.3]	7 [11.7]	16 [38.1]	14 [23.3]	7 [16.7]	11 [18.3]	2 [4.8]	2 [3.3]	6 [14.3]	23 [38.3]
MCS 8	18 [42.9]	24 [40]	14 [33.3]	16 [26.7]	4 [9.5]	3 [5]	0 [0]	0 [0]	0 [0]	0 [0]	6 [14.3]	17 [28.3]
MCS 9	10 [23.8]	13 [21.7]	14 [33.3]	15 [25]	12 [28.6]	15 [25]	0 [0]	1 [1.7]	0 [0]	0 [0]	6 [14.3]	16 [26.7]
MCS 10	0 [0.0]	0 [0]	0 [0]	0 [0]	3 [7.1]	4 [6.7]	17 [40.5]	22 [36.7]	18 [42.9]	22 [36.7]	4 [9.5]	12 [20]

Note. Numbers outside brackets are the frequencies and inside brackets are the valid percentages. MC is military-connected; Non-MC is non-military connected. NA is not applicable.

Both educator groups reported that military-connected students demonstrate qualities of an ideal, attentive student whose behavior is respectful and evident of a structured home life. However, respondents were also aware of the emotional and psychological impact of military life on the adolescent student, who often struggled with transitions and faced challenges during parental deployment. Educators reported a higher level of involvement from parents of military families by their responsiveness and engagement through email and attendance at events such as open house or registration advisement. Furthermore, military-connected parents exhibited higher expectations of their child's performance in the classroom both behaviorally and academically, along with the importance of life skills such as personal accountability, respect, timeliness, and communication with teachers. Responses to the survey's qualitative items within these sections can be categorized into four main topics, where positive and negative associations were developed through the educators' lived experiences as reflected in Table 25.

Table 25

Educators' Perceptions and Experiences Concerning Military-Connected High School Students

Theme	Positive Experiences	Negative Experiences
Peer and Adult Relationships	Engaged, well-adjusted	Trouble fitting in, isolated, disconnected
Academic Performance	Diligent, schedule-oriented, bright, curious	Inconsistencies in curriculum can yield an academic disconnect
Behavior	Strong work ethic, respectful, self-motivated, high expectations, adaptable	Elevated anxiety and depression Behavior changes during periods of transition or deployment
Parental Involvement	Yields better behavior, emphasis on academics, communication strong	Disconnect during periods of transition or deployment can affect parental presence and communication

The experiences of surveyed educators with military-connected students were primarily positive, and indicate that they interact well with peers and adults, comply with classroom procedures, actively participate in lessons, demonstrate responsibility with deadlines, and are well-behaved. One respondent elaborated that "most of the military-connected students I have taught have demonstrated appropriate classroom behavior and peer relationships and set a model example of preparedness to learn in my classroom." Emotional maturity and resilience often translate to positive behavior and classroom performance. But for students who are not as well-adjusted, a dysregulated homelife may explain negative behaviors which often results in challenges in adaptability, low performance in academics, and potential behavior issues. The military-connected adolescent's experience is rather polarizing, as one respondent stated: "Socially and emotionally, they tend to fall into two extreme categories. They either try too hard to be liked and/or form friendships. Or, they don't try hardly at all to form friendships, and typically fly under the radar because they are not exhibiting other indicators of struggle – a forced resilience." Transitions affect adolescents significantly, as they may have to start over and establish themselves in clubs, organizations, and sports when moving to a new school. A respondent recognized the challenges faced with relocation: "Military families can relocate every 3-4 years which makes it extremely hard for the children to restart their lives in new towns and schools." Social acclimation and relationship building is already challenging for adolescents but can be exacerbated when they are subjected to frequent relocations. These students may feel isolated as they have not had the time to create meaningful attachments to other students and their school.

Educators who are not military-connected have lower confidence in their understanding of military-connected students than the educators who have personal military affiliation.

Educators with a military-connected background educators explained their reliance on the lived experiences to connect and empathize with their military-connected students, as explained in response to the question on handling the differences when teaching military-connected and non-military students: “Because I was personally military-connected, I do have an understanding of some of the struggles today’s military-connected student may face.” The open-ended items revealed that educators who were not military-connected lacked awareness related to the needs of military-connected students’ and their circumstances beyond their classroom aptitude and behavior. Non-military connected educators often mentioned the importance of military counselors to support these students. The teachers who have a limited understanding, referred students to counselors when needs extend beyond the classroom teacher’s capacity. Respondents acknowledged that while military-connected students may have unique triggers, they responded to a student’s social, emotional, behavioral, and academic concerns individually rather than by their family’s military affiliation. Educators emphasized the importance of inclusivity, equal treatment, creating a culture of value and respect for the individual and their place within the school community, irrespective of military affiliation. Respondents noted the importance of creating opportunities for all students to excel, as indicated by this response: “I differentiate assignments to meet students’ academic strengths but prioritize understanding and empathy, to build a supportive environment and adapt my methods to my students’ needs.” Teachers adopted differentiated instruction and demonstrated flexibility to accommodate and celebrate the diverse learning styles, experiences, and circumstances of both military-connected and civilian students.

The educational environment section of the survey showed higher mean values when compared to the military-connected student section, as many of the survey items could have been interpreted as best practices regardless of student subpopulation. When compared to the military-

connected students and professional development sections of the survey, the educational environment section of the survey presented the greatest similarities between military-connected educators and non-military educators. Mean scores for all but 3 of the 11 survey items in Table 26 are within a tenth of a mean point (EE 5, EE 9, and EE 11), which indicates the mostly positive opinions among educators of their work environment when considering supports available to military-connected students and their families. Table 26 shows that mean values of the items pertaining to the educational environment and its ability to serve military-connected students and their families.

Table 26

Educational Environment Items by Mean Values

Item	Overall	MC Educator	Non-MC Educator
EE 1 - Provides a welcoming environment to military students and their families	3.97	3.93	4.00
EE 2 - Has additional services for students whose parents are deployed	3.68	3.60	3.73
EE 3- Has additional services for students who experience loss and trauma	3.78	3.78	3.77
EE 4- Makes additional efforts to help involve military parents	3.67	3.61	3.71
EE 5 - Has visual displays, rituals, ceremonies to honor military families	3.46	3.54	3.41
EE 6 - Works with community organization to provide educational support to military organizations	3.68	3.61	3.73
EE 7 - Works with community organizations to provide after school activities and support military students	3.34	3.37	3.33
EE 8 - Educates staff and students on what life is like for military families, and some of the special circumstances that come with military life	2.72	2.74	2.71
EE 9 - Assists military students in transitions between schools	3.53	3.38	3.63
EE 10 - Works with military liaisons to take advantage of additional military educational resources	3.71	3.74	3.69
EE 11 - Needs more support staff (e.g., pupil personnel services) to work with military families and students	2.72	2.86	2.62

The list of items stemming from this section of the survey is present in Appendix H. The mean values for both educator groups are similar when compared to the mean values and mostly positive. The items with the highest mean values focus on to the school's support structures and resources in place, which should be more readily available to all personnel with limited reliance on one's personal experiences. Table 27 provides the frequencies of data on the responses from the Likert scale that is sorted by educators who identified as currently or formerly military-connected in their personal lives. Most responses from both educator groups are reflective of the overall school environment, such as providing a welcoming environment for students who are new to the school (M = 3.97) and the availability of resources for those who experience trauma and loss (M = 3.78). Additionally, respondents recognized the presence of resources for military-connected students who have a parent deployed (M = 3.68) and the additional efforts of schools to involve military parents (M = 3.67). Items unique to the military-connected students also received mostly positive responses, such as the availability of military liaisons (M = 3.71) and the school's work with community organizations to support military-connected students (M = 3.68). The lowest mean values from this section were from the items pertaining to educating staff and students on what life is like for military families, and some of the special circumstances that come with military life (M = 2.72) and the need for more support staff to work with military families and students (M = 2.72). The only item with a significant discrepancy between the military-connected educators and the non-military educators was whether the school assists military students in transitions between schools (MC M = 3.38, Non-MC M =3.63).

Table 27

Frequency and Percent Values of the Educational Environment Items by Educator Military Affiliation

	Not True		Rarely True		Sometimes True		Usually True		Don't Know / NA	
	MC	Non-MC	MC	Non-MC	MC	Non-MC	MC	Non-MC	MC	Non-MC
EE 1	0 [0]	0 [0]	0 [0]	0 [0]	3 [7.1]	0[0]	6 [10]	60 [100]	1 [2.4]	0 [0]
EE 2	1 [2.4]	1 [1.7]	2 [4.8]	2 [3.3]	7 [16.7]	4 [6.7]	4 [6.7]	40 [66.7]	7 [16.7]	11 [18.3]
EE 3	0 [0]	0 [0]	1 [2.4]	3 [5]	6 [14.3]	30 [50]	30 [50]	43 [71.7]	5 [11.9]	8 [13.3]
EE 4	0 [0	1 [1.7]	3 [7.1]	0 [0]	8 [19]	19 [31.7]	19 [31.7]	39 [65]	6 [14.3]	8 [13.3]
EE 5	0 [0]	2 [3.3]	3 [7.1]	7 [11.7]	13 [31]	25[59.5]	25[59.5]	35 [58.3]	1 [2.4]	1 [1.7]
EE 6	1 [2.4]	0 [0]	1 [2.4]	3 [5]	19 [23]	23 [54.8]	23 [54.8]	36 [60]	9 [21.4]	14 [23.3]
EE 7	1 [2.4]	3 [5]	5 [11.9]	5 [8.3]	6 [14.3]	18 [42.9]	18 [42.9]	25 [41.7]]	12 [28.6]	17 [28.3]
EE 8	4 [9.5]	8 [13.3]	13 [31]	15 [25]	10 [23.8]	11 [26.2]	11 [26.2]	15 [25]	4 [9.5]	5 [8.3]
EE 9	2 [4.8]	1 [1.7]	2 [4.8]	1 [1.7]	11 [26.2]	19 [45.2]	19 [45.2]	32 [53.3]	8 [19]	14 [23.3]
EE 10	0 [0.0]	2 [3.3]	0 [0]	11 [18.3]	9 [21.4]	25 [59.5]	25 [59.5]	11 [18.3]	8 [19]	2 [3.3]
EE 11	3 [7.1]	6 [10]	3 [7.1]	11 [18.3]	14 [33.3]	7 [16.7]	7 [16.7]	6 [10]	13 [31]	15 [25]

Note. Numbers outside brackets are the frequencies and inside brackets are the valid percentages. MC is military-connected; Non-MC is non-military connected. NA is not applicable.

Responses through the survey's open-ended questions mirrored the quantitative findings, with respondents presenting their educational environments in a mostly positive light. Topics that emerged from the responses were related to knowledge about availability of resources and personnel (EE 12), the prioritization of support provided by schools for military-connected students (EE 13), as well as the implementation of support systems (EE 14) are presented in Table 28. The main themes that emerged were inclusivity of programs, the availability of support personnel, communication, and awareness of the military family's sacrifice.

Table 28

Educational Environment Open-Ended Responses by Theme

Theme	Positive Responses	Negative Responses
Support Personnel	Military liaison, former military teachers, counselors available	Military counselor is not consistently present, supports assigned to multiple schools, not proactively engaging with MC population
Programs	Military Child Club, JROTC, Military appreciation events, Academic supports	Social clubs not as effective in high school setting
Communication	Events, reminders, support available to military families	Not consistently advertised
Awareness	Celebrations for Veterans Day, Month of the Military Child, Breakfasts honoring active-duty parents	Participation is sparse, poor advertisement, successful events at elementary and middle schools do not yield high school success

Note. MC refers to military-connected.

Although most responses recognized that a military liaison was assigned to the school, respondents indicated that they were not aware of specific programs or resources that prioritized assistance for military-connected students. They highlighted a gap in knowledge about these initiatives. Some responses suggested that schools prioritize assistance for all students equally, without specifically targeting resources or programs for military-connected students. Others

expressed uncertainty about whether their school prioritizes assistance for military-connected students, and indicated lack of clarity or communication about the school's priorities in this regard. The most frequently mentioned support personnel were those from the counseling departments. Counselors provide a key role in aiding and supporting military-connected students, leveraging outside resources for parents and students based on their unique circumstances. A respondent recognized the valuable role of a strong counseling staff in student well-being: “Our school targets all military-connected students for counseling and support by setting appointments with these students to touch base and ensure relationships are forged.” The district strategically celebrates military families through national holidays and awareness months, like Veterans Day. The school district recognized April as the month of the Military Child, but events, celebrations, and parades that are often exciting to younger students are not as well received in a high school. A respondent indicated that “We spotlight military families in April and have military appreciation nights in our sports programs, but social media and free tickets are not directly benefitting military-connected students.” Some schools conduct recognition events or awareness months for military-connected students, which indicate a level of acknowledgment and support through such initiatives. Several respondents believe that their school's support systems for military-connected students are appreciated and perceived favorably by the community. This positive perception can contribute to a sense of belonging and support among military-connected students. These themes reflect a mixed understanding among respondents regarding how schools prioritize assistance for military-connected students.

While some educators are aware of specific programs or initiatives, many others express uncertainty or a lack of detailed knowledge about these efforts. Some educators note that there is limited information shared about the school's support systems for military-connected students.

This lack of information can lead to uncertainty among students and faculty. A respondent reported an initial buzz about their school's military liaison, "There was information about a military counselor at the beginning of the year, but there was not any other information shared."

Several respondents believe that their school's support systems for military-connected students are appreciated and perceived favorably by the community. This positive perception can contribute to a sense of belonging and support among military-connected students. The respondents who indicated that the best practices of creating a culture of inclusivity and support within the educational environment may not be military specific but reflects an environment that is supportive of students' and families' unique needs and the school's readiness to serve military-connected students.

Research Question 4

High school educators' knowledge of professional resources relative to military-connected students were evaluated through a survey with both Likert-scale questions and open-ended questions that allowed the participants to reveal their thoughts about preparedness and professional development of military-connected students. The guiding question in the survey for participants to address was: "how much of a need do you have for more professional development, training, mentorship, or other support in order to respond to the needs of military students?" Respondents selected a choice ranging from Not a Need, Little Need, Need, Major Need, and Don't Know. Survey data was retrieved from Qualtrics and uploaded into SPSS. The list of items stemming from this section of the survey is present in Appendix I. Mean values from each item were computed and by the respondents' personal military affiliation, presented in Table 29.

Table 29

Professional Development Needs Items by Mean Values

Item	Overall	MC Educator	Non-MC Educator
PD 1- Understand military culture	2.08	1.76	2.30
PD 2 - Understand the effects of deployment cycles	2.23	1.81	2.52
PD 3 - Learn how to work with military students who have experienced loss or other trauma in the family	2.47	2.14	1.70
PD 4 - Learn how to work with students who have a parent currently deployed	2.27	1.90	2.53
PD 5 - Learn how to address the needs and circumstances of military parents	2.31	1.93	2.58
PD 6 - Learn how to create a school climate that is welcoming to military students and families	2.00	1.71	2.20
PD 7 - Learn about community organizations that provide support for military students and families	2.33	2.17	2.45
PD 8 - Learn how to help parents deal with additional responsibilities during deployment	2.32	2.17	2.43
PD 9 - Learn about the resources available to support military students and families	2.38	2.29	2.45

Note. MC is military-connected. Non-MC is non-military connected.

The data was further disaggregated to evaluate the frequencies for each item by respondents' military-connected status to determine if there were any trends based on their military affiliation or lack thereof (Table 30).

