A Descriptive Qualitative Study of Parental Perceptions of the Influence Deployment has on their Child's Academic Performance

Submitted by

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A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctorate of Education

Grand Canyon University

Phoenix, Arizona

March 14, 2019

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I verify that my dissertation represents original research, is not falsified or plagiarized, and that I accurately reported, cited, and referenced all sources within this manuscript in strict compliance with APA and Grand Canyon University (GCU) guidelines. I also verify my dissertation complies with the approval(s) granted for this research investigation by GCU Institutional Review Board (IRB).

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Abstract

Many military families are experiencing the effects of deployment in an effort to support the mission of the US Armed Forces. The purpose of this descriptive, qualitative study was to provide a description of how families living in the Southeastern United States who have experienced military deployment perceive parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance, if at all. Parental perceptions of the influence of deployment are supported by the confluence model, attachment theory, and Bandura's social learning theory/social cognitive theory. Research questions focused on how soldiers who have experienced military deployment and their spouses perceive their PreK-12th grade children's academic performance is influenced by parental deployment. Data were collected using semistructured interviews and an open-ended counselor's questionnaire. A purposeful sampling strategy was used to recruit a sample of 38, including 19 soldiers and 19 nondeployed spouses who had children in Pre-Kindergarten through grade 12. Thematic analysis revealed the following findings: soldiers and their nondeployed spouses perceive that academic performance is influenced by the length, number of deployments, parental attitude/support, and whether there was effective communication between parents and their children during deployments. Results provide school staff with valuable insight as to specific facets of parental deployment that soldiers and nondeployed spouses perceive as having both positive and negative influence on student performance.

Keywords: Domestic Dependent Elementary and Secondary Schools, military deployment, academic achievement, students, student performance

Dedication

I dedicate my dissertation work to the soldiers and their families who selflessly give their time to defend American liberties through the Armed Forces. These soldiers spend countless time separated from their families to protect *our* civil liberties. They sacrifice so much for the freedom of others.

I also dedicate this dissertation to my family who supported me throughout the process. I will always appreciate all they have done, especially my mom, Gail Morgan Acuti, for teaching me to reach for the stars and never give up.

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Chapter 1: Introduction to the Study

Introduction

As Americans continue to fight the war against terrorism, a different battle is being waged on the home front: decreased academic achievement of students whose parents are deployed (Angrist & Johnson, 2000; Engel, Gallagher, & Lyle, 2006: Lyle, 2006; Pisano, 1992). Deployment refers to the movement of military personnel within the United States or overseas to accomplish a mission (Department of Defense Educational Opportunities, 2010). According to the Defense Manpower Data Center (2018), there were 1,347,106 active duty personnel in February 2018. Since the attacks on September 11, 2001, extensive military deployments have occurred, leaving children to endure the emotional and academic battle that ensues when a parent is away from home for an extended amount of time. With additional stressors comes decreased academic performance (Cozza, Chun, & Polo, 2005; Harrison &Vannest, 2008).

In order for schools to improve academic achievement, teachers and administrators need to be cognizant of the barriers that prevent students from achieving their true potential (Hill & Taylor, 2004). Hill and Taylor (2004) explained, "Understanding the mechanisms through which [parental] involvement promotes academic achievement would point to logical targets for intervention" (p. 163). When school personnel are aware of the barriers to academic success that military dependent students face, they can take appropriate steps to address these obstacles, thus positively influencing student academic achievement.

The purpose of this descriptive, qualitative study was to provide a description of how families in the Southeastern United States who have experienced military

deployment feel parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance, if at all. Deployment information was gleaned using interviews with the soldier and the nondeployed spouse designed for this study and an open-ended questionnaire completed by the school guidance counselor. Participants included 19 soldiers and their nondeployed spouses who had children in Pre-Kindergarten through grade 12 who attended a private school in the Southeastern United States.

Chapter 1 informs the reader of the background of the study, the problem statement, the purpose of conducting the research, and the research questions that will guide the study. Additionally, the chapter will present ways in which this study will advance scientific knowledge. An explanation of the rationale for the methodology is provided, as is the nature of the research design. Finally, the chapter ends with a set of definitions that will be used to build shared knowledge through clearly defined terms.

Background of the Study

With the nation's involvement in peacekeeping missions, especially those resulting from the attacks of September 11, 2001, many military families are experiencing longer and multiple deployments (Office of the Deputy under Secretary of Defense, 2010). From September 11, 2001 to December 2008, 1.7 million service members were serving unaccompanied deployments (United States Department of Veteran Affairs, 2010). According to the Defense Manpower Data Center (2018), there were 1,347,106active duty personnel in February 2018. Researchers have studied how academic achievement is affected by parental involvement (Blanchard & Biller, 1971; Carlsmith, 1964; Cozza et al., 2005; Hill, & Tyson, 2009) and resiliency to stressors

(Cozza et al., 2005; Harrison &Vannest, 2008). Since prior studies have shown a positive relationship between parental involvement and academic achievement of elementary students (Blanchard & Biller, 1971; Cozza et al., 2005; Hill & Tyson, 2009), then teachers working with students whose parents are deployed may need to create additional and different ways for parents to be involved in the education process.

Additionally, researchers have studied how situation-specific conditions such as divorce, additional stressors, and reduced parental involvement negatively affect academic achievement (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008). Further support that student achievement is affected by parental separations can be explained by the numerous studies that have shown that decreased academic achievement is influenced by mobility due to military relocations and deployments (Angrist &Johnson, 2000; Engel et al., 2006; Lyle, 2006; Pisano, 1992). In tandem with decreased academic achievement, military deployments cause a perceived increase in stress levels of soldiers, their spouses, and their children (Aranda, Middleton, Flake, & Davis, 2011; Erbes et al., 2011; Gewirtz et al., 2010; Hammelman, 1995; Henry et al., 2011; Reed, Bell, & Edwards, 2011; Renshaw et al., 2011). The understanding that divorce and emotional changes within the household directly affect how students perform in school is supported by the confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), and Bandura's (1989) social learning theory/social cognitive theory.

With this understanding, it is clear that when students have additional stress or are separated from their parents for extended amounts of time and/or multiple times, the students suffer academically (Aranda et al., 2011; Bandura, 1989; Bowlby, 1977; Reedet

al., 2011; Renshaw et al., 2011; Zajonc, 1976). This information is helpful to teachers, counselors, and administrators because when students experience stressors such as those that result from parental separations, schools need to find methods of reducing those stressors and provide a support system to help reduce academic delays and obstacles that accompany parental deployment. The focus of this descriptive, qualitative study was to provide a description of how families living in the Southeastern United States who have experienced deployment feel parental deployment influences academic performance, if at all.

Problem Statement

It was not known how, if at all, families living in the Southeastern United States who have experienced deployment feel parental deployment influences their children's academic performance. There have been studies of the effects of military deployments on children's and parents' emotional resiliency to stressors (Cozza et al., 2005; Harrison &Vannest, 2008), the impact of parental involvement on academic achievement (Hill, & Tyson, 2009), and the effect of extended deployments (Chandra et al., 2010; Richardson et al., 2011), but in order for schools to improve academic achievement, teachers and administrators need to understand which factors related to parental deployment have a perceived influence on academic performance.

Parental deployments continue to be a part of the military child's regular routine since the terrorist attacks on September 11, 2001 (Office of the Assistant Secretary of Defense-Public Affairs, 2013). By 2010, more than 2 million soldiers had been deployed as part of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIA) (Department of Defense, 2010). The number of soldiers on active duty increased within

one year to the point that more soldiers than had previously been on active duty in 2009 were deployed in 2010 (Department of Defense, 2010). Using the information from the Office of the Deputy Under Secretary of Defense (2010), for the 2009 statistics, at minimum 619, 157 children experienced parental military deployment the following year. According to the Defense Manpower Data Center (2018), there were 1,347,106active duty personnel in February 2018. Deployments have increased as new dangers face the American public, and with these deployments come the potential to disrupt the routines of students, increase the stress level of the nondeployed spouse, and ultimately influence students' academic achievement. Further research into the specific factors associated with military deployment was needed to address the needs of the more than half a million children annually who are impacted by parental military deployments.

Prior studies of the effects of military deployment were based on data from World War II deployments (Blanchard & Biller, 1971; Carlsmith, 1964). As researchers have begun to explore the effects of military deployment on student achievement, gaps in current research have led to the need to investigate the effects of prolonged deployment and multiple deployments on student achievement of military-dependent students enrolled in Pre-Kindergarten through grade 12 (Chandra et al., 2010; Richardson et al., 2011).

To expound upon previous research which has identified military parental deployment as having positively influencing academic achievement (Blanchard & Biller, 1971; Carlsmith, 1964; Chandra et al., 2010; Richardson et al., 2011) the natural extension is to study individual facets of parental military deployment in order to

determine which specific factors may positively influence student achievement. It is important for school personnel to understand the potential impact of parental military deployment on academic achievement in order to counteract those effects (Hill, & Tyson, 2009). The general population for this study was all military–dependent families who have experienced deployment. The target population for the study consisted of all military-dependent families with students enrolled in Pre-Kindergarten through grade 12in a private school located in the Southeastern United States. The unit of analysis for this study was military families who have experienced deployment whose children were enrolled in a private school in the Southeast for Pre-kindergarten to grade 12. This study sought to determine how soldiers and their nondeployed spouses perceive parental deployment influences their children's academic performance, if at all. Results of this study may lead to new understandings of the individual facets associated with parental military deployment which are needed to help teachers, counselors, and administrators identify methods of reducing those stressors associated with parental deployment and provide a support system to help reduce academic delays and obstacles that are associated with parental military deployment.

Purpose of the Study

The purpose of this descriptive, qualitative study was to provide a description of how, if at all, families living in the Southeastern United States who have experienced deployment feel parental deployment influences their children's academic performance. Since the study participants represented soldiers and their military dependents whose academic performance might be influenced by parental military deployments, understanding how parental deployment influences perceived academic performance

would help teachers, administrators, and counselors determine the facets of deployment parents feel may influence student achievement. Through the new insight gained from this study, school personnel would be able to develop interventions to address the specific needs of students with deployed parents. Without knowledge of these specific indicators of student achievement, intervention attempts will not be research-based (Hill & Taylor, 2004), nor will the interventions address the unique needs of the military child. The field of education as a whole will benefit from the findings of this study with the knowledge that specific aspects associated with parental military deployments have a positive relationship with academic performance, and through investigation into parent views of the effects of deployment on each specific aspect, educators can positively influence academic performance of those students by addressing factors which negatively impact performance.

In this descriptive, qualitative study, data were collected using interviews with soldiers and their nondeployed spouses and an open-ended questionnaire completed by the school guidance counselor. The target population for the study consisted of all military-dependent students enrolled in Pre-Kindergarten through grade 12 in the Southeastern United States. The sample included19 soldiers who have experienced deployment and their nondeployed spouses who have students in Pre-Kindergarten through grade 12 who attended a private school located in the Southeastern United States. This location was selected based on the local military installation's high deployment rate, which was projected to yield relevant data for the study.

Research Questions

Researchers such as Cozza et al. (2005) and Harrison and Vannest (2008) offered insight into how stress affects student achievement. In addition, Cutrona, Cole, Colangelo, Assouline and Russell (1994) explored the relationship between perceived parental social support and academic achievement. Using these studies, as well as others included in the literature review, the following research questions were explored in this descriptive, qualitative study which sought to provide a holistic description of the influences of length of parental deployment, duration of deployment, and parental involvement on perceived academic achievement from the perspective of the deployed parent and nondeployed parent.

R1: How do soldiers who have been deployed perceive their deployment influenced their children's academic performance?

R2: How do spouses of soldiers who have been deployed perceive the deployment influenced their children's academic performance?

Exploring participants' perceptions of the effects of parental deployment using a descriptive, qualitative design led to new understandings of how parental military deployments affect perceived academic performance from the perspective of the soldier and spouse. Since it was not known how, if at all, families living in the Southeastern United States who have experienced deployment feel parental deployment influences their children's academic performance the research questions of the current study sought to address how both the soldier and the nondeployed spouse individually perceive their child(ren)'s academic performance might be influenced by parental deployments. This study evolved by first determining current gaps in literature related to the perceived

influence of parental deployments on academic performance. Next, the researcher determined the problem as a lack of specific data to determine how the soldier and the nondeployed spouse each feel parental deployments influence academic performance if at all. Finally, the researcher connected the research questions to the problem statement as a means of answering how, if at all, soldiers living in the Southeast who have experienced military deployment perceive their PreK-12th grade children's academic performance is influenced by parental deployment and how if at all, nondeployed spouses living in the Southeastern United States perceive their PreK-12th grade children's academic performance is influenced by parental deployment.

Advancing Scientific Knowledge and Significance of the Study

The research indicated that parental deployment impacts student academic achievement (Angrist & Johnson, 2000; Engel et al., 2006; Gabriel, 2007; Lyle, 2006; Pisano, 1992); however, in order to address changes in student achievement due to parental military deployment, school personnel must know the specific aspects of parental deployment (length, number of deployments, changes to routines/amount of parent involvement) in order to provide appropriate interventions to address parent perceptions (Hill & Taylor, 2004). Gaps in current research, such as whether the length of the deployment, the number of deployments, or changes in parental involvement are perceived as the most significant factor influencing academic achievement, have led to the need to investigate the effects of deployments on student performance(Chandra et al., 2010; Richardson et al., 2011). Determining how parents perceive deployment influences academic performance advances scientific knowledge by identifying the specific conditions under which parents perceive academic achievement is delayed or

inhibited. Changes within the household such as through parental deployment have been correlated to how students perform in school. These changes in student performance are supported by the confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), Bandura's (1989) social learning theory/social cognitive theory, and Esposito-Smythers, et al.'s (2011) Emotional Cycle of Deployment for Families (ECDF).The confluence model (Zajonc, 1976) postulates that a child's intellectual development is profoundly influenced by family configuration. When a parent is removed from the environment for an extended amount of time, such as for military deployment, it may affect the child's intellectual development (Carlsmith, 1964; Zajonc, 1976; Fowler & Herbert, 1978; Angrist, &Johnson, 2000; Lyle, 2006). Parental deployments, therefore, may influence a child's intellectual development, thus affecting the student's academic performance (Zajonc, 1976).

Bowlby's (1977) attachment theory explains that the nature and origin of a child's connection to his/her mother influences his actions. In the current study, the attachment theory explains the relationship between a parent's anxiety because the spouse is deployed and the child's anxiety because of the strength of the tie to his nondeployed parent, who most often is the mother. When the child has strong bonds to the mother he is not at ease when the mother has additional stress, for example when her husband is deployed. Bowlby's (1997) attachment theory also works to explain the relationship between a child and the deployed soldier if this is the stronger bond (father/ child instead of mother/child) especially in the case of single military dads raising their children.

Thorndike's (1920), social intelligence theory is founded on the belief that people have the ability to perceive the motives and behaviors of others and to use that information to make informed choices. Social learning explains that people learn from each other through observation and imitation (Ormond, 1999). Social learning explains that the children interpret behaviors from their nondeployed parents as the impetus for their own actions (Thorndike, 1920).

The Emotional Cycle of Deployment for Families (ECDF) framework chronicles the stages through which military service members and their families transition, including pre-deployment anxiety, deployment anger/frustration, and reintegration adjustment (Esposito-Smythers, et al., 2011). ECDF purports that as families move from one stage of deployment to the next, their actions are predictable. These predictable patterns allow nondeployed spouses to anticipate what will happen next as they await the soldier's return. This predictable pattern also allows the researcher to draw conclusions about how the families will respond during each stage of the deployment cycle.

Based on the above theories, it is clear that when students have additional stress due to parental deployments (Thorndike, 1920) or are separated from their parents for extended amounts of time or for multiple separations (Bowlby, 1977), the children's intellectual development may suffer (Zajonc, 1976), thus influencing academic performance. Changes in academic performance may be the result of lack of parental involvement by the deployed parent (Bowlby, 1977), the nondeployed spouse, and/or the student's emotional connection to either the deployed parent or the nondeployed parent who is now preoccupied with thoughts of what might be happening to the deployed

parent (Thorndike, 1920). The research questions of this current study aligned with the confluence model, attachment theory, social learning/social cognitive theory, and emotional cycle of deployment for families by seeking to address how the academic performance perceptions of the soldier and spouse are influenced by military deployment. The research conducted for this study provided a heuristic description of perceived academic performance by the soldier and spouse in relation to their military-dependent students in Pre-Kindergarten through twelfth grade. The current study provided additional support to the work of the confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), Bandura's (1989) social learning theory/social cognitive theory, and Esposito-Smythers, et al.'s (2011) Emotional Cycle of Deployment for Families (ECDF) by offering new insight about the effect of extended parental separations, multiple parental separations, and parental involvement on perceived academic achievement. Results of the study revealed the influence of deployment on perceived academic performance.

This study explored how parents perceive deployments influence academic performance of military-dependent students in Pre-Kindergarten through twelfth grade. These research findings may prove beneficial by providing methods of improving academic success of military-dependent students with deployed parents by identifying the specific conditions under which academic achievement is delayed or inhibited due to parental military deployments. Addressing the guiding research questions led to a better understanding of how parental military deployment influences perceived student academic performance of all military-dependent students enrolled in Pre-Kindergarten through twelfth grade.

Understanding parent perceptions of changes in academic performance due to military deployment may lead to the development of strategies to overcome obstacles associated with parental military deployment (Hill & Taylor, 2004). This information may be helpful to teachers, counselors, and administrators because when students experience stressors such as those that result from parental deployment, schools need to find methods of reducing those stressors and provide a support system to help reduce academic delays and obstacles that accompany parental deployment (Hill & Taylor, 2004). This study sought to support previous research, which examined the effects of divorce, additional stressors, and reduced parental involvement, all of which demonstrated a negative influence on academic achievement (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008). This study extended previous research by exploring how both the soldier and the nondeployed spouse perceive deployment influences academic achievement, if at all, in terms of influencing their actions before, during, and after deployments. The nondeployed parents' reactions to military deployment might influence time spent helping their children with homework, participating in school events, or simply their focus of how important their child's education is compared to their current anxieties of what might be happening to their spouse while deployed. Specifics will be revealed through analysis of interviews.

This study extended previous research indicating that student achievement is affected by parental separations and decreased academic achievement is influenced by mobility due to military relocations and deployments (Angrist & Johnson, 2000; Engel et al., 2006; Lyle, 2006; Pisano, 1992) by examining the parental perceptions of the effects of deployment on academic performance. In tandem with decreased academic

achievement, research has also indicated that military deployments cause a perceived increase in stress levels of soldiers, their spouses, and their children (Aranda et al., 2011; Erbes et al., 2011; Gewirtz et al., 2010; Hammelman, 1995; Henry et al., 2011; Reed, Bell, & Edwards, 2011; Renshaw et al., 2011). Previous studies have explored the relationship between parental military deployments and academic achievement (Angrist & Johnson, 2000; Engel et al., 2006; Lyle, 2006; Pisano, 1992), but have lacked deeper investigation into the specific factors related to parental deployment that influence academic performance. Understanding the effects of deployments, will advance scientific knowledge by determining what factors related to parental military deployment are most likely to have an influence on perceived academic performance of students whose parents have experienced deployment.

Practical applications of the information acquired through this study include the possibility of teachers, counselors, and administrators developing interventions to address deployments, which are specific to the needs of the military-dependent student whose parents are deployed. Academic contributions of this study include advancing research pertaining to the field of education for a population of students which includes more than half a million students annually (Office of the Deputy Under Secretary of Defense, 2010). Addressing the perceived academic performance of military-dependent students whose parents are deployed will have an impact upon and add value to the success of military-dependent students, their parents, and schools who are looking for ways in which to address decreases in academic performance. The results of this study may be used by practitioners to address the needs of any student who is separated from his or her parents, thus potentially reaching an even greater number of students.

Rationale for Methodology

A qualitative methodology was selected as a means of determining how, if at all, parental deployment influences perceived student academic performance for military-dependent students in Pre-Kindergarten through twelfth grade in the Southeastern United States. A qualitative approach allowed the researcher to have an intimate glimpse at the perceptions (Baxter & Jack, 2008) of parents in regard to how parental deployment influences their children's academic performance, if at all. Interview responses from the soldier and the nondeployed spouse and an open-ended questionnaire completed by the school guidance counselor provided qualitative information for the researcher to report data regarding the perceptions of soldiers and their spouses (Baxter & Jack, 2008).

In previous studies, the effect of reduced parental involvement on student achievement was studied using quantitative methods (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008). Quantitative methods yield data that reflect what documentation exists to define the situation, in quantitative terms such as *how many*, *to what extent*, and *to what degree*. In contrast, using a qualitative method aligned with the research questions by allowing the researcher to compare data related to how deployments influence parental involvement, which may in turn, affect student academic achievement. According to Marczyk, DeMatteo, and Festinger (2005), the use of nonmetric data allows the researcher to explore how and why phenomena exist, instead of merely analyzing quantifiable data which yields facts without participant feelings, perceptions, or beliefs as to *why* the phenomena exist. This descriptive, qualitative study used nonmetric data from parental interviews to provide rich data about how soldiers

and their nondeployed spouses perceived their children's academic performance was influenced by parental deployments, and *why* soldiers and their nondeployed spouses believe those influences exist.

In this study, the problem statement was addressed through qualitative means, because the researcher was looking to find how parental deployments influence perceived student performance through the use of nonmetric data (Marczyk, DeMatteo, &Festinger, 2005). This qualitative research relied on triangulating evidence from two sources, including interview responses from the soldier and the nondeployed spouse and an open-ended survey completed by the school guidance counselor. This study was conducted to research contemporary phenomena when the boundaries between the context and problem are difficult to discern, such as is the case with military deployments and their perceived effect on academic achievement. Using a qualitative research methodology allowed the researcher to delve deeper into why parents feel deployment either influences or does not influence student performance (Yin, 2016).

Qualitative research also provided a lens through which parents were able to explore which facets of deployment, if any, contributed to changes in student academic performance. For example, some parents might have felt that the anxiety of pre-deployment might be the reason for their child's change in performance, while others might have felt that the stress during deployment prohibited their full attention to their child's school work, and still others might have believed that post deployment changes might have influenced their child's academic performance the most as the soldier reintegrated into the family routines (Esposito-Smythers et al., 2011). The use of interviews allowed the researcher to have a conversation with both the soldier and the

nondeployed spouse about their personal perceptions of the influence of deployment. This intimate look at deployment opened the door to find the answers to why deployment has been linked to changes in academic performance.

Nature of the Research Design for the Study

A descriptive, qualitative design was used for this study. The attributes of a descriptive qualitative study provided the researcher with the opportunity to explore a phenomenon that would not otherwise be accessible through experimental research (Baxter & Jack, 2008). Because military deployments cannot be controlled by the researcher, nor can the specific facets of deployment such as length or number of deployments, experimental research was not a feasible option.

Descriptive qualitative studies are common in the social sciences and applied fields such as education, health care, and business (Merriam, 2009). In descriptive designs, the researcher is interested in observing how individuals conceptualize reality as they interact in their worlds. The researcher also explores how individuals construct meaning with regard to experiences. Data collection in descriptive studies includes interviews, observations, and archival data (Merriam, 2009). These attributes fit this dissertation study. The context was the field of education. The researcher wanted to describe how soldiers and their non-deployed spouses made meaning out of how deployment influenced their child's academic success, if at all. Data were analyzed through interviews from the soldiers and the nondeployed spouses and an open-ended questionnaire completed by the school guidance counselor. This qualitative research explored a problem that was evident in the daily lives and experiences of the participants. The constructs of military deployment do not allow researchers to adjust

deployment length, number of deployments, or location. The research questions were framed considering the constraints of the deployment length, number of deployments, student resiliency, and parent attitudes about deployments.

Descriptive studies are conducted in a real life setting (Merriam, 2009). The setting for this study included one single private school in the Southeastern United States. The unit of analysis included two types of parents: deployed soldiers and their non-deployed spouse, who have experienced deployment while their children were in Pre-Kindergarten through twelfth grade. Using only one location allowed the researcher to focus on how deployment might influence families within one geographic area to determine if future studies reveal similar results in different areas. Including only a private school limited the potential number of enlisted/non-officer families who were study participants. Using a descriptive design provided a detailed description of parent perceptions of deployment and student academic outcomes.

According to school enrollment records and demographic data, the student population of the site school includes a total of 241 students. The target population for the study consisted of deployed soldiers and their non-deployed spouses, who had children enrolled in Pre-Kindergarten through grade 12 in the Southeastern United States. The sample included 19 soldiers and their non-deployed spouses who have experienced deployment who have students in Pre-Kindergarten to grade 12 who attended one private school in the Southeastern United States. Military dependents were identified by data on file through the school's demographic management system.

Data collection procedures included using the interview developed specifically for this research (see Appendix A). The interview questions were developed specifically

for this study and were conducted with the soldier and nondeployed spouse. The interviews were recorded and transcribed. By conducting interviews with the soldiers and nondeployed spouses, and having the school guidance counselor complete an open-ended questionnaire, the researcher gained targeted responses directly related to the research questions. This information was used to ascertain parental perceptions of the influence of deployment on academic achievement. Results were used to answer the research questions which sought to determine how soldiers and their nondeployed spouses perceive parental deployment influences academic achievement if at all. Results of this study may provide important information toward understanding how parents feel a deployment influences their child's academic achievement.

Definition of Terms

The following terms were used operationally in this study.

Dependent. A dependent is a spouse, child, stepchild, or adopted child of a member of the Armed Forces (National Military Family Association, 2005). This study looks at how dependent students are affected by the absence of one or both parents due to a military relocation of more than three months.

Deployment. Deployment refers to the movement of military personnel within the United States or overseas to accomplish a mission (Department of Defense Educational Opportunities, 2010). Within this study, deployment is defined as a member of the Armed Forces who is temporarily relocated without his or her family for three months or more.

Deployment length. According to Koopman and Hattiangadi (2002), deployment refers to

> The amount of time members of the armed forces are engaged in their official duties, including official duties at a location or under circumstances that make it infeasible for a member to spend off-duty time in the housing in which the member resides when on garrison duty at the member's PDS [permanent duty station]. (p.153)

For the purposes of this research, the length of the deployment will be measured in terms of months that the soldier is temporarily not living with the rest of his/her family, whether for combat or training purposes. Deployment length will be reviewed in terms of number of months of the deployment.

Number of deployments. For the purposes of this research, number of deployment refers to the amount of times a soldier has been temporarily stationed at another duty station away from his/her permanent duty station (PDS) for a time period of at least three months for each deployment (Koopman & Hattiangadi, 2002).

Resiliency to stressors. Harrison and Vannest (2008) explained that resiliency to stressors is one's ability to cope with difficult situations.

Assumptions, Limitations, Delimitations

Throughout this research study, several assumptions must be made, several limitations over which the researcher has no control must be considered, and delimitations should be presented which the researcher put in place to account for those items which are within the parameters to address.

Assumptions.As with any study, some assumptions should be made.

- It was assumed that all responses were accurate including the length of each deployment and the total number of deployments of each soldier. Assuming that responses are accurate representations is a methodological

assumptionbecause it addresses the methods used in qualitative research (Guba & Lincoln, 1994).

- It was assumed that participants in this study answered deployment questions honestly and to the best of their ability. Assuming that responses are truthful is an axiological assumptionbecause it involves the values and biases used in qualitative research (Guba & Lincoln, 1994).

- It was assumed that some participants might not have offered accurateresponses based on misinterpretation of the questions or intentional deception. Assumptions about misinterpretation of questions are axiological because they require the researcher to address the values and biases used in qualitative research (Guba & Lincoln, 1994).

- It was assumed that this study is an accurate representation of the current situation in a private school in the Southeast. Assuming that the results of this study accurately represent the population of military dependents enrolled in a private school in the Southeast provides the basis of examining how military dependents throughout the United States are influenced by parental deployments. An assumption of the representation of the population such as this is an example of anepistemologicalassumption because it addresses the present reality of the participants in this qualitative research (Guba & Lincoln, 1994).

- It was assumed that comparison of the open-ended guidance counselor's questionnaire and parent interview responseswould provide the necessary evidence to address the research questions regarding parental perceptions of the effects of deployment on student performance.

Limitations. Limitations are those items over which the researcher has no control. Several limitations should be pointed out.

1. Deployment may have affected different children in different ways, indicating that not all children may have decreased grades due to parental deployment. Some children have a higher level of resiliency than others and will not show academic decreases when parents are deployed for either lengthy deployments or multiple deployments. Limitations related to resiliency are theoretical limitations (Guba & Lincoln, 1994).

2. Some students might have resorted to inappropriate behaviors, but maintained academic integrity. This study did not examine the effects of students who exhibited inappropriate behavior problems due to parental deployments, but rather, only focused on the possible changes in academic prowess of students with deployed parents. Limitations related to academic integrity are theoretical limitations (Guba & Lincoln, 1994).

3. Parents attempt to prepare their children for the deployments to ease the child's separation anxiety. In order to truly understand the effects of military deployment, educational leaders must study the effects of parental deployment length and number of deployments in order to maximize student achievement while parents are deployed. Limitations related to preparedness are topic-specific limitations (Guba & Lincoln, 1994).

4. There was no distinction made between students whose parents were deployed for combat purposes and those who were deployed for training purposes, such as drill sergeant school. These differences might have affected academic achievement results. Limitations related to types of deployment are topic-specific limitations (Guba & Lincoln, 1994).

5. Since parent deployment data (length and number of deployments) came directly from the parents, there was the possibility that the data might have been reported incorrectly. Incorrect reporting of dates and number of deployments might have affected the overall results of the proposed study. Limitations related to self-reported data are methodological limitations (Guba & Lincoln, 1994).

6. Only one school was used in this study. Because the sample was from only one school, there was limited applicability of findings; however, due to the mobile nature of the military dependent, a diverse aggregate of students was represented in that sample. Limitations related to generalizability are methodological limitations (Guba & Lincoln, 1994).

7. Since the sample came only from a private institution, the demographic makeup of the group might not have been consistent with the general public. Typically, military parents who send their children to a private school are officers and do not represent the lower enlisted. There was the possibility that achievement scores would have been affected differently for students with parents who are officers compared to students whose parents are enlisted personnel. Limitations related to demographic composition of the sample are methodological limitations (Guba & Lincoln, 1994).

8. The interviews used in this study were shorter than 30-60 minutes, due to a novice researcher conducting the interviews. Longer interviews might have yielded a more rich discussion of the influence of deployment on student performance. Limitations related to interview length are methodological limitations (Guba & Lincoln, 1994).

9. Triangulation of data using report card grades would have yielded further support of the study's findings; however, attempting to track student grades from September 11, 2001 to present is not feasible when considering the transient nature of military families moving from one military installation to another. Through these military relocations, cumulative grades from elementary school are daunting to track and might not provide any quantifiable data. Limitations

related to tracking achievement are methodological limitations (Guba & Lincoln, 1994).

Delimitations. The delimitations are the boundaries that have been set by the researcher. The delimitations of this study include:

1. Students, whose parents were deployed, regardless of deployment location, were included in this study to address changes in parental involvement which might affect academic achievement. It is important to establish that to a student it might not matter if the parent is deployed to a different state or to Afghanistan, it is simply that the parent is not available at home to the student. Delimitations related to deployment location are topic-specific delimitations (Guba & Lincoln, 1994).

2. This study did not address parental absences that were less than three months. The focus of the study was to determine what factors of deployment have a perceived influence on achievement. Since deployments less than three months in length did not have a significant influence on the academic achievement scores of students (Angrist & Johnson, 2000; Cozza et al., 2005), the study only focused on deployments at least three months in length. Delimitations related to deployment length are topic-specific delimitations (Guba & Lincoln, 1994).

3. Conducting research at a private school might not have been transferable to the general military student population enrolled in either public school or Department ofDefense Schools because those typically enrolled in private schools tend to be children of officers. Officers and their spouses have been noted to have a higher parental involvement rate than parents who are enlisted soldiers or their spouses (Phelps, Lyons, & Dunham, 2010). By intentionally using a private school, the researcher made the determination based on results of the study that the perceptions of student achievement were directly related to changes in either deployment length or number of deployments and not the level of parental involvement as a result of parental rank or level of parental education. Delimitations related to generalizability are methodological delimitations (Guba & Lincoln, 1994).

Summary and Organization of the Remainder of the Study

Chapter 1 summarizes the problem of how parental deployments influence perceived achievement performance; the current state of research; the gaps in the literature; and the methodological approach this researcher took to conduct this study. The problem identified through this study was that there was limited insight into how

soldiers and their nondeployed spouses living in the Southeastern United States perceive military deployments influence academic performance, if at all. A review of existing research reveals a positive relationship between parental involvement and academic achievement of elementary students (Blanchard & Biller, 1971; Cozza et al., 2005; Hill & Tyson, 2009), Additionally, researchers have studied how situation-specific conditions such as divorce, additional stressors, and reduced parental involvement negatively affect academic achievement (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008).

Although there have been studies of the effects of military deployments on children's and parents' emotional resiliency to stressors (Cozza et al., 2005; Harrison & Vannest, 2008), the impact of parental involvement on academic achievement (Hill, & Tyson, 2009), and the effect of extended deployments (Chandra et al., 2010; Richardson et al., 2011), gaps in the literature neglect to identify which variables related to parental deployment have a perceived influence on academic performance. The two research questions which guided the focus of the study were how, if at all, soldiers who have experienced military deployment perceive their PreK-12th grade children's academic performance is influenced by parental deployment, and how if at all, nondeployed spouses perceive their PreK-12th grade children's academic performance is influenced by parental deployment. Determining how parents perceive deployment influences academic performance advances scientific knowledge by identifying the specific conditions under which parents perceive academic achievement is delayed or inhibited.

The qualitative approach of this study allowed the researcher to have an intimate glimpse at the perceptions (Baxter & Jack, 2008) of parents in regard to how parental

deployment influences their children's academic performance if at all. Interview responses and an open-ended questionnaire completed by the school counselor provided qualitative information for the researcher to analyze (Baxter & Jack, 2008). The descriptive, qualitative study design was the best approach to qualitative research which sought to describe a specific model for the phenomena; in this study, the phenomena, or problem statement, was how, if at all, parental deployment is perceived to influence student performance by the soldier and the nondeployed spouse. Through this overview, the reader has come to understand that in order for schools to increase academic achievement, teachers and administrators need to be cognizant of the barriers that prevent students from achieving their true potential (Hill & Taylor, 2004).

This study differs from previous studies in that it explored how parents who have experienced deployment perceive it affects academic performance of students in a private school in the Southeast. Deployment information was gleaned by interviewing military families who have children enrolled in the site school. The sample included19 families who have experienced deployment and who have students enrolled in Pre-Kindergarten through grade 12 in a private school in the Southeastern United States.

Chapter 2 examines the current literature available regarding parental deployments and their effect on academic achievement. The literature review includes a discussion of the theoretical framework of this study including the confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), and Bandura's (1989) social learning theory/social cognitive theory. Chapter 3 describes the methodology, research design, and procedures for this investigation. Research for this study was conducted January 2017 through May 2017, after obtaining Institutional Review Board (IRB) approval and

included conducting and analyzing interviews. Chapter 4 details how the data was analyzed and provides both a written and graphic summary of the results to include the disaggregation of data based on length of deployment, number of deployments, and changes in parental involvement. Chapter 5 is an interpretation and discussion of the results, as it relates to the existing body of research related to the dissertation topic. Data analysis and interpretation of results was conducted in June through September 2017.

Chapter 2: Literature Review

Introduction to the Chapter and Background to the Problem

Researchers have examined the effects of war on children in the Middle East and Bosnia (Baker, 1991; Brown, 1996; Goldstein, Wampler, & Wise, 1997), but little research is available after the attacks on September 11, 2001, about the impact on children in the United States, particularly regarding the influence of parental deployment on academic achievement. As educators seek out new methods of instruction to increase elementary student success, they must be cognizant of the conditions that affect academic achievement. For instance, researchers have studied how academic achievement is affected by parental involvement (Blanchard & Biller, 1971; Carlsmith, 1964; Cozza et al., 2005; Hill, & Tyson, 2009) and resiliency to stressors (Cozza et al., 2005; Harrison &Vannest, 2008). A positive relationship has been found between parental involvement and academic achievement of elementary students (Blanchard & Biller, 1971; Cozza et al., 2005; Hill & Tyson, 2009), which explains why students whose parents are involved in their education tend to have higher standardized test scores. Understanding the effects of parental military deployment may help teachers and administrators increase student achievement by encouraging and providing opportunities for parental involvement specifically targeting students whose parents are deployed

Additionally, researchers have studied how situation-specific conditions such as divorce, additional stressors, and reduced parental involvement negatively affect academic achievement in some children (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008; Kinley-Albers, 2000). Military deployments have been shown to cause a perceived increase in stress levels of soldiers, their spouses, and their children

(Arandaet al., 2011; Erbes et al., 2011; Gewirtz et al., 2010; Hammelman, 1995; Henry et al., 2011; Reed et al., 2011; Renshaw et al., 2011). In tandem with the perceived increase in stress of some children, further support that student achievement is affected by parental separations can be explained by the numerous studies that have shown that decreased academic achievement is influenced by mobility due to military relocations and deployments in some children (Angrist & Johnson, 2000; Lyle, 2006; Pisano, 1992).

The confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), Bandura's (1989) social learning theory/social cognitive theory, and the Emotional Cycle of Deployment for Families (Esposito-Smythers, et al., 2011) support the understanding that divorce, emotional changes, and military deployments directly affect how some students perform in school, offering support to the prospect that parental deployments might be the cause of decreased academic achievement of military-dependent students. The research questions of this proposed study might provide additional support to the confluence model, attachment theory, and social learning/social cognitive theory by seeking to address how parents perceive academic achievement is influenced by changes within their household as members of their family are removed for extended amounts of time and/or for multiple assignments away from home. With this understanding, it is clear that when students are separated from their parents for extended amounts of time, multiple times, or parental involvement changes due to deployments, parents perceive that their students suffer academically (Bandura, 1989; Bowlby, 1977; Zajonc, 1976).

Prior studies of the effects of military deployment were based on data from World War II deployments (Blanchard & Biller, 1971; Carlsmith, 1964). As researchers

have begun to explore the effects of military deployment on student achievement, gaps in current research have led to the need to investigate the effects of prolonged deployment and multiple deployments on student achievement of military-dependent students enrolled in Pre-Kindergarten through grade 12 (Chandra et al., 2010; Richardson et al., 2011). Understanding the effects of parental deployment might be helpful to teachers, counselors, and administrators as a means of providing insight into how to address changes in achievement when students experience stressors as a result of parental deployments. Schools would be able to use the new knowledge to find methods of reducing those stressors and to provide a support system to help reduce academic delays and obstacles that accompany parental deployment. The focus of this study was to provide a description of the effects of parental deployment on perceived academic achievement from the perspective of the deployed parent and nondeployed parent.

The literature review began with a comprehensive look at previous studies, which included an exploration of the influence of parental deployment on academic achievement. This literature search was limited to peer-reviewed articles using EBSCO, JSTOR, ProQuest, and other academic online databases, using combinations of the keywords such as *(military) deployment, academic achievement, parental involvement, the impact of deployment, deployment length,* and *student achievement*. The literature was surveyed by considering research related to the influence of deployment on soldiers, their spouses, and their children. Deployment stress impacts how the individual soldier interacts with his/her child(ren). The nondeployed parent's reaction to deployment impacts how he/she interacts with the child(ren) while the soldier is away. Finally, deployment was approached as it impacts the child.

This literature review began with an exploration of the theoretical foundations upon which this study evolved. The literature review was then organized by the effects of deployment-related stress on soldiers, their spouses, and their children. The influence of the military deployment on service members explored the stressors and emotional changes associated with deployment. The impact of military deployment on spouses looked at how deployments affect the marital relationship and the health and wellbeing of the nondeployed spouse. The impact of deployment on children took a closer look into the behavior/mental health issues associated with parental deployments, how responses to changes within the home by the nondeployed parent influence student behaviors, how attachment theory explains the influences of parental deployment on student well-being and the influence of parental deployment on the academic achievement of students.

Identification of the Gap

This study evolved by first determining current gaps in literature related to the perceived influence of parental deployments on academic performance. Research indicated that parental deployment has an impact on student academic achievement (Angrist & Johnson, 2000; Engel et al., 2006; Gabriel, 2007; Lyle, 2006; Pisano, 1992); however, in order to address changes in student achievement due to parental military deployment, school personnel must know the specific aspects of parental deployment to target in order to provide appropriate interventions (Hill & Taylor, 2004). Gaps in current research, such as whether the length of the deployment, the number of deployments, or changes in parental involvement are perceived as the most significant factor influencing academic achievement, have led to the need to gain a deeper

understanding of how parents perceive deployments influence student performance (Chandra et al., 2010; Richardson et al., 2011).

Next, the researcher determined the problem as a lack of specific data to determine how the soldier and the nondeployed spouse each feel parental deployments influence academic performance, if at all. Determining how, if at all, parents perceive deployment influences academic performance advances scientific knowledge by identifying the specific conditions under which parents perceive academic achievement is delayed or inhibited. Addressing the guiding research questions led to a better understanding of how parental military deployment influences perceived student academic performance of all military-dependent students enrolled in Pre-Kindergarten through twelfth grade. This information may be helpful to teachers, counselors, and administrators because when students experience stressors such as those that result from parental deployment, schools need to find methods of reducing those stressors and provide a support system to help reduce academic delays and obstacles that accompany parental deployment (Hill & Taylor, 2004).

Prior research examined the effects of divorce, additional stressors, and reduced parental involvement, all of which demonstrated a negative influence on the academic achievement of some students (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008).Other prior research indicated that student achievement is affected by parental separations and decreased academic achievement was influenced by mobility due to military relocations and deployments (Angrist & Johnson, 2000; Engel et al., 2006; Lyle, 2006; Pisano, 1992). Previous studies explored the relationship between parental military deployments and academic achievement (Angrist & Johnson, 2000; Engel et al.,

2006; Lyle, 2006; Pisano, 1992), but have lacked deeper investigation into the specific factors related to parental deployment that influence academic performance. This study extended previous research by exploring how, if at all, both the soldier and the nondeployed spouse perceive deployment influences student performance in terms of influencing their actions before, during, and after deployments. Understanding parent perceptions of deployments will advance scientific knowledge by determining what factors related to parental military deployment that soldiers and their nondeployed spouses believe are most likely to have an influence on academic performance of students whose parents have experienced deployment.

Conceptual Framework

This study is supported by the confluence model, attachment theory, emotional cycle of deployment for families, and social learning theory. The confluence model (Zajonc, 1976) postulates that a child's intellectual development is profoundly influenced by family configuration. Using this model, when a parent is removed from the environment for an extended amount of time, such as for military deployment, a child's intellectual development may be affected (Carlsmith, 1964; Zajonc, 1976; Fowler & Herbert, 1978; Angrist, & Johnson, 2000; Lyle, 2006). Additions to the family, such as through marriage or meaningful relationships with mentors, can positively influence academic achievement (Zajonc, 1976).

The strength of the emotional attachment of children to their mothers also affects student achievement (Bowlby, 1977). Bowlby's (1977) attachment theory explains that the nature and origin of a child's connection to his/her mother influences his actions. Research has shown that infants with a close relationship with their parents are more

secure, more skilled, and have better adaptive functioning as young children than those without close relationships with their parents (Granot &Mayseless, 2001). With respect to military family deployment, attachment theory may help explain a child's anxiety because of the strength of the tie to the nondeployed parent. Esposito-Smythers, et al. (2011) purported, "prolonged separation from a parent figure and poor parental emotional health can negatively affect youth adjustment to the deployment cycle and quality of parental care" (p. 500). Since a large population of two-parent military parents includes the father as the soldier, Bowlby's attachment theory may add information related to how some children may suffer when the mother is emotionally unavailable, for example if she is worried about her husband who is deployed.

How children adjust to changes such as parental deployment can influence their academic achievement. The Emotional Cycle of Deployment for Families (ECDF) framework chronicles the stages through which military service members and their families transition (Esposito-Smythers, et al., 2011). The cycle begins with pre deployment anxiety about the upcoming change. Students tend to act out because of emotional confusion about the "loss" of their parent, regardless of how temporary it might be. Deployment leads to more emotional turmoil by the nondeployed spouse, including anger, isolation, frustration, and a sense of being overwhelmed by the newly added duties of performing the duties of both paternal and maternal roles. As the deployment continues the family experiences the sustainment phase, in which a new routine begins. The family starts to adjust to the new schedules and duties, and a lessening of the stress starts to develop. As the service member prepares to return home, the anticipation of return can cause excitement as well as anxiety about the changes.

Once the service member has returned, the post-deployment phase follows with additional adjustments as re-integration begins. As families progress through the stages of ECDF, students experience emotional changes that may affect their academic performance (Esposito-Smythers, et al., 2011). In this study, ECDF might explain how changes in family stress levels due to the cycle of deployment could influence student academic performance.

Thorndike's (1920) social intelligence theory and Bandura's (1977, 1989) social learning theory/social cognitive theories explain that social intelligence is influenced by perceived self-efficacy. Thorndike's (1920), social intelligence theory is founded on the belief that people have the ability to perceive the motives and behaviors of others and to use that information to make informed choices. Social learning explains that people learn from each other through observation and imitation (Ormond, 1999). Students identified as more successful are those who are more emotionally and socially intelligent (Bar-On, 2005). Additionally, the ability to manage one's emotions as well as to be able to problem-solve leads to academic success (Bar-On, 2005). Once teachers and counselors are able to identify why changes in student achievement occur (such as through changes in perceived self-efficacy due to parental deployments), they would be able to offer interventions to address those changes in an effort to counteract them (Hill & Taylor, 2004).

Research showed that academic achievement was negatively affected by frequent moving due to military relocations for some students (Brown, 1996; Gabriel, 2007). Engel, Gallagher, and Lyle (2006) determined that military deployment negatively affected academic achievement. Gabriel (2007) asserted that date and length of

deployment were major contributors to decreased academic performance. Furthermore, Phelps et al. (2010) concluded that the academic achievement of students with deployed parents during standardized test administration was lower than those without deployed parents. This reduced standardized achievement purports that changes in academic performance were correlated to military deployments.

In the *Military Family Syndrome,* Lagrone (1978) suggested that families are affected by the mobility, deployments, and stressors of the military lifestyle. Military deployments have been identified as a cause of increased stress on soldiers, their spouses, and their children (Hammelman, 1995; Gewirtz et al., 2010; Aranda et al., 2011; Erbes et al., 2011; Henry et al., 2011; Reed et al., 2011; and Renshaw et al., 2011). Based on these studies, it can be determined that the emotional state of the parents and that of the students themselves during the deployment of a parent affects student academic achievement(Hammelman, 1995; Gewirtz et al., 2010; Aranda et al., 2011; Erbes et al., 2011; Henry et al., 2011; Reed et al., 2011; and Renshaw et al., 2011).

In this study, data were collected from interview responses with the soldiers and their nondeployed spouses and an open-ended questionnaire completed by the school guidance counselor. The sample included 19 soldiers and their nondeployed spouses who had students in Pre-Kindergarten through twelfth grade who attended a private school located in the Southeast. Analyzing the relationships using a descriptive, qualitative study design led to new understandings of how, if at all, soldiers and their nondeployed spouses living in the Southeast perceive parental deployments have an impact on student achievement. The research questions aligned with the respective

theories in that the researcher was looking at how frequently a parent may be separated from the student, the length of the separation, and how changes in parental involvement might have influenced the parents' perception of students' intellectual development, which correspond to the confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), emotional cycle of deployment for families (Esposito-Smythers, et al., 2011), and Bandura's (1989) social learning theory/social cognitive theory.

Review of the Literature

According to the Defense Manpower Center Data (2018), there were 1,347,106active duty personnel in 2018. From September 11, 2001 to December 2008, 1.7 million service members had been deployed (United States Department of Veteran Affairs, 2010). Since the attacks on September 11, 2001, extensive military deployments have occurred, leaving children to endure the emotional and academic battle that ensues when a parent is away from home for an extended amount of time in a combat situation. This literature review encapsulates empirical studies that detail the current research about the effects of military deployment on soldiers, their spouses, and their children including how additional stressors, a change in the amount of parental involvement, emotional resiliency, and home environment affect the academic achievement of students. Omissions and gaps in previous research will be used as the basis for the current study.

The purpose of this descriptive, qualitative study was to provide a description of how, if at all, families living in the Southeastern United States who have experienced military deployment perceive parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance. Understanding how academic

performance of military-dependent students is impacted by the parental deployment would help teachers, administrators, and counselors determine the variables most likely to cause a decline in student achievement so they can develop interventions to address the specific needs of students with deployed parents. Knowledge of parental perceptions of these specific indicators of student achievement (length, number of deployments, changes in routines, changes in parental involvement) would allow intervention attempts to be research-based with a focus on the unique needs of the military child (Hill & Taylor, 2004). Based on the findings highlighted within this literature review, it is evident that longer deployments influence student achievement more than shorter deployments (Erbes et al., 2011) and multiple deployments affect academic achievement more than one or no parental deployments (Cutrona, Cole, Colangelo, Assouline & Russell, 1994). Gaps in literature do not address parental perceptions of which aspects of military deployment influence student performance, if any.

The relationship between military deployments and stress. The relationship between military deployments and stress can be illustrated by exploring the effects of deployment on soldiers, their spouse, and their children. The researcher uses results of studies conducted by Gewirtz et al. (2010), Hammelman (1995), and Henry et al. (2011) to examine how deployments influence the stress level of soldiers. Next, the researcher uses results from Renshaw et al. (2011), Henry et al. (2011), Gewirtz et al. (2010), and Mansfield et al. (2010) to examine the effects of deployment on spouse's stress levels. Last, the researcher looks at the effects of deployment on children's stress levels by reviewing data from Aranda et al. (2011), Reed, Bell, and Edwards (2011), and Barnes, Davis, and Treiber (2007).

Effects of deployment stress on soldiers. Gewirtz et al. (2010) surveyed 468 Army National Guard European American fathers who deployed as part of a combat unit in their mixed methods study. Surveys were administered 1 month before deployment and again 1 year after returning from deployment to assess the impact of change in posttraumatic stress disorder (PTSD). Participants completed the PTSD Checklist – Military version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993). Gewirtz et al. (2010) speculated that increases in PTSD symptoms would correlate with lower levels of perceived effective parenting and couple adjustment after deployment than prior to deployment. Gewirtz et al. used examination of sample descriptive data and a paired sample *t* tests to compare changes in PTSD scores. Results indicated that participants had greater perceived parenting challenges upon reintegration, than when they prepared to deploy. Because 60% of the sample had been previously deployed, these soldiers were aware of prior difficulties after deployment, so the results potentially were not limited to the effects of this one deployment. What this developmental-ecological study did reveal, though, is that deployment does influence perceptions of parenting skills (Gewirtz et al., 2010).

PTSD Checklists – Military Version (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993) were also used when Erbes et al. (2011) surveyed 522 National Guard soldiers 2 to 3 months after they returned from deployment to Iraq and again a year later to determine the relationship between soldiers with PTSD and relationship adjustment. Participants were soldiers who were deployed for 16 months. Erbes et al. (2011) purported that soldiers with PTSD would have poorer relationship adjustment than those without PTSD. Erbes et al. used structural equation modeling using a four-factor model.

Results of this quantitative study confirmed their hypothesis and demonstrated a relationship between military deployments and marital strain (Erbes et al., 2011). Because the sample was predominately white soldiers (94%) with at least a 2-year college degree (46%) and were married (64%), results might not generalize to younger, single soldiers with less education, or to soldiers from different ethnic groups.

Hammelman (1995) surveyed 105 soldiers from Texarkana, Texas, to determine the impact of stressors on Army National Guard soldiers deployed to the Persian Gulf. In this quantitative study, surveys included 29 closed-ended questions developed to assess age, gender, marital status, rank, and educational level of participants. Additional questions asked about the number of years the soldier had been in the military, how long they served on active duty, and how far away their deployments were. Hammelman hypothesized that deployment stressors would affect lower ranking soldiers more than higher ranking soldiers, those soldiers stationed overseas more than soldiers who remained stateside, female soldiers more than male soldiers, single soldiers more than married soldiers, and single-parent families more than two-parent families. Hammelman used F tests based on gender, location of deployment, rank, and family composition to analyze data. Results indicated that married soldiers reported suffering more from the stressors than single soldiers, and those with preschool-age children had greater difficulty handling the stressors than other family populations (Hammelman, 1995). In addition, Hammelman purported that the responsibilities of taking care of a spouse and children might have contributed to the stress levels of married soldiers. Furthermore, Hammelman postulated that single soldiers might have less financial responsibilities

than their married counterparts, resulting in a lesser perception of stress by the single soldiers (Hammelman, 1995).

Gewirtz et al. (2010), Erbes et al. (2011), and Hammelman (1995) each used self-reported surveys to determine the perceived level of stress of soldiers after deployment. All three studies surveyed National Guard soldiers who were deployed to combat areas. There were greater perceived parenting challenges upon reintegration from deployment, married soldiers reported suffering from stressors more than single soldiers, and those with young children reported being less resilient to the stressors than those with older children or no children at all. Post-traumatic Stress Disorder (PTSD) symptoms were exacerbated upon reintegration; linking deployment to increased stressors on soldiers (Erbes et al., 2011; Gewirtz et al., 2010; and Hammelman, 1995).Gewirtz et al.'s developmental-ecological study had consistent results with the quantitative studies of Erbes et al. (2011) and Hammelman(1995).Gewirtz et al. (2010), Erbes et al. (2011), and Hammelman (1995) each connect to the current study by indicating changes in stress of the soldier that could influence student performance.

Effects of deployment stress on spouses. When a soldier is deployed, the nondeployed spouse has additional stressors due to additional responsibilities and a sense of uneasiness about the deployment (Renshaw et al., 2011). In 2011, Renshaw et al. examined the relationship of distress of spouses to Secondary Traumatic Stress Disorder (STS/STSD). In this quantitative study, participants included 190 wives of male service members suffering from PTSD. Researchers questioned whether the PTSD measure would show a higher correlation with general distress than with generic symptoms. Renshaw et al. (2011) administered the PTSD Checklist for Civilians (PCL-

C; Weathers, Litz, Herman, Huska, & Keane, 1993) to both the service members and their spouses. Between 21.6% and 42.6% of the wives reported severe levels of STSD, but results could also be attributed to personal stressors, not only those of their deployed soldier (<20% reported their stressors being from their husbands' experiences). Additionally, the study lacks an interview as part of the baseline data to determine if PTSD-like symptoms were directly linked to the traumatic events of the soldier and not of the spouse, since the interview was only part of the post-deployment survey. A source of potential bias in this study was that participants were paid to answer the baseline survey questions ($50 each, $100 for the couple).

Henry et al. (2011) used a mixed-methodology study to determine how traumatic events affected military spouses. Seventeen participants (age 21-52) completed the Traumatic Events Questionnaire (TEQ; Vrana & Lauterbach, 1994), the Purdue Post-Traumatic Stress Disorder Scale-revised (PPTSD-R; Lauterbach &Vrana, 1996), the Trauma Symptom Checklist-40 (TSC; Briere, 1996), and the Dyadic Adjustment Scale (DAS; Spanier, 1976). Participants were then interviewed and the data were compiled by identifying 33 themes then sorting the results into three categories. Data were analyzed using the NUD*IST Version N6. Findings revealed that the non-traumatized partner tended to take on the traumatized partner's roles within the family. Previous research demonstrated that negative or impaired relationship patterns were the cause of the non-traumatized partner taking on new roles, but Henry et al. (2011) found that the ability of couples to cope with traumatic events might have helped reduce stress on the relationship. One limitation of this study was that 10 of the participants had been in their current relationship less than 3 months, which could have influenced results of the study.

Newly married or dating couples might not have the same relationship patterns as couples that have been together for many years (Granot & Mayseless, 2001). Further support comes from Bowlby's (1977) attachment theory which states that attachments within a family influence how each individual member of the family reacts to stress.

Gewirtz et al.'s (2010) developmental-ecological study not only explored the relationship of deployment to the stress level of soldiers, but it also examined the relationship between deployment and the level of stress perceived by the nondeployed spouse. Results of the Alabama Parenting Questionnaire (APQ-9; Elgar, Waschbusch, Dadds, & Sigvaldason, 2007) indicated that participants had greater perceived couple adjustment difficulties upon reintegration, than when they prepared to deploy. Further, results completed by the soldiers indicated a perceived difficulty with couple adjustment and lower levels of effective parenting. One limitation of this study was that the spouses were not surveyed to determine their perception of the level of stress before and after deployment. Findings, however, indicated a strain on the relationship between soldiers and their spouses. Another limitation was that it cannot be determined if parenting and couple-adjustment were affected by, and also affect, PTSD symptoms.