Table 30

Frequency and Percent Values of the Professional Development Items by Educator Military Affiliation

	Not a Need		Little Need		Need		Major Need	
	MC	Non-MC	MC	Non-MC	MC	Non-MC	MC	Non-MC
PD 1	22 [52.4]	11 [18.3]	10 [23.8]	25 [41.7]	8 [19]	19 [31.7]	2 [4.8]	5 [8.3]
PD 2	22 [52.4]	7 [11.7]	8 [19]	22 [36.7]	10 [23.8]	24 [40]	2 [4.8]]	7 [11.7]
PD 3	15 [35.7]	5 [8.3]	9 [21.4	20 [33.3]	15 [35.7]	28 [38.3]	3 [7.1]	12 [20]
PD 4	21 [50]	7 [11.7]	7 [16.7]	23 [38.3]	11 [26.2]	21 [35]	3 [7.1]	9 [15]
PD 5	21 [50]	7 [11.7]	6 [14.3]	22 [36.7]	12 [28.6]	20 [33.3]	3 [7.1]	11 [18.3]
PD 6	21 [50]	15 [25]	14 [33.3]	23 [38.3]	5 [11.9]	17 [28.3]	2 [4.8]	5 [8.3]
PD 7	14 [33.3]	10 [16.7]	11 [26.2]	19 [31.7]	13 [9.5]	25 [41.7]	4 [9.5]	6 [10]
PD 8	15 [35.7]	11 [18.3]	10 [23.8]	18 [30]	12 [28.6]	25 [41.7]	5 [11.9]	6 [10]
PD 9	14 [35.7]	10 [16.7]	8 [19]	20 [33.3]	14 [33.3]	23 [38.3]	6 [14.3]	32 [53.3]

Note. MC refers to military-connected educators. Non-MC refers to non-military educators.

Numbers outside brackets are the frequencies and inside brackets are the valid percentages.

The mean values for most items reflect a need for professional development to understand and better serve military-connected students when compared to military-connected educators. The mean values are lower for the military-connected educators, which is likely due to their familiarity with life as a former military dependent or as a parent of a dependent. The lower end of overall mean values ranged between 2 and 2.47 which indicated a lower concern for professional development that is specific to military-connected students. The lower mean values could additionally indicate that educators feel more comfortable in assessing social, emotional, and academic concerns of all students regardless of indicators like military affiliation. However, non-military educators' mean values were higher across each item when compared to military-connected educators. The frequency of "not a need" and "little need" responses is greater than the "need" and "major need" responses across all responses, which indicated that professional development about specific aspects concerning military-connected students is not an immediate priority, but non-military educators expressed a stronger need for training. The educators who were not personally affiliated with the military perceived that professional development was a need or a little need, with a higher frequency of responses that identified professional development for military-connected students and their families was a major need.

Educators with military-connected educators expressed a greater sense of self-efficacy that surrounded their work with military-connected students and their culture (PD 1); most responses were that professional development which was not a need or a little need. Most educators reported that they felt equipped to work with military-connected students who have experienced loss or trauma, presumably because they would have a similar approach for any student who has experienced loss or trauma (PD 3). The non-military connected staff members presented a stronger need to learn more about the deployment cycle (PD 1), the needs and

circumstances of military parents (PD 5) and how the school culture can be enhanced to accommodate military-connected students better (PD 6). Military-connected educators' responses of "not a need" or "little need" highlights the value of their personal lived experiences when understanding military culture, the deployment cycle, and the school culture of these students and families from military backgrounds. The largest discrepancy between military-connected and non-military educators was the need for professional development to learn about resources available to support military students and families (PD 9). Non-military educators (N = 32) reported this aspect as a major need compared to military-connected educators (N = 6).

The open-ended responses gathered from educators offer valuable insights into the current landscape of training and support for military-connected students and their families within educational settings, as shown in Table 31.

Table 31

Professional Development Open-Ended Responses by Theme

Theme	Positive Responses	Negative Responses
Training	Military liaison available at faculty meetings, case-by-case with additional support from counseling department	No direct professional development to mitigate MC student needs, Military student support not individually addressed.
Legal Support	GI Bill, Military Interstate Compact	Lack of awareness to effectively support students and parents.
Educator Efficacy	Military-connected educators feel equipped to support these students based on their personal understanding	Civilian educators are not comfortable to address MC student needs, rather pull from adjacent experiences to support students, refer to counselor

The responses offer explanation that supports the lower mean values. While professional development for military-connected students is important, many of their unique needs can be addressed through best practices and communication with appropriate support personnel. Educators were asked to reflect on the training (e.g. workshops, events, seminars, opportunities) they have participated in to support military-connected students and their families (PD 10). A recurring theme that emerged from the feedback is the apparent lack of specific training or workshops tailored to address the unique needs of these students. Many educators expressed that they have not participated in any dedicated training sessions focused on supporting military-connected students. This absence of targeted training could potentially hinder educators' ability to effectively address the challenges and provide appropriate support to military-connected students. The quotes provided by respondents underscore this point, with phrases like “None,” “I have not participated in specific training,” and “There has been none offered” which reflect the widespread lack of formal training that is specific to military-connected students. This highlights a gap in professional development that may hinder the educators from fully understanding and meeting the needs of military-connected students.

Despite the lack of formal training, some educators mentioned that they rely on personal experiences, either as military-connected individuals themselves or through family members, to inform their understanding and support strategies for military-connected students. This reliance on personal backgrounds as a resource is evident in quotes such as “I have not had training, but I have lived the military life” and “I am, however, a veteran and married to active duty, so I have personal experience in this area.” While personal experience can be valuable, it may not always encompass the full range of challenges and nuances that military-connected students and their families encounter.

Additionally, the feedback highlighted the limited awareness and opportunities for educators to participate in training sessions that are specifically aimed to support military-connected students. Quotes such as “None up to this point in my career” and “I am not aware of any opportunities to participate in these types of training sessions” indicate a need for increased awareness and accessibility to professional development resources in this domain. While some educators mentioned informal information sessions or brief introductions during faculty meetings as sources of information, these sessions may not offer comprehensive training on supporting military-connected students. As one respondent mentioned, “Just a faculty meeting in which people went over all the offerings but not much detail was given.” This suggests a potential gap in the depth and breadth of training provided through informal sessions.

The educators were assessed on their knowledge on support programs offered by the state and federal government, as well as support staff offered for military-connected students. The educators revealed a spectrum of responses when it came to the supports available for military-connected students through various levels of government and support staff within educational settings. One prominent insight is the limited awareness of specific supports provided by federal or state governments for these students. Many respondents expressed uncertainty or lack of detailed knowledge about these supports, as reflected in quotes like “I am unaware of the supports, if any, that are available” and “I do not have a clear understanding.” This indicates a potential gap in educators' awareness of the comprehensive support systems in place.

However, there is recognition among some respondents of financial aid, benefits, or funding available to military-connected students through federal programs. Quotes such as “The government provides funding for programs” and “I know that military-connected students can receive financial aid for college” demonstrate an awareness of these broader support mechanisms

such as funding for college, graduate school, and training programs. However, there still seems to be a need for more specific and detailed information about the eligibility criteria and application processes for these benefits, especially for smaller-scale, non-Federal legislation. Some educators also mentioned state-specific programs or laws that favor military families, such as laws related to school choice, funding, and excused absences. Quotes like "Georgia is military-friendly" and "There are various laws that favor military families" which indicate an awareness of broader legislative supports, such as the Military Interstate Compact. Respondents acknowledged a limited understanding or awareness beyond school-based resources like counselors or Junior Reserve Officers' Training Corps (JROTC) programs.

Another key finding is the acknowledgment of the role played by military counselors or liaisons in schools to support military-connected students. Several respondents mentioned the presence of these support staff like the Military Family Life Counseling (MFLC) program: "Our liaison is provided by the military and our local school system" and "Support staff includes our MFLC and local base liaison." This finding indicates that educators recognized the importance of having dedicated personnel to assist military-connected students, although there may be variations in the depth of understanding regarding the scope of their support services. A notable observation is the recognition that the level of support for military-connected students often depended on the individual student's needs and the extent to which families share information about their circumstances. This case-by-case approach was mentioned by respondents who noted that "How much the family shares dictate a lot of what the support staff can assist with" and "The base and school system, as well as the healthcare system, have provided support on a case-by-case basis."

These insights suggest that while there is a degree of awareness regarding general support systems like financial aid and the role of counselors, there is also a specific need for clearer communication, education, and training regarding the specific supports available to military-connected students from federal, state, and local levels. The provision of comprehensive information and resources to educators enhance their ability to advocate for and support these students effectively. The responses highlight a clear need for more targeted, in-depth, and comprehensive professional development opportunities and resources to support educators in effectively meeting the needs of military-connected students and their families.

Mixed-Methods Findings

As described in Chapter 3, this study integrated mixed-methods research at three levels: design, method, and interpretation and reporting (Fetters et al., 2013). This study followed the convergent parallel design, which occurred when the quantitative and qualitative data are collected and analyzed simultaneously, and the results are merged and compared for convergence and divergence (Creswell & Creswell, 2017). The researcher quantitively analyzed student achievement data and a survey that was administered to educators which had both close-ended (Likert questions) and open-ended questions. The responses to Likert (quantitative) and open-ended (qualitative) questions were connected for a deeper understanding of educator perceptions (Creswell & Creswell, 2017; Creswell & Plano Clark, 2018; Fetters, Curry, & Creswell, 2013). The interpretation and reporting stage occurred when the researcher brought together findings from both qualitative and quantitative strands of the study, accomplished via collaborative displays, data transformation, and narration (Fetters et al., 2013). This process involved comparing, contrasting, and synthesizing the results to provide a more comprehensive

understanding of the research problem (Creswell, 2014; Creswell & Creswell, 2017; Teddlie & Tashakkori, 2009).

This research integrated at the results point, which involved gathering the results of the quantitative data in advance of the qualitative data. The results are presented in joint displays, which list the qualitative and quantitative findings with an integrative statement guiding the displays (Fetters et al., 2013; Morse & Niehaus, 2009). The researcher resolved any discrepancies or contradictions between the two data sets and provided a unified interpretation through educators' positive and negative perceptions of military-connected students in conjunction with the quantitative survey items that addressed the selected themes. This comparative analysis sought to illuminate educators' perceptions of military-connected students and their needs, as well as identify potential areas for growth through professional development. Joint displays for Research Question 3 (Tables 32 – 37) and Research Question 4 (Table 38) connect the quantitative and qualitative findings.

Data transformation involves converting qualitative data to quantitative data or the reverse (Fetters et al., 2013). In this study, quantitative data was examined through mean differences within survey subsections. The qualitative, open-ended questions in the survey were converted into thematic statements to address the two research questions where the themes were converted into quantitative numerical values. Furthermore, transformation was utilized when the researcher counted the number of appearances of each theme throughout the qualitative results. Contiguous narration was used in Research Questions 1 and 2 to present results which compared military-connected achievement compared to non-military students on both the MAP Growth Reading 6+ and the MAP Growth Math K-12 assessments in consecutive sections during data analysis (Fetters et al., 2013; Miller et al., 2014). Weaving narration was applied when

qualitative and quantitative data were interwoven within the survey subsections throughout Research Questions 3 and 4. Weaving is a technique used in the mixed-methods interpretation phase (Fetters et al., 2013; Miller et al., 2014). Quantitative and qualitative data were combined using methodological and data triangulation. Methodological triangulation involved employing causal-comparative research for the quantitative aspect and phenomenological research for the qualitative aspect. Data triangulation occurred through the connection of linking quantitative data to specific themes that emerged from the open-ended items in the survey teacher perception through qualitative analysis (Denzin, 2012).

Table 32 highlights educators' perceptions of the relationships shared by military-connected students with their peers and adults. Educators' positive perceptions of military-connected students feeling supported by their peers (MCS 1) and teachers (MCS 2) were two of the highest mean values throughout the survey. "Most" or "nearly all" military-connected students felt supported by their peers and teachers, according to educators, who reiterated the relative ease through which these students adjusted to new environments in their open-ended responses. Answers centered primarily around military-connected students' adaptability, resilience, and comfort with the occasional recognition of issues adjusting for students who are more introverted or lower-performing than other military-connected peers. The adaptability of military-connected students was referenced 15 times, resilience was mentioned 15 times, and comfort was mentioned 30 times. Educators also recognized the potential for military-connected students to have additional emotional and psychological needs (MCS 5) and strengths (MCS 6) due to their family's circumstances. Educators' observations were mostly positive, with "most" or "nearly all" students exhibiting traits that translated to respect for authority, diligent work ethic, and few conflicts or issues among peers and with adults. Negative responses centered

primarily around the challenges associated with building and maintaining friendships. Educators responded with a lower level of concern that "almost none" or "few" military-connected students were discriminated against or felt isolated from others in items MCS 8 and MCS 9, respectively. However, the overall frequency of words like "challenging," "struggle," "hard," and similar descriptors only appeared 18 times, which validates the challenges military-connected students endure because of their family's transient nature, yielding to a more positive understanding of military-connected students among educators.

Table 33 displays educators' perceptions of military-connected students' academic performance. Educators' positive perceptions of military-connected students in the classroom is evident through a lower need for academic interventions (MCS 3), the availability of academic supports (EE 6), and the strengths associated with military-connected students to have a positive impact on academic performance (MCS 6). Educators perceive military-connected students as well adjusted, dedicated, and disciplined 28 times in their responses related to academic performance. Negative responses mostly highlighted the uniqueness of every student's academic ability, and that military-connection is not necessarily a correlating factor. A total of 22 counts referencing academic struggles were mentioned, but only 6 of those responses suggested military-connected students are academically disadvantaged.

Table 32

Joint Display of Educators' Perceptions of Military-Connected Students' Peer and Adult Relationships

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
MCS 1	4.22 (3)	They tend to make friends very easily.	MCS 8	1.56 (2)	Socially, military-connected students may face extremes in their efforts to form friendships due to frequent moves, creating challenges in relationships among peers and adults.
MCS 2	4.47 (4)	Often, these students are respectful, well-behaved, and eager to please.	MCS 9	2.08 (3)	Military families relocate every 3-4 years making it extremely hard for the children to restart their lives in new towns and schools
MCS 5	2.90 (3)	Most military students are hardworking, bright, respectful, and willing to do what it takes to succeed.			
MCS 6	3.83 (2)	Students traditionally are much more engaged. Students are only absent for true sickness. Majority seem to be more rigid in terms of their schedules.			
MCS 7	2.96 (4)	Military-connected students often present a more mature, well-adjusted attitude toward peers and teachers and seem to be more self-motivated.			

Note. Quant is quantitative and Qual is qualitative. The "don't know" response has been excluded from mean computations.

Table 33

Joint Display of Educators' Perceptions of Military-Connected Students' Academic Performance

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
MCS 3	2.84 (4)	The former students who do come to mind when I think about military-connections were typically well-engaged and performed well academically.	MCS 3	2.84 (4)	Academically, military students may have a stronger or weaker background in skills. This is dependent upon where they have attended school.
MCS 6	3.83 (2)	Military-connected students are more self-reliant and take ownership of learning.	EE 10	3.71 (2)	We have a military folder in the front office that has military student specific information, but it's not advertised.
EE 6	3.68 (3)	I think military connected students have a great support system to support their academic endeavors.			

Note. Quant is quantitative and Qual is qualitative. The "don't know" response has been excluded from mean computations.

Table 34 displays educators' perceptions of military-connected students' behavior. Educators' positive perceptions of the behavior of military-connected students was addressed when considering educators' interactions with these students (MCS 2), as well as evaluating emotional and psychological needs (MCS 5 and EE 3). Educators primarily indicated that "nearly all" military-connected students exhibited positive behavior traits. The frequency of descriptors of positive military-connected student behavior with words like "respectful," "well-behaved," and "responsible" appeared 38 times within educators' responses. Negative perceptions centered around behaviors that were detrimental to military-connected students' well-being, such as having additional educational needs (MCS 3) or experiencing feelings of discrimination (MCS 8) and isolation (MCS 9). Educators reported that "few" or "some" students exhibit negative behaviors; the frequency of words that reflected in negative perceptions were far fewer. Open-ended responses with words like "issue," "struggle," and "challenging" only appeared 14 times.