Mansfield et al. (2010) examined how military deployments impacted spouse's mental health. Mansfield's linear risk regression analysis of outpatient mental health records, paired with 6,585,224 outpatient visits by military spouses, revealed higher rates of psychiatric diagnoses, including sleep disorders, anxiety, and depression, while the soldier was deployed than when they were not deployed (Mansfield et al., 2010).The mental health visits were from spouses of active duty Army Service members between the ages of 18 and 48 years old. Through these sessions, it was noted that there was a

27% increase in the use of mental health services by spouses when the soldier was deployed longer than 11 months (Mansfield, 2010).

Renshaw et al. (2011), Henry et al. (2011), Gewirtz et al. (2010), and Mansfield et al. (2010) evaluated the effects of military deployment of soldiers on the mental wellness of their spouses. In Gewirtz et al.'s developmental-ecological study (2010) the use of an interview of the spouses increased its validity and reliability, whereas Renshaw et al. (2011), Henry et al. (2011), and Mansfield et al. (2010) did not survey the spouses directly in their quantitative studies. Regardless of how the surveys were conducted, the results of all three studies concluded that spouses of deployed soldiers had greater difficulty with couple adjustment, had symptoms of PTSD, displayed less effective parenting than their nondeployed counterparts, and reported more incidence of psychiatric disorders. Renshaw et al. (2011) proposed that these results could be attributed to personal stressors and not only those of their deployed soldier. It should be noted that the length of the relationship could influence the results of such testing (Bowlby, 1977; Granot & Mayseless, 2001) and should be considered in future research.

A limitation of the study conducted by Henry et al. (2011) led to the identification of a need to explore whether the amount of time a family has been together affects the level of stress experienced by the nondeployed partner and their children. This can be applied to the current study in that the emotional attachment of children to their parents influences the perceived level of stress of a parental deployment (Bowlby; 1969, 1977). More research into how the deployment of soldiers affects others would offer new insight into the lives of military families and how this affects student

achievement. Future research into the effects of length of deployment on spouses' well-being may be warranted (Mansfield et al., 2010).

Effects of deployment stress on children. Military deployment not only affects the soldier and the nondeployed spouse, but it also affects their children (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Erbes et al., 2011; Gewirtz et al., 2010; Hammelman, 1995; Henry et al., 2011; Reed et al., 2011; and Renshaw et al., 2011). Aranda et al. (2011) used parent reports from the Pediatric Symptom Checklist (PSC) and youth self-reports from Y-PSC to determine if children of deployed parents demonstrated more symptoms of psychosocial morbidity than children without a deployed parent. Participants in this descriptive study included 106 parents (53 with a parent deployed and 53 with no deployed soldiers) and 72 children (36 with a deployed parent and 36 without a deployed parent) from a northwest U.S. military treatment facility. Results indicated that 1 in 4 military children had increased symptoms of psychosocial morbidity related to parental deployment.

Children with a deployed parent also reported more psychosocial difficulties than those without a deployed parent (Aranda et al., 2011). Arandaet al.(2011) purport that gender and age had no significant influence on the psychosocial level of the children. Comparisons using *t* tests and one-way, between-subjects analysis of variance between deployed, nondeployed, and civilian families indicated that military, whether deployed or nondeployed, suffered from higher stress levels than their civilian counterparts (Arandaet al., 2011). The researchers suggested a future study of the effects of the number of deployments on school-age children to determine if there is a relationship between multiple deployments and increased perceived stress of children. The current

study will further explore the relationship between multiple deployments and the perceived academic achievement of children.

Reed, Bell, and Edwards (2011) examined the relationship between parental military deployment and the well-being of children. Researchers used cross-sectional data from 8th, 10th, and 12th grade students using the Washington State Healthy Youth Survey (2008). The quantitative, correlational study concluded that there was an increased chance of impaired well-being in students whose parents are deployed. Eighth grade girls reported a higher percentage of thoughts of suicide when parents were deployed and eighth grade boys reported a lower quality of life and a higher rate of thoughts of suicide Tenth and twelfth grade girls with deployed parents reported lower quality of life than those with nondeployed parents. Reed, Bell, and Edwards used one-way analyses of variance, partial F tests, and multivariable logistic regression analysis in this study. Because all of the data were self-reported, the results of this survey could be biased due to under-reporting of negative indicators such as drinking, drug use, or thoughts of suicide. Including reports from teachers and parents might rectify this discrepancy.

Barnes, Davis, and Treiber (2007) compared the perceived level of stress of adolescents with parents deployed to Operation Iraqi Freedom (OIF) and those with nondeployed parents in their exploratory study. Participants included 149 students in an inner city high school in Augusta, Georgia. Seventy-four percent of the students were non-Caucasian, and 43% were recipients of free/reduced lunch. Participants completed the Psychosocial Resources Scale (PRS) at the onset of OIF and again at its conclusion. After accounting for families that moved or who did not complete post deployment PRS,

121 subjects were included (53 nondeployed military, 20 deployed, and 48 civilian). Barnes, Davis, and Treiber (2007) used multivariate analysis of covariance and univariate analyses of covariance in their analysis. Results indicated that adolescents with deployed parents had a significantly higher incidence of posttraumatic stress. Barnes, Davis, and Treiber (2007) questioned whether the results would have been the same if the demographics had been a little more diverse. It was also postulated that the media coverage of OIF hostilities might have added to the level of perceived stress of adolescents (Barnes, Davis, &Treiber, 2007).

Whether the data were collected from parent reports or was self-reported by children, the results purported a distinct relationship between parental deployment and increased levels of stress of children (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011). Students reported increased thoughts of suicide, depression, and lower quality of life when their parents were deployed (Reed et al., 2011). Although Aranda et al. (2011) found no correlation between gender, age, and level of stress, Reed, Bell, and Edwards (2011) found that girls reported higher thoughts of suicide than boys, and younger students reported lower quality of life than older students with deployed parents. Regardless of age or gender, all children of deployed parents were identified to be at risk for increased psychosocial distress compared to their nondeployed peers (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011).

A synthesis of the studies on the effects of stress on soldiers, spouses, and children reveals that military deployment has an adverse effect on the well-being of the family, especially when the deployment is to a combat area (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Erbes et al., 2011; Gewirtz et al., 2010; Hammelman, 1995;

Henry et al., 2011; Reed et al., 2011;Renshaw et al., 2011). Soldiers reported more post-traumatic stress disorder (PTSD) symptoms and parenting challenges (Gewirtz et al., 2010; Erbes et al., 2011; Hammelman, 1995), spouses reported more difficulty with couple adjustment and increased symptoms of PTSD (Renshaw et al., 2011; Henry et al., 2011; Gewirtz et al., 2010), and children reported increased thoughts of suicide and higher levels of stress (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011) during military deployments. Research is still needed to determine if the level of stress of children is affected by the length of the parental deployment or the number of parental deployments during a student's enrollment in school (Pre-Kindergarten to grade 12). Additional research should explore the relationship between family factors such as parental involvement, expectations, home environment and the academic achievement of students.

Relationship between family factors and academic achievement. The relationship between family factors and some students' academic achievement can be illustrated by exploring the effects of parental involvement and home environment on academic achievement. The researcher uses results of studies conducted by Perillo (2000), Hsu et al. (2011), Lyle (2006), and Fowler and Herbert (1978) to explore how parental involvement influences academic achievement. Next, the researcher uses results of research conducted by Jacobs and Harvey (2005), Cutrona, Cole, Colangelo, Assouline and Russell (1994), and Granot and Mayseless (2001) to review the influence of home environment on academic achievement.

Effects of parental involvement on academic achievement. To determine if increased parent involvement resulted in higher achievement scores compared to lower

parent involvement, Perillo (2000) used Comprehensive Test of Basic Skills (CTBS) scores, report card scores, school records, and parent surveys. In this quantitative study, surveys were distributed to 200 parents of students in grades 7-12 in Department of Defense Dependent High Schools in Europe during SY 1997-1998 and SY 1998-1999. Perillo (2000) used multivariate analysis of variance to analyze differences in student achievement. Results indicated that there was no statistical difference between mean scores of those students with high parent involvement compared to students with low parental involvement.

Hsu, Zhang, Kwok, Li, and Ju (2011) included 8,108 seventh grade students (4,164 males and 4,002 females) from the Taiwan Education Panel Survey (TEPS) to determine the relationship between adolescents' perception of parental involvement and academic achievement in their qualitative study. Parents and children completed surveys in addition to the TEPS administration of a standardized test of achievement. Findings showed that a mother's involvement in the student's education influenced academic achievement more than a father's involvement.

Another study that examined the impact of parental absence on children in military families was Lyle's (2006) study. Participants included 13,000 students from Texas schools. Lyle (2006) used personnel data from the U.S. Army and students' math scores from the Texas Assessment of Academic Skills (TAAS). Lyle (2006) used ordinary least squares (OLS) and two-stage least squares (2SLS) estimates of the impact of parental absences. Maternal separations had a higher effect on academic achievement than paternal separations based on the results from the study. Additionally, this

quantitative non-experimental study revealed that when the length of the deployment was longer than seven months there was a significant drop in academic achievement.

An earlier quantitative study by Fowler and Herbert (1978) used 12 educational preparedness measures to assess the effects of continued parental absence on academic achievement. One hundred twenty African American Kindergarten students (60 father-present, 60 father-absent) from Charlottesville, Virginia were assessed using Zajonc and Markus's Confluence Model. Participants were administered the Early Detection Inventory (McGahan & McGahan, 1967, 1973), the Social Psychological Adjustment Inventory (Fowler & Crowe), and the Metropolitan Readiness Test (Hildreth, Griffiths, &McGowran, 1969). Two years later, teachers administered the Science Research Associates' (1971) Assessment Survey (SRA). Fowler and Herbert used multivariate and univariate analyses of covariance to analyze data. The results only partially supported the confluence model predictions because it did not offer social and emotional connections as to why the father absence was noted. Context of the absence and social structure of the family would have different cognitive relationships and influence. When parents are deployed, the level of academic intelligence is changed only during that timeframe, whereas changes in family structure due to death or divorce might have different results because of the length of the absence.

Researchers such as Perillo (2000), Lyle (2006), and Hsu et al. (2011) used surveys to explore student perceptions of the impact of parental involvement on academic achievement. Although Perillo's (2000) research did not confirm the relationship between parental involvement and academic achievement, other researchers have shown that parental involvement influences academic achievement in the United

States and overseas (Fowler & Herbert, 1978; Lyle, 2006; and Hsu et al., 2011). In addition, Lyle's (2006) study used military dependents to track the effects of military deployments on parental involvement. These studies explored parental involvement in Kindergarten, middle school, and high school, but more research is needed to determine the effects of parental involvement of military-dependent students. One could posit that the amount of parental involvement has a varied effect based on the age of the student or the level of attachment between parents and their children. Also, when the level of involvement is changed one could predict that the students might experience academic variance based on their preconceived notion that parental involvement affects academic achievement.

Effects of the home environment on academic achievement. To determine how the home environment affects academic achievement, Jacobs and Harvey (2005) surveyed 432 parents (110 from *high* achieving schools, 173 from the *medium* achieving schools, and 149 from *low* achieving schools) and 534 students in 12th grade (129 from high achieving schools, 180 from middle achieving schools, and 225 from low achieving schools) in Australia. Researchers used the Parent Attitudes to School Environment Questionnaire (PASEQ) to assess parents' attitudes and expectations of the role of school in this quantitative study. Jacobs and Harvey (2005) used multiple regression analyses to analyze data related to parent expectations of their children's educational level. Results indicated that parents of children in high achieving schools desired and expected higher levels of academic achievement than parents with children in the middle or low achieving schools. Some students with higher academic achievement were more likely to come from home environments in which the parents had attended higher

education and had higher expectations for their children. This is supported by the confluence model, which explains that the level of education within the household affects student achievement (Zajonc, 1976). Although Jacobs and Harvey (2005) conducted their research in Australia, translating this study to the United States might be beneficial to draw upon ways in which parents' attitudes and expectations of the role of school might influence student success.

Cutrona, Cole, Colangelo, Assouline and Russell (1994) explored the relationship between perceived parental social support and student academic achievement. Participants included 418 undergraduates at the University of Iowa (234 females, 165 males, and 19 who did not indicate their gender). Students completed the Social Provisions Scale – Parent Version (SPS-P) at the beginning of the year to assess their perception of social support from their parents. American College Testing Assessment Program (ACT) scores and cumulative grade point averages (GPAs) were used to determine academic achievement. Researchers hypothesized that perceived parental social support would lead to increased academic achievement. Cutrona, et al. (1994) used structural equation modeling with latent variables and an ordinary least squares regression model within their correlational study. Results showed that parental support had a cumulative effect on some students' academic achievement.

Granot and Mayseless (2001) researched the relationship between attachment security and the level of adjustment of middle school students. Participants included 113 fourth and fifth grade students (48 males and 65 females) in Israel. Researchers videotaped students completing the Doll Story Completion task. Information gleaned from completion of the task was used to ascertain the student's quality and security of

attachment to their mothers. Adjustment was determined by using students' GPA and a cognitive achievement rating scale completed by the student's homeroom teacher. Pearson correlations, ANOVA, and four separate MANOVAs were conducted as part of this quantitative study. Researchers concluded that students who felt secure because of their parental attachment tended to demonstrate better adjustment in school as indicated through intellectual, social, emotional, and behavioral responses (Bowlby, 1977). Interestingly, there was no correlation between secure attachment and cognitive achievement after controlling data for gender. Translating conclusions of this study conducted in Israel to ones conducted in the United States might provide insight into American students and the attachment theory.

Jacobs and Harvey (2005), Cutrona, Cole, Colangelo, Assouline and Russell (1994), and Granot and Mayseless (2001) all explored how student achievement is related to the social bonds between parent and child. Parents' attitudes and expectations, perceived parental social support, and attachment security all contribute to how a student copes with parental military deployment (Jacobs & Harvey, 2005; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994; Granot & Mayseless, 2001). How academic achievement of military-dependent students is influenced by the length of the deployment, the number of deployments, and parental involvement can be directly related to their social attachment to their parents (Bowlby, 1977).

Relationship between students' mental well-being and academic achievement. The relationship between students' mental well-being and academic achievement can be illustrated by exploring the relationship between emotional intelligence and deployment on academic achievement. The researcher uses results of

studies conducted by Fatum, (2008), Nasir and Masrur (2010) and Nelson (2009) to explore how emotional intelligence influences academic achievement. Next, the researcher uses results of research conducted by Gabriel (2007), Engel, et al. (2006), and Phelps et al. (2010) to review the influence of deployment on academic achievement.

Relationship between emotional intelligence and academic achievement. To determine the relationship between emotional intelligence and students' academic achievement, Fatum (2008) used the Six Seconds Emotional Intelligence Assessment for Youth (SEI-YV) and the California Standardized Testing and Reporting program (STAR) achievement tests. Fatum's (2008) mixed-methods study included 27 students from an alternate school setting (13 females and 14 males) and 50 from a traditional school setting (28 females and 22 males). Fatum revealed qualitative data from two focus groups (one high and one low) using open-ended questions about EI in each focus-group session and quantitative data from correlational analysis. This study presents quantitative data, using the SEI-YV, elementary children's EI competencies. Results of Fatum's (2008) study "validated the relationship between high emotional intelligence and academic achievement" (p. 190).

Nasir and Masrur (2010) also investigated the relationship between emotional intelligence and academic achievement in their correlational study. Researchers administered a survey to 132 randomly selected students (50% male, 50% female with a mean age of 24.14 years) to examine the relationship between emotional intelligence (EI), gender, age and academic achievement of students of International Islamic University Islamabad (IIUI). Academic achievement was measured by students'

Cumulative Grade Point Average (CGPA). Emotional intelligence was measured using results from the Bar-On Emotional Quotient Inventory (EQi). Correlation analysis, regression analysis and *t* tests were performed in Nasir and Masrur's (2010) study to determine if a relationship exists between emotional intelligence and academic achievement. Results indicated a significant correlation between emotional intelligence and academic achievement. No significant correlation was found between age and emotional intelligence (Nasir &Masrur, 2010). This lack of relationship between age and emotional intelligence demonstrates that deployment stress is not dependent upon age, but rather on the resiliency of the child due to his or her emotional attachment to the deployed parent (Bowlby, 1977).

Nelson (2009) conducted a quantitative, correlational study of 142 eleventh grade students to assess the relationship between the results of the Mayer, Salovey, and Caruso Emotional Intelligences Test: Youth Version (MSCEIT:YV) and the Virginia Standards of Learning End-of-Course Reading Assessment in an effort to answer the research question, "Is emotional intelligence a predictor of academic achievement?" The study revealed a significant relationship between Emotional Intelligence and Academic Achievement. Emotional Intelligence affects student academic achievement because when the students are able to cope with stressors they are more likely to have higher achievement (Nelson, 2009).

Nelson (2009), Nasir and Masrur (2010), and Fatum (2008) found that emotional intelligence was a predictor of academic achievement. Students have varying levels of emotional intelligence (Bowlby, 1977) in regard to parental deployments. Analyzing how emotional intelligence influences stress allows the researcher to explore the

relationship between attachment bonds and their impact on achievement (Bowlby, 1977). If school personnel want to increase academic achievement, they should assess emotional intelligence and coping capabilities of students with deployed parents to determine the most effective method of supporting these students.

Effects of deployment on student academic achievement. Deployment during wartime has increased the anxiety of some military children, moving their fears from whether or not they will fit in at the new school, to whether or not their parent will return home from the deployment (Gabriel, 2007). Gabriel (2007) conjectured that this added anxiety might lead to decreased academic achievement. Gabriel (2007) compiled *TerraNova* standardized test scores for students in third through ninth grade at each of Fort Bragg, North Carolina's schools from 1998-2006. According to Gabriel (2007),

> The children of the soldiers in these elite units come under more stress, and sooner than those military children in any of the other eight areas in the Continental United States that have large military centers located near their city or town. (p. 79)

Data from this mixed-methods study concluded that the students showed an increase and not a decrease in academic achievement during times of deployment. Gabriel (2007) included descriptive and analytical, quantitative, and qualitative procedures. This 8-year study resolved that deployment did not negatively affect academic achievement, but when reviewing the yearly growth, however, there was a 2.5 percentile growth before September 11, 2001 compared to only a 0.23 yearly increase after September 11, 2001. This indicated that there was a slowing of the rate of academic growth during these times of parental deployment. Based on the incongruence

of the national test scores which showed an increase, and the growth rate slowing, Gabriel (2007) speculated that, “The military school system (DoDEA) seems to have provided sufficient and effective interventions to promote academic achievement and social/emotional development among the children of military members in combat” (p. 111). This study contradicted previous works in this field (Engel et al., 2006; Coza, Chun, & Polo, 2005). Mass public attention to the military gleaned after the terrorist attacks of September 11, 2001 could account for increased support and interventions during this timeframe.

Engel, Gallagher, and Lyle (2006) also collected data using student achievement scores from the *TerraNova Multiple Assessment*, a norm-referenced test administered to military students in Department of Defense Educational Activity (DoDEA) schools. The sample included 56,000 school-age children who were enrolled in DoDEA schools between 2002 and 2005. Military deployment dates and locations were tracked using hostile fire pay (HFP) data. HFP is the military’s method of tracking soldiers who are deployed to high-risk areas in order to provide higher pay during that timeframe. HFP was combined with student demographics and test data in relation to the testing dates. Academic data and parental service record data were combined to determine the relationship between achievement and times of parental deployment. Engel et al. (2006) use ordinary least squares (OLS) and two-stage least squares (2SLS) estimates of the impact of a parent’s deployment in their quantitative study. Engel et al. (2006) showed similar results to previous studies by Blanchard and Biller (1971), and Angrist and Johnson (2000) which correlated the amount of parental involvement to academic

success; thus proving that increased parental involvement resulted in increased academic achievement.

Engel et al. (2006) effectively documented the use of controlled conditions to analyze the effects of parental deployment on academic achievement. Information regarding length of deployment and timeframe added to previous findings. Additionally, this study was the first to explore deployment effects after 9/11. During extended parental deployments, elementary-age students scored lower than secondary-age children. These cumulative effects did not diminish, but rather lingered, indicating that parental deployment can cause students to permanently fall behind both their military and non-military dependent peers (Engel et al., 2006). Additionally, children whose parents were deployed during the time that the *TerraNova* testing was administered scored 0.92 percentage points lower in math than children with nondeployed parents; causing the date of the deployment to be the highest single-effect on student achievement (Engel et al., 2006).

Several limitations should be pointed out, based on the studies of Engel, Gallagher, and Lyle (2006) and Gabriel (2007). Deployment may affect different children in different ways, indicating that not all children might have decreased grades due to parental deployment. Some students might resort to inappropriate behaviors, but maintain academic integrity. *TerraNova* results do not rely solely on technical ability, but also are dependent upon good problem-solving skills and testing comfort level of the student. If students are anxious or distracted due to parental deployments, then results might be considerably lower than actual academic ability. Results might be skewed because the parents who volunteer to deploy may have lower academic expectations for

their children. Also, parents who attempt to prepare their children for the deployments might be the ones trying to avoid family separation due to deployment. In order to truly understand the effects of military deployment, educational leaders must explore the changes in academic achievement when parents are deployed multiple times, or for extended deployments lasting longer than 1year.

With the multiple deployments during Desert Shield/Desert Storm and after 9/11, each of which lasted approximately eighteen months, Phelps et al. (2010) posited that these extended parental absences would affect the academic achievement of the soldiers' children. *TerraNova Multiple Assessment* data from 2006 to 2007 were analyzed in this study (Phelps et al., 2010). The study began with 283 participants, but to account for missing data the researchers omitted more than half of the participants, resulting in only 137 fourth and fifth grade students in the Mid-South being used in the study. Results of the Phelps et al. (2010) study concluded that students with a deployed parent during both academic years of the study scored lower than those whose parent was deployed only during the first year of the study. Additionally, students whose parents did not deploy either year scored higher than those whose parents deployed either the first or the second year.

Data used in the Phelps et al. (2010) study included *TerraNova* results from two local schools, which were not housed on a military installation; however, a high proportion of military-dependent children were enrolled there. There was a minimal number of participants who had a deployed parent (N=28) compared to the total population (N=137). These two factors might lead one to find the results of this study

too limited for reliability to be established. Further research should be conducted to account for these limitations and to check for effects of extended deployments.

Engel, Gallagher, and Lyle (2006), used data from Hostile Fire Pay and *TerraNova* results to determine the relationship between times of parental deployment and academic achievement from 2002 to 2005, Gabriel (2007) examined the relationships between parental deployment and academic achievement from 1998-2006, and Phelps et al. (2010) examined the effects of extended deployment and multiple deployments from 2006 to 2007. Each of the studies proposed to assess the effects of military deployment on academic achievement in an effort to improve student success. The *TerraNova* was used as the academic achievement indicator for all three studies.

Researchers such as Engel, et al. (2006); Gabriel (2007); and Phelps et al. (2010) have paved the way for research into the effects of deployment on academic achievement. Engel, et al. (2006), and Phelps et al. (2010) concluded that deployment had a negative impact on the academic achievement of elementary students and this effect was intensified when deployments were extended for longer periods of time. Contrary to these findings were those of Gabriel (2007), who found that parental deployment did not decrease academic achievement, but that the rate of growth of the participants was slowed during parental deployments. These skewed results could be attributed to the mid-study change of *TerraNova* testing material in 2002. Further research is warranted to assess the effects of parental deployment on perceived academic achievement and to offer possible interventions.

Methodology

Various methodologies and designs have been used in prior empirical research related to this dissertation study. Several quantitative studies have been conducted on the topic.

Quantitative studies. Reed, Bell, and Edwards (2011) examined the relationship between parental military deployment and the well-being of children. Results showed there was an increased chance of impaired well-being among students whose parents were deployed. Perillo (2000) analyzed differences in student achievement. In this quantitative study, surveys were distributed to 200 parents of students in grades 7-12 in Department of Defense Dependent High Schools in Europe during SY 1997-1998 and SY 1998-1999. The intent of Perillo's (2000) study was to determine the effects of parental involvement (or lack of) on achievement of military students. Results indicated that there was no statistical difference between mean scores of those students with high parent involvement compared to students with low parental involvement.

Another study that examined the impact of parental absence on children in military families was Lyle's (2006) study. Lyle (2006) used ordinary least squares (OLS) and two-stage least squares (2SLS) estimates of the impact of parental absences due to military deployments. In Lyle's study, maternal separations had a higher effect on academic achievement than paternal separations. Additionally, results showed that when the length of the deployment was longer than seven months there was a significant drop in students' academic achievement. Although Perillo's (2000) research did not confirm the relationship between parental involvement and academic achievement, other quantitative studies have shown that parental involvement influences academic

achievement in the United States and overseas (Fowler & Herbert, 1978; Lyle, 2006; and Hsu et al., 2011).

Mixed methods. Gabriel's (2007) mixed-methods study concluded that the students showed an increase and not a decrease in academic achievement during times of deployment. Engel et al. (2006) use ordinary least squares (OLS) and two-stage least squares (2SLS) estimates of the impact of a parent's deployment in their quantitative study. Results showed that increased parental involvement resulted in increased academic achievement. Phelps et al.'s (2010) quantitative study included *TerraNova* data to examine the effects of extended deployment and multiple deployments from 2006 to 2007. Results of the Phelps et al. (2010) study concluded that students with a deployed parent during both academic years of the study scored lower than those whose parent was deployed only during the first year of the study. Additionally, students whose parents did not deploy either year scored higher than those whose parents deployed either the first or the second year.

Qualitative studies. Chandra, Martin, Hawkins, and Richardson (2010) used a qualitative, cross-sectional approach to explore how 148 teachers and administrators at 12 schools serving military children perceived students coped with parental absence, changes in responsibility, and mental health while parents were deployed for military purposes. Results indicate that some children's anxiety impacted their ability to function well at school. Faber, Willerton, Clymer, MacDermid, and Weiss (2008) used a longitudinal descriptive approach to examine how 34 reservists, spouses, and family members dealt with a 15 month deployment to Iraq in 2003. Children of the soldiers were reported as having struggled with parental absence and changing roles upon

reintegration. Huebner and Mancini's (2005) study focused on 107 military dependent adolescents who experienced parental deployments. Huebner and Mancini's results purport that children who felt supported by others had greater resiliency than those without additional supports. In 2007, Huebner, Mancini, Wilcox, Grass, and Grass conducted an observational study using 107 children who experienced parental deployments. Results of Huebner et al.'s 2007 study posit that some adolescents experience increased anxiety and depression due to parental deployments.

Instrumentation

Instruments. Perillo (2000) used parent surveys to explore perceptions of the impact of changes in parental involvement due to military deployment on academic achievement. Researchers such as Perillo (2000) and Erbes et al. (2011)used surveys to explore perceptions of the impact of changes in parental involvement due to military deployment on academic achievement. In contrast, Erbes et al.'s study surveyed National Guard soldiers who were deployed to combat areas. The instrumentation used in the above studies appropriately revealed data directly related to the research questions within their studies. Erbes et al. (2011) used self-reported surveys to determine the perceived effects of deployment on student performance.

Interviews and surveys allowed the researchers to gain intimate access to the inner workings of the participants' feelings on the effects of deployment on student academic achievement. Use of surveys and interviews allows participants to open the door to deeper investigation into the effects of deployment.

Aranda et al. (2011), Barnes et al. (2007), and Reed et al. (2011) demonstrated that whether the data was collected from parent reports or was self-reported by children,

the results purported a distinct relationship between parental deployment and increased levels of stress of children. Reed, Bell, and Edwards (2011) examined the relationship between parental military deployment and the well-being of children using cross-sectional data from 8th, 10th, and 12th grade students using the Washington State Healthy Youth Survey (2008). Researchers such as Perillo (2000) and Engel et al. (2006) used surveys to explore student perceptions of the impact of parental involvement on academic achievement.

Gabriel (2007), Engel et al. (2006), Perillo (2000), and Phelps et al. (2010) each used standardized assessment data to determine the effects of deployment on student achievement. Perillo (2000) used the Comprehensive Test of Basic Skills (CTBS) scores. Gabriel (2007) compiled *TerraNova* standardized test scores for students in third through ninth grade at each of Fort Bragg, North Carolina's schools from 1998-2006.Engel et al. (2006) and Phelps et al. (2010) also collected data using student achievement scores from the *TerraNova Multiple Assessment*. A limitation should be pointed out in all three of the studies which used the TerraNova Multiple Assessment: *TerraNova* results do not rely solely on technical ability, but also are dependent upon good problem-solving skills and testing comfort level of the student. A limitation of using standardized assessments is that periodically they are updated and studies using these assessments must account for changes in the assessment tool.