Table 34

Joint Display of Educators' Perceptions of Military-Connected Students' Behavior

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
MCS 2	4.47 (4)	Often, these students are respectful, well-behaved, and eager to please.	MCS 3	2.84 (4)	They tend to move more often, which makes it harder for them to grow meaningful attachments to other students and the school especially.
MCS 5	2.90 (3)	Most have been responsible students.	MCS 8	1.56 (2)	Students with military connections are often have behavior issues in class due to a dysregulated home life.
EE 3	3.78 (2)	Academically, these students tend to be more resilient, curious, and better traveled	MCS 9	2.08 (3)	They either try too hard to be liked and/or form friendships. Or, they don't try hardly at all to form friendships.

Note. Quant is quantitative and Qual is qualitative. The "don't know" response has been excluded from mean computations.

Table 35 shows educators' perceptions on the parental involvement of military-connected students. This theme had mostly positive interpretation, as military parents or spouses displayed traits of responsibility, priority on education, and communication. Educators perceive that these students are proud of their family's contributions to our country (MCS 10), and the dedication military-connected students often exhibit toward their schoolwork reflects a respect to their family. MCS 10 was the highest mean score across all survey items (M= 4.61), as educators reported consistent presence and responsiveness when military parents are present in the home. During deployment, the parent who is home may be less responsive to school responsibilities given the other roles the parent absorbs when the other is deployed, but educators remarked the consistent presence of military parents and the involvement in community-driven celebrations and supports (EE 1 and EE4). Words like "involved" and "supported" surrounding parental involvement and the shared goal of supporting the military-connected student permeated in the responses, with support and resources mentioned 65 times throughout the responses. Negative interpretations of parental involvement involved a lack of communication perceived by the educators and their school with the military-connected population (MCS 4 and EE 5). Words like "unsure" or "I don't know" relative to resources available to support military families appeared a total of 61 times, which indicated educators' lack of awareness about ongoing supports for military-connected students within the building. An opportunity for streamlined communication and more intentional inclusion of all educators presents itself based on the frequency of individuals who did not know or were unsure of how to properly support and include military families.

Table 35

Joint Display of Educators' Perceptions of Military-Connected Students' Parental Involvement

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
MCS 10	4.38 (2)	My military-connected students typically have parents who either show up for open house, send and respond to emails, or accommodate requests for tutoring	MCS 4	2.61 (3)	The government provides funding for programs, but I don't know what they are.
EE 1	3.97 (1)	Military students are recognized and supported at various times throughout the school year and parents are involved in various activities.	EE 5	3.46 (3)	Students and parents know there are resources offered but don't usually know where or how to access them
EE 4	3.67 (3)	Our supports are communicated to the military community by social media and school call outs.			

Note. Quant is quantitative and Qual is qualitative. The "don't know" response has been excluded from mean computations.

Table 36 illustrates educators' perceptions of the support personnel and the programs that supports military-connected students. Positive perceptions recognized the efforts made within the school district to support and celebrate military-connected students (MCS 2). Events such as Purple Up for Military Kids during April, which is the month of the military child, Veterans' Day ceremonies and events that welcome military parents into the schools in recognition of their service were referenced 23 times. Most notably, the support provided through a dedicated

military liaison and the school counseling department was mentioned 104 times, which indicates that educators place a major responsibility and value on support staff to provide resources and support for military-connected students rather than within the classroom (EE 1 and EE 2). The Likert scale responses about the supports cultivated by the schools were "usually true," which aligns with the qualitative responses in support of military-connected students and families. Negative perceptions indicate a limited awareness of personnel and programs outside of the supports that counselors and military liaisons provide to military-connected students (MCS 5). Educators reported not knowing and being "unaware" of specific programming, which indicated that the placement of a military liaison was the extent of their knowledge (EE 7 and EE 11). These sentiments were reported a total of 54 times, but the high range of responses in the quantitative items indicated that some educators are aware of programming and personnel that support military-connected students. An opportunity for awareness is presented to unify educators' knowledge of resources to support military-connected students.

Table 36

Joint Display of Educators' Perceptions of Military Support Personnel and Programming

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
MCS 2	4.47 (4)	Our school's liaison is provided by the military and our local school system, which helps teachers support students.	MCS 5	2.90 (3)	Other than our liaison, I do not know of many of the supports available.
EE 1	3.97 (2)	I try to reach out to my military students and make them feel welcome.	EE 7	3.84 (4)	There was information about a military counselor at the beginning of the year, but there was not any other information shared.
EE 2	3.94 (4)	Our school provides specific counseling for students who are connected to the military.	EE 11	3.38 (4)	I am unaware of the supports, if any, that are available.
EE 6	4.0 (4)	Our school provides supports military families with a dedicated liaison, who has resources for educational and social / emotional well-being			

Note. Quant is quantitative and Qual is qualitative. The "don't know" response has been excluded from mean computations.

Table 37 shows educators' perceptions of the school's communication about and awareness of military-connected students. Responses were varied, with a positive perception of events and activities that bring awareness to military-connected students and their families (MCS 10), which indicated that "nearly all" military-connected students are proud of their family's service and appreciate the school's support through spirit weeks and celebrations. The educational environment is also usually positively perceived in their overall efforts to support military-connected students through counselors and support staff (EE 9), but responses indicated a greater need for additional resources and more deliberate communication (EE 10). Words like "awareness" appeared 17 times, while "celebration" and "recognition" surrounding military-centric celebrations appeared 25 times. While most respondents recognized the celebrations of military culture, negative perceptions of these celebrations indicated high school students are not wanting attention or want to participate in dress-up day to foster awareness for military culture. Responses about the presence of visual displays, rituals, and activities indicated that "some" schools participate in military awareness with active participation (EE 5), but the range was across all responses, which indicates inconsistencies and lapses in communication. The school does not routinely communicate what life is like for military families (EE 8), with "none" or "few" mostly selected. Phrases suggesting a lack of participation or enthusiasm from high school students about these events, such as "uninterested" or "low participation" was present 17 times, but some respondents referenced the excitement of military events and celebrations in primary and elementary grades.

Table 37

Joint Display of Educators' Perceptions of Communication and Awareness for Military-Connected Students

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
MCS 10	4.38 (2)	Students love Military Appreciation Month, especially when everyone wears purple to show support.	EE 5	3.50 (4)	We celebrate Month of the Military Child to bring honor and awareness to these students and their families, but it feels gimmicky and juvenile and student participation is basically non-existent.
EE 9	3.53 (3)	I also like to incorporate aspects of military life into lessons as appropriate. Additionally, I work on social skills a lot. This tends to reduce the social anxiety associated with military connected students.	EE 8	2.72 (3)	Most military students ignore and do not use the military specific support at my school.
EE 10	3.71 (2)	I refer to counseling as much as needed for academic support and meaningful connections.			

Note. Quant is quantitative and Qual is qualitative. The "don't know" response has been excluded from mean computations.

Table 38 shows the perceptions about professional development for high school educators. This section of the survey had the lowest mean values, and while the Likert scale's range was smaller than previous sections. The responses suggested that professional development for military-connected students is "not a need." Non-military educators had higher mean values when compared to military-connected educators, but educators placed the responsibility of supporting military-connected students on the counseling department and with the military liaison. The strongest professional development need was to learn how to work with military-connected students who have experienced loss or trauma (PD 3) and to learn more about the community organizations and resources that offer support to military families (PD 7 and PD 9). Only 13 responses focused on the need for general professional development about working with military-connected students. Professional development was mostly "not a need" on the Likert scale when considering military culture, (PD 1) the effects of deployment, and the needs and circumstances of military parents (PD 5). Additionally, respondents did not see a need for training to create a welcoming school climate for military-connected students and families (PD 6). Open-ended responses were overwhelmingly against training, with 86 or 137 responses that "none is needed" or "we have other training needs."

Table 38

Joint Display of Educators' Perceptions of Professional Development Needs for Military-Connected Students

Quant. Survey Items Positive Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions	Quant. Survey Items Negative Perceptions	Mean (Range)	Qual. Quotes to Support the Quant. Perceptions
PD 3	2.47 (3)	I did one training on teaching students with trauma, but it was not specific to military students.	PD 1	2.08 (3)	No training is needed because we live in a military town.
PD 7	2.32 (3)	During a professional development workday, the counseling office introduces us to the school military liaison who briefly explained her role and responsibility with military-connected students.	PD 2	2.23 (3)	None specifically but have picked up a lot of first-hand knowledge through my 21 years of teaching.
PD 9	2.38 (3)	Any would be good, I don't remember when I last had training specific to this topic.	PD 5	2.27 (3)	I see little to no difference in the way military-connected students are supported now versus when I was in school, and personally I felt that there was none.
			PD 6	2.00 (3)	I am not opposed to training, just oftentimes don't see the need. My experience is that military children don't wish to be singled out based on their families. They simply just want to be treated fairly, respected, and supported just like every other kid.

Note. Quant is quantitative and Qual is qualitative.

Summary

The findings from this mixed methods study yielded a stronger understanding of the needs of high school military-connected student with regards to academic performance, socialization, and emotional well-being. Research Question 1 compared the academic performance of military-connected students (M = 72.68) to non-military students (M = 69.76) in reading. A t-test was conducted to answer Research Question 1 to test the differences in MAP Growth Reading 6+ scores based on military connection. The results of the independent t-test showed that there are statistically significant differences between military-connected and non-military student achievement scores on the MAP Growth Reading 6+ assessment, t (320) = 2.312, p = .021. Through the analysis of MAP Growth 6+ Reading scores, the findings in this study showed that high school military-connected students outperformed non-military students to a statistically significant degree and the researcher rejected the null hypothesis.

Research Question 2 investigated the academic performance of military-connected students (M = 72.72) compared to non-military students (M = 71) in math. A t-test was conducted to answer Research Question 2 to test the differences in MAP Growth Math K-12 scores based on military connection. The results of the independent t-test showed that there are no statistically significant differences among military-connected and non-military-connected student achievement scores on the MAP Growth Math K-12 assessment, t (194) = .999 , p = .321. Through the analysis of MAP Growth Math K-12 scores, the findings in this study showed that high school military-connected students outperform non-military students on average but not to a statistically significant degree on this assessment. The researcher failed to reject the null hypothesis.

Additionally, the perceptions of high school educators revealed that they worked in strong educational environments that support the needs of military-connected students and their families. Research Question 3 used quantitative and qualitative survey items to assess high school educators' perceptions of military-connected students and the supports provided in their schools for these students and their families. The findings revealed that military-connected students are mostly comfortable self-advocating. They adjust well to new peers, activities, and curriculum, and feel supported by their peers and educators. While military-connected students tend to exhibit unique emotional and psychological needs, their additional strengths such as resilience and maturity propel them forward where they are well-behaved, dependable, and strong students. The schools mostly provide optimal support for military families through dedicated military liaisons and school counselors. General knowledge about military-connected students was presented through the survey, but insights related specifically to federal and state support programs were minimal. Educators believed that their efforts to bring awareness and celebration to the military community was well-received by military families through events to commemorate Veterans Day and during April as the Month of the Military Child. However, educators indicated that while these efforts may have resonated with military parents and spouses, high school aged students did not actively participate in events celebrating their military connection.

Research Question 4 addressed educators perceived professional development needs relative to military-connected students and families. Despite clear indication that surveyed teachers did not participate in professional development that was directly aimed at supporting and bringing awareness to military-connected students and families, the reported needs were hardly present. Educators acknowledged their personal military connection or if not military,

awareness of military culture by residing in a military community decreased the need for targeted professional development. Additionally, educators referred to prior trainings and their pre-service programs that focused on social and emotional learning and noted that the interventions they incorporated in their classrooms would apply to any student who is enduring a challenging situation, regardless of military affiliation. Educators felt equipped to identify and intervene academically if a student was struggling to grasp content independent of military-connected status, but readily acknowledged these students may have additional barriers to learning from frequent location, curricular gaps, and the emotional toll from frequent locations. The survey identified counselors and military liaisons as the primary support personnel who are better equipped to address student academic and psychological well-being, but a few teachers reported that they would benefit from transparent identification of the military-connected students in their classes as well as communication of concerns reported by the family.

The findings mostly aligned with the research presented in the literature review that centered on the positive attributes of military life and culture. By enhancing awareness and offering training to new or non-military educators, proactive support and early interventions could occur to preemptively address the unique challenges faced by military-connected students, which would foster a more supportive and inclusive educational environment.

Chapter V: Conclusions

Summary of the Study

Military-connected adolescents encounter a myriad of challenges that are unique to their circumstances. These challenges include frequent moves, parental absence, exposure to trauma, and academic, social, and emotional struggles (King et al., 2010; Scott et al., 2014; Vogt et al., 2008). For instance, the constant relocation associated with military life can lead to feelings of instability, social isolation, and a lack of belonging (Vogt et al., 2008). Prolonged absences of a parent during deployments can significantly impact the mental health and overall well-being of military children, with adolescents often assuming additional responsibilities within the household (Chandra et al., 2011). This situation can contribute to heightened experiences of anxiety, depression, and feelings of abandonment among military adolescents (Davis et al., 2012; De Pedro et al., 2011; De Pedro et al., 2018; Flake et al., 2009). Additionally, the process of reintegrating with a parent after deployment can be challenging, as adolescents may struggle to adjust to changes in family dynamics (King et al., 2010). Furthermore, military-connected adolescents may face trauma not only through their parent's experiences but also through their own experiences as dependents, leading to academic difficulties such as adapting to new schools and disruptions in education (Astor et al., 2013; Cozza & Lerner, 2013). Consequently, academic performance may suffer, potentially resulting in lower grades and standardized test scores (Scott et al., 2014).

To address these challenges, readily available support systems and resources for military adolescents are crucial, which include counseling services, peer support groups, and academic tutoring (Finkelstein et al., 2017). Additionally, educators play a vital role in supporting these students by being aware of their unique needs and providing necessary training to meet those

needs effectively (Arnold et al., 2014). Creating inclusive environments and fostering connections among military youth and civilian peers also contributes positively to the well-being of military-connected students (Vogt et al., 2008).

The current study attempted to address the issue surrounding educators' awareness and support of military-connected students' academic, social, and emotional needs by learning how these students perform academically when compared to their civilian counterparts. The survey results helped the researcher to learn about the educators' knowledge on military-connected students and any prior professional development experiences related to this population. In a mixed methods research study employing a convergent parallel design, the researcher investigated the academic achievement of high school military-connected and civilian students using MAP Growth 6+ Reading and Math assessments (Creswell, 1998; Padilla-Diaz, 2015). This study included a causal-comparative quantitative phase, where MAP scores on Math and Reading assessments were compared between military-connected and non-military students to answer Research Questions 1 and 2 (Creswell & Creswell, 2017). Additionally, a survey was used to understand military-connected students' needs and educator preparedness, where Likert scores were compared based on educators' roles. The open-ended questions were used to develop themes within each domain of the survey (Fetters et al., 2013; Miller et al., 2014). The qualitative phase simultaneously explored educators' lived experiences and perspectives through open-ended questions, with thematic analysis revealing underlying themes (Creswell, 1998; Padilla-Diaz, 2015). The integration of quantitative and qualitative data enhanced the study's understanding, combining statistical relationships with nuanced experiences (Fetters et al., 2013; Miller et al., 2014). This mixed methods design provided a comprehensive exploration of the

research problem, that bridged quantitative patterns and qualitative insights (Creswell & Creswell, 2017).

Limitations of the Study

Several limitations were encountered during the data collection and analysis phases. One notable limitation was the incomplete participation of some surveyed educators, resulting in the exclusion of their responses for each section that was not fully completed. This limitation reduced the overall sample size and potentially skewed the data analysis, as not all perspectives were accounted for in the findings. Additionally, teachers made up 96% of the population who fully completed the survey, leaving only a few non-teaching staff members who were represented within this study. Only one military liaison responded to the survey among the four who were employed by the school district under investigation. The lack of representation among these perspectives prevented a stronger understanding about the role these individuals play in bridging gaps between the military base and their local school system. Additionally, the student achievement data was not sorted by each classroom or by teacher when provided to the researcher. This designation would have been helpful to see if the teachers also feel that students are having a positive experience and how that reflects in their MAP scores. Additionally, classroom teachers who completed the survey may have been influenced by their students' academic achievement on their content's MAP assessment when reflecting on military-connected students in their classroom, as academic performance and aptitude are often considered when considering the whole student. Furthermore, The overall positive responses related to the educational environment may have been affected by the possibility of social desirability bias (SDB), which was a stated limitation in Chapter I. SDB occurs when respondents seek approval, especially within their place of employment, and commonly occurs within surveys wherever

there is a potentially right or more acceptable answer, which results in biased responses (Brace, 2018; Sudman & Bradburn, 1982). The respondents worked in the school district where the researcher was trying to assess military-connected students and their families. The expression of a lack of preparation to serve these students and their families would not necessarily be a desirable response and participants may have felt more inclined to provide an overall positive response than an accurate and realistic answer.

A limitation from this study was also the inability to survey military-connected students and families. Their input relative to their individual experiences would have provided valuable insight in conjunction with educator perceptions to determine divergence and alignment. The survey did have a student version as well as a parent version, but the researcher's school district does not allow research to be conducted with students or families. Only retroactive student demographic and assessment data was utilized.

Another limitation pertained to the method of participant selection for the student achievement scores, where a random selection of non-military individuals was made to precisely match the military populations precisely. While this approach aims for balance in the participant demographics, it may not be the most reliable method, as it does not represent the full scope of students who took the MAP Growth Reading 6+ and MAP Growth Math K-12 assessments. This limitation raises questions about the generalizability of the study's results and the extent to which they accurately reflect the diversity within the military-connected and non-military populations in the researcher's district.

Furthermore, the study's decision to limit the number of student achievement scores analyzed, to focus only on the 50th to the 90th percentiles, posed another limitation. This restriction did not fully represent the entire population's range of academic performance,

potentially overlooking valuable trends among military-connected students from those individuals who scored outside this percentile range. In the hopes of preventing outliers, the research scope was narrowed considerably but this decision could explain the close margins among the mean scores of military-connected and civilian students for both reading and math assessments. Additionally, the use of student data from only one math and one reading assessment, rather than a collection of student performance data across various subjects and assessments, further limited the research scope. This narrow focus may have omitted important nuances in students' academic strengths and weaknesses and limited a holistic examination of their educational experiences.

Consequently, the findings may not provide a comprehensive understanding of the academic performances when comparing military-connected and non-military students. Research tends to highlight academic struggles among military-connected students compared to civilian students (Atuel et al., 2011; Bradshaw et al., 2010; Cederbaum et al., 2014; Chandra et al., 2011, Chandra et al., 2013, De Pedro et al., 2011, De Pedro et al., 2014, De Pedro et al., 2018), and perhaps the narrow scope of students represented in the research is responsible for the study's findings that military-connected students mostly outperform academic performance non-military students. Another limitation is the military base within the researcher's district. The ongoing missions and operations within the military base employs servicemembers who are likely to have performed better on the Armed Services Vocational Aptitude Battery (ASVAB) assessment than other branches of military service. The military population that resides within the researcher's district is likely to be more educated than the average military base in the United States, which has the potential to affect the children of these servicemembers.

These limitations highlight the need for careful consideration and interpretation of the study's findings, while acknowledging the constraints that may have influenced the results and the implications for drawing broader conclusions.

Recommendations for Future Research

Future research should broaden the range of assessments that were used to evaluate the academic performance of military-connected students in comparison to their non-military peers. While current studies often focus on standardized test scores through MAP Growth Reading 6+ and MAP Growth Math K-12 assessments. The incorporation of diverse measures such as formative assessments and classroom performance will provide a more comprehensive understanding of military-connected students' academic abilities. Additionally, future research could employ state-level assessments to determine the adjustment of military-connected students who may be new to the state. This expanded scope can help identify specific areas where military-connected students may excel or need additional support, allowing for more targeted interventions.

In addition to comparing academic performance at single points in time, future research should emphasize the growth trajectories of military-connected students. The analysis of longitudinal data to track students' progress over time can reveal whether these students face unique challenges in maintaining or improving their academic performance. This research indicated that military-connected students outperform non-military students on the MAP assessments within the given parameters but does not consider whether military-connected students are stagnant in their performance. By examining growth metrics, researchers can better understand the impact of military lifestyle on continuous academic development and identify critical periods when military-connected students might need extra support. Given the frequent

relocations experienced by military families, future studies should investigate how school mobility affects the academic growth of military-connected students. Research could explore the relationship between the number of school transitions and student achievement, considering both short-term disruptions and long-term educational outcomes. Additionally, examining the role of school stability and consistent educational environments could highlight practices that mitigate the negative effects of mobility. Future research should conduct comparative studies across different educational contexts, such as urban, suburban, and rural schools, to determine if the experiences of military-connected students vary by setting. Case studies of several military-connected families over the course of many years could uncover context-specific challenges, which would ensure that interventions are adaptable, and the benefits and challenges associated with diverse learning environments on military-connected students are revealed.

Finally, research should investigate the effectiveness of existing policies and support programs aimed at assisting military-connected students. The evaluation of outcomes related to the initiatives as tutoring programs, counseling services, and extracurricular activities can inform policymakers and educators about the most effective strategies to enhance academic growth and overall well-being. Future research can provide deeper insights into the academic experiences of military-connected students that extend from this study. These efforts will contribute to developing tailored educational strategies that support the unique needs of these students, fostering their academic success and overall development.

Implications of the Study

Military-connected students' resiliency is well-documented in research and this study aligns with their academic, social, and emotional strengths despite facing unique challenges (Cozza & Lerner, 2013; Easterbrooks et al., 2013; Wadsworth, 2013). Military families are

typically highly involved in their child's education, communicating with educators and fostering a positive academic climate (Cabrera et al., 2018). The tendency of military-connected students to perform at levels comparable to or better than civilian peers, even during times of parental absence or relocation, contradicts some research that suggests military-connected students are at an academic disadvantage (Astor & Benbenishty, 2014; De Pedro et al., 2011; Moeller et al., 2015).

Educators' perceptions of military-connected students align with the research that acknowledges the unique circumstances that can affect their academic, social, and emotional well-being, especially during times of transition or parental deployment (Garner et al., 2014; Kranke, 2019). Educators' positive perceptions of the school environment and the support provided to military-connected students and their families is apparent both throughout this study and in research (Berkowitz et al., 2014; Sullivan et al., 2019). However, educators in this study and in prior research note a lack of training specific to the needs of military-connected students and their families, relying on best practices and lived experiences to navigate this population's potential academic, social, and emotional barriers (Kranke, 2019). One significant implication of this research is the necessity for educators to be transparently aware of the military-connected students in their classrooms each year. The implementation of a system where these students are visibly marked, such as a flag in the district's learning management system (LMS), can be instrumental. Such visibility allows teachers to recognize who their military-connected students and be mindful of changes in student behavior and performance. A possible outcome would be teacher-initiated conversations with appropriate personnel that proactively address potential concerns so interventions and support can begin. Awareness fosters a supportive environment where educators can address the academic, social, and emotional needs of these students, to

ensure that they receive the necessary attention and resources from the very beginning of the school year. The understanding of the unique situation of military-connected students can help educators tailor their teaching strategies and provide timely interventions. This proactive stance not only helps in addressing issues as they arise but also in preventing potential academic and emotional struggles before they escalate.

To effectively support military-connected students, educators need specialized training that goes beyond general strategies to address students who may be struggling socially, emotionally, or academically. Rather, educators should be familiarized with military life, values, and culture as well as the challenges that military-connected students can face. These trainings could be conducted by representatives from the local military base, the school's military liaison, JROTC instructors at the high school level, or military-connected educators whose lived experiences can develop heightened awareness and coping strategies with non-military educators. Professional development would equip teachers with the knowledge and skills necessary to understand and address the specific needs of military-connected students, to foster an environment that is both empathetic and conducive to their academic success.

Another implication is the need for a stronger line of communication between Military Family Life Counselors (MFLCs) and base liaisons with school counselors, teachers, and support staff. A community that visibly supports military-connected students ensures that they have a reliable network to turn to during times of need. Effective communication allows for the seamless sharing of vital information regarding military-connected students' well-being, enabling a coordinated and comprehensive approach to supporting their mental health, academic performance, and overall well-being.

Counselors play an essential role in supporting the mental health and well-being of students, particularly those facing volatile or challenging life circumstances. However, the current educational landscape often overburdens counselors with additional responsibilities such as scheduling, parent meetings, and registration, which sidelines their primary role of counseling. Schools must reevaluate and potentially restructure the role of counselors to prioritize student wellness or consider allocating increased staffing to balance the counselors' workload. Ensuring that counselors can focus on providing consistent and proactive support to students, rather than reacting to crises, is vital for the mental health and academic success of all students.

Preservice educators should also receive comprehensive training on military life and culture. The understanding of how military life impacts student behavior and potential academic concerns is crucial for future teachers. The incorporation of this knowledge into teacher education programs will better prepare educators to meet the unique needs of military-connected students. By equipping preservice teachers with this understanding, schools can create a more inclusive and supportive environment for all students, to ensure that military-connected students receive the necessary support to thrive both academically and emotionally.

These implications underscore the need for systemic changes within school systems and educational preparatory programs to better support military-connected students. By enhancing teacher awareness, providing specialized training, strengthening communication networks, redefining counselor roles, and incorporating military culture into teacher education, schools can create a more supportive and effective learning environment for these students.

Conclusion

This mixed methods study investigated the academic, social, and emotional needs of military-connected students in high school students. First, the academic performance of military-

connected high school students was compared to their non-military peers on the MAP Growth 6+ Reading and MAP Growth K-12 Math assessments. The study found that high school military-connected students performed significantly better in reading compared to their non-military peers. This finding suggests that military-connected students may possess unique strengths or receive support that enhances their reading skills. On the other hand, military-connected students outperformed non-military students on average in mathematics, and this difference was not statistically significant. This determination indicates that the advantage observed in reading does not necessarily translate to mathematics that highlights the need for further investigation into subject-specific or exam-specific factors or expanding the sample size outside of the researcher's school district to account for other military bases.

Additionally, this study provided insight into educator perceptions of military-connected students and their families through a survey with both quantitative and qualitative items. Educators' perceptions revealed that high school environments generally well support military-connected students. These students are comfortable, self-advocating, adapt well to new peers and curricula, and feel supported by their educational community. Their resilience and maturity are noted as significant strengths. Schools provide dedicated support through military liaisons and counselors, although there is a gap in awareness about specific federal and state support programs. The study also highlighted that while educators recognize the importance of military appreciation events, such as Veterans Day and the Month of the Military Child, these events primarily resonate with military parents and spouses rather than high school students. This suggests a potential disconnect between the intended and actual engagement of military-connected students in these activities.

Regarding professional development, the study found that educators generally do not feel the need for additional training specifically aimed at supporting military-connected students. Many educators rely on their personal experiences or existing training in social and emotional learning to support military-connected students as they would any other student in their classroom or case load. However, there is an acknowledgment that military-connected students face unique challenges, such as frequent relocations and heightened emotional stress during times of transition or parental deployment, which may require more proactive and targeted support.

Overall, the findings suggest that while current support mechanisms are effective to some extent, there is room for improvement in both educator training and the engagement of military-connected high school students. The enhancement of opportunities for targeted training to educators could lead to more proactive support and early interventions, which ultimately foster a more inclusive and supportive educational environment for military-connected students and their families. Studying the academic successes of military-connected students within the researcher's district could provide valuable insights to aid military-connected students who may struggle to adjust and perform academically.

Serving the children of those who serve our country is of paramount importance, as these young individuals face unique challenges and sacrifices associated with military life. Their parents' dedication and commitment to national service often entail frequent relocations, extended separations, and the psychological stress of deployment. These experiences can significantly impact students' academic performance, social development, and emotional well-being. The provision of robust support systems in schools, including dedicated counselors, specialized programs, and tailored educational resources, ensure that military-connected students

receive the stability, understanding, and encouragement they need to thrive. By addressing their specific needs, schools honor not only the sacrifices made by their parents but also help nurture resilient, well-adjusted, and successful individuals who will contribute positively to society.

References

About the [Redacted] County School District. Home. (2023). Retrieved from the school district internal database.

Arievitch, I. M. (2003). A potential for an integrated view of development and learning: Galperin's contribution to sociocultural psychology. *Mind, Culture, and Activity*, *10*(4), 278-288.

Arievitch, I. M., & Haenen, J. P. (2005). Connecting sociocultural theory and educational practice: Galperin's approach. *Educational Psychologist*, *40*(3), 155-165.

Arnold, P. L., Garner, J. K., & Nunnery, J. A. (2014). Understanding teaching and learning with military students in public school contexts: Insights from the perspectives of teachers. *Children & Schools, 36*(1), e9-e17. doi:10.1093/cs/cdt044

Ash, D. (2003). Dialogic Inquiry and Biological Themes and Principles. *Journal of Museum Education, 28*(2), 8-12.

Ashton, P. T., & Webb, R. B. London (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. Longman Publishing Group.

Astor, R. A., De Pedro, K. T., Gilreath, T. D., Esqueda, M. C., & Benbenishty, R. (2013). *The promotional role of school and community contexts for military students. Clinical Child and Family Psychology Review, 16*, 233–244.

Astor, R., Jacobson, L., Benbenishty, R., Atuel, H., Gilreath, T., Wong, M., De Pedro, K., Esqueda, M., Estrada, J., Gilreath, T., Esqueda, M., & Benbenishty, R. (2012a). *The school administrator's guide for supporting students from military families*. Teachers College Press.

Astor, R., Jacobson, L., Benbenishty, R., Atuel, H., Gilreath, T., Wong, M., De Pedro, K.,

Esqueda, M., Estrada, J., Gilreath, T., Esqueda, M., & Benbenishty, R. (2012b). *The teacher's guide for supporting students from military-connected families*. Teachers College Press.

Atuel, H. R., & Castro, C. A. (2018). Military Cultural Competence. *Clinical Social Work Journal, 46*(2), 74-82. https://doi.org/10.1007/s10615-018-0651-z

Atuel, H., Esqueda, M., & Jacobson, L. (2011). The military child within the public school education system. *Los Angeles, CA: USC Center for Innovation and Research on Veterans & Military Families*.

Avgitidou, S. (2009). Participation, roles and processes in a collaborative action research project: A reflexive account of the facilitator. *Educational Action Research*, *17*(4), 585-600.

Baptist, J., Barros, P., Cafferky, B., & Johannes, E. (2015). Resilience building among adolescents from National Guard families: Applying a developmental contextual model. *Journal of Adolescent Research, 30*, 306–334. doi:10.1177/0743558414558992

Barker, L. & Berry, K.D. (2009). Developmental issues impacting military families with young children during single and multiple deployments. *Military Medicine, 174,* 1033–1040.

Barnes, V., Davis, H. & Treiber, F. (2007). Perceived stress, heart rate, and blood pressure among adolescents with family members deployed in Operation Iraqi Freedom. *Military Medicine, 172*, 40–43.

Barr, A. (2015). From the battlefield to the schoolyard the short-term impact of the Post-9/11 GI bill. *Journal of Human Resources*, *50*(3), 580-613.

Basham, K. (2008). Homecoming as a safe haven or the new front: Attachment and detachment in military couples. *Clinical Social Work Journal, 36*, 83-96.

Becker, S. J., Swenson, R. R., Esposito-Smythers, C., Cataldo, A. M., & Spirito, A. (2014).

Barriers to seeking mental health services among adolescents in military families. *Professional Psychology: Research and Practice, 45*, 504–513.

Bedrisk, E. J., & Breslin, F. C. (1996). Estimating the polyserial correlation coefficient. *Psychometrika, 61*(3), 427–443.

Bellini, J. L. (2017). *Research in rehabilitation counseling: A guide to design, methodology, and utilization*. Charles C Thomas Publisher.

Belmont Report. (2014). Ethical principles and guidelines for the protection of human subjects of research. *Journal of the American College of Dentists, 81*(3), 4-13.