Summary

The studies presented in this literature review showed that changes in the level of stress in children (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011), parental involvement (Cutrona, Cole, Colangelo, Assouline& Russell; 1994;

Hsuet al., 2011; Perillo, 2000), and emotional intelligence (Fatum, 2008) negatively influence student academic achievement. Additionally, military deployments have been linked to increased stress for soldiers, their spouses, and their children (Aranda et al., 2011; Barnes, and Davis, &Treiber, 2007; Erbes, Polunsy, & Compton, 2011; Gewirtz et al., 2010; Hammelman, 1995; Henry et al., 2011; Reed et al., 2011; Renshaw et al., 2011). Soldiers reported more symptoms of Post-traumatic stress disorder PTSD and parenting challenges (Erbes, Polunsy, & Compton, 2011; Gewirtz et al., 2010; Hammelman, 1995), spouses reported more difficulty with couple adjustment and increased symptoms of PTSD (Gewirtz et al., 2010; Henry et al., 2011; Renshaw et al., 2011), and children reported increased thoughts of suicide and higher levels of stress (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011) during military deployments. This current study explores whether changes due to parental deployment length, number of deployments, and/or changes in parental involvement due to deployments might influence perceived academic achievement. A sample of 19 military dependent families from a small private school in the Southeastern United States who have experienced deployment allows the researcher to study the phenomena of military deployment in a manageable environment.

When soldiers are deployed, the nondeployed parents might become more focused on what is happening on the military front, than on the home front. Nondeployed parents might begin to reduce the amount of parental involvement in schools because they have had to take on the additional responsibilities that the deployed spouse is no longer able to do. The effect of the change in parental involvement on academic achievement can be supported by the attachment theory, in that the bond

between parent and child influences the decisions children make, personally and academically (Bowlby, 1977). Additionally, the confluence model (Zajonc, 1976) expounds that when there is a change in the family structure there is a change in the amount of academic intelligence within the household for the length of the deployment. Changes in parental involvement and attachment inform the research questions regarding how, if at all, soldiers and their spouse perceive their PreK-12th grade children's academic performance is influenced by parental deployment.

Another factor that contributes to decreased academic achievement is the home environment (Jacobs & Harvey, 2005). During parental deployments, the home environment switches to a place filled with tension and anxiety, instead of one in which children retreat for solace and care (Cutrona, Cole, Colangelo, Assouline & Russell, 1994). As families progress through the stages of the Emotional Cycle of Deployment for Families (ECDF), students experience emotional changes that may affect their academic performance (Esposito-Smythers, et al., 2011).

Further research is needed to determine how, if at all, perceived student academic achievement is affected by a decrease in the level of parental involvement and academic intelligence that results from military deployments, nondeployed parental anxiety, and stress. Lyle (2006) revealed, however, that when the length of the deployment was longer than seven months there was a significant drop in academic achievement. The current study explored how, if at all, the parental deployment influenced perceived academic performance of the students. Using a qualitative design allowed the researcher to delve deeper into why parents feel military deployments might or might not influence student performance (Baxter & Jack, 2008; Marczyk, DeMatteo,

& Festinger, 2005). Additionally, the use of personal interviews allowed the researcher to gain an intimate connection between the participants in the study to better understand their perceptions of the influence of military deployments on academic achievement. Furthermore, the use of member checking in interviewing ensured accuracy and integrity (Krefting, 1991).

Future studies investigating the relationship between military deployment and perceived academic performance would be beneficial to provide a means of increasing the academic success of students, especially during times of extended parental deployment and lengthy deployments. By analyzing how, if at all, families living in the Southeastern United States who have experienced deployment perceive their children's academic performance is influenced by deployments, schools will be able to provide effective interventions for combating the obstacles that military children face. Once these obstacles are addressed teachers, administrators, and counselors will be able to effectively empower students and parents, which will lead to increased academic achievement.

Chapter 3: Methodology

Introduction

The purpose of this descriptive, qualitative study was to provide a description of how, if at all, families living in the Southeastern United States who have experienced military deployment perceive parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance. Data collection included conducting and analyzing interviews of military parents were deployed for more than three months with students enrolled in Pre-Kindergarten through twelfth grade at a private school in the Southeastern United States and an open-ended questionnaire completed by the school counselor.

Researchers have studied the effects of decreased academic achievement as a result of mobility due to military relocations and deployments (Angrist & Johnson, 2000; Engel et al., 2006; Lyle, 2006; Pisano, 1992) and how situation-specific conditions such as divorce, additional stressors, and reduced parental involvement negatively affect academic achievement (Cozza et al., 2005; Gabriel, 2007; Harrison &Vannest, 2008; Kinley-Albers, 2000). The current study sought to explore how, if at all, parental deployments affected perceived academic performance.

Chapter 3 describes the methodology, research design, and procedures for this investigation. Research for this study was conducted January 2017 – May 2017, after obtaining Institutional Review Board (IRB) approval. The current study included conducting and analyzing interviews of military parents were deployed for more than three months with students enrolled in Pre-Kindergarten through twelfth grade at a

private school in the Southeastern United States and an open-ended questionnaire completed by the school counselor.

Statement of the Problem

It was not known how, if at all, families who have experienced military deployment feel parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance. There have been studies of the effects of military deployments on children's and parents' emotional resiliency to stressors (Cozza et al., 2005; Harrison &Vannest, 2008), the influence of parental involvement on academic achievement (Hill, & Tyson, 2009), and the effect of extended deployments (Chandra et al., 2010; Richardson et al., 2011), but in order for schools to improve academic achievement, teachers and administrators need to understand which variables related to parental deployment most influence perceived student achievement.

Parental deployments continue to be a part of the military child's regular routine (Office of the Assistant Secretary of Defense-Public Affairs, 2013, 2013). By 2010, more than 2 million soldiers had been deployed as part of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIA) (Department of Defense, 2010). As researchers have begun to explore the effects of military deployment on student achievement, gaps in current research have led to the need to investigate the effects of prolonged deployment and multiple deployments on perceived student achievement (Chandra et al., 2010; Richardson et al., 2011). It is important for school personnel to understand the potential influence of parental deployments on academic achievement in order to counteract those effects (Hill, & Tyson, 2009). This study explored how soldiers and nondeployed spouses perceive parental deployment influences academic

achievement of military-dependent students in Pre-Kindergarten through grade 12, if at all.

Research Questions

The following research questions were explored in this descriptive, qualitative study, which sought to provide a description of how parental deployment impacts academic performance, if at all, from the perspective of the soldier and nondeployed spouse.

R1: How do soldiers who have been deployed perceive their deployment influenced their children's academic performance?

R2: How do spouses of soldiers who have been deployed perceive the deployment influenced their children's academic performance?

In the current study, data sources included interview responses from the soldier and the nondeployed spouse, an open-ended questionnaire completed by the school guidance counselor, and archived student grades from report cards provided qualitative information for the researcher to heuristically analyze data regarding the perceptions of soldiers and their spouses (Baxter & Jack, 2008).

The sample included 19 soldiers who have experienced deployment and their nondeployed spouses who have students in Pre-Kindergarten through grade 12 who attended a private school located in the Southeastern United States. The use of a semi structured interview allowed the researcher to obtain concrete information about perceptions of deployment factors directly from the parents. Both the deployed soldier and the nondeployed spouse were interviewed to ascertain information regarding length of deployment, number of deployments the service member has experienced, changes in

routines, levels of stress before/during/after deployment, communication, and the perceived effects of deployment on academic achievement. Additionally, the researcher employed member checking to ensure that the interviews were transcribed accurately, and that the transcribed statements aligned with what participants believed they stated during the interview. Additionally, data included an open-ended questionnaire completed by the school guidance counselor for the researcher to analyze data regarding the perceptions of soldiers and their spouses.

Research Methodology

This study employed a qualitative approach to explore how, if at all, the soldier and nondeployed spouse feel deployment influences academic performance. In this study, the problem statement was addressed through qualitative means, because the researcher was looking to explore how soldiers and their spouses perceive parental deployments influence student performance through narrative data (Marczyk, DeMatteo, & Festinger, 2005). Quantitative methods yield data that reflect what documentation exists to define the situation, in quantitative terms such as *how many*, *to what extent*, and *to what degree*. In contrast, using a qualitative method aligns with the research questions by allowing the researcher to compare data related to *how* deployments influence parental involvement, which may in turn, affect student academic achievement. According to Marczyk, DeMatteo, and Festinger (2005), the use of nonmetric data allows the researcher to explore *how* and *why* phenomena exist, instead of merely analyzing quantifiable data which yields facts without participant feelings, perceptions, or beliefs as to *why* the phenomena exist.

Using qualitative methods aligns with the research questions by allowing the researcher to compare interview responses regarding parental deployment using a heuristic approach. A qualitative methodology was selected as a means of determining how parental deployment influences student academic achievement for military-dependent students in Pre-Kindergarten through twelfth grade. Using a qualitative research methodology allowed the researcher to delve deeper into why parents feel deployment either influences or does not influence student performance (Baxter & Jack, 2008). Qualitative research also provides a lens through which parents can explore which facets of deployment, if any, contribute to changes in student academic performance.

Research Design

A descriptive study design was used to explore how, if at all, soldiers and their nondeployed spouses feel academic performance of students in Pre-Kindergarten through twelfth grade is influenced by parental deployments. The unit of analysis for this study was military families who have experienced deployment, specifically, the soldier and nondeployed spouse. The homogeneous unit representing the "bounded system" within which this case study was conducted was one single private school in the Southeastern United States where each military family is a member of the group of parents who have experienced deployment while their children were in Pre-Kindergarten through twelfth grade. The researcher sought to understand the soldier and nondeployed spouse's perceptions of the effects of deployment on their children's academic performance, and so the sample was specific to the site used for the study, but the effects are part of the larger unit of observation which includes all military families world-wide

who have experienced deployment. Deployment length and/or number of deployments cannot be adjusted by civilians, and thus, a descriptive study design meets the needs of this study.

The researcher considered several research designs for this study, including phenomenology, grounded theory, ethnography, narrative, and case study. The researcher considered if a phenomenological approach would have met the needs of the study, but decided that phenomenology would have revealed the common lived experience among participants (Colaizzi, 1978), and this was not the intent of the current study. Similarly, the researcher considered employing an ethnographic design, but the intent of the current study was not to study the learned patterns of behavior, beliefs, and language of the group (Hammersley& Atkinson, 1995), but rather to study the perceptions of soldiers and their nondeployed spouses regarding the effects of parental deployment on student performance. Next, the researcher considered a grounded theory approach for this study, but grounded theory would have best met the needs if the researcher was planning to formulate a theory or model and test the accuracy of those findings, and hypothesize about new ideas until a new theory evolved (Strauss &Corbin, 1990).Finally, the researcher considered a narrative research design. Narrative designs explore the interaction between researcher and participants for an *extended* period of time. The goal is to use written or spoken words to capture participants' stories (Clandinin& Connelly, 2000, p. 20), whereas the current study sought to explore the phenomena of deployment as it might influence the perceptions of soldiers and their spouses regarding student performance, not the individual experiences of military deployment from each participant of the study.

The researcher considered a case study design for the study, which would have been a viable option. According to Baxter and Jack (2008), case study is the best design when

> (a) the focus of the study is to answer "how" and "why" questions; (b) you cannot manipulate the behavior of those involved in the study; (c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context. (p. 545)

While these attributes were aligned with the current study, case studies also use multiple sources of evidence for triangulation. For this study, the researcher chose to use interviews and a questionnaire to gather data. Due to the study being conducted at one school, there was only one school counselor. The school site was a private, Christian school, not associated with a larger school district.

When comparing the current study to ethnography, grounded theory, narrative, and phenomenology, a descriptive design met the research needs because it looks at parental feelings and perceptions of how deployment shapes student performance, if at all, instead of simply analyzing quantitative data (Yin, 2016). The descriptive study design is the best approach to qualitative research which seeks to describe an issue or problem as a specific model for the phenomena; in this study, the phenomena, or problem statement, is how, if at all, parental deployment is perceived to influence student performance by the soldier and the nondeployed spouse.Using a descriptive study design in this manner aligns with the research questions by comparing interview

responses regarding deployments in a manner that allowed the researcher to explore the relationship in a situation in which experimental research was not a viable option because one cannot control the length of parental deployments or how many times a parent is deployed (Brown, Cozby, Kee, & Worden, 1999).

The research questions sought to determine how, if at all, perceived academic performance is influenced by parental deployment; thus employing a descriptive study design makes comparison of data accessible when experimental research is not possible (Brown, Cozby, Kee, & Worden, 1999). Selection of a descriptive, qualitative study design allowed the researcher to describe how parents believe academic achievement is influenced by parental deployments. This examination provided a rich understanding of soldiers and nondeployed spouses' feelings about the influence of parental deployments. Results of this study provide an important link toward understanding the relationship between parental deployment and perceived academic performance.

Population and Sample Selection

With the nation's involvement in peacekeeping missions worldwide, especially those resulting from the attacks of September 11, 2001, many military families are experiencing longer and/or multiple deployments (Office of the Deputy Under Secretary of Defense, 2010). Stages for the process of determining the sample include moving from the general population (all military dependents), to the target population (military-dependent students who attended the private school), and then finally to the specific sample (20 families, with students in Pre-Kindergarten to grade 12 in the specific private school who returned consent forms, are military dependents, and whose parents were deployed during the target timeframe).Therefore, the general population for this study

included all military dependent families with students in Pre-Kindergarten to twelfth grade (approximately 1.2 million students had parents who have been deployed during the specific timeframe) for this study. The target population of the study included military dependents from a private school located in the Southeast, with an enrollment of 241 students. From these 241 students, the study sample was purposefully selected by including only military-dependent families. A purposeful sampling strategy was used to recruit participants. According to Marshall (1996), purposeful sampling includes "developing a framework of the variables that might influence an individual's contribution and will be based on the researcher's practical knowledge of the research area" (p 523). Criteria for participation included parents who had been deployed for any length of time longer than three months while their child was in Pre-Kindergarten through grade 12 at the private school.

Prior to data collection, the researcher secured IRB approval from Grand Canyon University, and site approval from the school. In order to obtain permission, the researcher wrote a letter explaining the study and the educational implications of the findings. The head of the school granted permission to use the site following school board approval. The researcher invited the students' parents/guardians, school board members, and teachers to attend a meeting, where the researcher explained the research purpose and process. The invitation to attend the meeting was open to all parents with students enrolled at the school. A question and answer format was presented to allow parents to ask questions about the study and what precautions would be taken to ensure confidentiality. At the conclusion of the meeting, the researcher disseminated consent forms with a detailed description of the study and explanation of the potential

implications of such to each military-dependent student's parents/guardians. Additional consent forms were sent home to those parents/guardians that were not in attendance at the meeting. By signing the consent form, parents/guardians agreed to participate in the study. Additionally, signing of the consent form allowed participants to acknowledge that the researcher would make every effort to avoid the risk of disclosing personally identifiable information. The head of school provided demographic information, including phone numbers of military families, in order to allow the researcher to contact prospective participants.

To account for attrition, the researcher contacted every military family enrolled at the school, a total of 34 military families, to request an interview of the soldier and nondeployed spouse. Most families were eager to participate, but some did not meet the criterion of having a student enrolled in Prekindergarten through twelfth grade while the soldier was deployed for at least three months. The researcher called prospective participants from the school attempting to reach 20 families. Ultimately, the researcher was able to include 19 families (where the soldier and the spouse were both participants) for a total of 38 participants, ensuring a sufficient sample size.

To protect anonymity, the researcher created an identifier for the research participant and labeled the interview transcripts based on the student's last name and grade. Interviews were labeled with the first three letters of the student's last name, followed by the two digit number for their grade level in school and either "–S" (for soldier) or "–NP" (for nondeployed parent). For example, a fourth grade student with the last name of Hastings would be labeled as HAS04, and a kindergarten student with the last name of Rodgers would be coded as ROD0K (with a zero in front of the K to hold

the place for a double digit number). The nondeployed parent's interview responses would be labeled "HAS04NP" if the student's last name was Hastings and was in 4th grade. In the case of families having students in multiple grades, the interview labels included each of the student grades included in chronological order, such as "HAS040812NP." Deployed parent interview responses were paired with nondeployed parent responses in order to effectively analyze data by family.

Sources of Data

The data for this study included interview responses from the soldier and the nondeployed spouse and an open-ended questionnaire completed by the school guidance counselor. Demographic information were obtained through the school database and included student name, grade, gender, whether the student was a military dependent, and names of siblings enrolled at the school. The demographic information was used to identify the number of deployments, length of and deployments in months.

Interviews. Fourteen interview questions asked participants to identify dates of deployments, number of deployments, perceptions of student performance before/during/after deployments, impressions about effects of length of deployment and number of deployments, factors related to deployment perceived as most instrumental in improving performance during deployments, and factors related to deployment perceived as most detrimental to student performance during deployments. Using data directly from participants, instead of from a third party, provides a smaller likelihood of erroneous data collection and analysis (Krefting, 1991).

Questionnaire. Fourteen interview questions asked the school counselor through email to identify perceptions of student performance before/during/after deployments.

Additionally, the counselor was asked to record impressions about effects of length of deployment and number of deployments. Finally, the counselor shared perceptions of factors related to deployment perceived as most instrumental in improving performance during deployments, and factors related to deployment perceived as most detrimental to student performance during deployments.

Trustworthiness

When research is invalid, it is worthless (Cohen, Manion, &Morrison, 2007). Trustworthiness of a qualitative study encompasses the credibility, transferability, dependability, and confirmability of the data. Dependability and confirmability are the qualitative counterparts to how reliable the data and results are in a quantitative study. According to Cohen, Manion, and Morrison (2007), reliability refers to research that when "carried out on a similar group of respondents in a similar context (however defined)(p 146)," would result in similar results.

Credibility and Transferability

Data must be credible to be valuable. Credibility refers to how well the findings of a study reflect reality (Merriam, 2009). Transferability refers to how well the results can be applied in other settings or situations. Several steps were taken to ensure the credibility and transferability of the study. First, credibility is established with a well-documented data collection plan as evidenced in Chapter 3 of this dissertation.

The interview functions as a means of obtaining the desired information: how parental deployments influence perceived student performance, if at all. The interview questions were evaluated by a panel of experts to determine if the tool produced the expected data. The panel consisted of two military parents who have

experienced deployment, and two educators who have undergone the doctoral process. Internal validity can be established due to the measures taken to ensure confidentiality, the process for sample selection, and the level of professionalism in which the study was conducted (Cohen, Manion, & Morrison, 2007).

Responses to the open-ended questionnaire from the school counselor were analyzed and compared with interview responses to help determine if the perceived academic changes reported by parents were accurate reflections of student performance when compared with school records. The questionnaire was also juried by the same panel used for the interviews, consisting of two military parents who have experienced deployment, and two educators who have undergone the doctoral process. The use of an open-ended questionnaire provides further data by using a neutral third party to share observations of students' possible changes in behavior, grades, emotional resiliency, etc.; further validating the research tools of the current study.

Furthermore, interviews were reviewed through member checking to validate the accuracy of the transcription. Carlson (2010) stated, "Data should be continually revisited and scrutinized for accuracy of interpretation and for meaningful, coherent conveyance of the participant's narrative contributions" (p. 1105). This iterative data review offers another piece to the validity of the study. The results of the analysis were presented in a narrative that is true to the participants' comments and perspectives.

The researcher also employed researcher positionality through personal experience working as a teacher at a Department of Defense School, as well as having

been a military dependent. This intimate connection to soldiers, their spouses, and their children on a daily basis, allowed the researcher to gain a deeper understanding into the perspectives shared during the interviews.

Dependability. Dependability of a qualitative study entails ensuring the steps in research are recorded in detail, so the research could be repeated. Evidence of dependability in a qualitative study includes full transcripts of audio files digitally stored for review, transcribed interviews, and use of member checking to ensure transcripts were accurate representations of participants' views and perceptions. Methodological descriptions were included in the data collection and analysis sections, and include factors such as following IRB regulations, gaining site authorization, conducting interviews individually, digitally storing transcriptions of interviews, transcribing interviews manually, coding interviews to protect Personally Identifiable Information (PII), clustering responses by thematic categories, and triangulating data.

In order to determine the dependability of this study, one would expect that the interview would produce consistent results when administered over time and to similar samples. The interview guide for this study consisted of four main target questions: perceived academic performance before, during, and after deployment, and perceived most influential factor(s) of deployment. The researcher used the interview guide to ensure all participants addressed similar questions.

The dependability of the current study was also increased through use of an audit trail, records of data analysis, and member checking. When collecting data, it is important to document the trail of information, how it led to the results, and what interpretations were involved to get to the end. For this study, the researcher reflected on

data collection procedures, considered multiple options, consulted with committee members for advice and tips, and synthesized the information for future researchers' consideration.

Confirmability. Confirmability ensures the researcher has taken steps to ensure the results are representative of the participants, rather than the preferences of the researcher. Confirmability was developed by coding data, providing ample evidence to support claims, use of researcher reflexivity, and identification of shortcomings which are further discussed in the assumptions and limitations of the study. The interview questions were evaluated by a panel of experts for comprehensibility. The panel consisted of two military parents who have experienced deployment and two educators with doctorates. Furthermore, interviews were reviewed through member checking to validate the accuracy of the transcription. The interview was developed specifically for this study to address the research questions which include how, if at all, parents perceive deployment influences academic achievement. The interview questions were juried and reviewed by a panel of experts which included two military parents who have experienced deployment and two educators with doctorates in the field of education. Enlisting military parents to be part of the panel of experts allowed the researcher to determine if the interview questions provide accurate data based on the responses of military personnel with first-hand knowledge of deployments. Educators with doctorates in education were also invited to review the interview questions to determine if the responses would yield accurate results based on knowledge of the doctoral process.

For this study, the data were coded by seeking themes and semantic relationships among interview responses/transcribed interviews. The researcher made connections

between terms based on their meaning and implied relationships. Samples of the interview responses are included in Chapter 4 to provide sufficient evidence to support claims made by the researcher.

Reflexivity of the researcher should also be considered. "A researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions" (Malterud, 2001, p. 483-484). As a wife of a former soldier, and a teacher at a Department of Defense School in the Southeast, this researcher's background was influential in providing a purpose for the study and how the study would evolve. Researcher reflexivity was also a factor in making connections to interview responses and developing semantic relationships between and among responses.

Additionally, an open-ended questionnaire was completed by the school counselor. The questionnaire was also juried by the same panel used for the interviews. The use of an open-ended questionnaire provided further data by using a neutral third party to share observations of students' possible changes in behavior, grades, emotional resiliency, etc.; further validating the research tools of the current study.

Next, any biases or weaknesses of the data collection, methodology, instruments, or analysis needed to be evaluated to ensure that threats to trustworthiness of the study were limited. One perceived weakness is length of interviews. Because of the researcher's personal connection with military deployments in schools, interview

responses did not need to be a considerable length for the researcher to gain a deep understanding of the soldiers' and spouses' perspectives.

Transferability. Next, the transferability of the study was considered. The researcher had to ensure that the current study results would transfer to practice and future research. In order to address transferability, the study must provide sampling sufficiency and include thick description. In this study, sampling sufficiency was met by providing data from 19 soldiers and their spouses related to their perspective of how military deployments influence their children's performance in schools. The sample included both male and female soldiers and their spouses from a rapid deployment area in the Southeast. This sample appropriately meets the needs of the study by providing insight into the phenomena of parental perceptions of the influence of military deployments. Interview responses were detailed and provided thick description of parental perceptions of events that occur before, during, and after deployments in regard to student performance. Responses from parents included rich details into the personal lives of military families. Future studies could expect to get similar results if researchers used similar sample populations, followed similar procedures, and employed the same methodologies; therefore the results are transferrable under those conditions.

This study is trustworthy due to member checking and expert panel reviews. Results of the study yielded descriptions of the perceptions of soldiers and their nondeployed spouses in regard to student achievement. The findings included several recurring themes including how the length of the deployment, number of deployments, amount/type of communication, and parental support/routines are perceived to influence student performance.

Regardless of all the supports put into action, in any study there exists threats to the credibility and/or dependability due to flawed study design, strategies or methodologies. These threats were minimized by having a qualitative case study design which used direct input from both parents, included a full panel review of the interview questions, included interview questions that focused on how length of deployment, number of deployments, communication, and support/routines influenced perceived student achievement, and included a sample from a high deployment area to ensure for maximum number of deployments from one sample environment. Attention to multiple facets of deployment allowed the researcher to gain valuable insight into parental perceptions of the effects of military deployment on student performance.

Data Collection and Management

Prior to data collection, the researcher obtained Institutional Review Board (IRB) approval from Grand Canyon University and site authorization on letterhead from the head of school. In order to obtain permission, the researcher wrote a letter explaining the study and the educational implications of the findings. The head of the school granted permission to use the site following school board approval.

Following receipt of site authorization, the researcher invited the students' parents/guardians, school board members, and teachers to attend a meeting, where the researcher explained the research purpose and process. Following the meeting, the researcher disseminated consent forms with a detailed description of the study and explanation of the potential implications of such to each military-dependent student's parents/guardians. Additional consent forms were sent home to those parents/guardians that were not in attendance at the meeting.

By signing the consent form, parents/guardians agreed to participate in the study. Additionally, signing of the consent form allowed participants to acknowledge that the researcher would make every effort to avoid the risk of disclosing personally identifiable information. The head of school provided demographic information, including phone numbers of military families, in order to allow the researcher to contact prospective participants.

The researcher contacted every military family enrolled at the school, a total of 34 military families, to request an interview of the soldier and nondeployed spouse. Most families were eager to participate, but some did not meet the criterion of having a student enrolled in Prekindergarten through twelfth grade while the soldier was deployed for at least three months. Ultimately, the researcher was able to include 19 families (where the soldier and the spouse were both participants) for a total of 38 participants, ensuring a sufficient sample size. The sample was selected based on demographic information from the school's data management system. Of the 241 students in the entire school, those military-dependent families who consented to the study and experienced at least one deployment during the student's school years were selected as the sample.

Interviews. Interviews were conducted individually at a time and place convenient for the participants. Additionally, they were recorded and transcribed. Additionally, interview transcripts were labeled with identifiers for confidentiality, and then paired with the spouse's responses. Interviews were reviewed through member checking to validate the accuracy of the transcription. Participants were asked to check the transcription for accuracy. Transcripts were emailed to participants for review and/or

corrections. Participants were asked to email back any requested revisions or that the transcript was accurate without changes within 48 hours. Participants were reminded after 48 hours to return transcripts. All participants returned transcripts within 72 hours. Krefting (1991) explained that the use of member checking "ensures that the researcher has accurately translated the informants' viewpoints into data" (p. 219).

Open-ended questionnaire. An open-ended questionnaire was completed by the school counselor and submitted to the researcher. Data from the questionnaire were analyzed in tandem with interview transcripts. Information gleaned from the responses to the open-ended questionnaire were reviewed and included to provide a description of perceptions of student performance based on parental military deployments.

All documentation was labeled with participant identifiers to ensure confidentiality. Based on the Department of Defense's policy for ensuring that personally identifiable information (PII) remains secured, the only way to ascertain the specific details of parental deployment was to obtain the information directly from the parents. Responses were labeled with identifiers to protect PII for both parents and students. By following the aforementioned process, data can accurately be collected regarding deployment length and number of deployments, with little to no possibility of data distortion in regard to deployment data.

All records will be stored in a secured location within the school's records vault. Findings will be reported to the school board and then to the research participants with copies of the results available for review. Findings will be available for review for the remainder of school year 2017-2018 and upon request. Participant responses to

interview questions will be destroyed by the researcher 3 years after the completion of the study.

Data Analysis Procedures

The purpose of this descriptive, qualitative study was to provide a description of how, if at all, families living in the Southeastern United States who have experienced deployment feel parental deployment influences their children's academic performance. The following research questions guided data collection:

R1: How do soldiers who have been deployed perceive their deployment influenced their children's academic performance?

R2: How do spouses of soldiers who have been deployed perceive the deployment influenced their children's academic performance?

The data for this study included interview responses from the soldier and the nondeployed spouse and an open-ended questionnaire completed by the school guidance counselor.

Preparation of raw data for analysis. The researcher transcribed the interviews and put them in a Word document for analysis. Participants were asked to check the transcription for accuracy. Krefting (1991) explained that the use of member checking "ensures that the researcher has accurately translated the informants' viewpoints into data" (p. 219).

The interview transcripts were labeled with identifiers to protect personally identifiable information in accordance with the Department of Defense's personally identifiable information (PII) regulations. To protect participants' anonymity and confidentiality, interview transcripts were labeled with an identifier to include the first

three letters of the student's last name, followed by the two digit number for their grade level in school and "-S" for soldier or "-NP" for nondeployed parent. For example, a deployed soldier of a fourth grade student with the last name of Hastings would be identified and labeled as HAS04S, and a nondeployed parent of a kindergarten student with the last name of Rodgers would be coded as ROD0KNP (with a zero in front of the K to hold the place for a double digit number).

Questionnaire. The questionnaire completed by the school counselor was sent and returned by email as an attachment. Once they were returned, the researcher downloaded the document. The responses were already in a Word document.

Data analysis. After interviews were transcribed, the researcher read transcripts several times. During this process, key terms were highlighted. Printed interview transcripts were cut, separating each response by interview question. Individual responses were sorted by question, and coded by category of response (see Appendix F). This is consistent with a blended approach to research (Colorafi & Evans, 2016). Blended approaches are often used in thematic analysis, with codes developed first and then inductive analysis following.

In the current study, the researcher used a deductive strategy to categorize interview responses based on the following predetermined categories: positive and negative effects of communication, scheduling/routines, childcare options/support, length of the deployment, number of deployments (multiple deployments), and parental attitudes. This is similar to Colorafi and Evans' (2016) design in which they developed a code book (a priori) containing codes identified from the theoretical framework, the literature review, and prior studies on the topic, along with data from field

tests.Similarly, in the current study category names were hand written on each transcript response and were then placed in corresponding piles. After placing all transcript responses in each category, the researcher reviewed the number of responses in each pile or category. Next, the researcher compared the responses of soldiers to nondeployed spouses.

Evaluating which students had deployed parents was the first step in analysis of the open-ended questionnaire completed by the school counselor. Dates of parental deployment were annotated on the report cards of each student, and trends were studied to determine if differences were present before, during, or after times of parental deployment. Then, counselor responses were sorted by question and compared to categories obtained from parent interviews: communication, scheduling/routines, parental support, most influential factor of deployment, student changes in achievement, and perceived influence of length and number of deployments on student performance.

Data analysis and interpretation of results were conducted June 2017- September 2017. The 38 transcribed interviews (19 soldiers and 19 nondeployed spouses) gave sufficient statistical data to observe trends in responses among participant categories and themes. The consistent categories which evolved from the interview and questionnaire data analysis provided evidence that the quality of data obtained were sufficient to answer the research questions. Additional support for sufficiency of data can be found in the appendix, data samples, interview transcriptions and coding matrix. At the completion of the study, all data will be reported to the school board and then to the research participants with copies of the results available for in-depth review. All data

will be kept at the researcher's residence in a locked filing cabinet for a period of 3 years, after which it will be shredded.

Ethical Considerations

Institution Review Board (IRB) approval was obtained before beginning the research process. Additionally, the school board of the site school was contacted to receive authorization to proceed. After obtaining permission to use the school, the researcher obtained permission and held a meeting with the students' parents/guardians, school board members, and teachers to explain the research process and intent. Following the meeting, the researcher disseminated consent forms with a detailed explanation of the study and the potential implications of the study to each military-dependent student's parents/guardians. Additional consent forms were emailed home by the school administrator to those parents/guardians who were not in attendance at the open forum. Informed consent was required, as well as site authorization to obtain approval to conduct research using student personally identifiable information (PII).

Any time that students are participants in research, there is the potential that there will be unfair ethical practices (Belmont Report, 1979). To address this potential, in the current study the researcher did not have direct access to individual students, and all data collected were obtained by conducting interviews with parents and a questionnaire completed by the school counselor interviews. In response to the Belmont Report (1979), certain types of interaction with subjects are considered a minimal ethical risk including,

In order to keep the data from this study protected, all interview transcripts were labeled with participant identifiers. By using identifiers on the interview responses, the researcher limits the possibility of exposing sensitive information to the public. Additionally, responses to the interviews revealed confidential information related to the service member's number of deployment and length of each deployment. A breach of this personally identifiable information could result in a national crisis if the data were to end up in the hands of America's enemies. It is the researcher's responsibility to ensure that all personally identifiable information is protected from public exposure, which is why it is of vital importance that all data collected is coded to avoid revealing any personally identifiable information.

Limitations and Delimitations

Limitations are those items over which the researcher has no control. Several limitations existed in this study. Deployment may have affected different children in different ways, indicating that not all children may have decreased grades due to parental deployment. Some children have a higher level of resiliency than others and may not show academic decreases when parents are deployed for either lengthy deployments or multiple deployments. In this study, there was no distinction made between students whose parents were deployed for combat purposes and those who were deployed for training purposes, such as drill sergeant school. These differences might have affected academic achievement results.

Since parent deployment data (length and number of deployments) came directly from the parents, there was the possibility that the data might have been reported incorrectly. Incorrect reporting of dates and number of deployments might have affected

the overall results of the proposed study. Only one school was used in this study. Because the sample was from only one school, there was limited applicability of findings; however, due to the mobile nature of the military dependent, a diverse aggregate of students was represented in that sample. Limitations related to generalizability are methodological limitations (Guba & Lincoln, 1994).

Since the sample came only from a private institution, the demographic makeup of the group might not have been consistent with the general public. The interviews used in this study were shorter than 30-60 minutes, due to a novice researcher conducting the interviews. Longer interviews might have yielded a more rich discussion of the influence of deployment on student performance. Only one counselor was used to complete the questionnaire, limiting the data from this source. More than one counselor may have added more depth and detail to these findings. Finally, the researcher used deductive coding, which could have limited the results of the study, due to missing other information that did not fit within those predetermined categories.

Delimitations. The delimitations are the boundaries that have been set by the researcher. Delimitations of the study included putting parameters in place to consider deployment location, minimal parental absences when the soldier was deployed for less than three months, and conducting the research for this study at a private school.

The research was delimited to one private school. Therefore, results might not be transferable to other settings or samples. Finally, the study was delimited parent perceptions of how a deployment may influence student academic outcomes. Behavior changes in children were not addressed.

This study does not address parental absences that were less than three months. The focus of the study is to determine if length of deployment or multiple deployments have a more substantial perceived influence on achievement. Results of prior studies showed deployments less than three months in length did not have a significant influence on the academic achievement scores of students (Angrist & Johnson, 2000; Cozza et al., 2005), so the study was delimited to focus on deployments at least three months in length.

Summary

Chapter 3 explained the methodology, research design, and procedures for this investigation. The purpose of this qualitative case study was to provide a holistic description and analysis of how, if at all, families living in the Southeast who have experienced military deployment perceive parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance. A qualitative methodology was selected to determine in what ways soldiers and their nondeployed spouses perceive military deployment impacts student academic achievement. The researcher sought to answer the two guiding research questions which were how, if at all, soldiers who have experienced military deployment perceive their PreK-12th grade children's academic performance is influenced by parental deployment and how, if at all, nondeployed spouses perceive their PreK-12th grade children's academic performance is influenced by parental deployment.

The general population includes all military dependent families with students in Pre-Kindergarten to twelfth grade. The target population of the study includes military dependents from a private school located in the Southeast which has 241 students

enrolled. From these 241 students, the study sample was selected by including only military-dependent families. The unit of analysis for this study was military families who have experienced deployment, specifically, the soldier and nondeployed spouse. The homogeneous unit representing the "bounded system" within which this case study was conducted was one single private school in the Southeast where each military family is a member of the group of parents who have experienced deployment while their children were in Pre-Kindergarten through twelfth grade.

When comparing the current study to ethnography, grounded theory , narrative, and phenomenology, it is evident that a descriptive study design best meets the research needs because it provides an in depth look at parental feelings and perceptions of how deployment shapes student performance, if at all, instead of simply analyzing quantitative data (Yin, 2016). Using a descriptive study design in this manner aligns with the research questions by comparing interview responses regarding deployments in a manner that allowed the researcher to explore the relationship in a situation in which experimental research was not a viable option because one cannot control the length of parental deployments or how many times a parent is deployed (Brown, Cozby, Kee, & Worden, 1999).

Research for this study was conducted January 2017 through May 2017, after obtaining Institutional Review Board (IRB) approval and included interviewing families and analyzing interview responses. The data for this study included interview responses and an open-ended questionnaire completed by the school counselor. The open-ended questionnaire and interview questions were developed specifically for this study to identify the perceived effects of number of deployments, length of deployments in

months, and changes in parental involvement caused by parental deployment on academic achievement.

The use of an interview allowed the researcher to obtain concrete information about deployment factors directly from the parents. Both the deployed soldier and the nondeployed spouse were interviewed as primary sources to ascertain information regarding length of deployment, number of deployments the service member has experienced, changes in routines, levels of stress before/during/after deployment, communication, and the perceived effects of deployment on academic achievement. The researcher compared interview responses by soldier's responses and nondeployed spouse's responses to explore whether differences exist between them. Because there is no control group and all information gleaned was observational, this non-experimental case study design was the most appropriate type of design to determine the relationship between factors (McMillan, 2012).

Chapter 4 details how the data were analyzed and provides both a written and graphic summary of the results to include the disaggregation of data based on responses by the soldier and the nondeployed spouse. Also included in Chapter 4 is a summary of how analysis of interview responses was conducted to determine how soldiers and nondeployed spouses perceive parental deployments impact student achievement. Chapter 5 is an interpretation and discussion of the results, as it relates to the existing body of research related to the dissertation topic. Data analysis and interpretation of results was conducted in June 2017 through September 2017.

Chapter 4: Data Analysis and Results

Introduction

Military deployments result in soldiers being separated from their children for extended amounts of time and/or multiple times during their enlistment with the military. Separations caused by deployments influence soldiers and families in numerous ways, particularly children. The problem addressed this study was that it was not known how soldiers and their spouses view parental deployment influences their children's academic performance. The purpose of this descriptive, qualitative study was to provide a description of how, if at all, families living in the Southeast who have experienced deployment feel parental deployment influences their children's academic performance, if at all. Chapter 4 presents a description of the sample, data analysis procedures and results. Semi structured interviews and an open-ended questionnaire completed by one school counselor were used to address the guiding research questions:

R1: How do soldiers who have been deployed perceive their deployment influenced their children's academic performance?

R2: How do spouses of soldiers who have been deployed perceive the deployment influenced their children's academic performance?

Descriptive Findings

Sample (parental couples). The sample for this study included 38 participants (19 parental couples). The parental couples had a total of 30 students. These students were enrolled in grades Pre-Kindergarten through grade 12 at a private school in the Southeastern United States.

Deployed participants. Fourteen of the soldiers were male. Five soldiers were female. Additionally, in one family both parents were active duty soldiers, but for the purposes of this study the female was the soldier since her deployments occurred while the children were school-aged.

Non-deployed participants. Fourteen nondeployed spouses were female. Five nondeployed spouses were male. One male was also in the military, but was listed as the non-deployed spouse since his deployments were prior to the children enrolling in school so during the timeframe his role was the nondeployed parent.

Deployment history. Deployment history revealed that 21.05% of the sample had been deployed one time, and 31.58% had been deployed two times. Additionally, 26.32% had been deployed three times, and 21.05% had been deployed four or more times between August 2000 and February 2017.

Data for children of participants. The sample for this study included 38 participants (19 parental couples) who had a total of 30 students enrolled in a private school in the Southeast. Students ranged in age from 4 to 18 years old. Ten percent of the students were in Pre-Kindergarten, 10% were from Kindergarten, and 3.34% were from 1stgrade.Another10% were from 2nd grade, 3.34% from 3rd and 10% were from 4th grade. Fifth grade comprised 13.34% of the students; 6.67% were from 6th grade, 3.34% were from 7th grade, and 3.34% were from 8th grade. At the high school level, 6.34% were from 9th grade, 10% were from 10th grade, 3.34% were from 11th grade, and 6.67% were enrolled in 12th grade (see Figure 1). Of the students, 87.5% were male and 12.5% were female. African Americans comprised 37.5%, Caucasians included 37.5%, and 25% were Multiracial.

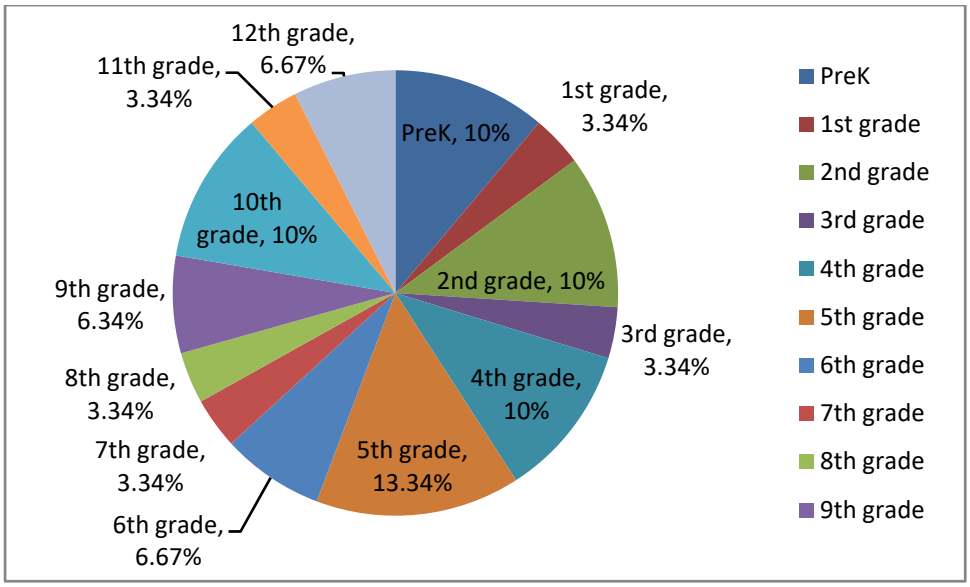

Figure 1. Grade level of participants' dependents.

Interview data. Interviews were recorded and ranged in length from 4 minutes 19 seconds to 13 minutes 53 seconds. Soldiers' interviews averaged 7:58 minutes (see Table 1) and nondeployed spouses' interviews averaged 8:40 minutes (see Table 2). Transcribed interviews were two pages in length each for a total of 76 pages. Information obtained from the interviews provided data for understanding the perceptions of soldiers and nondeployed spouses in regard to student performance.

Table 1.

Deployed Participants' Interview Length and Transcript Duration

Interview #	Participant Code	Length in Minutes
27	ANDKS	5:03
30	BOW46S	7:47
5	BUS7NP	9:22
37	CLI412S	9:35
4	COU2S	5:40
2	DOTK35S	5:19
33	DYE159S	8:14
34	ELEP25S	8:24
23	FRE410S	5:38
36	GAM6810S	10:12
18	GIL11S	7:28
17	HAN9S	9:38
14	KIL12S	8:50
13	MAN2S	11:11
9	SAT5S	13:53
8	SCO10S	7:06
29	SEAPS	5:27
32	SPOPKS	8:26
25	STEKS	4:20
		Average # of Minutes of Interview 7:58

Table2.

Non-Deployed Participants' Interview Length and Transcript Duration

Interview #	PARTICIPANT CODE	Length in Minutes
26	ANDKNP	5:43
28	BOW46NP	4:19
1	BUS7NP	13:20
38	CLI412NP	8:17
35	COU2NP	7:41
3	DOTK35NP	8:58
20	DYE159NP	10:20
24	ELEP25NP	8:58
21	FRE410NP	8:04
22	GAM6810NP	7:46
19	GIL11NP	7:06
16	HAN9NP	10:03
15	KIL12NP	11:13
12	MAN2NP	9:42
11	SAT5NP	11:39
7	SCO10NP	11:18
31	SEAPNP	5:16
6	SPOPKNP	7:03
10	STEKNP	7:59
		Average # of Minutes of Interview 8:40

Data collected from the interviews provided information on deployment history, and perceptions of stress levels of soldiers/nondeployed spouses (before/during/after deployments). Additional interview responses provided information related to student performance (before/during/after deployments), perceived effect of length of deployment, and perceived effect of multiple deployments. Finally, interview responses included how participants perceived as the most negative influential factor of deployment, and the most positive influential factor of deployment.

Deployment history. Parental Deployments included four soldiers who were deployed once (21.05%), six who were deployed twice (31.58%), 5 who were deployed

four times (26.32%), and four who were deployed 4 or more times (21.05%) (see Figure 2). Deployments ranged from 3 months to 30 months each deployment, and from March 2000 to October 2016 (see Table 3).

Table 3

Deployment Dates and Duration

Participant Identifier	Deployment Dates
	SEP15-DEC15(4 months)
ANDKS	APR16-OCT16 (6 months)
BOW46S	FEB09-MAR10 (13 months)
	MAR-00NOV00 (9 months)
	DEC02-DEC03 (12 months)
BUS7S	OCT04-OCT05 (12 months)
	OCT04-NOV05 (13 months)
	MAR07-APR08 (13 months)
CLI412S	DEC09-NOV10 (11 months)
	FEB13-DEC13 (10 months)
	MAR14-MAY15 (12 months)
COU2S	FEB16-JUL16 (12 months)
	MAR14-MAY15 (12 months)
DOTK35S	FEB16-JUL17 (16 months)
	MAR03-MAR04 (12 months)
	JUL07-AUG08 (13 months)
	JAN13-MAY14 (16 months)
DYE159S	SEP15-DEC16 (15 months)
	JAN10-AUG10 (7months)
ELEP25S	MAR15-MAY15 (3 months)
	OCT10-FEB11 (4 months)
FRE410S	JUL13-JUN14 (11 months)
	FEB09-MAR10 (13 months)
GAM6810S	OCT11-DEC11 (14 months)

Participant Identifier	Deployment Dates
	MAR12-MAY13 (12 months)
	FEB16-JUL16 (17 months)
	JAN03-SEP03 (9 months)
	JUL07-AUG08 (13 months)
GIL11S	SEP09-SEP10 (12 months)
	MAR03-SEP05 (30 months)
HAN9S	MAR14-SEP16 (30 months)
	OCT01-NOV02 (13 months)
	JAN06-JAN07 (12 months)
	DEC09-NOV10 (11 months)
KIL12S	MAR14-SEP15 (18 months)
	JAN10-AUG11 (12 months)
	MAR12-MAY13 (14 months)
MAN2S	JUN16-OCT16(4 months)
SAT5S	FEB08-MAR10 (25 months)
	MAR03-MAR04 (12 months)
	FEB08-AUG08 (7 months)
SCO10S	SEP13-DEC14 (15 months)
SEAPS	SEP15-DEC15 (3 months)
	MAR15-NOV15 (8 months)
SPOPKS	APR16-SEP16 (5 months)
STEKS	JUL15-OCT15 (3 months)

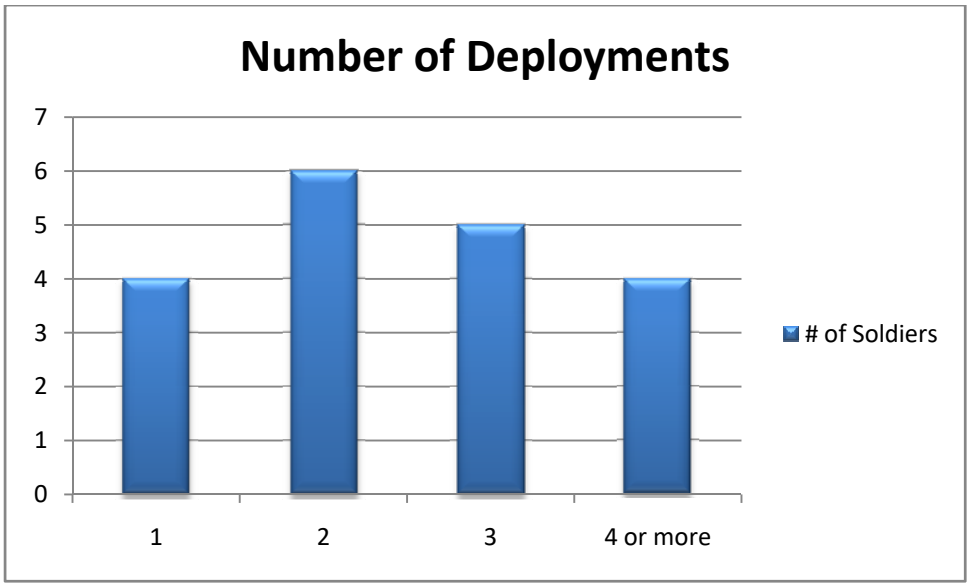

Figure 2. Number of deployments

Deployed soldiers' stress levels. Soldier's responses about stress prior to military deployment included three soldiers who stated that their stress level was lower or the same prior to deploying. Prior to deployment, 15soldiers indicated an increased stress level, and one soldier was indecisive (see Figure 3).

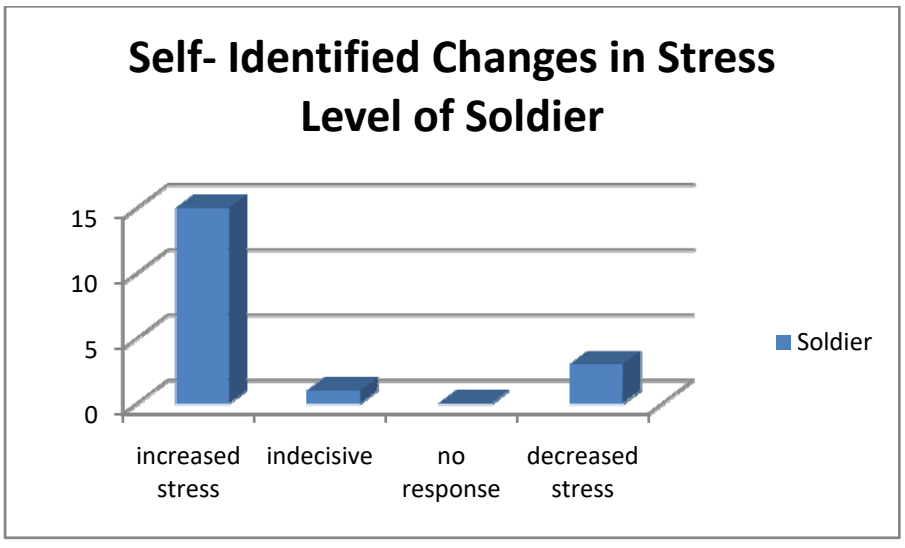

Figure 3. Self-identified soldiers' changes in stress level prior to deployment

Nondeployed spouses' stress levels. Nine nondeployed spouses indicated elevated stress levels prior to their spouse deploying. Eight nondeployed spouses

indicated decreased stress levels prior to their spouse deploying. One nondeployed spouse was indecisive, and one spouse spoke about student stress, not his own stress level (see Figure 4).

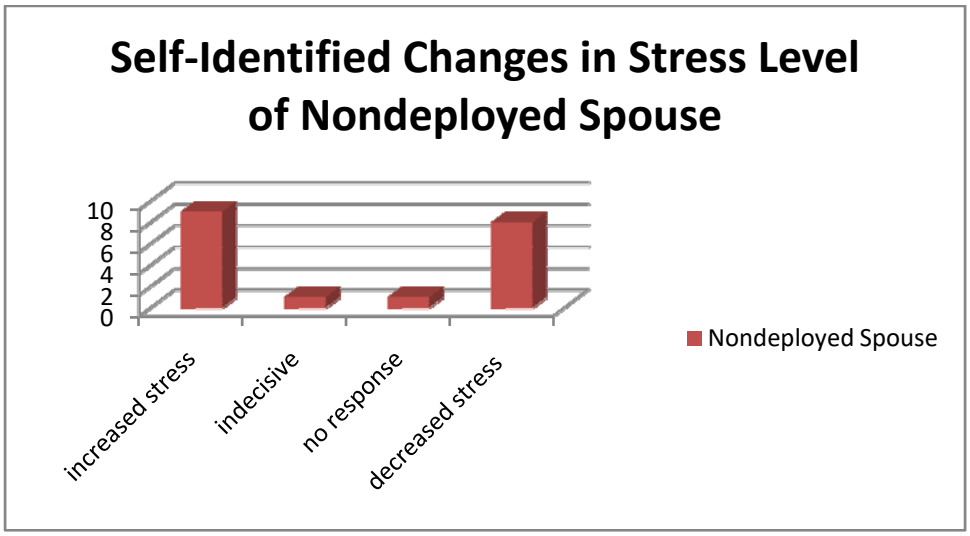

*Figure 4.*Self-identified stress levels of nondeployed spouses before deployment changes in routines during deployment.

Deployed soldiers' perceptions of changes in routines during deployment. When asked how soldiers felt things were different for the nondeployed counterparts back home while the soldier was deployed, 16 soldiers indicated that there were different routines, schedules, and responsibilities due to deployments which caused their stress levels to increase during deployments. Five soldiers indicated that the nondeployed spouse had additional stressors while the soldier was deployed. (See Figure 4).

Nondeployed spouses' perceptions of changes in routines during deployment. When asked how soldiers and nondeployed spouses felt things were different for the nondeployed counterparts back home while the soldier was deployed, 14 nondeployed spouses indicated that there were different routines, schedules, and

responsibilities due to deployments which caused their stress levels to increase during deployments. Three nondeployed spouses indicated that the nondeployed spouse had additional stressors while the soldier was deployed.

School counselor's perceptions of changes in grades. The school counselor completed an open-ended questionnaire regarding perceptions about parental deployment to provide insight from the perspective of one staff member who has weekly interaction with all students during parental deployments. The counselor reported that most students seem to keep the grades they had, so "A" students remained "A" students even during deployments. The counselor further reported that after deployments the children are extremely happy, but want to stay home with the soldier instead of going to school. During this post deployment timeframe, the counselor reported that, "grades typically stay the same, but the work 'feels' easier to students.

Data Analysis Procedures

Data were collected from interviews and an open-ended questionnaire completed by the school counselor. These were compiled into a database (see Appendix F) to allow the researcher to compare information from the data sources. These procedures were implemented to strengthen the case study's findings (Yin, 2016).

Interviews. Interviews were conducted with both the soldier and the nondeployed spouse. Semi structured interviews included predetermined questions to guide the focus of the interviews toward the research questions and provide a framework for consistency in responses. This section presents procedures for analysis.

Preparation for analysis. Interviews were transcribed by the researcher, who printed each interview response and compiled them into a Word document. A participant

identifier was assigned to the respective interviewee. Transcripts were labeled with the first three letters of the student's last name, followed by the two digit number for their grade level in school and "-S" for soldier or "-NP" for nondeployed parent. For example, a deployed soldier of a fourth grade student with the last name of Hastings would be given the identifier HAS04S, and a nondeployed parent of a kindergarten student with the last name of Rodgers would be labeled as ROD0KNP (with a zero in front of the K to hold the place for a double digit number).

Participants were asked to check the transcription for accuracy. Transcripts were emailed to participants for review and/or corrections. Participants were asked to email back any requested revisions or that the transcript was accurate without changes within 48 hours. Participants were reminded after 48 hours to return transcripts. All participants returned transcripts within 72 hours. Krefting (1991) explained that the use of member checking "ensures that the researcher has accurately translated the informants' viewpoints into data" (p. 219).

Interview analysis. The researcher analyzed the data and compared the interview responses of soldiers and their spouses to determine which factors of deployment, if any, were perceived to influence student achievement. The researcher used a self-developed deductive and inductive approach to data analysis. This is consistent with a blended approach to research (Colorafi & Evans, 2016). Blended approaches are often used in thematic analysis, with codes developed first and then inductive analysis following.

Deductive analysis. Participant responses to interview questions were deductively analyzed based on: deployment dates, number of deployments, perceived academic achievement of students before, during, and after deployments, effects of

length of deployment, and effects of multiple deployments. Responses were tallied by category to determine the most influential factors reported by soldiers and their nondeployed spouses. This is similar to Colorafi and Evans' (2016) design in which they developed a code book (a priori) containing codes identified from the theoretical framework, the literature review, and prior studies on the topic, along with data from field tests. Key terms identified in the transcripts were highlighted, and the coded transcriptions were then sorted into the designated category and by participant groups (soldiers and nondeployed spouses).

Data were initially coded deductively based on categories in interview questions as noted above in the deductive analysis section. Within those categories, transcripts were then inductively coded. The researcher ultimately came up with the following inductive categories: positive/negative communication, parental attitude, changes in routines and schedules during deployments, length of deployments, and number of deployments.