Berkowitz, R., De Pedro, K. M., Couture, J., Benbenishty, R., & Astor, R. A. (2014). Military parents' perceptions of public school supports for their children. *Children & Schools*, *36*(1), e1-e8.

Biden, J. (2016, April 13). *Operation Educate the Educators* [speech]. Operation Educate the Educators Conference, Washington D.C. https://awpc.cattcenter.iastate.edu/2017/03/09/operation-educate-the-educators-april-13-2016.

Blaisure, K. R., Saathoff-Wells, T., Pereira, A., MacDermid Wadsworth, S., & Dombro, A. L., (2016). *Serving military families in the 21st century*. Routledge.

Blue Star Families. (2012). *America joins forces with military families*. *White Oak II, executive summary.* Joining Forces Initiative.

Booth, A., & Crouter, A. C. (Eds.). (2001). *Does it take a village?: Community effects on children, adolescents, and families*. Psychology Press.

Bourg, C., & Segal, M. W. (1999). The impact of family supportive policies and practices on organizational commitment to the Army. *Armed Forces and Society*, *25*, 633– 652.

Bowen G. L., Mancini J. A., Martin J. A., Ware W. B., Nelson J. P. (2003). Promoting the adaptation of military families: An empirical test of a community practice model. *Family Relations*, 52(1), 33–44.

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage.

Brace, I. (2018). *Questionnaire design: How to plan, structure and write survey material for effective market research.* Kogan Page Publishers.

Bradshaw, C., & Sechrest, R. (2010). Military youth: A school perspective. *Presentation at the Johns Hopkins Bloomberg School of Public Health, December*, *7*.

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.

Brendel, K. E., Maynard, B. R., Albright, D. L., & Bellomo, M. (2014). Effects of school-based interventions with US military-connected children: A systematic review. *Research on Social Work Practice*, *24*(6), 649-658.

Buehrle, J. (2014). "Us" as United States: Sparking community-based solutions for supporting military-connected children and their families. *Children & Schools*, *36*(1), 60-63.

Cabrera, A. F., Peralta, A. M., & Kurban, E. R. (2018). The invisible 1%: A comparison of attaining stepping stones toward college between military and civilian children. *The Journal of Higher Education, 89*(2), 208-235.

CalSCHLS. The California School Climate, Health, and Learning Survey (CalSCHLS) System. (2023). https://calschls.org/administration/downloads/#ssm_mcs

Capp, G., Astor, R. A., Benbenishty, R., Weiss, E., & Pineda, D. (2017). School staff perceptions

of military-connected students in civilian public schools: Implications for teachers, counselors, and school staff. *Military Behavioral Health*, *5*(2), 147-15.

Card, N. A., Bosch, L., Casper, D. M., Wiggs, C. B., Hawkins, S. A., Schlomer, G. L., & Borden, L. M. (2011). A meta-analytic review of internalizing, externalizing, and academic adjustment among children of deployed military service members. *Journal of Family Psychology*, *25*(4), 508.

Carpenter, K. J., Potts, K. M., & Brown, L. C. (2019). Instructional accommodations for military-connected students. *Teaching Exceptional Children, 51*(1), 17-24.

Ceci, S. J. (1990). *On intelligence …more or less: A bioecoligical treatise on intellectual development*. Prentice-Hall.

Cederbaum, J.A., Gilreath, T.D., Benbenishty, R., Astor, R.A., Pineda, D., DePedro, K.T., Esqueda, M.C., & Atuel, H. (2014). Well-being and suicidal ideation of secondary school students from military families. *Journal of Adolescent Health, 54*(6), 672–677.

Chan, C.S., Becker, S.J., Swenson, R.R., Esposito-Smythers, C., Cataldo, A.M., & Spirito, A. (2014). Barriers to seeking mental health services among adolescents in military families. *Professional Psychology: Research and Practice, 45*(6), 504-513. https://doi.org/10.1037/a0036120

Chandra, A., Lara-Cinisomo, S., Jaycox, L. H., Tanielian, T., Burns, R., Ruder, T…..& Han, B. (2011). Children on the homefront: The experience of children from military families. *Pediatrics, 127*(4), 867-874.

Chandra, A., & London, A. S. (2013). Unlocking Insights about Military Children and Families. *The Future of Children, 23*(2). https://www.proquest.com/scholarly-journals/unlocking-insights-about-military-children/docview/1519283765/se-2

Chandra, A., Martin, L. T., Hawkins, S. A., Richardson, A. (2010). The impact of parental deployment on child social and emotional functioning: Perspectives of school staff. *Journal of Adolescent Health, 46*, 218-223. https://doi.org/10.1016/j.jadohealth.2009.10.009

Chartrand, M. M., & Seigel, B. (2007). At war in Iraq and Afghanistan: Children in US military families. *Ambulatory Pediatrics, 7*(1), 1-2.

Choe, Y. J. (2021). *A Multiple Case Study: Military-Dependent Children's Social and Emotional Well-Being and Its Impact on Classroom Behavior* (Order No. 28647650). Available from ProQuest Central; ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (2572566981). https://www.proquest.com/dissertations-theses/multiple-case-study-military-dependent-children-s/docview/2572566981/se-2

Classen, A. I., Horn, E., & Palmer, S. (2019). Needs of Military Families: Family and Educator Perspective. *Journal of Early Intervention*, *41*(3), 233-255. https://doi.org/10.1177/1053815119847235

Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *The Future of Children*, 13-39.

Coll, J. E., Weiss, E. L., & Yarvis, J. (2011). No one leaves unchanged: Insights for civilian mental health care professionals into the military experience and culture. *Social Work in Health Care, 50,* 487–500.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*, 87-127.

Conforte, A. M., Bakalar, J. L., Shank, L. M., Quinlan, J., Stephens, M. B., Sbrocco, T., &

Tanofsky-Kraff, M. (2017). Assessing military community support: Relations among perceived military community support, child psychosocial adjustment, and parent psychosocial adjustment. *Military Medicine, 182*(9), e1871-e1878.

Conway, B., & Schaffer, C. L. (2017). Faculty perceptions regarding the inclusion of military-connected children into educator preparation curriculum. *National Teacher Education Journal*, *10*(2), 5.

Cozza, S. J., & Lerner, R. M. (2013). Military children and families: Introducing the issue. *Military Children and Families, 23*(2), 3-10.

Crabtree, B., & Miller, W. (1999). A template approach to text analysis: Developing and using code books. In B. Crabtree & W. Miller (Eds.), *Doing Qualitative Research* (pp.163-177.) Sage.

Cramm, H., McColl, M. A., Aiken, A. B., & Williams, A. (2019). The mental health of military-connected children: a scoping review. *Journal of Child and Family Studies*, *28*, 1725-1735.

Creech, S. K., Hadley, W., & Borsari, B. (2014). The impact of military deployment and reintegration on children and parenting: A systematic review. *Professional Psychology: Research and Practice*, *45*(6), 452.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Sage.

Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.

Creswell, J. W., & Plano Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage.

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Sage Handbook of Mixed Methods in Social & Behavioral Research* (pp. 209-240). Sage.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297-334.

Curtis, L. J. & Risberg, S. L. (2014). Teachers care about military-connected students. *On the Move, 8*(2), 18-20.

Daigle, P. (2013). *On the homefront: assessing the well-being of Canada's military families in the new millennium*. Ottawa, ON: Office of the Ombudsman, National Defense and Canadian Forces.

Dansby, V. S., & Marinelli, R. P. (1999). Adolescent children of Vietnam combat veteran fathers: a population at risk. *Journal of Adolescence, 22*(3), 329–340. https://doi.org/10.1006/jado.1999. 0225.

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Schulman, L. (2005). The design of teacher education programs. In Darling-Hammond, L. & Bransford J. (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 390-441). Jossey-Bass.

Davis, B. E., Blaschke, G. S., & Stafford, E. M. (2012). Military children, families, and communities: supporting those who serve. *Pediatrics-English Edition*, *129*(1), S3-10.

Davydov, V. V., & Kerr, S. T. (1995). The Influence of L. S. Vygotsky on Education Theory,

Research, and Practice. *Educational Researcher*, *24*(3), 12–21. https://doi.org/10.2307/1176020

Department of Defense, (n.d.b). Military students on the move: A toolkit for school leaders. Retrieved on October 8, 2020, from georgia4h.org/cp-content/uploads/2018/05/SchoolLeadersToolkit_0406.pdf

Department of Defense Education Activity [DoDEA]. (2022). *The Military Interstate Compact*. https://www.dodea.edu/partnership/interstatecompact.cfm

De Pedro, K.T., Astor, R. A., Benbenishty, R., Estrada, 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.

De Pedro, K.T., Astor, R.A., Gilreath, T. D., Benbenishty, R., & Berkowitz, R. (2018). School climate, deployment, and mental health among students in military-connected schools. *Youth & Society, 50*(1), 93-115. https://doi.org/10.1177/00044118X15592296

De Pedro, K. T., Astor, R. A., Gilreath, T. D., Benbenishty, R., & Esqueda, M. C. (2014). School climate perceptions among students in military-connected schools: A comparison of military and nonmilitary students in the same schools. *Military Behavioral Health*, *2*(1), 3-13.

De Pedro, K.T., Esqueda, M.C., Cederbaum, J.A., & Astor, R.A. (2014). District, School, and Community Stakeholder Perspectives on the Experiences of Military-Connected Students. *Teachers College Record, 116*(4), 1-32.

Dunivin, K. O. (1994). Military culture: Change and continuity. *Armed Forces & Society*, *20*(4), 531-547.

Easterbrooks, M. A., Ginsburg, K., & Lerner, R. M. (2013). Resilience among military

youth. *The future of children, 23*(2), 99-120.

Engel, R. C, Gallagher, L. B., & Lyle, D. S. (2006). Military deployments and children's academic achievement: Evidence from Department of Defense Education Activity Schools. Retrieved from http://s3.documentcloud.org/ documents/205139/deployments-and-dodea.pdf

Esqueda, M. C., Astor, R. A., & De Pedro, K. M. T. (2012). A call to duty: Educational policy and school reform addressing the needs of children from military families. *Educational Researcher*, *41*(2), 65-70.

Faber, A. J., Willerton, E., Clymer, S. R., MacDermid, S. M., & Weiss, H. M. (2008). Ambiguous absence, ambiguous presence: A qualitative study of military reserve families in wartime. *Journal of Family Psychology, 2,* 222-230.

Falk, J., & Dierking, L. (2000). *Learning from Museums: Visitor Experiences and the Making of Meaning*. AltaMira Press.

Faran, M.E., Weist, M.D., Faran, D.A. & Morris, S.M. (2004). Promoting resilience in military children and adolescents. In Clauss-Ehlers, C.S. & Weist, M.D (Eds.), *Community Planning to Foster Resilience in Children* (pp. 233–246). Kluwer Academic/ Plenum Publishers.

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1), 80-92.

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs—principles and practices. *Health Research and Educational Trust, 48*(6), 2134-2156. https://doi.org/10.1111/1475-6773.12117

Field, A. (2013). Discovering Statistics with IBM SPSS. Sage.

Fitzsimons, V. M., & Krause-Parello, C. A. (2009). Military children: When parents are deployed overseas. *The Journal of School Nursing*, *25*(1), 40-47.

Finkelstein, J., DiMartino, J., & Callahan, J. (2017). The military adolescent: Unique challenges and considerations. *Adolescent Medicine: State of the Art Reviews, 28*(1), 47-58.

Flake, E. M., Davis, B. E., Johnson, P. L., & Middleton, L. S. (2009). The psychosocial effects of deployment on military children. *Journal of Developmental & Behavioral Pediatrics, 30*(4), 271-278. https://doi.org/10.1097/DBP.0b013e3181aac6e4

Garner, J. K., Arnold, P. L., & Nunnery, J. (2014). Schoolwide impact of military-connected student enrollment: Educators' perceptions. *Children & Schools*, *36*(1), 31-39.

Georgia Department of Education. (2023). *Professional Learning*. Office of School and District Improvement. https://www.gadoe.org/school-improvement/pages/professional-learning.aspx

Gilreath, T. D., Astor, R. A., Cederbaum, J. A., Atuel, H., & Benbenishty, R. (2014a). Prevalence and correlates of victimization and weapon carrying among military-and nonmilitary-connected youth in Southern California. *Preventive medicine*, *60*, 21-26.

Gilreath, T. D., Estrada, J. N., Pineda, D., Benbenishty, R., & Avi Astor, R. (2014b). Development and use of the California Healthy Kids Survey Military Module to support students in military-connected schools. *Children & Schools*, *36*(1), 23-29.

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. https://doi.org/ 10.1016/j.amepre.2012.09.059.

Gilreath, T., Wrabel, S., Sullivan, K., Capp, G., Roziner, I., Benbenishty, R., & Astor, R. (2016). Suicidality among military-connected adolescents in California schools. *European Child & Adolescent Psychiatry, 25*(1), 61-66.

Gorman, G., Eide, M., & Hisle-Gorman. (2010). Wartime military deployment and increased pediatric mental and behavioral complaints. *Pediatrics, 126*, 1058-1066.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11*, 255-274. doi:10.3102/01623737011003255

Gross-Portney, L., & Watkins, M. P. (2000). *Foundations of clinical research: Applications to practice* (2nd ed.). Prentice Hall Health.

Gunby, J. D., & Schutz, P. A. (2016). Mixed methods designs: Frameworks for organizing your research methods (1st ed.). *Developing a Mixed Methods Proposal: A Practical Guide for Beginning Researchers* (pp. 83-104). Sage.

Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 4*(1), 63-69.

Hall, L. K. (2008). *Counseling military families: What mental health professionals need to know*. Routledge, Taylor, and Francis.

Hall, L. K. (2012). The military lifestyle and the relationship. In B. A. Moore (Ed.), *Handbook of counseling military couples* (pp. 137-156). Routledge, Taylor, and Francis.

Hall, L. K. (2013). Military culture. *Military psychologists' desk reference*, 22-26.

Hanna, J.L. (2020). Removing the Camouflage: A deeper look at military-connected adolescent perception of identity in secondary schools. *Clearing House, 93*(4), 184-194. https://doi.org/10.1080/00098655.2020.1758014

Hansman, C. (2001). Context-Based Adult Learning. In S. Merriam (Ed.), *The New Update on Adult Learning Theory* (pp. 43-52). Jossey-Bass.

Hanson, T. L., & Kim, J. O. (2007). *Measuring resilience and youth development: the psychometric properties of the Healthy Kids Survey*. (Issues & Answers Report, REL 2007–No. 034). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from http://ies.ed.gov/ncee/edlabs

Hernandez, B.F., Peskin, M.F., Markham, C.M., Burr, J., Roberts, T., & Emery, S.T. (2018). The context of sexual decisions and intrapersonal and interpersonal factors related to sexual initiation among female military-dependent youth. *Journal of Sex Research, 55*(1), 73-83. https://doi.org/10.1080.00224499.2017.12987

Huebner, A. J., Mancini, J. A., Bowen, G. L., & Orthner, D. K. (2009). Shadowed by war: Building community capacity to support military families. *Family Relations*, *58*, 216-228.

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*, *56*(2), 112-122.

Hoshmand, L. T., & Hoshmand, A. L. (2007). Support for military families and communities. *Journal of Community Psychology, 35*, 171-180.

Huebner, A. J., & Mancini, J. A. (2005). *Adjustments among adolescents in military families when a parent is deployed. Final report to the military family research institute and department of defense quality of life office.* West Lafayette, IN: The Military Family

Research Institute at Purdue University. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.614. 365&rep=rep1&type=pdf.

Huebner, A. J., Mancini, J. A., Bowen, G. L., & Orthner, D. K. (2009). Shadowed by war: Building community capacity to support military families. *Family Relations, 58*, 216-228.

Hughes, D., & DuMont, K. (1993). Using focus groups to facilitate culturally anchored research. *American Journal of Community Psychology, 21*(6), 775–806. https://doi.org/10.1007/BF00942247

Hulsey, A. (2011). Military Child Education Coalition: Building Partnerships and Support Networks for Military Children with Special Needs. *Exceptional Parent*, *41*(9), 18-20.