Counselor open-ended questionnaire. The school counselor questionnaire was prepared for analysis by reviewing the questions for completion and putting the responses into a Word document. Responses were deductively analyzed based on: positive/negative communication, parental attitude, changes in routines and schedules during deployments, length of deployments, and number of deployments. The researcher looked for similarities and differences in responses from each participant to determine if trends exist across the study.

The researcher ensured validity and reliability by including an expert panel of two military dependents and two educators to review interview questions. A field

interview was completed to check for participant understanding and ability to answer questions posed, and member checking was completed after interviews were transcribed. Attention to how the interview questions were posed, presented, and transcribed helped ensure that the study could be replicated in future studies and ensured valid, reliable data. Despite these precautions, interview times were short, posing a limitation to the study. Additionally, data were compared with the school counselor's responses to an open-ended questionnaire regarding student performance before, during, and after deployment.

Results

Research Question 1. The first research question was: How, if at all, do soldiers who have experienced military deployment perceive their PreK-12th grade children's academic performance is influenced by parental deployment? Interviews with soldiers were conducted to gather data to answer this research question. Data were initially coded deductively based on categories in interview questions: level of stress before deployment, student grades before deployment, student grades after deployment, length of deployment, number of deployments, perceived worst factor of deployment, and perceived best factor to improve deployment. Within those categories, transcripts were then inductively coded to come up with the following final categories: communication, changes in routines and schedules during deployments, length of deployments, and number of deployments.

Communication and changes in schedules/routines during a deployment. Communication was perceived as being a factor positively and negatively influencing student performance by allowing soldiers and students to stay connected with daily

routines at home and school. Thirty seven percent (37%) of soldiers reported that communication was the most influential factor to improve deployments for students. Most soldiers indicated that during a deployment, children were more stressed. Additionally, some parents perceived changes in their child's performance at school. Finally, students had different roles and/or responsibilities at home during a deployment of parent.

Stress, roles, and responsibilities. Thirteen soldiers stated that during a deployment, their children were more stressed. Four soldiers indicated that their children had different roles and responsibilities, and one soldier indicated there was no change in grades, stress levels, or routines while the soldier was deployed. One soldier of a 10th grader reported that while he is gone,

> They (children) have to do a lot more around the house and I'm not as readily available to answer questions as I would if I were home. Well, their responsibilities go up as far as chores and what not, and I would anticipate that my wife's stress is pretty high. I never got the impression that my daughter's stress was too high, well, maybe Kuwait she was stressed about me leaving. It was definitely higher than if I was home.

When asked about differences in routines for the students during deployments, one soldier with a 1st, 5th, and 9th grade student stated that, "It's not very different. My wife is in charge of scheduling events, homework, meals - so all of that stays the same while I'm gone, it's just they have to be flexible to allow for the fact that it's just her trying to get them everywhere." Two soldiers stated that there were additional childcare personnel/routines while the soldier was deployed (see Figure 5).

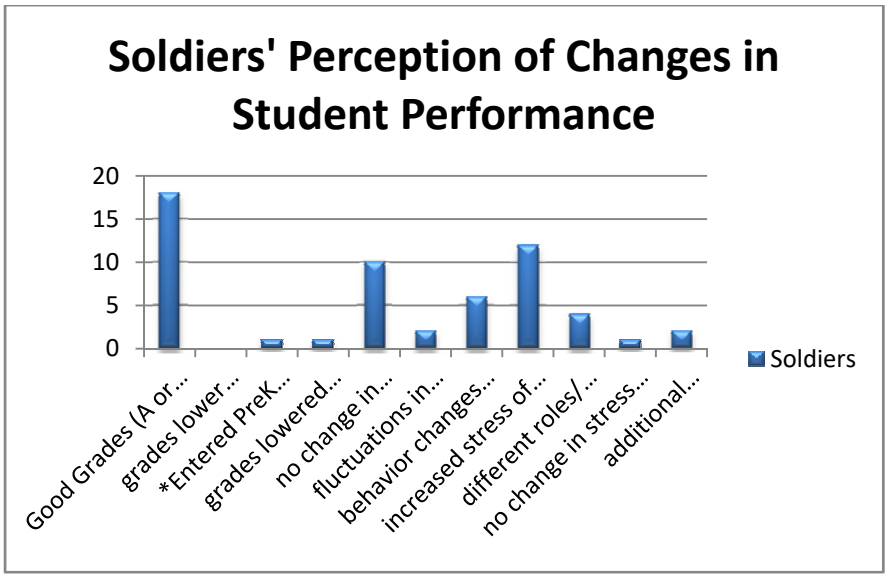

Figure 5. Soldiers' perception of changes in student performance during parental deployments

Grades and behavior. Student grades before deployment were reported as good (A's and B's) by 18 soldiers. One soldier indicated that his child entered Pre-Kindergarten while the soldier was deployed, so there were no grades for comparison prior to deployment. During deployments, one soldier indicated changes in students' grades as lowered, 10 soldiers indicated no changes in students' grades, and two soldiers indicated that students' grades fluctuated during deployments. Additionally, six soldiers indicated that students experienced changes in behavior or emotional stability during parental deployments.

Length of deployment. Most soldiers felt that longer deployments had a negative influence in their child's emotional stability, behavior and academic performance. However, some felt that longer deployments did not have this influence.

Emotional/behavioral stability. Twelve soldiers indicated that longer deployments had a negative impact on student's emotional and behavioral stability which they felt influenced how well the students responded to parental deployments (see

Figure 6). One soldier with a child in preschool indicated that school performance was impacted by “Emotional breakdowns because the kids just don't understand what's going on and when Dad is going to be home.”

Student performance. When soldiers were asked if the length of the deployment had any perceived effect on student performance, five soldiers reported longer deployments were better than shorter ones, 12 soldiers indicated that longer deployments had a negative impact on student performance, and two soldiers indicated there was no perceived difference based on deployment length. One soldier with a 7thgradersaid,

> Longer ones (deployments) suck, the reason I say this is I go on short deployments now. I say longer deployments suck because when you go on longer deployments you come back everybody's changed, kids look different, got taller, don't wear the same shoe sizes, they're not even in the same , into the same things like when you left. Like I might leave and she might be into video games and when I come back she's outgrown that so longer deployments surely suck and sometimes it's actually hard to get to know your family again.

Sixty-three percent of the soldiers interviewed reported that changes in behavior due to length of the deployment were much more prevalent than changes in academic performance.

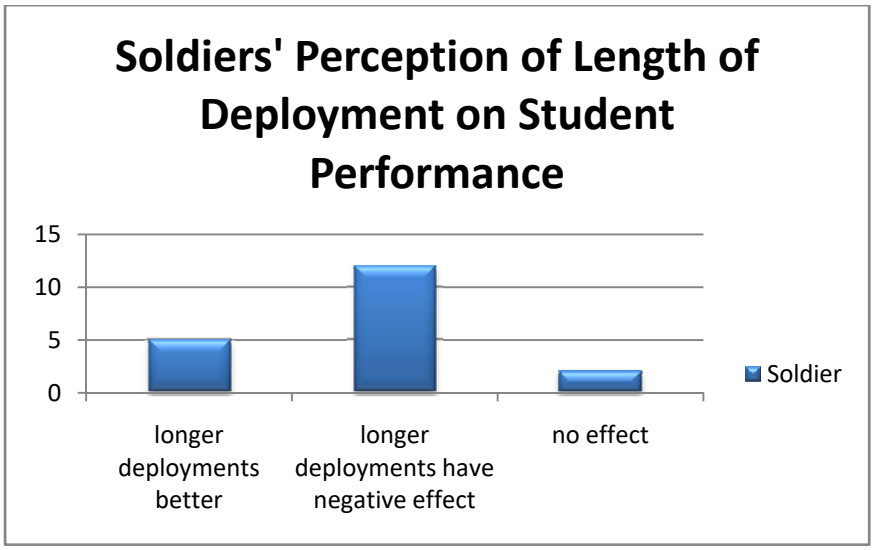

Figure 6. Soldiers' perception of influence of length of deployment on performance

Multiple deployments. When asked to identify the most negative factor of parental deployments for its perceived influence on student performance, six soldiers out of 19 reported that the number of deployments (multiple deployments) was perceived as the most negative factor of parental deployments (see Figure 7). Three soldiers reported that shorter, multiple deployments were better than longer ones. Seventy four percent (74%) of soldiers reporting that multiple deployments have a negative effect on student performance, and 32% of soldiers purporting that multiple deployments were a negative factor to influence student performance. One soldier of a Kindergarten student commented, "it was just the amount of deployments; if she was in an older school setting (grade), it might have been easier. But multiple deployments were the hardest."

Academic performance. Fourteen soldiers indicated that multiple deployments had a negative influence on perceived student performance, and two soldiers stated that there was no difference on student performance based on number of deployments.

Soldiers reported that the age of the children influenced their ability to cope better than others. A soldier with a student in 4th grade and one in 10th grade stated,

"Number of deployments impact performance the most negatively." Overall, 74% of soldiers interviewed reported that although the students' academic performance was not different, the child's emotional wellbeing and behavior were influenced by multiple deployments.

One soldier with a 7th grade student reported that the factor that most positively influences student performance is communication, specifically, "Skype." A soldier with a 10th grader stated communication made deployments more bearable and, "(the student) and I did a lot of her school work on Skype; they were pretty much able to get a hold of me at least several times a week."Regular communication was perceived as a means of improving student performance during deployments. Thirty-seven percent of the soldiers interviewed reported that communication was the factor of deployment most likely to help students with academic performance.

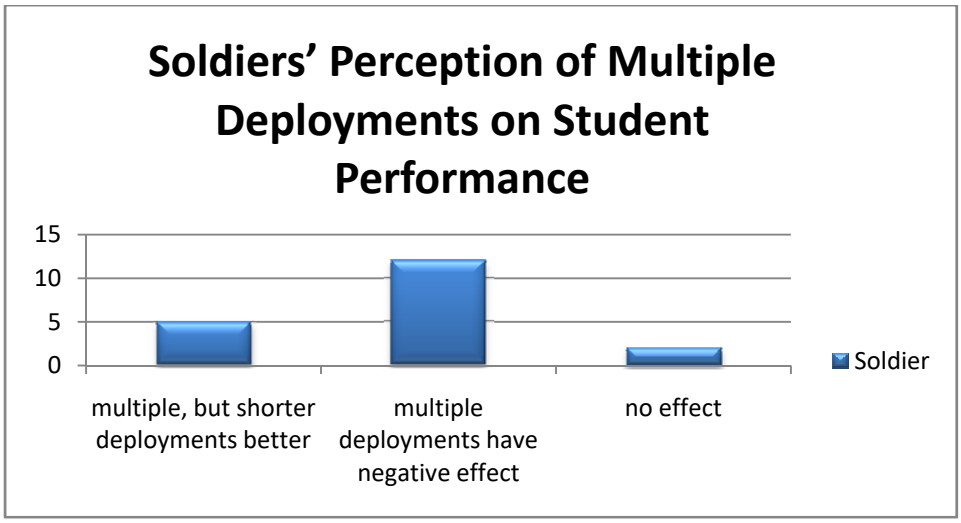

*Figure 7.*Soldiers' perception of multiple deployments on student performance

Research Question 2. The second research question was: How do spouses of soldiers who have been deployed perceive the deployment influenced their children's academic performance? During deployments, two nondeployed spouses indicated

changes in students' grades as lowered, nine nondeployed spouses indicated no changes in students' grades, and one nondeployed spouse indicated that students' grades fluctuated during deployments. Additionally, seven nondeployed spouses indicated that students experienced changes in behavior or emotional stability during parental deployments (see Figure 8).

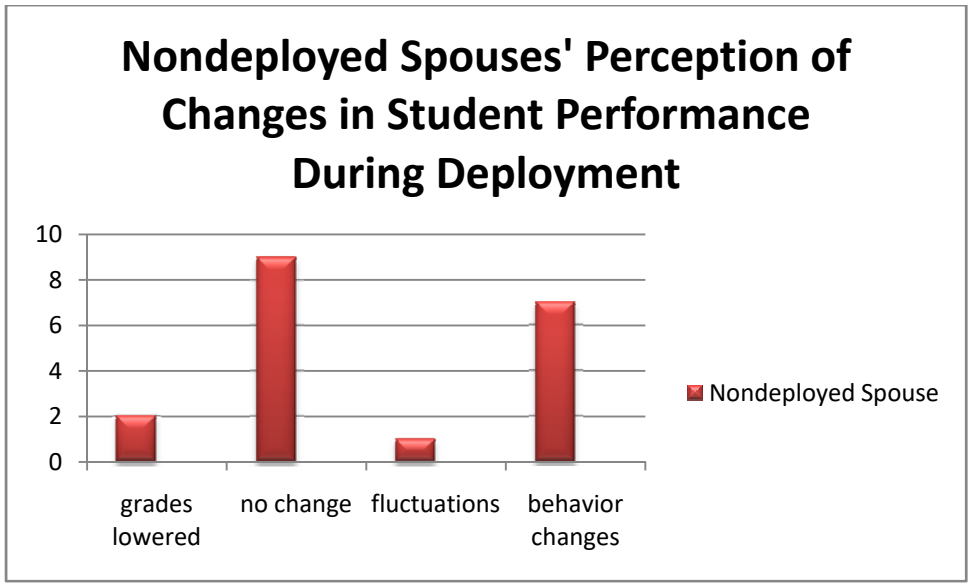

Figure 8. Perceptions of nondeployed spouses regarding changes in student performance during parental deployments.

Positive/negative communication. Thirty-two percent of nondeployed spouses who were interviewed reported that ineffective communication was the factor most likely to negatively impact student performance during parental deployments. Lack of communication or ineffective communication was the most negative factor reported by six nondeployed parents (see Figure 9). One nondeployed parent of a preschooler, 2nd grader, and 5th grader reported that the factor that most negatively influenced her children's success during deployments was, communication:

He (soldier) would only call at like 5 o'clock in the morning the way his schedule worked out, and he would only get 15 or 20 minutes and (the children) were still not up yet. So they missed out on talking to Dad while he was gone.

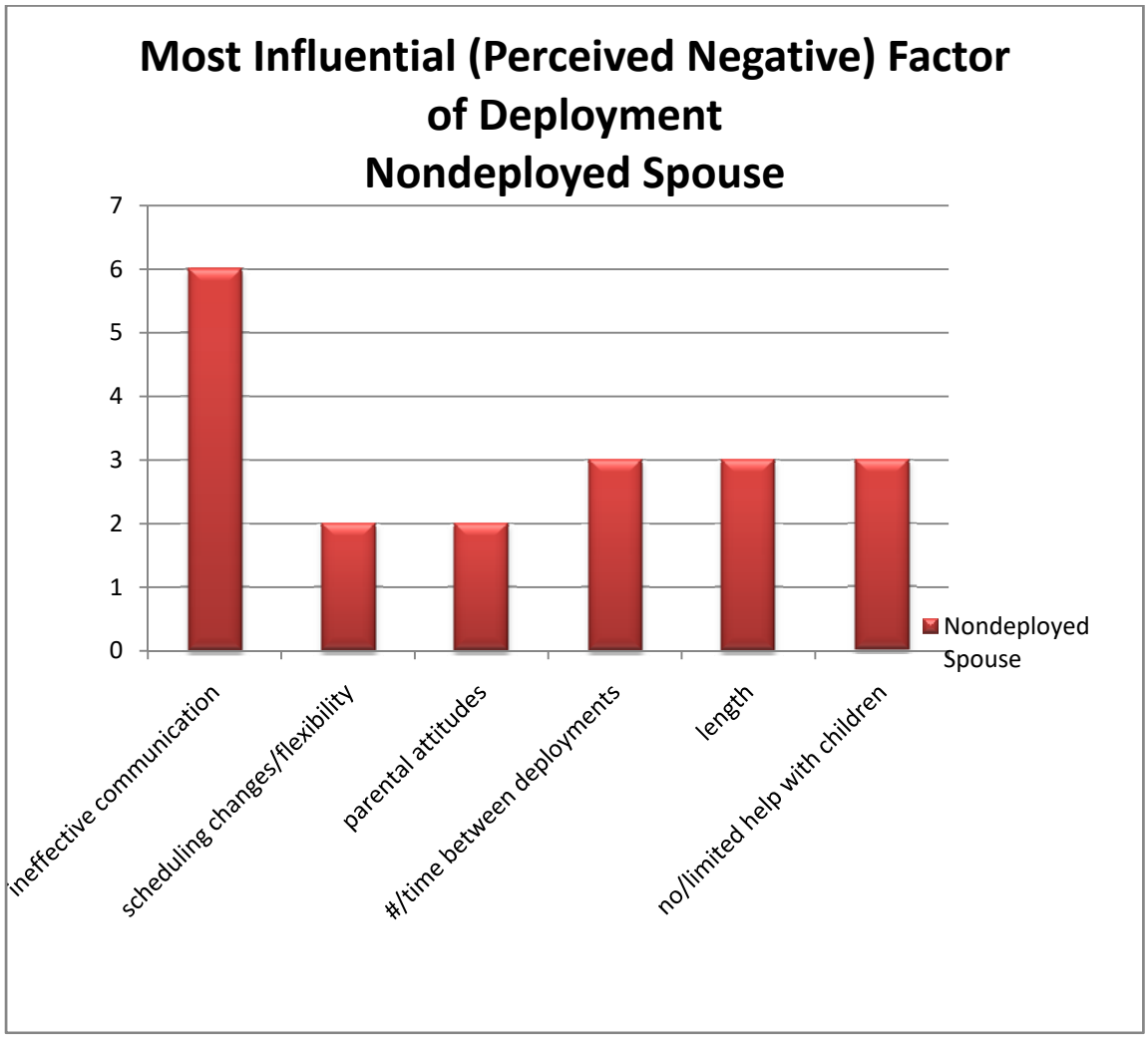

Figure 9. Perceptions of nondeployed spouses regarding most negatively influential factor during parental deployments

One nondeployed parent of a Kindergarten student, 3rd grader, and 5th grader stated,

um, communication, because kids they don't have the ability to communicate. Like talking over the phone with a child who has very little focus, so it was like

> ‘hi, bye’. And it's like if everything is going on around them, they're just not focusing on conversation, so communication is like almost entirely like he'd go stretches of four weeks without talking to them and everybody seems fine because it's not right in our face, you kind of ignore what's missing.

A nondeployed spouse with a student in 5th grade stated,

> The few times when we could talk to them (soldiers), anything that went wrong he (student) blamed it on his dad for not being here. Or my husband would send a video message and he (student) wouldn't watch anything to do with his dad. Then when his father first came home he was a little detached, then when he made the connection he wouldn't let go. Our house was broken into while we were still home (we were here so it was a home invasion) and he blamed his dad for not being home to take care of us, so we had to put him through therapy. His stress was higher the whole time dad was gone.

In sum, nondeployed spouses reported that they perceived that ineffective communication influences their Prekindergarten through 12th grade student’s performance at school during parental deployments.

Parental attitude. Sixty-three percent (63%) of nondeployed spouses reporting that parental attitude/support was the most influential factor to improve deployments for students. Support and parental attitude was reported as the most positive factor by seven nondeployed spouses (see Figure 10). One nondeployed parent of an eleventh grader reporting,

> Our attitude and involvement have the most effect. As far as school went, we had the same expectations when Daddy was there as when Daddy was not

there. So I would say that would be it. And I was just as involved as when he was not here, the only difference was he was not.

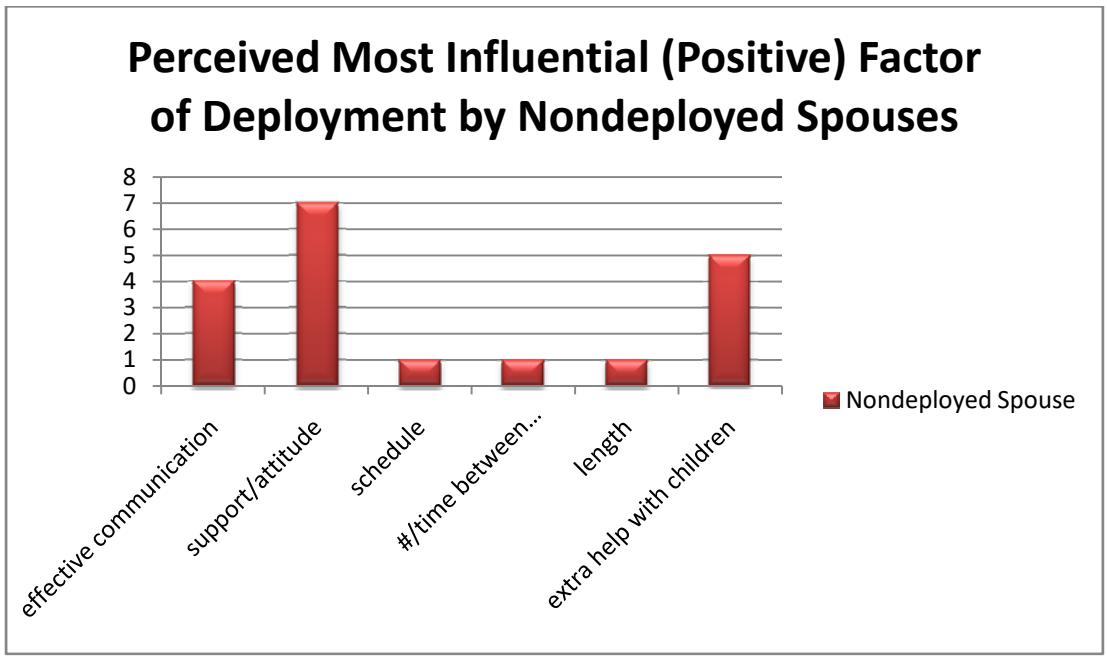

Figure 10. Perceived Most Influential Factor of Deployment (Positive) by Nondeployed Spouses

A nondeployed parent of a 4th and a 10th grader reported,

The parents' attitude toward the whole situation has a major impact because I have had friends who were parents who did not stay on top of their kids because of what they were going through personally, and that is very evident in children.

Another nondeployed parent of a 6th, 8th, and 10th grader explained,

If we don't do well about being positive and supporting each other during deployment then it negatively impacts how they do at home and at school. Attitude of myself and my husband, more positive and consistent, regardless of the situation would be the biggest impact with them doing well.

One nondeployed spouse with a 4th and 12th grader stated,

> Most influential, I really don't know if it's any ONE thing. I think the supports that the child feels like they have and the spouse feels like they have. Only because the spouse that's deployed will worry that the spouse who's home doesn't have the supports and so the spouse who's at home feels like they've got support no matter who it's from: family, friends, Army friends, whoever. And I think that is the biggest factor of how people handle and deal with deployments and how the child handles it.

Nondeployed spouses reported that a positive attitude would decrease negative influence on academic performance of their children. Thirty-seven percent of nondeployed spouses who were interviewed indicated that their attitude and the attitude of the deployed soldiers were the best indicators of how well their children would do during the deployments.

Changes in schedules/routines during a deployment. As soldiers are deployed, the nondeployed parent often has to adjust schedules and routines to ensure students are picked up from school, able to attend extracurricular activities, and have assistance available to help with homework and projects. Soldiers and their nondeployed spouses indicated that these changes in routines and schedules often contributed to personal stressors and differences in student behaviors and school performance. For longer deployments, semi-permanent changes in routines were necessary such as hiring additional childcare providers, nannies, or enrolling children in extra after school care programs.

Stress, roles, and responsibilities. No non-deployed spouses indicated there was no change in grades, stress levels, or routines while the soldier was deployed. One non-

deployed spouse stated that her children were more stressed, 13 non-deployed spouses stated that there were changes in students' stress levels, four non-deployed spouses indicated that their children had different roles and responsibilities, two nondeployed spouses stated that there were additional childcare personnel/routines while the soldier was deployed (see Figure 11).

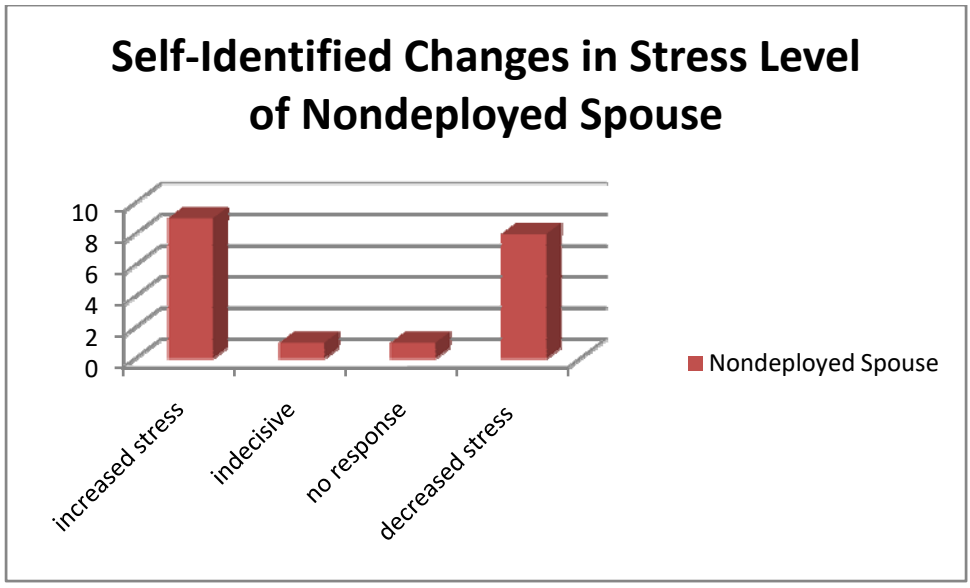

Figure 11. Self-Identified Changes in Stress Level of Nondeployed Spouse

One nondeployed parent of a second grader reported, "It is so much harder when he is gone for longer deployments, because the routine is different for an extended amount of time, and we know it isn't going to stay like this forever, just for a few months or a year then it is back to the real routine". One nondeployed spouse with a second grader stated, "The routine is different, going to a babysitter, getting picked up by me after work, things are frazzled sometimes." When asked about differences for the students during deployments, one nondeployed spouse with a student in Prekindergarten, 2nd, and 5th grade stated,

> Just different expectations. I tried to keep everything normal - we went and spent six weeks with my parents that summer, and they spent 2 weeks at my in-laws, which gave us all a break, so I don't think their stress level was any different. Just everything made him (oldest) angry - if he didn't get a puzzle right it was anger. If we didn't do what he wanted to do, it was more anger. He was triggered easily. When dad came back, the anger resolved.

Grades and behavior. When 19 non-deployed spouses were asked how they perceive their PreK-12th grade children's academic performance is influenced by parental deployment, nine non-deployed spouses reported no change in student grades during deployments. Two non-deployed spouses reported longer deployments were better than shorter ones, 12 non-deployed spouses indicated that longer deployments had a negative impact on student performance, and five non-deployed spouses indicated there was no perceived difference based on deployment length.

Length of deployment. Sixty-three percent (63%) of nondeployed spouses stated that longer deployments are worse than shorter deployments. Twelve non-deployed spouses indicated that longer deployments had a negative impact on student's emotional and behavioral stability which they felt influenced how well the students responded to parental deployments. Sixty-three percent of non-deployed spouses who were interviewed reported that although grades were not influenced by deployment, emotional stability was a concern, specifically with longer deployments. More than half of the nondeployed spouses stating during interviews that longer deployments did impact how students reacted to events emotionally (see Figure 12).

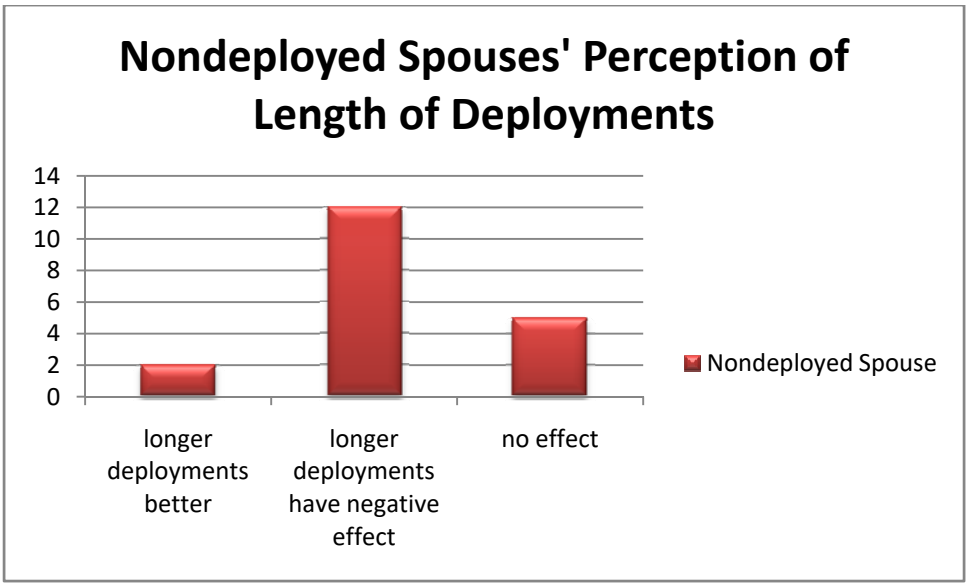

Figure 12. Nondeployed Spouses' Perception of Length of Deployments

Multiple deployments.Nondeployed spouses who were interviewed reported that longer deployments are challenging for students to endure. They stated that multiple deployments were harder for students to find a natural rhythm in school during the deployments. More than half of the participants felt that multiple deployments caused changes in routine which resulted in changes in behavior and emotions for their child. .A non-deployed parent of a preschool student reported,

> I think longer deployments are easier (than short, multiple deployments) because it is easier to get into a routine and stay in a routine versus the coming and going because the coming and going is way too hard because as soon as they get used to him being around he's gone again.