Humes, E. (2006). *Over here: How the GI Bill transformed the American dream*. Houghton Mifflin Harcourt.

IBM Corp (2022). IBM SPSS Statistics for Macintosh, Version 29.0. Armonk, NY: IBM Corp.

Jeffrey, J. R. (1972). *Education for children of the poor: A study of the origins and implementation of the Elementary and Secondary Education Act of 1965*. Rice University.

Joining Forces: Education. (2017). https://obamawhitehouse.archives.gov/joiningforces/issues/education

Kelly, L. J. (2007). *The Interrelationships between adult museum visitors' learning identities and their museum experiences*. Sydney, Australia: University of Technology, Sydney.

Kelley, M. L., & Jouriles, E. N. (2011). An introduction to the special section on US Military operations: Effects on military members' partners and children. *Journal of Family Psychology*, *25*(4), 459.

King, D. W., King, L. A., & Vogt, D. S. (2010). The impact of deployment on military children

and families. *Clinical Child and Family Psychology Review, 13*(4), 333-341.

Knox, J. E., & Stevens, C. (1993). Vygotsky and Soviet Russian defectology: an introduction. *The collected works of LS Vygotsky: the fundamentals of defectology (Abnormal psychology and learning disabilities)*, 1-25.

Kozulin, A. (2004). Vygotsky's theory in the classroom: Introduction. *European Journal of Psychology of Education*, *19*(1), 3–7. http://www.jstor.org/stable/23421397

Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds.). (2003). *Vygotsky's educational theory in cultural context*. Cambridge University Press.

Kranke, D. (2019). Teachers' perspectives on educating military-connected students: The forgotten group. *Children & Schools*, *41*(3), 189-190.

Kranke, D., Barmak, S., Weiss, E., & Dobalian, A. (2019). The application of self-labeling approach among military-connected adolescents in a public school setting. *Health & Social Work, 44*(3), 193-201.

Lakens, D. E. (2013). Calculating and Reporting Effect Sizes to Facilitate Cumulative Science: A Practical Primer for t-tests and ANOVAs. *Frontiers in Psychology, 4*. https://doi.org/10.3389/fpsyg.2013.00863

Landers-Potts, M. A., O'Neal, C. W., & Mancini, J. (2017). Electronic communication use and socio-emotional well-being among military youth. *Journal of Child & Family Studies, 26*(12), 3266-3267.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lefcourt, H. M. (1991). *Locus of control*. Academic Press.

Lester, P. & Flake, E. (2013). How wartime military service affects children and families.

Future of Children, 23, 121–141.

Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., & Mogil, C. (2010) The long war and parental combat deployment: effects on military children and at-home spouses. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*, 310–320.

Levy, D. L. (2016). *Helping military-connected students succeed: Strategies for educators*. ASCD.

Lewis, C., Enciso, P., & Moje, E. (2007). Introduction: Reframing sociocultural research on literacy. In C. Lewis, P. Enciso, & E. Moje (Eds.) *Reframing sociocultural research on literacy: Identity, agency, and power*. Lawrence Erlbaum Associates, Inc.

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, 21*(4), *421-432.*

Lucier-Greer, M., Arnold, A.L., Mancini, J.A., Ford, J.L., & Bryant, C.M. (2015). Influences of cumulative risk and protective factors on the adjustment of adolescents in military families. *Family Relations, 64*(3), 363-377.

Lythgoe, T. J. (2022). *The Soldier and the Citizen: Examining the US Military's Non-Partisan Norms* (Doctoral dissertation, University of Kansas).

MacDermid Wadsworth, S., Bailey, K. M., & Coppola, E. C. (2017). US military children and the wartime deployments of family members. *Child Development Perspectives*, *11*(1), 23-28.

Macdonald, G. (2017). School-based support for students with a parent on military deployment. *Children Australia*, *42*(1), 57-65.

Mahn, H. (1999). Vygotsky's methodological contribution to sociocultural theory. *Remedial and*

Special education, *20*(6), 341-350.

Mahn, H., & John-Steiner, V. (2012). Vygotsky and sociocultural approaches to teaching and learning. *Handbook of Psychology, Second Edition*, *7*.

Mancini, J. A., O'Neal, C. W., Martin, J. A., & Bowen, G. L. (2018). Community social organization and military families: Theoretical perspectives on transitions, contexts, and resilience. *Journal of Family Theory & Review*, *10*(3), 550-565.

Marchant, K., & Medway, E. (1987). Adjustment and achievement associated with mobility in military families. *Psychology in the Schools, 24*, 289-294.

Marek, L. I., & D'Aniello, C. (2014). Reintegration stress and family mental health: Implications for therapists working with reintegrating military families. *Contemporary Family Therapy*, *36*(4), 443-451.

Martin, J. A. & McClure, P. (2000). Today's active duty military family: The evolving challenges of military family life. In J. A. Martin, L. N. Rosen, & L. R. Sparacino (Eds.), *The military family: A practice guide for human service providers* (pp. 3-24), Praeger.

Matusov, E., & Rogoff, B. (1995). Evidence of Development from People's Participation in Communities of Learners. In J. Falk & L. Dierking (Eds.), *Public Institutions for Personal Learning* (pp. 97-104). American Association of Museums.

McKinney, K., & Renk, K. (2011). Differential perceptions of school functioning in military-connected children: Understanding the impact of parental military affiliation, mobility, and social support. *School Psychology, 40*(2), 256-271.

Means, B., Padilla, C., DeBarger, A., & Bakia, M. (2009). Implementing data-informed decision making in schools: Teacher access, supports and use. *US Department of Education*.

Meyer, E. G., Writer Brian, W., & Brim, W. (2016). The Importance of Military Cultural

Competence. *Current Psychiatry Reports, 18*(3). https://doi.org/10.1007/s11920-016-0662-9

Milburn, N. G., & Lightfoot, M. (2013). Adolescents in wartime US military families: A developmental perspective on challenges and resources. *Clinical Child and Family Psychology Review, 16*, 266–277.

Military Child Education Coalition. (2020). Military kids now 2020 survey: Summary report. Militarychild.org. https://www.militarychild.org/upload/files/MCEC_2020EdSurvey_digital.pdf

Military Community and Family Policy. (2013). 2012 Demographics: Profile of the military community. Retrieved from http://www.militaryonesource.miI/12038/MOS/Reports/2012_ Demographics_Report.pdf

Military Culture. (2008). In *Encyclopedia of violence, peace, and conflict*. Retrieved March 28, 2023, from http://credoreference.com/entry/estpeace/military_culture

Miller, R. (2011). *Vygotsky in perspective*. Cambridge University Press.

Miller, W. L., Crabtree, B. F., Harrison, M. I., & Fennell, M. L. (2013). Integrating mixed methods in health services and delivery system research. *Health Services Research, 48*(6 Pt 2), 2125.

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

Mmari, K., Roche, K., Sudhinaraset, M., & Blum, R. W. (2009). When a parent goes off to war: Exploring the issues faced by adolescents and their families. *Youth & Society*, *40*, 455-475.

Moeller, J. D., Culler, E. D., Hamilton, M. D., Aronson, K. R., & Perkins, D. F. (2015). The effects of military-connected parental absence on the behavioural and academic functioning of children: A literature review. *Journal of Children's Services, 10*(3), 291-306. https://doi.org/10.1108/JCS-05-2015-0017

Moll, L. C. (1993). Vygotsky & education: instructional implications & applications of sociohistorical psychology // Review. *Canadian Journal of Education, 18*(3), 181-183. https://www.proquest.com/scholarly-journals/vygotsky-education-instructional-implications/docview/215380734/se-2

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into practice*, *31*(2), 132-141. https://doi.org/10.1080/00405849209543534

Moos, R. H. (1979). *Evaluating educational environments*. Jossey-Bass.

Morgan, M. & Ross, A. (2013). Helping military children feel "at ease." *Principal, 92*(3), 30-33.

Morse, J. M. (2016). *Mixed method design: Principles and procedures* (Vol. 4). Routledge.

Mullis, J., & Habel, M. A. (2016). Addressing the needs of military-connected students: A guide for educators. *Harvard Educational Review, 86*(4), 526-549.

Muthén, B. O. (1984). A general structural equation model with dichotomous, ordered, categorical, and continuous latent variable indicators. *Psychometrica, 49,* 115–132.

Muthén, L. K., & Muthén, B. O. (2006). *Mplus user's guide: Fourth edition*. Muthén & Muthén.

National Military Family Association. (2010). *We Serve, Too: Toolkit about Military Teens*. National Military Family Association.

National Military Family Association. (2021). Education Revolution.

https://militaryfamily.org/wp-content/uploads/Education-Revolution_Advocacy-Booklet.pdf

National Military Family Association. (2021). Understanding military children: How educators can support their unique experiences. https://www.militaryfamily.org/understanding-military-children-how-educators-can-support-their-unique-experiences/

National Military Family Association. (2023a). *Finding Common Ground: Toolkit for Communities Supporting Military Families*. National Military Family Association. https://militaryfamily.org/wp-content/uploads/Finding_Common_Ground__A_Toolkit_for_Communities_Serving.pdf

National Military Family Association. (2023b). *Research + Insights*. National Military Family Association. https://www.militaryfamily.org/about-us/research-insights/

Northwest Evaluation Association (2020). *MAP Growth and Norms*. NWEA.org https://teach.mapnwea.org/impl/maphelp/Content/Data/GrowthInsights.htm

Northwest Evaluation Association (2023). *MAP Growth Fact Sheet*. NWEA.org. https://nwea.org/resource-center/fact-sheet/46825/map-growth_NWEA_factsheet.pdf/

Nunnally, J. C. (1978). Psychometric theory. *McGraw-Hill.*

NWEA Connection. (2023). Connection.nwea.org. https://connection.nwea.org/s/article/What-is-the-RIT-scale?language=en_US

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods, 19*, 1-13. https://doi.org/10.1177/1609406919899220.

Ogbu, J. (1995). The Influence of Culture on Learning and Behavior. In J. Falk & L. Dierking

(Eds.), *Public Institutions for Personal Learning* (pp. 79- 95). American Association of Museums.

Ohye, B.Y., Jakubovic, R. J., & Bui, E. (2020). Staying strong with schools: Testing an elementary school-based intervention for military-connected children. *Journal of Clinical Child & Adolescent Psychology, 49*(5), 595-602. https://doi.org/10.1080/15374416.2018.1547971

Onwuegbuzie, A. J., & Collins, K. M. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. *The Qualitative Report, 12*(2), 281-316. Retrieved from http://nsuworks.nova.edu/tqr/vol12/iss2/9

Onwuegbuzie, A. J., & Johnson, R. B. (2004). Mixed method and mixed model research. In R. B. Johnson & L. B. Christensen, *Educational research: Quantitative, qualitative, and mixed approaches* (pp. 408-431). Allyn & Bacon.

Orthner, D. K. & Rose, R. (2009). Work separation demands and spouse psychological well-Being. *Family relations: An Interdisciplinary Journal of Applied Family Studies, 58*(4), 392-403. https://doi.org/10.1111/j.1741-3729.2009.0056

Padden, D., & Conners, R., (2014). *Supporting military children in school: A guide for educators.* Teachers College Press.

Padilla-Díaz, M. (2015). Phenomenology in educational qualitative research: Philosophy as science or philosophical science. *International Journal of Educational Excellence, 1*(2), 101-110.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015).

Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Park, N. (2011). Military children and families: Strengths and challenges during peace and war. *American Psychologist, 66*(1), 65-72.

Paul, C. A. (2016). Elementary and Secondary Education Act of 1965. *Social Welfare History Project*. Retrieved from https://socialwelfare.library.vcu.edu/programs/education/elementary-and-secondary-education-act-of-1965/

Penuel, W. R. & Wertsch, J. V. (1995). Vygotsky and identity formation: A sociocultural approach. *Educational Psychologist, 30*(2), 83-92.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879.

Reger, M. A., Etherage, J. R., Reger, G. M., & Gahm, G. A. (2008). Civilian psychologists in an Army culture: The ethical challenge of cultural competence. *Military Psychology, 20*, 21-35.

Riggs, S. A., & Riggs, D. S. (2011). Risk and resilience in military families experiencing deployment: the role of the family attachment network. *Journal of family psychology*, *25*(5), 675.

Risberg, S. L., Curtis, L. J., & Shivers, L. (2014). A professional development school in action: Meeting the needs of military-connected students and families. *Educational Considerations, 42*(1), 43-48.

Rodriguez, A. J., & Margolin, G. (2011). Siblings of military service members: A qualitative

exploration of individual and family systems reactions. *Professional Psychology*, *42*, 316-323.

Rogers, R. (2018). Coding and writing analytic memos on qualitative data: A review of Johnny Saldaña's the coding manual for qualitative researchers. *The Qualitative Report, 23*(4), 889-892.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford University Press.

Roschelle, J. (1995). Learning in Interactive Environments: Prior Knowledge and New Experience. In J. Falk & L. Dierking (Eds.), *Public Institutions for Personal Learning* (pp. 37-51). American Association of Museums.

Rosen, L. N., Teitelbaum, J. M., & Westhuis, D. J. (1993). Children's reactions to the Desert Storm deployment: initial findings from a survey of Army families. *Military medicine, 158*(7), 465–469.

Ruff, S. B., & Keim, M. A. (2014). Revolving Doors: The impact of multiple school transitions on military children. *Professional Counselor*, *4*(2), 103-113.

Salda, J. (2016). The coding manual for qualitative researchers (3rd ed.). Sage.

Schauble, L., Leinhardt, G., & Martin, L. (1997). A Framework for Organizing a Cumulative Research Agenda in Informal Learning Contexts. *Journal of Museum Education, 22*, 3-8.

Schenker, J. D., & Rumrill Jr, P. D. (2004). Causal-comparative research designs. *Journal of vocational rehabilitation, 21*(3), 117-121.

Scott, J. G., Tan, S. Y., & Johnson, D. J. (2014). Addressing the educational needs of military-connected children: A review of the literature. *School Psychology Review, 43*(3), 377-388.

Sedzielarz, M. (2003). Watching the Chaperones: An Ethnographic Study of Adult-Child

Interactions in School Field Trips. *Journal of Museum Education, 28*(2), 20-24.

Shabani, K. (2016). Applications of Vygotsky's sociocultural approach for teachers' professional development. *Cogent education*, *3*(1), 1252177.

Shabazz, K. M. (2008). *The effects of environment and age on locus of control, self-efficacy, and self-esteem of military and non-military students' academic achievement* (Doctoral dissertation, ProQuest Information & Learning).

Shahzad, K., & Naureen, S. (2017). Impact of Teacher Self-Efficacy on Secondary School Students' Academic Achievement. *Journal of Education and Educational Development*, *4*(1), 48-72.

Sherbert, V. S. (2018). " A Constant State of Flex and Change": A Teacher Candidate's Perceptions of and Experiences with Military-Connected Learners. *Educational Considerations*, *44*(1), 5. https://doi.org/10.4148/0146-9282.1866

Skjott, L. M., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative Research Journal, 19*(3), 259-270. https://doi.org/100.1108/QRJ-12-2018-0012

Smagorinsky, P. (2007). Vygotsky and the Social Dynamics of Classrooms. *The English Journal*, *97*(2), 61–66. http://www.jstor.org/stable/30046790

Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology, 11*(1), 101-121. https://doi.org/10.1080/1750984X.2017.1317357

Smith, T. E., Reinke, W. M., Herman, K. C., & Huang, F. (2019). Understanding family–school engagement across and within elementary-and middle-school contexts. *School Psychology*, *34*(4), 363.

Steele, J. L., Salcedo, N., & Coley, J. (2010). *Service members in school: Military veterans' experiences using the Post-9/11 GI Bill and pursuing postsecondary education*. Rand Corporation.