Another nondeployed parent of a preschooler stated that the biggest negative impact was due to how often they were deployed. She explained, “So they were on a rotation of four months. That makes it very difficult, whereas if they would just be gone for 6-8 months and be stationed here for a little while that would be better.”

One non-deployed parent of a 4th and 6th grader reported, “back and forth, lots of deployments/PCS'ing[Permanent Change of (duty) station/relocating] all the time. She is never in one place for long.”The non-deployed parent of a preschooler, 2nd, and 5th grader (who is also a soldier, but was not the deployed soldier for this study because his wife was deployed during the target timeframe) commented that he,

> would rather there be just one bigger one than just multiple ones. Then you are constantly trying to reacclimate. If they go, it takes 4-6 weeks to get acclimated to the rhythm; if they are only doing three months at a time then they have to reacclimate again. Our unit here they were changing out every three months. So they would just send a new group in every three months, then back and forth, back and forth. I would rather do a big year-18 month and get it all done at one time.

When considering the perceived effect of multiple deployments, one nondeployed spouse reported that shorter, multiple deployments were better than longer ones, 14 non-deployed spouses indicated that multiple deployments had a negative influence on perceived student performance, and four nondeployed spouses stated that there was no difference on student performance based on number of deployments. One non-deployed spouse with a 4th and 12th grader stated,

> I think even one deployment is enough to wreck grades, but when you have multiple deployments you are looking at multiple grade levels of grades that are inconsistent, and learning that is inconsistent because your kids are not focused. It's hard for them to remember what they’re learning in school when they’re worried about Dad who is being shot at on a regular basis or especially when

they are older and they learn what it means to go to war. So I don't know if the number of deployments, I don't know that really - one is enough to wreck your grade, so multiple ones just make it that much worse.

Additionally, 14 nondeployed spouses indicated that multiple deployments had a negative impact on perceived academic achievement (see Figure 13).

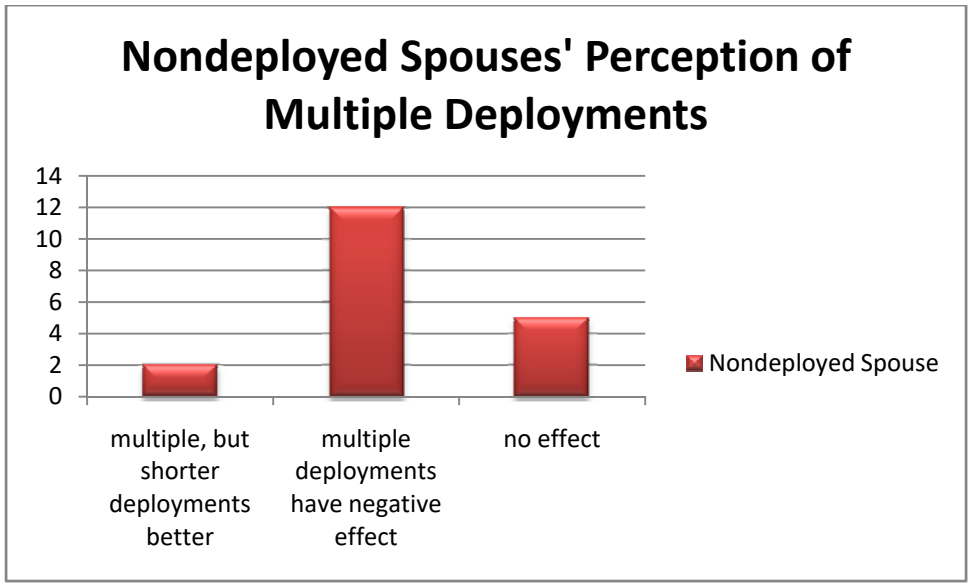

Figure 13. Nondeployed Spouses' Perception of Multiple Deployments

School counselor questionnaire. The school counselor completed an open-ended questionnaire as one data source. The counselor was recruited because she has deployment sessions weekly with all students in pre-kindergarten through grade 12. Classroom teachers were not selected because they do not have all students.

Data from the school counselor's questionnaire revealed that military-dependent students worried about the home situation when a parent is deployed. The counselor reported that during deployments, many students feel more responsible for the overall family. They worry about the parent at home, as well as the parent who is deployed. The counselor reported that, "When a parent is deployed, these students performed

emotionally with more difficulty because they were worried about the parent and not able to see/talk to them." The counselor stated that, "The younger children become more 'needy' and don't want to leave the nondeployed parent's side, fearing he/she will leave just like the deployed parent has left. Often, these students will "act out" to get what they want."

The counselor stated, "When the nondeployed spouses demonstrate resiliency early during the deployment, the students are better able to cope with the deployment and the subsequent changes to routines." A last comment was: "When the soldier is deployed the student's stress level increases and they feel they have more responsibilities around the house." Students were reported as worrying more about both parents.

Academically, the counselor felt that students' grades were contingent on the individual student and parents. She stated, "when the families are together the parents are just as involved as nonmilitary families and they see the importance of grades."She continued:

> Changes in student grades are specific to the child and/or family, so consequently some students want to not be a burden so they try even harder, while others stop doing their work because they do not feel it is important or it is a way to get the nondeployed parent's attention. Most students seem to keep the grades they had, so "A" students remained "A" students.

The counselor reported that most children want to please their parents so they try to take care of the nondeployed parent as well as get all of their school work done. Concurrently, the nondeployed parent has increased stress levels, feelings of loneliness,

and pressure to make all decisions on their own. Often they feel that they have less time to help their children with school work, which can be overwhelming.

The counselor reported that after deployments the children are extremely happy, but want to stay home with the soldier instead of going to school. The counselor sets up deployment conferences with students giving them an opportunity to share their homecoming routines and tell how exciting it is for them to have the soldier back home. During this post deployment timeframe, the counselor reported that, "grades typically stay the same, but the work 'feels' easier to students. Students share with the counselor during the deployment conferences that they have less worry once the soldier returns home and can focus more on school work."

Length of deployment. When asked about how the length of the deployment influences student grades, the counselor reported that,

> Short, multiple deployments cause students to have a hard time adjusting. Longer deployments allow the student to establish routines to manage the deployment more effectively. Short, frequent deployments do not provide for consistent routines, which can be upsetting and cause students to fall behind in work. Typically, students are the most upset in the first month or so of deployments and if there are multiple deployments the recovery times from these emotional upsets take longer to establish.

Multiple deployments. The counselor reported that the length and number of times of deployment are the most influential factors in predicting student success in the school. Included with this is the nondeployed spouse's attitude. The counselor reported,

> If the nondeployed spouse is able to reestablish a routine quickly, children usually respond well. Multiple, short deployments are harder on the nondeployed spouse, and the children assimilate the loneliness and frustration of their parents.

Additional findings. One category that emerged from the data occurred when soldiers were questioned about reintegration of the deployed back into the family after a deployment. Several soldiers and non-deployed spouses talked about their own experiences rather than how this reintegration influenced student academics.

Soldier perspectives on reintegration. As soldiers return home from deployments, reintegration causes some new concerns. Nine soldiers were concerned about how the soldier would fit back into the routines of the family. One soldier stated he wanted to do more to help out at home. One soldier stated that he felt that when he returned from deployments he needed the nondeployed spouse to continue with the new routines for a longer amount of time to allow for his own reintegration to occur more naturally. Four soldiers stated they felt that reintegration should occur more slowly. Three soldiers stated that reintegration caused increased stress levels for soldiers, their spouses, and their children. One soldier indicated no changes in stress after the soldier returned. A soldier with a Kindergarten student explained,

> Multiple deployments are a problem. This is because the family never has a chance to find their "norm" before having to pack up and leave again. There is no time to catch up on everything that you missed before the next rotation, so there is no balance.

One soldier with a 6th, 8th, and 10th grader stated, “I try to step back and take my wife's lead - let her handle it for the first week or so and then slowly ease back into the routine”.

Non-deployed spouses perspectives on reintegration. Seven nondeployed spouses were concerned about how the soldier would fit back into the routines of the family. One nondeployed spouse stated she felt that the soldier needed to do more now that he was home. Three non-deployed spouses stated reintegration should happen more slowly.

Three nondeployed spouses stated that reintegration caused increased stress levels. Three nondeployed spouses indicated no changes in stress after the soldier returned and two nondeployed spouses stated that they were happier and relieved once the soldiers returned home. One nondeployed spouse with a Kindergarten student stated that when the soldier returned, “We still continued with our routine and he just incorporated back into it. We put her (student) in counseling because of me seeing the change and knowing it was too much for her.” Another nondeployed spouse with a 4th and 10th grade student said,

> Oh, I think there's definitely that period, you've been playing that role for so long, but it does become very difficult for someone else to come in and start taking over and some people might be like "oh thank God you're here you can do it now", but I've never seen it work that way. The truth is they come home and you’re like "who do you think you are because I've been doing this all by myself and so " It was very difficult for him too because one night he said, "you don't even need me anymore" and all I could say was "what about when I needed you

> for the last 9 months or year?" It's definitely very difficult for the first couple of months of that reintegration period.

A nondeployed parent of a 4th grader and a 12th grader stated the hardest part of deployment was,

> the emotional turmoil it causes on the family. Not only is the soldier traumatized by what he sees and does, but the family feels the effects of that soldier's experiences by how they interact upon reintegration. Deployment touches the lives of everyone involved.

A nondeployed parent of a 5th grader reported,

> Emotions were on edge right after he came home. There was so much we all had to catch up on when he was finally home. Too much tragedy while he was gone so there was a flood of emotion for the first few weeks.

Summary

Chapter 4 presented the findings of the study. These findings were based on analysis of 38 interview transcripts (19 soldiers and their spouses) and one open-ended questionnaire from the school counselor. Interviews were recorded and ranged in length from 4 minutes 19 seconds to 13 minutes 53 seconds. Transcribed interviews were two pages in length each for a total of 76 pages, giving a picture of how soldiers and their nondeployed spouses perceive student performance might be influenced by military deployments. Although interview length was a limitation, data gleaned from the interviews were sufficient to answer the research questions. Patterns and trends evolved from the responses of both soldiers and nondeployed spouses to effectively gain a

comprehensive understanding of how soldiers and nondeployed spouses perceive military deployments influence student performance.

Findings were discussed in relation to the perspective of the soldier and then the nondeployed spouse, with responses from the questionnaire completed by the school counselor and the corresponding students' grades. Data in the 'Soldier' section focused on perceptions of soldiers who have students enrolled in PreK-12 in regard to the effects of deployment on their children's academic achievement. Data in the 'Nondeployed Spouse' section focused on perceptions of nondeployed spouses who have students enrolled in PreK-12 in regard to the effects of deployment on their children's academic achievement. The 'School Counselor' section offered data from school counselor's perspective.

Data collected through the interviews and an open-ended questionnaire completed by the school counselor revealed that prior to deployment, soldiers and spouses indicated an increased stress level. Soldiers and nondeployed spouses indicated that the nondeployed spouse had additional stressors while the soldier was deployed, that there were changes in students' stress levels, their children had different roles and responsibilities, and there were additional childcare personnel/routines while the soldier was deployed. During deployments, soldiers and spouses indicated no changes in students' grades, but students experienced changes in behavior or emotional stability during parental deployments. Soldiers and nondeployed spouses indicated that longer deployments and multiple deployments both had a negative impact on student performance. Effective support/positive attitude was reported by soldiers and

nondeployed spouses as being perceived as the most influential factor to make deployments better for students.

When addressing the research questions that seek to answer how, if at all, soldiers who have experienced military deployment perceive their PreK-12th grade children's academic performance is influenced by parental deployment, soldiers indicated that longer deployments had a negative impact on student's emotional and behavioral stability which they felt influenced how well the students responded to parental deployments. Additionally, soldiers indicated that multiple deployments had a negative impact on perceived academic achievement based also on the effects multiple deployments had on the students' emotional wellbeing. The number of deployments (multiple deployments) was perceived as the most negative factor of parental deployments reported by soldiers, and frequent communication was reported as the perceived most positive factor by soldiers.

In order to respond to the research question that seeks to determine how nondeployed spouses perceive their PreK-12th grade children's academic performance is influenced by parental deployment, the data revealed that nondeployed spouses reported no change in student grades during deployments; however, they indicated that longer deployments had a negative impact on student's emotional and behavioral stability which they felt influenced how well the students responded to parental deployments. Additionally, nondeployed spouses indicated that multiple deployments had a negative impact on perceived academic achievement. Support/Parental attitude was reported as the most positive factor by nondeployed spouses, and lack of communication or

ineffective communication was the most negative factor reported by nondeployed parents.

There were several limitations that evolved through the data analysis, which included the understanding that interview length is a limitation, as was researcher journaling to document the audit trail. Although interviews were not 30-60 minutes in length, during the course of the interviews, the participants were able to give a detailed picture of how they perceived military deployments influenced student performance. Soldiers and nondeployed spouses both referenced the length of the deployments, the number of deployments, effective and ineffective communication, parental attitude, and routines/schedules as factors contributing to how well the students performed during parental deployments. With such consistent results, the limitation of short interview length was marginal. In regard to an audit trail, it would have been beneficial if the researcher had journaled during the study to document each step of the process from data collection, to analysis, to drawing conclusions and confirming results. Although the interviews were dated and recorded digitally to include length of each interview, it would have strengthened the study had the researcher created a matrix of the data collection during the study, not as part of the analysis. Again, this audit trail is a limitation, but not significant enough to disregard the results of the study and the impact they have on student performance for military families who experience deployment.

Chapter 5 provides a summary of the critical elements of the study, to include the topic, problem statement, research questions, methodology, data analysis, and results. The chapter further discusses the themes that emerged from this study, and recommends future practice, implications, and research related to academic achievement of students

whose parents have experienced military deployments. Chapter 5 synthesizes how the research questions were answered and provides an overview of why this study is important and how it was designed to contribute to the understanding of parental perceptions of the impact of military deployment on student performance.

Chapter 5: Summary, Conclusions, and Recommendations

Introduction and Summary of Study

Extensive military deployments have occurred since the attacks on September 11, 2001, leaving children to endure the emotional and academic battle that ensues when a parent is away from home for an extended amount of time. One problem with military deployments is that in addition to other stressors, deployments can negatively influence a student's academic performance (Cozza et al., 2005; Harrison &Vannest, 2008). Researchers such as Cozza et al. (2005) and Harrison and Vannest (2008) offered insight into how stress affects student achievement. Cutrona, Cole, Colangelo, Assouline and Russell (1994) explored the relationship between perceived parental social support and academic achievement and found that perceived social support has a positive correlation to academic achievement. Using these studies, as well as others which were included in the literature review, the researcher identified a gap in the research, which revealed that further research was needed to identify specific factors of deployment which parents perceived as having an influence on academic performance of students.

The purpose of this descriptive, qualitative study was to provide a description of how, if at all, families living in the Southeastern United States who have experienced deployment feel parental deployment influences their children's academic performance. Research questions looked at how, if at all, soldiers who have experienced military deployment and their nondeployed spouses perceive their PreK-12th grade children's academic performance is influenced by parental deployment. A qualitative methodology was deemed most effective for answering this proposed study's research questions. Using a qualitative research methodology allowed the researcher to delve

deeper into why parents feel deployment either influences or does not influence student performance (Yin, 2016). Data collection instruments included: interviews of soldiers and non-deployed spouses who have experienced deployment and an open-ended questionnaire completed by the school counselor. The sample included 19 military families with students in Pre-Kindergarten through grade 12 who attended a private school in the Southeastern United States.

To analyze data, the researcher used a self-developed deductive and inductive coding strategy. Participant responses to interview questions were deductively analyzed based on: deployment dates, number of deployments, perceived academic achievement of students before, during, and after deployments, effects of length of deployment, and effects of multiple deployments. Responses were tallied by category to determine the most influential factors reported by soldiers and their nondeployed spouses. Key terms identified in the transcripts were highlighted, and the coded transcriptions were then sorted into the designated category and by participant groups (soldiers and nondeployed spouses). Data were initially coded deductively based on categories in interview questions as noted above in the deductive analysis section. Within those categories, transcripts were then inductively coded. Final categories included communication, changes in routines and schedules during deployments, length of deployments, and number of deployments.

In order for schools to improve academic achievement, teachers, and administrators need to be cognizant of the barriers that prevent students who have deployed parents from achieving their true potential (Hill & Taylor, 2004). Results from

this study provided insight into how soldiers and their nondeployed spouses perceive military deployments influence student performance.

Chapter 5 summarizes the soldiers' and their nondeployed spouses 'perceptions of the influence of parental deployment on academic performance. Chapter 5 will review several key points the researcher explored to address the perceived influence of military deployment on academic performance: the study topic, the purpose, the problem, the sample, the research questions, the phenomenon, data collection approaches, methodology, and data analysis. Additionally, the researcher presents the findings and draws conclusions based on the data collected and analyzed. The researcher provides recommendations for future research and practice, and explains implications which became evident through the study.

Summary of Findings and Conclusion

The two research questions for this study focused on how, if at all, do soldiers and their non-deployed spouses who have experienced military deployment perceive their PreK-12th grade children's academic performance is influenced by parental deployment.

Soldiers and their spouses were interviewed to determine the number of deployments the family had sustained since the oldest child had entered Prekindergarten. Additionally, the school guidance counselor completed an open-ended questionnaire. Categories that emerged from the data included: communication, changes in routines and schedules during deployments, length of deployments, and number of deployments. The results will be presented according to these categories in this section. Additionally, results of this study will be examined in light of results of other research on the topic.

Communication. Both soldiers and non-deployed spouses in this study reported that lack of communication or ineffective communication was a factor likely to negatively influence student performance during parental deployments. Communication caused students and nondeployed spouses to feel isolated from their soldiers. This weakened the students' ability to be resilient during deployments. Non-deployed spouses indicated lack of communication negatively influenced the family at home. One nondeployed parent of a preschooler, 2nd grader, and 5th grader stated:

> He (soldier) would only call at like 5 o'clock in the morning the way his schedule worked out, and he would only get 15 or 20 minutes and (the children) were still not up yet. So they missed out on talking to Dad while he was gone.

Flake et al. (2009) found similar results, indicating that children experience stress when their parents are deployed, but use of communication technologies such as Skype help children maintain a connection with the deployed parent. Likewise, soldiers in this study reported that a factor that positively influenced student performance is communication, specifically, "Skype." In sum, both soldiers and nondeployed spouses reported that they perceived that ineffective communication influenced their Prekindergarten through 12th grade student's performance at school during parental deployments.

Stress levels. Most soldiers and non-deployed spouses indicated that during a deployment, children were more stressed. The results of this study aligned with other research on the effects of deployment on stress levels. Military deployments have been shown to cause a perceived increase in stress levels of soldiers, their spouses, and their children (Aranda et al., 2011; Erbes et al., 2011; Gewirtz et al., 2010; Hammelman,

1995; Henry et al., 2011; Reed et al., 2011; Renshaw et al., 2011). Aranda et al. (2011) found that 1 in 4 military children had increased symptoms of psychosocial morbidity related to parental deployment. Reed, Bell, and Edwards (2011) found an increased chance of impaired well-being in students whose parents are deployed. Barnes, Davis, and Treiber (2007) found that adolescents with deployed parents had a significantly higher incidence of posttraumatic stress. Students reported increased thoughts of suicide, depression, and lower quality of life when their parents were deployed (Reed et al., 2011). Although Aranda et al. (2011) found no correlation between gender, age, and level of stress, Reed, Bell, and Edwards (2011) found that girls reported higher thoughts of suicide than boys, and younger students reported lower quality of life than older students with deployed parents. Regardless of age or gender, all children of deployed parents were identified to be at risk for increased psychosocial distress compared to their nondeployed peers (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011).

Changes in schedules/routines during a deployment. During deployments, soldiers, their nondeployed spouses, and the school counselor all perceived that students feel more responsible for the overall family and worry about the parent at home, as well as the parent who is deployed. Students had different roles and/or responsibilities at home during a deployment of a parent. Most of these changes were additional chores to help the nondeployed spouse. As soldiers are deployed, the nondeployed parent often has to adjust schedules and routines to ensure students are picked up from school, able to attend extracurricular activities, and have assistance available to help with homework and projects. Soldiers and their nondeployed spouses indicated that these changes in

routines and schedules often contributed to personal stressors and differences in student behaviors and school performance. For longer deployments, semi-permanent changes in routines were necessary such as hiring additional childcare providers, nannies, or enrolling children in extra after school care programs. When comparing results of the current study to those in the literature review from Renshaw et al. (2011), Henry et al. (2011), Gewirtz et al. (2010), and Mansfield et al. (2010), all four studies concluded that changes in schedules and routines of the nondeployed spouse influenced stress levels. Results of this study revealed all non-deployed spouses indicated changes in their own and their children's' stress levels, or routines while the soldier was deployed. Several other researchers found that children of deployed parents were identified to be at risk for increased psychosocial distress compared to their nondeployed peers (Aranda et al., 2011; Barnes, Davis, &Treiber, 2007; Reed et al., 2011). Additionally, other researchers indicated changes in stress of the soldier that could influence student performance (Erbes, et al. 2011; Gewirtz et al. 2010; Hammelman1995). During parental deployments, the home environment can switch to a place filled with tension and anxiety, instead of one in which children retreat for solace and care (Cutrona, Cole, Colangelo, Assouline& Russell, 1994). The results of the current study indicated that both nondeployed spouses and children experience stress during deployments.

Parental support/attitude. Support and parental attitude was reported as the most positive factor by seven nondeployed spouses. Positive attitudes improved student performance by allowing soldiers to edify students in positive ways at home and at school. From the literature review, one can conclude that there is a positive relationship between perceived parental social support and student academic achievement (Cutrona,

Cole, Colangelo, Assouline& Russell, 1994). Parents' attitudes and expectations, perceived parental social support, and attachment security all contribute to how a student copes with parental military deployment (Jacobs & Harvey, 2005; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994; Granot & Mayseless, 2001). How academic achievement of military-dependent students is influenced by the length of the deployment, the number of deployments, and parental involvement can be directly related to their social attachment to their parents (Bowlby, 1977). While most soldiers and spouses reported little change in student grades during deployment, many indicated that students experienced changes in behavior or emotional stability during parental deployments.

Length of deployments. Most soldiers felt that longer deployments had a negative influence in their child's emotional stability, and behavior. Sixty-three percent (63%) of nondeployed spouses stated that longer deployments are worse than shorter deployments; having a negative impact on student's emotional and behavioral stability. Non-deployed spouses indicated that although they did not perceive that grades were influenced by deployment, emotional stability was a concern, specifically with longer deployments. Results of other studies indicated that deployment had a negative impact on the academic achievement of elementary students and this effect was intensified when deployments were extended for longer periods of time (Engel et al., 2006; Phelps et al., 2010).

Number of deployments. Results of this study showed that soldiers reported the main issue related to student academic outcomes was the number of deployments. Multiple deployments were reported to have negatively influenced perception of student

grades more than the length of deployment. An interesting finding in this study was that 63% of the soldiers interviewed reported that changes in behavior due to length of the deployment were much more prevalent than changes in their child's academic performance. Further, soldiers reported that the age of the children influenced their ability to cope better than others.

Nondeployed spouses in this study felt that multiple deployments made it difficult for students to find a natural rhythm in school. Additionally, most nondeployed spouses indicated that multiple deployments had a negative influence on perceived student performance and academic achievement. More than half of the participants felt that multiple deployments caused changes in routine, which resulted in changes in behavior and emotions for their child.

The findings of the current study are consistent with existing research regarding how parental deployment is perceived to influence student performance. Prior research showed that multiple deployments influence student achievement more than shorter deployments (Erbes, Polunsy, & Compton, 2011) and multiple deployments affect academic achievement more than one or no parental deployments (Cutrona, Cole, Colangelo, Assouline & Russell, 1994). Engel et al. (2006), and Phelps et al. (2010) concluded that deployment had a negative impact on the academic achievement of elementary students and this effect was intensified when deployments were extended for longer periods of time. Contrary to these findings were those of Gabriel (2007), who found that parental deployment did not decrease academic achievement, but that the rate of growth of the participants was slowed during parental deployments. When synthesizing this information, it can be concluded that stress levels of the soldier, the

nondeployed spouse, and the children were all increased due to deployments, and although grades were not perceived to be lower, there were noted changes in behavior or emotional stability due to changes in stress levels, routines, and responsibilities.

The relationship between academic achievement of military-dependent students, length of the deployment, number of deployments, and parental involvement can be attributed to the social attachment between students and their parents (Bowlby, 1977). Engel, Gallagher, and Lyle (2006), used data from Hostile Fire Pay and *TerraNova* results to determine the relationship between times of parental deployment and academic achievement from 2002 to 2005, Gabriel (2007) examined the relationships between parental deployment and academic achievement from 1998-2006, and Phelps et al. (2010) examined the effects of extended deployment and multiple deployments from 2006 to 2007. Each of the studies proposed to assess the effects of military deployment on academic achievement in an effort to improve student success.

Practical applications of the information acquired through this study include the possibility of teachers, counselors, and administrators developing interventions to address deployments, which are specific to the needs of the military-dependent student whose parents are deployed for long amounts of time or multiple times. Academic contributions of this study include advancing research pertaining to the field of education for a population of students which includes more than half a million students annually (Office of the Deputy Under Secretary of Defense, 2010). Addressing the perceived academic performance of military-dependent students whose parents are deployed will have an impact upon and add value to the success of military-dependent students, their parents, and schools who are looking for ways in which to address

decreases in academic performance. The results of this study may be used by practitioners to address the needs of any student who is separated from his or her parents, thus potentially reaching an even greater number of students.

Implications

Determining how parents perceive deployment influences academic performance advances scientific knowledge by identifying the specific conditions under which parents perceive academic achievement is delayed or inhibited. The confluence model (Zajonc, 1976), attachment theory (Bowlby, 1977), Bandura's (1989) social learning theory, and Esposito-Smythers, et al.'s (2011) Emotional Cycle of Deployment for Families (ECDF) served as the theoretical framework of this study.

Confluence model. The confluence model (Zajonc, 1976) postulates that a child's intellectual development is profoundly influenced by family configuration. When a parent is removed from the environment for an extended amount of time, such as for military deployment, it may affect the child's intellectual development (Carlsmith, 1964; Zajonc, 1976; Fowler & Herbert, 1978; Angrist, &Johnson, 2000; Lyle, 2006). Although parents from the current study did not indicate noticeable differences in grades during times of deployment, they did indicate that student behaviors were influenced by parental stressors and changes in routines. These perceived affects on students' emotional health may have further influence on their academic progress. Parental deployments, therefore, may influence a child's intellectual development, thus affecting the student's academic performance (Zajonc, 1976).

Emotional Cycle of Deployment for Families (ECDF) framework. The Emotional Cycle of Deployment for Families (ECDF) framework chronicles the stages

through which military service members and their families transition, including pre-deployment anxiety, deployment anger/frustration, and reintegration adjustment (Esposito-Smythers, et al., 2011). ECDF purports that as families move from one stage of deployment to the next, their actions are predictable. These predictable patterns allow nondeployed spouses to anticipate what will happen next as they await the soldier's return. These predictable patterns allow nondeployed spouses to anticipate what will happen next as they await the soldier's return. The predictable pattern of ECDF also allows the researcher to draw conclusions about how the families will respond during each stage of the deployment cycle.