Stites, M. L. (2016). How early childhood teachers perceive the educational needs of military dependent children. *Early Childhood Education Journal, 44,* 107-117. https://doi.org/10.1007/s10643-015-0698-1

Strange, C. C., & Banning, J. H. (2015). *Designing for learning: Creating campus environments for student success*. John Wiley & Sons.

Sudman, S., & Bradburn, N. (1982). Asking questions: A practical guide to questionnaire design.

Sullivan, R. M., Cozza, S. J., & Dougherty, J. G. (2019). *Children of military families. Child and Adolescent Psychiatric Clinics, 28*(3), 337-348.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches* (Applied Social Research Methods, No. 46). Sage.

Tashakkori, A., & Teddlie, C. (2003). *Sage handbook of mixed methods in social & behavioral research*. Sage.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.

The United States Government. (2022, December 5). *Joining Forces*. The White House. Retrieved February 8, 2023, from https://www.whitehouse.gov/joiningforces/

Thompson-Plunkett, O. (2022). *They Serve Too! Supporting Military-Connected Children in Civilian-Run Public Schools*. The Florida State University.

Trimillos, A. D. (2018). *Professional Development for Teachers Working with a Military-Connected Student Population* (Doctoral dissertation, Concordia University Chicago).

Tsai, J., & Pietrzak, R. (2017). Trajectories of posttraumatic growth among US military veterans: A 4 year nationally representative, prospective cohort study. *Acta Psychiatrica Scandinavica, 136*(5), 483-492.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.

Turner, H. A., Finkelhor, D., Hamby, S., & Henly, M. (2017). Victimization and adversity among children experiencing war-related parental absence or deployment in a nationally representative US sample. *Child Abuse & Neglect, 67*, 271–279. https://doi.org/10.1016/j.chiabu.2017.02.039.

U.S. Department of Health, Education, and Welfare. (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research*. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, Bethesda, MD. hhs.gov/ohrp/humansubjects/guidance/belmont.html

United States Census Bureau. (2021). *Quick facts: Houston County, Georgia*. https://www.census.gov/quickfacts/houstoncountygeorgia

Vannest, K. J., Carrero, K. M., Patience, B., Price, G., Altmann, R., Haas, A., & Smith, S. (2021). Military-connected adolescents' emotional and behavioral risk status: Comparisons of universal screening data and national norms. *Journal of Child and Family Studies, 30,* 134-145.

Vogt, D. S., Southwick, S. M., King, L. A., & King, D. W. (2008). The role of social support in the adaptation of military youth: A review. *Journal of Clinical Psychology, 64*(12), 1329-1344.

Vygotsky, L. S. (1978). Socio-cultural theory. *Mind in society*, *6*(3), 23-43.

Vygotsky, L. S. (1997). *The collected works of LS Vygotsky. Vol. 4: The history of the development of higher mental functions* (W. Rieber, Vol. Ed., & Marie J. Hall, Trans.).

Wadsworth, S. M. (2013). Understanding and supporting the resilience of a new generation of combat-exposed military families and their children. *Clinical Child and Family Psychology Review, 16*, 415-420.

Wadsworth, S.M., Cardin, J., Christ, S., Willerton, E., O'Grady, A. F., Topp, D., Coppola, E., Lester, P., & Mustillo, S. (2016) Accumulation of risk and promotive factors among young children in US military families. *American Journal of Community Psychology, 57*(1/2), 190-202.

Walker, J. D., Johnson, K. M., & Randolph, K. M. (2021). Teacher self-advocacy for the shared responsibility of classroom and behavior management. *Teaching Exceptional Children*, *53*(3), 216-225.

Weber, E. G., & Weber, D. K. (2005). Geographic relocation frequency, resilience, and military adolescent behavior. *Military medicine*, *170*(7), 638-642.

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge University Press.

Wenger, E. (2009). A social theory of learning. In K. Illeris (Ed.), *Contemporary theories of learning* (pp. 209-218). Routledge.

Williams, B. (2013). Supporting middle school students whose parents are deployed: Challenges and strategies for schools. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*.

Woolfolk, A. E. (1998). *Educational psychology* (7th Ed). Allyn & Baker.

Wooten, N. R., Brittingham, J. A., Sumi, N. S., Pitner, R. O., & Moore, K. D. (2019). Behavioral

health service use by military children during Afghanistan and Iraq wars. *The Journal of Behavioral Health Services & Research, 46*(4), 1–21.

Zascavage, V. (2010). Elementary and Secondary Education Act. In Encyclopedia of Educational Reform and Dissent. http://dx.doi.org/10.4135/9781412957403.n149

Zickfeld, J. H., Williams, M. A., Elliott, M. N., & Schreck, C. J. (2015). The effect of parental military deployment on children's academic outcomes. *Journal of School Psychology, 53*(1), 35-51.

Zvonkovic, A. M., Solomon, C. R., Humble, A. M. and Manoogian, M. (2005). Family work and relationships: lessons from families of men whose jobs require travel. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 54*(3), 411-422, http://doi.org/10.1111/j.1741-3729.2005.00327

Appendices

Appendix A

Healthy Kids Staff Survey: Military-Connected Schools Module

Staff Identifiers:

1. You are employed as a(n):

a. Teacher
b. Counselor
c. Military liaison
d. Other non-teaching staff

2. How many years have you been employed within this district?

a. 0-5 years
b. 6-10 years
c. 11-15 years
d. 16+ years

3. What is your highest completed level of education?

a. High school diploma or equivalent
b. Bachelor's degree
c. Master's degree
d. Educational Specialist degree
e. Doctorate degree

4. Do you teach a MAP assessed content?

a. Yes, my current students have taken/will take the MAP Math 6+ or MAP Reading 6+ assessment this year
b. No, but I do teach either ELA or Math
c. No, I do not teach a content assessed by MAP
d. I am not a classroom teacher.

5. Are you formerly or currently military-connected in your personal life?

a. Yes
b. No

6. Please indicate your sex assigned at birth.

a. Male
b. Female
c. Intersex

7. Please indicate your race.

a. American Indian or Alaska Native
b. Asian
c. Black or African American
d. Native Hawaiian or Other Pacific Islander
e. White

8. Please indicate your ethnicity.

a. Hispanic or Latino or Spanish origin
b. Not Hispanic or Latino or Spanish origin

9. Please provide your age range.

a. 18-24
b. 25-34
c. 35-44
d. 45-54

e. 55+

Staff Survey: Military-Connected Schools Module

CALIFORNIA school staff SURVEY

1. Do you have students in your school who have at least one parent or guardian who is serving in the military?

A) No

B) Yes

C) Don't know

2. Do you teach or have contact with students from military families (military students)?

A) No
B) Yes

C) Don't know

3. Describe your experiences with military-connected high school students, including your observations of classroom interaction and engagement, academic-learning styles, interaction with other students, testing, behavior, absenteeism, and tardiness compared to their civilian counterparts.

The questions from the next section will be positioned in a Likert-scale format with the following response options:

Almost None (A) **Few (B)** **Some (C)** **Most (D)** **Nearly All (E)** **Don't Know /NA (F)**

Based on your experience, how many military students…

1. feel supported by their peers?

2. feel supported by their teachers?

3. have additional educational needs?

4. face financial difficulties?

5. have additional emotional and psychological needs?

6. have additional strengths due to their family circumstances?

7. feel that others may not appreciate their families' sacrifice for the nation?

8. feel that others may discriminate against them because they are military students?

9. feel isolated in the school?

10. are proud of their parents and families' contributions to our country's security?

The following questions ask participants to elaborate on their individual experiences and understandings. Please utilize complete sentences in your responses.

11. Based on your experience, how do military-connected students differ from civilian students? Consider academic, social, and / or emotional aspects of the students in your response.

12. How do you cope with or handle these differences when teaching both military and civilian students in same classroom?

The questions from the next section will be positioned in a Likert-scale format with the following response options:

Not at all true (A) Rarely True (B) Sometimes True (C) Usually True (D) Don't Know / NA (E)

Please indicate how true each of the following statements is about the ways this school responds to military students and their families.

This school…

1. provides a welcoming environment to military students and their families.

2. has additional services for students whose parents are deployed.

3. has additional services for students who experience loss and trauma.

4. makes additional efforts to help involve military parents.

5. has visual displays (e.g., bulletin boards, pictures) rituals, activities, artwork, murals, and ceremonies to honor military families.

6. works with community organizations to provide educational support to military students.

7. works with community organizations to provide after school activities and support military students.

8. educates staff and students on what life is like for military families, and some of the special circumstances that come with military life.

9. assists military students in transitions between schools.

10. works with military liaisons to take advantage of additional military educational resources.

11. needs more support staff (e.g., pupil personnel services) to work with military families and students.

The following questions ask participants to elaborate on their individual experiences and understandings. Please utilize complete sentences in your responses.

12. Based on your knowledge, what resources and / or personnel are available to support military-connected students in your school?

13. How does your school prioritize assistance for military-connected students, encompassing various forms of support like financial aid, counseling, and academic resources such as tutoring and mentoring?

14. Share insights on how your school's support systems for military-connected students are put into practice, communicated, and perceived by those students within the military community.

The questions from the next section will be positioned in a Likert-scale format with the following response options:

Not a Need (A) **Little Need (B)** **Need (C)** **Major Need (D)** **Don't Know (E)**

How much of a need do you have for more professional development, training, mentorship, or other support in order to respond to the needs of military students in any of the following areas?

I need professional development in order to…

1. understand military culture.

2. understand the effects of deployment cycles.

3. learn how to work with military students who have experienced loss or other trauma in the family.

4. learn how to work with students who have a parent currently deployed.

5. learn how to address the needs and circumstances of military parents.

6. learn how to create a school climate that is welcoming to military students and families.

7. learn about community organizations that provide support for military students and families.

8. learn how to help parents deal with additional responsibilities during deployment.

9. learn about the resources available to support military students and families.

The following questions ask participants to elaborate on their individual experiences and understandings. Please utilize complete sentences in your responses.

10. What kind(s) of training (workshops, events, seminars, or other opportunities) have you participated in to support military-connected students and their families?

11. Explain your understanding of supports through federal/state government, support staff for military-connected students.

Appendix B

Email to Principal Requesting Staff Participation

Dear _____,

I hope this email finds you having a great school year. I am a doctoral student at Columbus State University conducting my research in the identification and support of military-connected high school students. I humbly request the participation of your faculty and select non-teaching staff whose input is valuable for the current perceptions and understanding of educators relative to this important population of students. My goal is to use survey feedback to make recommendations based on results to benefit the academic, social, and emotional development of these students while simultaneously supporting educators' professional development around work with military-connected students and their families. I have obtained proper IRB approval as well as district-level approval to conduct research via [redacted] in Human Resources, which is attached for your verification.

With your permission, I would appreciate the chance to either send an email through you or directly to your teachers, counselors, military liaison, and fellow administrators, whichever you prefer. If the latter, I will CC you in all correspondence and reiterate that permission was obtained through the building-level supervisor to request their participation. The survey features some identifying and demographic questions without compromising confidentiality among the participants, Likert-scale questions and open-ended questions relative to the educators' experiences with military-connected students and their families. The survey in its entirety is attached to this email and has been put in Qualtrics for participation ease and consistency in response collection.

Below is the email I will send to participants or directly to you for distribution, if given the opportunity to conduct my research within your building. Thank you in advance for your consideration.

> *Good morning! I am a doctoral student at Columbus State University in my data collection phase of my research and dissertation processes. Your participation is requested as I seek to contribute to literature surrounding military-connected adolescents and their social, emotional, and academic needs. The hyperlinked survey will take you to Qualtrics, which will securely store respondents' information for five years.*
>
> *Your building supervisor has approved this research and authorized my email to you. I humbly thank you for your assistance in this process.*
>
> *Your confidentiality will be maintained within the survey, and your responses will be categorized based on your response to Items 1 and 5, which will ask for your role as either a teacher, counselor, military liaison, or administrator and whether or not you are personally military-connected. No other personal identifiable questions will be linked to your responses, such as contact information, but demographic information is requested*

to provide greater understanding of the participants. The research approval from HR and my IRB approval is attached for your reference if you elect to review.

The survey will be open for two weeks and should take approximately 15 minutes.

Thank you for your support of my research endeavors and please email me with questions either to megan.jones@hcbe.net or wilkeson_megan@students.columbusstate.edu.

Have a great day!

Megan Jones
Veterans High School

Appendix C

Email to Staff Requesting Participation

Good morning! I am a doctoral student at Columbus State University in my data collection phase of my research and dissertation processes. Your participation is requested as I seek to contribute to literature surrounding military-connected adolescents and their social, emotional, and academic needs. The hyperlinked survey will take you to Qualtrics, which will securely store respondents' information for five years.

Your building supervisor has approved this research and authorized my email to you. I humbly thank you for your assistance in this process.

Your confidentiality will be maintained within the survey, and your responses will be categorized based on your response to Items 1 and 5, which will ask for your role as either a teacher, counselor, military liaison, or administrator and whether or not you are personally military-connected. No other personal identifiable questions will be linked to your responses, such as contact information, but demographic information is requested to provide greater understanding of the participants. The research approval from HR and my IRB approval is attached for your reference if you elect to review.

The survey will be open for two weeks and should take approximately 15 minutes.

Thank you for your support of my research endeavors and please email me with questions either to megan.jones@hcbe.net or wilkeson_megan@students.columbusstate.edu.

Have a great day!

Megan Jones
Veterans High School

Appendix D

Follow-up Email to Staff Requesting Participation

Good morning! Thank you so much for those who participated in my survey; I am grateful for the responses received thus far. If you have not yet taken this survey, I thank you for your assistance in this process.

Your confidentiality will be maintained within the survey, and your responses will be used to develop my results in greater detail. Once again, the research approval from HR and my IRB approval is attached for your reference, if desired.

The survey will be open for one more week and should take approximately 15 minutes to complete.

Thank you for your support of my endeavors; please email me with questions either to megan.jones@hcbe.net or wilkeson_megan@students.columbusstate.edu.

Gratefully,

Megan Jones
Veterans High School

Appendix E

Thank you Email to Principals

Good morning!

Thank you so much for your willingness to share my research and to encourage participation with your staff. I am beyond grateful for your aid in my research process as I seek to wrap up my dissertation.

With any staff or personal questions that may arise stemming from the survey, please do not hesitate to reach out and I will be happy to provide any details.

Thank you for your support of my endeavors; please email me with questions either to megan.jones@hcbe.net or wilkeson_megan@students.columbusstate.edu.

Gratefully,

Megan Jones
Veterans High School

Appendix F

CHKS Licensing Agreement for the Use of the Survey

Licensing Agreement for Use of the Staff Survey

Military Connected Schools Module

2023-24 School Year

Licensee: Megan Jones

1. The Parties

This license agreement ("Agreement") is entered into by and among the California Department of Education ("CDE"), a state agency, WestEd, a joint powers agency and authorized agent of CDE, and Megan Jones, collectively "the Parties."

2. License Scope

This Agreement governs the Licensee's use of survey items from the Healthy Kids Staff Survey: Military- Connected Schools Module ("CHKS Module"). This Agreement outlines terms and conditions the license granted by CDE to the Licensee for the Licensee's authorized use of the CHKS Module, in exchange for the payment described herein. The license granted to the Licensee herein is limited, restricted to the Territory, non- exclusive, non-transferable, revocable license and not sub-licensable. Licensee shall use the Licensed Product only to administer a survey for its intended purpose of the licensee's personal research in their dissertation: determining school staff's familiarization of military-connected students and families, their unique needs, and indicating the professional development regarding military-connected students/families of the researcher's school district (Houston County Board of Education, Perry, GA 31069) under the direct supervision of the researcher's committee at Columbus State University, Columbus, GA 31907.

The study will be surveying exclusively staff members at 5 high schools within 1 district, which is home to a military installation. The research will survey content teachers (English, math, social studies, science, and world languages), counselors, and military liaisons in order to better understand staff perceptions of military- connected students, their needs / potential barriers, and become more aware of our district's training / professional development relative to work with military-connected students. I hope to have 50-100 respondents, and I have developed some qualitative questions to accompany each section of the survey as well as a few respondent qualifiers (years of experience, position within the high school, and whether the participant is personally connected to the military as a former dependent, military spouse / sibling / parent). The survey would be available to participants at the permission of their building supervisors for 2 weeks, and I would send the invitation to participate via email. I hope to provide my district

with evidence that suggests our staff should receive training and increased partnership with our local base to better support our military-connected students.

3. Territory - The territory is limited to United States of America.

4. Term - The license granted is valid for 2 beginning on January 1, 2024, ending on January 1, 2026. The survey will be issued once over a span of two weeks and the researcher will maintain license through the completion of the doctoral dissertation defense.

5. Licensed Product

The CHKS Module is administered by WestEd under contract on behalf of the CDE, who owns all rights, title and interest in the CHKS Module. The CHKS

Module is one component of the California School Climate, Health, and Learning Survey system. The CHKS Module consists of a series of survey materials and assessments in electronic and paper form, which are designed to be administered to students at grades five, seven, nine and eleven in order to assess school climate, health risk and behaviors and related issues. At the heart of the CHKS Module is a research-based core that provides valid indicators for student engagement and achievement, safety, positive development, health and overall well-being.

6. Ownership and Transfer

CDE owns all proprietary rights and interests in the CHKS Module, including its contents, copyrights and rights in data, whether in physical or electronic form. All of the CHKS Module components are proprietary. The purchase, sale, loan, assignment, transfer, license, sub-license, use, disclosure, dissemination and/or publication of the CHKS Module by any individual, person, organization, company, public or private entity, association or enterprise is strictly prohibited except with the prior, express permission of CDE stated in writing and signed by an authorized CDE official or representative.

7. Administration

a. The CHKS Module shall be administered by the Licensee in a manner designed to avoid the unauthorized dissemination, publication and copying of the CHKS Module.

b. The Licensee will restrict at all times the access to, possession of, and use of the CHKS Module to only its authorized employees or agents; the Licensee will not, and will not allow any of its employees or agents to, use, communicate, copy, transmit, disseminate or publish the CHKS Module, or any component, thereof except for the purposes and in the manner specifically authorized by this Agreement;

c. The Licensee will destroy all CHKS Module materials in its possession, including any paper and electronic survey questions, upon completion of its use of them pursuant to this Agreement. Such destruction should be witnessed by one other person who can later attest to the complete destruction of such materials occurred. Should the Licensee fail or refuse to destroy all

CHKS Module materials in its possession as provided herein, CDE shall be entitled to liquidated damages in the amount of $50,000.

d. The Licensee understands and agrees that this Agreement does not transfer or assign, nor give rise to any right, title or interest of the Licensee or any other entity or person, in the CHKS Module, except for the License explicitly granted herein.

8. Authorized Use

The use of the CHKS Module is strictly limited to the project(s) described in section 1, above (hereafter, "the project"), and the uses listed below.

The CHKS Module may only be used for educational, academic, or social research and similar purposes in conjunction with the project.

The Licensee may copy or duplicate the CHKS Module only to the extent necessary to complete the project, including the creation of assessment materials to be distributed to project participants, for internal licensee distribution, for the administration of assessments, and to train the licensee employees and officers.

The Licensee shall destroy or return all such copies of the CHKS Module upon the expiration or termination of this license and certify the same in writing upon the return or destruction.

The Licensee agrees and warrants that the CHKS Module will not be:

A. Used for any "for profit" commercial activity;

B. Modified, translated, adapted, or publicly displayed, except to the extent explicitly permitted by this Agreement;

C. Made publicly available or uploaded to any publicly accessible website;

D. Transmitted or transferred for the purpose of evading the prohibition on copying, duplication, or modification;

E. Sublicensed, sold, transferred, conveyed, or pledged;

F. Used for any purpose that conflicts with or is contrary to the rights and interests of WestEd or CDE or that is inconsistent with the terms and stated purposes of this Agreement.

9. Alterations and Derivative Works

The Licensee agrees that it will not modify any portion of the CHKS Module or make any derivatives thereof without CDE's prior written consent.

Notwithstanding anything herein to the contrary, should Licensee have the need to translate the CHKS Module, Licensee shall deliver an electronic copy of the translated CHKS Module (the "Translated Module") to WestEd prior to any use, dissemination, duplication, or display and further agrees to and hereby does convey and assign to CDE all right, title, and interest in and to the Translated Module.

Licensee understands and agrees that this Agreement only permits the creation and use by Licensee of a complete and accurate translation of the CHKS Module contents into another language. It does not authorize Licensee to create or use any translated version of the CHKS Module which materially alters or modifies the meaning or contents of the CHKS Module. Licensee understands and agrees that the creation and use of any Translated Module is subject to all of the terms and conditions of this Agreement. The CDE shall retain all rights, title and interest in and to the CHKS Module and Translated Module. Licensee understands and agrees that any translation of the CHKS Module made pursuant to this Agreement shall only translate the language of the CHKS Module into another language, without any change to its meaning or contents beyond that which is minimally necessary for a complete and accurate translation.

The Licensee further agrees that all CHKS Module materials used, duplicated, or presented to others by the Licensee shall contain the attributions to CDE as they originally appear in the CHKS Module and CDE and WestEd will be cited in all oral and written presentations using data derived from the CHKS Module or assessment.

10. Information to be Provided by the Licensee to WestEd

The Licensee agrees that it will provide the following to WestEd upon completion of the project:

A. A list of all public presentations made by the Licensee or its employees, officers, officials or agents, which include or rely upon results based upon CHKS Module assessment results or responses;

B. A list of all papers submitted for publication that include or rely upon results based upon CHKS Module assessment results or responses, including complete citations

C. A list of all papers accepted for publication that include or rely upon results based upon CHKS Module assessment results or responses, including complete citations; and

D. A list of all graduate students that have used or relied upon the CHKS Module or CHKS Module assessment results or responses for dissertations or theses. This list shall include the titles of these papers, and the date of completion.

11. Indemnification

The Licensee shall indemnify, defend and hold harmless CDE and WestEd, including their officers, employees, and agents from all claims, liabilities, losses, damages, or judgments, including CDE and WestEd's attorney's fees and costs incurred in connection with any claim or complaint arising out of: (i) any breach or alleged breach by the Licensee , its employees,

officials, officers, or agents, of any of the obligations set forth herein; (ii) any acts by the Licensee in connection with this Agreement; or (iii) the Licensee use, transmission, or distribution of the CHKS Module regardless of the type or nature of the claim or complaint.

12. Limitation of Liability

THE CHKS MODULE IS PROVIDED "AS IS" AND WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED. ANY AND ALL WARRANTIES ARE EXPRESSLY DISCLAIMED, INCLUDING WITHOUT LIMITATION, TITLE, SECURITY, ACCURACY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. WESTED DISCLAIMS, ON BEHALF OF ITSELF AND CDE, AND THE LICENSEE WAIVES ALL LIABILITY ARISING FROM THE USE OF THE CHKS MODULE.

IN NO EVENT WHATSOEVER SHALL THE CDE OR WESTED BE LIABLE TO THE LICENSEE OR ANY THIRD PARTY FOR ANY CAUSE OR CLAIM WHATSOEVER RELATED TO OR ARISING OUT OF THIS AGREEMENT, AND NO LIABILITY CONNECTED TO THIS AGREEMENT MAY EXCEED THE PRO RATA AMOUNT PAID BY THE LICENSEE FOR USE OF THE CHKS MODULE DURING THE PRECEEDING 12 MONTHS (I.E. ONE-FIFTH OF THE TOTAL LICENSING FEE). IN NO EVENT SHALL CDE OR WESTED BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES ARISING FROM THE USE OF THE CHKS MODULE.

13. Exclusions

The Licensee acknowledges and agrees that the license granted pursuant to this Agreement does not include any scoring services or technical or other support from WestEd or CDE.

14. Termination

CDE reserves the right to terminate this Agreement without notice, liability or refund to the Licensee in the event of any breach of any portion of this Agreement. CDE further reserves the right to restrict or suspend the License granted under this Agreement in the event of a threatened breach until such threat has been negated.

All applicable provisions of this Agreement, including the Information to be Provided, Indemnification, Limitation of Liability, Waiver and Severability and Governing Law provisions herein, shall remain in effect beyond the expiration or termination of the agreement and until the expiration of any applicable statute of limitation.

15. Modifications and Amendments

This Agreement may be amended or modified only upon the prior, mutual written agreement between the Licensee, CDE and WestEd signed by their authorized representatives

16. Waiver and Severability

No provision of this Agreement will be waived and no breach excused unless the waiver or consent is in writing and is signed by a duly authorized representative of CDE If any provision of this Agreement is determined to be invalid or unenforceable by a court of competent jurisdiction, whether in whole or in part, the remaining provisions will continue in full force and effect as if the Agreement has been executed without the invalid provision.

17. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of California, without regard to conflict of law principles. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, whether involving remedies at law or in equity, shall be adjudicated in an appropriate state or federal court in Sacramento, California. The Licensee agrees to submit to the personal and subject matter jurisdiction of the United States District Court for the Northern District of California and agrees to venue in San Francisco, California.

18. Successors and Assigns

Each party's rights and obligations under this Agreement will bind and inure to the benefit of its respective successors and permitted assigns. Neither WestEd nor the Licensee may assign this Agreement, whether by operation of law or otherwise, without CDE's express prior written consent.

19. Entire Agreement

This Agreement constitutes the entire agreement between the Parties. All prior agreements, understandings, and proposals, oral or written, between the Parties relating to Confidential Information are superseded by this Agreement. This Agreement may only be modified or amended by a writing signed by all Parties. All Parties explicitly acknowledge and agree that any subsequent oral agreements, oral understandings, and oral proposals will be null and void.

20. Notices

All notices permitted or required under this Agreement shall be in writing and shall be delivered by personal delivery, electronic mail, by Federal Express (FedEx) Premium International Service or United Parcel Service (UPS) Worldwide Express Service, with signature and delivery confirmation, to each Party's respective contact listed below, and will be deemed given upon proof of delivery or upon acknowledgment of receipt of electronic transmission.

Notice to WestEd shall be delivered to:	Notice to the Licensee shall be delivered to:
Michael Neuenfeldt WestEd	Megan Jones Veterans High School
730 Harrison Street	340 Piney Grove Rd
San Francisco, CA 94107 USA	Kathleen, GA 31047 USA

Email: contracts@wested.org Email: wilkeson_megan@students.columbusstate.edu

IN WITNESS WHEREOF, CDE, WestEd and the Megan Jones have, by their respective duly authorized representatives, executed this Agreement as of the last date entered below.

Licensee

By: Megan Jones, Columbus State University

Name: Megan Jones Megan Jones

Title: Doctoral Candidate

Date: 22 January 2024

Faculty Advisor

By: Jennifer M. Lovelace

Name: Jennifer Lovelace, PhD

Title: Chairperson

Date: 22 January 2024

California Department of Education

By: Hilva Chan

Name: Hilva Chan

Title: Jan 29, 2024

Date: Jan 29, 2024

WestEd

By: Baron Rodriguez

Name: Baron Rodriguez

Title: Director of Technology

Date: Jan 30, 2024

Appendix G

District Approval Letter

DATE: January 19, 2024

TO: Megan Jones
Veterans High School

FROM: Sharon Moore
Director of Professional Learning

SUBJECT: RESEARCH APPROVAL REQUEST

Your request to conduct research for your graduate program at Columbus State University is approved. The purpose of your research study, "Dissertation in Identification and the Social, Emotional, and Academic Support for Military-Connected Adolescents among High Schools in a Central Georgia School District", is to examine the perceived self-efficacy of educators with military-connected high school students in their classrooms and to consider the academic implications of these students. The timeframe for this research study is one year from the date of district approval.

Thank you for submitting your research proposal, syllabus, assent form, survey, Likert scale, interview questions, non-identification letter, and the principal approval letters.

Please keep in mind that you will be responsible for compiling the data for your research. Staff at HCHS, PHS, VHS, WRHS, and the Departments of District & School Effectiveness and Technology Services are unable to compile data for your research. Board policy also prohibits the use of district email for personal research. Please also remember student and teacher anonymity is of utmost priority for this research project.

I have attached to this approval e-mail the Houston County Schools Requirements for Conducting Research.

I wish you the best as you work toward earning your graduate degree. Please let me know if I may be of any assistance to you again in the future.

cc: Elgin Mayfield Amy Barbour

478-988-6200 1100 Main Street | Perry, Georgia 31069 www.hcbe.net

Appendix H

High School Educators' Experiences with Military-Connected Students and Reflection on their School's Response to Military-Connected Students and their Families

Type	Stem	Code	Item
Quantitative	Based on your experience, how many military students…	MCS1	Feel supported by their peers?
		MCS2	Feel supported by their teachers?
		MCS3	Have additional educational needs?
		MCS4	Face financial difficulties?
		MCS5	Have additional emotional and psychological needs?
		MCS6	Have additional strengths due to their family circumstances?
		MCS7	Feel that others may not appreciate their families' sacrifice for the nation?
		MCS8	Feel that others may discriminate against them because they are military students?
		MCS9	Feel isolated in the school?
		MCS10	Are proud of their parents and families' contributions to our country's security?
	This school…	EE1	Provides a welcoming environment to military students and their families.
		EE2	Has additional services for students whose parents are deployed.
		EE3	Has additional services for students who experience loss and trauma.
		EE4	Makes additional efforts to help involve military parents.
		EE5	Has visual displays (e.g., bulletin boards, pictures) rituals, activities, artwork, murals, and ceremonies to honor military families.
		EE6	Works with community organizations to provide educational support to military students.
		EE7	Works with community organizations to provide after school activities and support military students.
		EE8	Educates staff and students on what life is like for military families, and some of the special circumstances that come with military life.
		EE9	Assists military students in transitions between schools.
		EE10	Works with military liaisons to take advantage of additional military educational resources.

		EE11	Needs more support staff (e.g., pupil personnel services) to work with military families and students.
Qualitative	The following questions ask participants to elaborate on their individual experiences and understandings. Please utilize complete sentences in your responses.	MCS11	Based on your experience, how do military-connected students differ from civilian students? Consider academic, social, and / or emotional aspects of the students in your response.
		MCS12	How do you cope with or handle these differences when teaching both military and civilian students in same classroom?
		EE12	Based on your knowledge, what resources and / or personnel are available to support military-connected students in your school?
		EE13	How does your school prioritize assistance for military-connected students, encompassing various forms of support like financial aid, counseling, and academic resources such as tutoring and mentoring?
		EE14	Share insights on how your school's support systems for military-connected students are put into practice, communicated, and perceived by those students within the military community.
		MCF3	Describe your experiences with military-connected high school students, including your observations of classroom interaction and engagement, academic-learning styles, interaction with other students, testing, behavior, absenteeism, and tardiness compared to their civilian counterparts.

Note. MCS is Military-Connected Students. EE is Educational Environment. MCF is military connected families.

Appendix I

High School Educators' Preparedness and Training Needs for Military-Connected Students

Type	Stem	Code	Item
Quantitative	I need professional development to…	PD1	Understand military culture.
		PD2	Understand the effects of deployment cycles.
		PD3	Learn how to work with military students who have experienced loss or other trauma in the family.
		PD4	Learn how to work with students who have a parent currently deployed.
		PD5	Learn how to address the needs and circumstances of military parents.
		PD6	Learn how to create a school climate that is welcoming to military students and families.
		PD7	Learn about community organizations that provide support for military students and families.
		PD8	Learn how to help parents deal with additional responsibilities during deployment.
		PD9	Learn about the resources available to support military students and families.
Qualitative	The following questions ask participants to elaborate on their individual experiences and understandings. Please utilize complete sentences in your responses.	PD10	What kind(s) of training (workshops, events, seminars, or other opportunities) have you participated in to support military-connected students and their families?
		PD11	Explain your understanding of supports through federal/state government, support staff for military-connected students.