In tandem with expected outcomes, research revealed that soldiers and nondeployed spouses each felt anxiety prior to deployments, increased stress during deployments, a "leveling off" time as the new "normal" was reached, and then increased anxiety as the soldier prepared to return. Soldiers expressed concerns about how to reintegrate with the family upon returning home from deployments, and the cycle repeated as soldiers prepared for the next deployment event. In the current study, soldiers and their nondeployed spouses indicated that prior to deployment there was a heightened sense of anxiety. During the deployments nondeployed spouses recounted stories of their children (and themselves) feeling angry or frustrated that the soldier wasn't home. Additionally, soldiers shared their difficulties learning how to readjust to the family's routines when they reintegrate after deployments. This ability to anticipate next steps was reported during the current study as a reason why multiple deployments were more challenging (according to nondeployed spouses) because the family was able

to anticipate what would happen for the next deployment which would occur just a few months after the preceding deployment.

Past experience with deployments explains why soldiers feel that multiple deployments would have a negative impact on student performance because their previous deployments caused challenges for the students. As families progress through the stages of the Emotional Cycle of Deployment for Families (ECDF), students experience emotional changes that may affect their academic performance (Esposito-Smythers, et al., 2011). However, results of this study did not indicate that academic performance changed a great deal. However, length and number of times of deployment were perceived by soldiers, their nondeployed spouses, and the school counselor as being the most influential factors in predicting student success in the school.

Attachment theory. Bowlby's (1977) attachment theory explains that the nature and origin of a child's connection to his/her mother influences his actions. In the current study, the attachment theory explains the relationship between a parent's anxiety because the spouse is deployed and the child's anxiety because of the strength of the tie to his nondeployed parent, who most often is the mother. When the child has strong bonds to the mother he is not at ease when the mother has additional stress, for example when her husband is deployed.

Bowlby's (1977) attachment theory also works to explain the relationship between a child and the deployed soldier if this is the stronger bond (father/ child instead of mother/child) especially in the case of single military dads raising their children. Results of this study show that both soldiers and nondeployed spouses perceive that deployments caused the stress levels of the nondeployed spouse and the child to

increase. These results support the claim that student performance is perceived as decreasing during deployments, based on Bowlby's (1997) attachment theory.

Social intelligence theory. Thorndike's (1920), social intelligence theory is founded on the belief that people have the ability to perceive the motives and behaviors of others and to use that information to make informed choices. Social learning explains that people learn from each other through observation and imitation (Ormond, 1999). Social learning explains that the children interpret behaviors from their nondeployed parents as the impetus for their own actions (Thorndike, 1920).Nondeployed spouse responses that indicate that parental attitude was the most influential factor to improve deployments is supported by social learning (Thorndike, 1920) and social intelligence theory (Ormond, 1999).

When students have additional stress due to parental deployments (Thorndike, 1920) or are separated from their parents for extended amounts of time or for multiple separations (Bowlby, 1977), the children's intellectual development may suffer (Zajonc, 1976), thus influencing academic performance. Changes in academic performance may be the result of lack of parental involvement by the deployed parent (Bowlby, 1977), the nondeployed spouse, and/or the student's emotional connection to either the deployed parent or the nondeployed parent who is now preoccupied with thoughts of what might be happening to the deployed parent (Thorndike, 1920). The research questions of this study align with the confluence model, attachment theory, social learning/social cognitive theory, and emotional cycle of deployment for families as they address how the academic performance perceptions of the soldier and nondeployed spouse are influenced by military deployment. The results of this study revealed that soldiers, their

non-deployed spouses and the school counselor all felt that different factors related to deployment influence the child's academic performance.

Practical implications. The results of this study identified some possible influences of changes in emotions, behavior, and academic performance of students whose parents are deployed. Results may lead to the development of strategies to overcome obstacles associated with deployment. This information may be helpful to teachers, counselors, and administrators because when students experience stressors such as those that result from parental deployment, schools need to find methods of reducing those stressors and provide a support system to help reduce academic delays and obstacles that accompany parental deployment (Hill & Taylor, 2004).

1. Nondeployed spouses felt that multiple deployments influenced students more than length of deployments. Schools should consider the local military installation's trends for multiple deployments to determine if additional interventions should be put in place to address perceived areas of concern when families are facing an upcoming redeployment. One option might be for schools to offer afterschool tutoring, homework clubs, or counseling options for military families during these periods of back to back deployments. Soldiers and nondeployed spouses did not report changes in academic performance, but did indicate changes in behavior and emotions. Based on previous research which correlates children's attachment to parents, changes in emotional intelligence due to changes in the home environment, and social learning theory to academic achievement, any changes in routines or stress levels of child or nondeployed spouse could result in changes in academic achievement. Although parents did not perceive these changes in academic progress, schools should be made aware that parents did perceive that their children's emotional and behavioral health were influenced during deployments, which could manifest in changes in academic performance. One practice application would be for schools to provide military family deployment counseling to students before, during, and after deployments to address the possible changes in emotional intelligence and coping skills.

2. Soldiers and nondeployed spouses reported changes in routines and responsibilities at home during a deployment. Because nondeployed spouses were concerned about the repeated changes in routines during deployments, schools could provide a list of agencies who offer assistance to these families such as Army Community Services (ACS), Military & Family Life Counseling (MFLC), Behavioral Health, and Exceptional Family Member

Program (EFMP). When schools partner with these agencies they are better able to meet the needs of students with deployed parents.

3. Soldiers felt deployment increased their stress levels and they worried about reintegration. Soldiers indicated that they were concerned about how to step back into their children's lives without disrupting their new routines. Schools could offer reintegration classes to help soldiers adjust to their role as an extension of the school.

Future implications. Looking at the results of this study, it is clear that future research would benefit the field of education to help provide new insight into the perceived effects of military deployments on academic performance. Research should explore different subjects, geographical locations, socioeconomic status, and gender to determine how these variances would influence the results of the study. Future results would provide a holistic overview of all the facets of military deployment from multiple sources, locations, levels of status, and gender to provide the most comprehensive look at deployment possible.

Strengths and weaknesses of the study. Several strengths and weaknesses existed with this study. The strength of the study is that it provided some unique insights regarding how parents perceived deployment influenced children. The results showed that emotions, behavior, routines at home and reintegration all influenced the family unit. In the current study, both soldiers and nondeployed spouses indicated that their children continued to be resilient because of regimented routines, parental attitudes, and effective communication. An unexpected finding was that soldiers spoke about their own concerns and emotions surrounding deployment, so this could be further explored.

Several weaknesses were present in the study. This study did not examine the effects of students who exhibited inappropriate behavior problems due to parental deployments. Therefore, more research needs to be done to explore the behavior patterns

of children during deployment. In order to truly understand the effects of military deployment, educational leaders should study the effects of parental deployment length and number of deployments in order to maximize student achievement while parents are deployed.

Another weakness of the current study was that there was no distinction made between students whose parents were deployed for combat purposes and those who were deployed for training purposes, such as drill sergeant school. These differences might have affected academic achievement results. Since parent deployment data (length and number of deployments) came directly from the parents, there was the possibility that the data might have been reported incorrectly. Incorrect reporting of dates and number of deployments might have affected the overall results of the proposed study.

Additionally, only one school was used in this study. Because the sample was from only one school, there was limited applicability of findings. However, due to the mobile nature of the military dependent, a diverse aggregate of students was represented in that sample.

Since the sample came only from a private institution, the demographic makeup of the group might not have been consistent with the general public. Typically, military parents who send their children to a private school are officers and do not represent the lower enlisted. There was the possibility that achievement scores would have been affected differently for students with parents who are officers compared to students whose parents are enlisted personnel.

Originally, the researcher intended to triangulate data using report card grades would have yielded further support of the study's findings, however, attempting to track

student grades from September 11, 2001 to present is not feasible when considering the transient nature of military families moving from one military installation to another. Through these military relocations, cumulative grades from elementary school are daunting to track and might not provide any quantifiable data.

Furthermore, since only one school was used in this study there is limited transferability. Since the sample came only from a private institution, the demographic makeup of the group might not be consistent with the general public. Typically, military parents who send their children to a private school are officers and do not represent the lower enlisted.

This study only looked at parental perceptions of changes in academic achievement, but not at the quantifiable changes of achievement. The researcher considered using report cards to triangulate data from parental perceptions, but because deployment dates for this study ranged from 2000-2017, most student report cards were not able to be traced back far enough due to multiple relocations associated with military families. An example of this includes considering a high school senior in 2017 whose parent deployed in 2004, 2009, and 2014 would need to have report cards from Prekindergarten through twelfth grade in order for a researcher to analyze trends due to deployments. This same military family might have relocated six times during the student's educational career, resulting in a need to obtain cumulative records from five previous schools over a 13 year period.

Lastly, it should be noted that the interviews used in this study were shorter than the typical 30-60 minutes. The interviews used in this study were shorter than 30-60 minutes. This was due to a novice researcher conducting the interviews. Longer

interviews might have yielded a more rich discussion of the influence of deployment on student performance. Future studies should ensure that the length of the interview does not devalue to results. On a final note, a thorough audit trail would have provided a deeper understanding of how the data evolved through each step of the study. The strengths and weaknesses of this study are what bring integrity to the results. Each weakness provides opportunity for improvement in future studies, and each strength supports the validity of the conclusions drawn herein.

Recommendations

As researchers gain information from this study, it is the hope that it will inspire them to continue the efforts started here and venture forward with more research on the effects of military deployments. Continued research and practical application of the results of this study can bridge gaps for students during parental deployment. Recommendations for future research include repeating this study in a public school setting in the same geographic area, comparing results of enlisted soldiers to those of officers, replication of the current study in different geographic areas, and comparing results for female soldiers to those of male soldiers.

Recommendations for future research. The results of this study yielded information on how parents with children enrolled in a private school in the Southeastern United States perceived their children's academic performance was influenced by parental deployments. Recommendations for future research are discussed in this section.

1. Parents in this study did not feel that student academic achievement changed as a result of deployments. Future research is recommended to further explore reasons student academic achievement is influenced during deployment.

2. This study did not examine the effects of students who exhibited inappropriate behavior problems due to parental deployments. Future qualitative research is recommended to explore how behavior is influenced during deployment.

3. Only one private school was used in this study. Future qualitative research is recommended to include more than one school site, including other private and public schools.

4. The interviews used in this study were shorter than 30-60 minutes. Future qualitative research is recommended with longer interviews.

5. There was no distinction made between students whose parents were deployed for combat purposes and those who were deployed for training purposes, such as drill sergeant school. Future research is recommended on how different types of deployment may influence students.

6. An unexpected finding was that soldiers spoke about their own concerns and emotions surrounding deployment, so this could be further explored. Future qualitative research is recommended on how deployment influences soldiers, including their reintegration back into the family.

7. Furthermore, there was no distinction made between students whose parents were deployed for combat purposes and those who were deployed for training purposes such as drill sergeant school. These differences might affect academic achievement results. Future studies should consider types of deployment on student performance.

Finally, future research could include a comparison of the same study with one in which the soldiers were predominately female to see how the results might vary based on Social Learning (Bandura, 1989) and Attachment Theory (Bowlby, 1977). Since the current study's participants were typically male soldiers with females as the nondeployed spouses, role reversals might have differing results. Further research should be conducted to determine if the gender of the nondeployed parent results in different outcomes.

Recommendations for future practice. Gaps in current research, such as whether the length of the deployment, the number of deployments, or changes in parental involvement are perceived as the most significant factor influencing academic

achievement, have led to the need to investigate the effects of deployments on student performance (Chandra et al., 2010; Richardson et al., 2011). Parents, in their responses, demonstrate those factors they perceive to be most important in affecting student academic performance. Changes within the household such as through parental deployment have been correlated to how students perform in school.

Practical applications of the information acquired through this study include the possibility of teachers, counselors, and administrators developing interventions to address deployments, which are specific to the needs of the military-dependent student whose parents are deployed. Academic contributions of this study include advancing research pertaining to the field of education for a population of students which includes more than half a million students annually (Office of the Deputy Under Secretary of Defense, 2010). Addressing the perceived academic performance of military-dependent students whose parents are deployed will have an impact and add value to the success of military-dependent students, their parents, and schools that are looking for ways in which to address decreases in academic performance. As teachers, counselors, and administrators work to provide interventions to help struggling students, results of this study can be used to target students who might be in jeopardy of increased stress and decreasing grades. The results of this study may be used by practitioners to address the needs of any student who is separated from his or her parents, thus potentially reaching an even greater number of students.

The results of this research revealed how soldiers and their nondeployed spouses perceive military deployments influence their Prekindergarten through Twelfth grade students' academic performance. Soldiers and their nondeployed spouses both felt that

the length of the deployment and the number of deployments negatively influence student performance by causing changes in stress levels of students and the nondeployed spouse. Soldiers reported that length and multiple deployments are the factors that cause students to suffer emotionally, with an emphasis on multiple deployments as the most significant factor of deployments from the soldiers' perspective. Communication was perceived as being the factor most likely to improve student performance by allowing soldiers and students to stay connected with daily routines at home and school.

Nondeployed spouses who were interviewed reported that longer deployments are challenging for students to endure. They stated that multiple deployments were harder for students to find a natural rhythm in school during the deployments. The most negative factor of deployments, according to nondeployed spouses who were interviewed, was that communication caused students and nondeployed spouses to feel isolated from their soldiers. Limited communication weakened the students' ability to be resilient during deployments. Nondeployed spouses reported that parental support/attitude was perceived as being the factor most likely to improve student performance by allowing soldiers and students to edify students in positive ways at home and at school.

Synthesizing the findings, communication and parental support/attitude are the factors that school personnel should promote in order to maximize student performance during parental deployments. By providing counseling programs, interventions, and support groups geared to increase communication and provide additional support to deployed families, school personnel can improve parent perceptions of student performance.

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Appendix A.

Site Authorization Letter

Site authorization letter is on file at Grand Canyon University.

Appendix B.

IRB Approval Letter

GRAND CANYON UNIVERSITY™

3300 West Camelback Road, Phoenix Arizona 85017 602.639.7500 Toll Free 800.800.9776 www.gcu.edu

DATE:	December 19, 2016
TO:	Lienne Hill, M. Ed.
FROM:	Grand Canyon University Institutional Review Board
STUDY TITLE:	[890176-1] A Qualitative Case Study of Perceptions of Parental Deployment on Academic Performance
IRB REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	December 19, 2016
EXPIRATION DATE:	December 19, 2017
REVIEW TYPE:	Expedited Review
REVIEW CATEGORY:	Expedited review category # *[7.6 and 7.7]*

Thank you for your submission of New Project materials for this research study. Grand Canyon University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

Appendix C.

Informed Consent

The Effect of Military Deployment on Academic Achievement

Grand Canyon University
College of Doctoral Studies
3300 W. Camelback Road
Phoenix, AZ 85017
Phone: 602-639-7804
Email: irb@gcu.edu

INFORMED CONSENT FORM (SOCIAL BEHAVIORAL)
MINIMAL RISK SAMPLE

CONSENT FORM
TITLE OF RESEARCH STUDY
A Qualitative Case Study of Perceptions of Parental Deployment on Academic Performance

INTRODUCTION

The purposes of this form are to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research and to record the consent of those who agree to be involved in the study.

RESEARCH

Lienne Hill, of Grand Canyon University, has invited your participation in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.

STUDY PURPOSE

The purpose of this study is to provide a holistic description and analysis of how families who have experienced military deployment feel parental deployment influences their Pre-Kindergarten through twelfth grade children's academic performance, if at all. When school personnel are aware of the barriers to academic success that military dependent students face, they can take appropriate steps to remove these obstacles, thus positively influencing student academic achievement.

A Qualitative Case Study of Perceptions of Parental Deployment on Academic Performance

DESCRIPTION OF RESEARCH STUDY
If you decide to participate, then as a study participant you will join a study involving research of the perceived effects of parental military deployments on student achievement. Data will be collected from parental responses to interview questions regarding deployment developed specifically for this study (see attached Interview Questions). The first step of data collection will be to interview parents with students in grades Pre-Kindergarten through twelve to determine which students had deployed parents and which did not. Based on the Department of Defense's policy for ensuring that personally identifiable information (PII) remains secured, the only way to ascertain the specific details of parental deployment is to obtain the information directly from the parents. If you say YES, then your participation will last until approximately June 2017 at First Presbyterian Christian Academy. Your participation will include completing the interview. Approximately 20 families will be participating in this study.
RISKS
There are no known risks from taking part in this study, but in any research, there is some possibility that you may be subject to risks that have not yet been identified. The risks of this study are minimal. These risks are similar to those you experience when disclosing work-related information to others. The topics in the survey may upset some respondents. You may decline to answer any or all questions and you may terminate your involvement at any time if you choose.
BENEFITS
There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may prove beneficial by providing methods of improving academic success of students with deployed parents by identifying the specific conditions under which academic achievement is perceived as delayed or inhibited. The research conducted for this study will reveal how families who have experienced deployment feel their child(ren)'s academic achievement is influenced by deployment. Identifying the perceived causes of changes in academic achievement of students whose parents are deployed will lead to the development of strategies to overcome obstacles associated with parental military deployment.
NEW INFORMATION
If the researcher finds new information during the study that would reasonably change your decision about participating, then she will provide this information to you.

A Qualitative Case Study of Perceptions of Parental Deployment on Academic Performance

CONFIDENTIALITY

All information obtained in this study is strictly confidential. The results of this research study may be used in reports, presentations, and publications, but the researcher will not identify you. In order to maintain confidentiality of your records, Lienne Hill and the administrative staff at First Presbyterian will preserve your confidentiality including the following:

Assigning code names/numbers for participants that will be used on all researcher notes and documents. Written transcription of the interview will be coded to protect personally identifiable information in accordance with the Department of Defense's PII regulations.

Notes and any other identifying participant information will be kept in a locked file cabinet at First Presbyterian Christian Academy for three years. When no longer necessary for research, all materials will be destroyed by shredding transcripts of interviews and deleting audio interviews.

The researcher and the members of the researcher's committee will review the researcher's collected data. Information from this research will be used solely for the purpose of this study and any publications that may result from this study. All participants involved in the study will be de-identified and anonymity will be maintained.

WITHDRAWL PRIVILEGE

Participation in this study is completely voluntary. It is ok for you to say no. Even if you say yes now, you are free to say no later, and withdraw from the study at any time. If you do not want to be in the study, you may choose not to participate by simply returning this form after marking "I do not wish to participate in this study".

COSTS AND PAYMENTS

The researchers want your decision about participating in the study to be absolutely voluntary. There are no costs to you for your participation in this study. There is no monetary compensation to you for your participation in this study.

A Qualitative Case Study of Perceptions of Parental Deployment on Academic Performance

VOLUNTARY CONSENT

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you do decide to take part in this study, you will be asked to sign a consent form. If you decide to take part in this study, you are still free to withdraw at any time and without giving a reason. You are free to not answer any question or questions if you choose. This will not affect the relationship you have with the researcher or First Presbyterian Christian Academy.

Any questions you have concerning the research study or your participation in the study, before or after your consent, will be answered by Lienne Hill, (912) 977-1897.

If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Institutional Review Board, through the College of Doctoral Studies at (602) 639-7804.

This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be given (offered) to you.

Your signature below indicates that you consent to participate in the above study. By signing this consent form, you confirm that you have read and understood the information and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form.

Subject's Signature	Printed Name	Date
Other Signature (If appropriate)	Printed Name	Date

INVESTIGATOR'S STATEMENT

"I certify that I have explained to the above individual the nature and purpose, the potential benefits and possible risks associated with participation in this research study, have answered any questions that have been raised, and have witnessed the above signature. These elements of Informed Consent conform to the Assurance given by Grand Canyon University to the Office for Human Research Protections to protect the rights of human subjects. I have provided (offered) the subject/participant a copy of this signed consent document."

Signature of Investigator Lienne J Dee Date 2/3/17

Appendix D.

Copy of Instruments and Permissions Letters to Use the Instruments

Deployed Parent Interview Questions

Amount of Deployments and Dates

1. How many times have you been deployed since your child(ren) has/have been in school (since entering Pre-Kindergarten)?
2. What were the dates of your deployments?

Before Deployment

1. How do you feel just before you deploy (stress level - same, elevated, or less)?- Why do you feel that way?
2. Before you deploy, how are your child(ren)'s grades in school (A, B, etc)? To what do you attribute that (This could include things such as your attitude about school/grades, the nondeployed spouse's attitude about school/grades, parental involvement, your child(ren)'s personal attitude toward school/grades)?

During Deployment

1. When you are deployed how do you feel things are different for your child(ren) and spouse back home compared to when you are not deployed?
2. When you are deployed how are your child(ren)'s grades in school (A, B, etc)?
3. When you are deployed do you feel your child(ren)'s grades are better, the same, or worse than when you aren't deployed? To what do you attribute that?
4. When you are deployed, do you feel it is easier, harder, or the same for your child(ren) in regard to their level of stress, responsibility, ability to perform in school, etc? , If so, in what way?
5. When you are deployed, do you feel it is easier, harder, or the same for your spouse? In what area, in what way?

After Deployment

1. After you come back home from being deployed how do you feel? Why do you feel this way? Does this influence your interactions with your child(ren)?
2. After you come back home from being deployed how are your child(ren)'s grades in school (A, B, etc)? To what do you attribute this?

Length and Number of Deployments

1. Do you feel length of deployment influences your child(ren)'s grades? Why or why not?
2. Do you feel number of deployments influences your child(ren)'s grades? Why or why not?

Most influential factor

1. What do you feel, if any, is the most influential factor (or factors) in your child(ren)'s grades (this could include things such as number of deployments, length of deployments, parental involvement, your attitude toward deployment, nondeployed spouse's attitude toward deployment, or child(ren)'s own attitude toward deployment)? Why?

Nondeployed Parent Interview Questions

Amount of Deployments and Dates

1. How many times has your spouse been deployed since your child(ren) has/have been in school (since entering Pre-Kindergarten)?
2. What were the dates of the deployments?

Before Deployment

1. How do you feel just before your spouse deploys (stress level - same, elevated, or less)?- Why do you feel that way?
2. Before your spouse deploys, how are your child(ren)'s grades in school (A, B, etc)? To what do you attribute that (This could include things such as your attitude about school/grades, the deployed spouse's attitude about school/grades, parental involvement, your child(ren)'s personal attitude toward school/grades)?

During Deployment

1. When your spouse is deployed how do you feel things are different for you and your child(ren) back home compared to when your spouse is not deployed?
2. When your spouse is deployed how are your child(ren)'s grades in school (A, B, etc)?
3. When your spouse is deployed do you feel your child(ren)'s grades are better, the same, or worse than when your spouse wasn't deployed? To what do you attribute that?
4. When your spouse is deployed, do you feel it is easier, harder, or the same for your child(ren) in regard to their level of stress, responsibility, ability to perform in school, etc? , If so, in what way?
5. When your spouse is deployed, do you feel it is easier, harder, or the same for you in regard to your level of stress, responsibility, etc.? , If so, do you feel this influences your ability to help your child with school work and/or participate in school events?

After Deployment

1. After your spouse comes back home from being deployed how do you feel? Why do you feel this way and how does this influence your interactions with your child(ren), if at all?
2. After your spouse comes back home from being deployed how are your child(ren)'s grades in school (A, B, etc)? To what do you attribute this?

Length and Number of Deployments

1. Do you feel length of deployment influences your child(ren)'s grades? Why or why not?
2. Do you feel number of deployments influences your child(ren)'s grades? Why or why not?

Most influential factor

1. What do you feel, if any, is the most influential factor (or factors) in your child(ren)'s grades (this could include things such as number of deployments, length of deployments, parental involvement, your attitude toward deployment, deployed spouse's attitude toward deployment, or child(ren)'s own attitude toward deployment)? Why?

School Counselor Open-Ended Questionnaire

Before Deployment

1. How do military-dependent students perform emotionally compared to nonmilitary-dependent students? To what do you attribute this?
2. How do military-dependent students perform academically compared to nonmilitary-dependent students? To what do you attribute this? (This could include things such as students' attitudes about school/grades, the parents' attitudes about school/grades, parental involvement, etc.)?

During Deployment

1. When military-dependents' parents are deployed how do you feel things are different for the students back home compared to when their parents are not deployed?
2. When military-dependents' parents are deployed how are their child(ren)'s grades in school (A, B, etc.)?
3. When your military-dependents' parents are deployed, do you feel it is easier, harder, or the same for their child(ren) in regard to their level of stress, responsibility, ability to perform in school, etc? , If so, in what way?
4. When military-dependents' parents are deployed, do you feel it is easier, harder, or the same for the nondeployed spouse in regard to their level of stress, responsibility, etc.? , If so, do you feel this influences their ability to help their child(ren) with school work and/or participate in school events?

After Deployment

1. After military-dependents' parents come back home from being deployed how do their children appear emotionally? Why do you think they feel this way and how does this influence your interactions with those child(ren), if at all?
2. After military-dependents' parents come back home from being deployed how are their child(ren)'s grades in school (A, B, etc)? To what do you attribute this?

Length and Number of Deployments

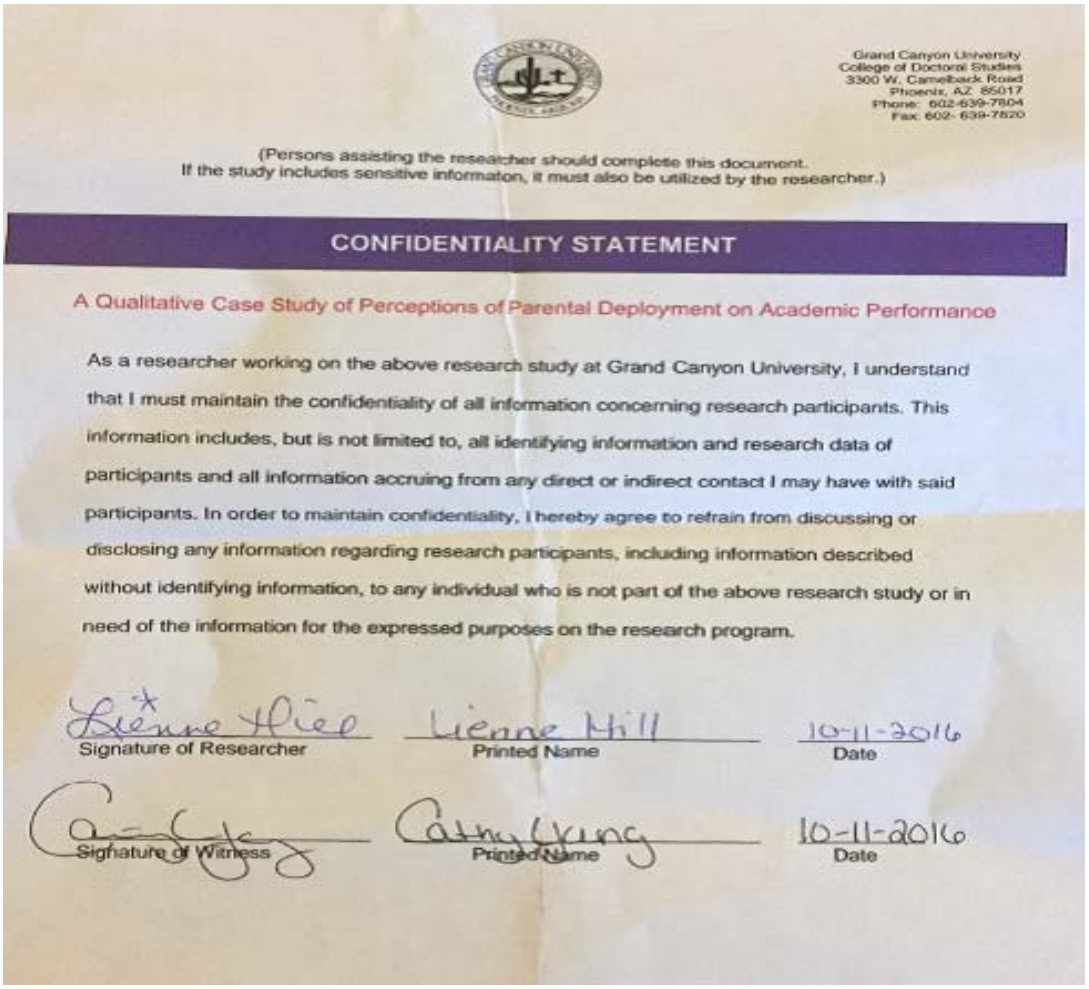
1. Do you feel length of deployment influences students' grades? Why or why not?
2. Do you feel number of deployments influences students' grades? Why or why not?

Most influential factor

1. What do you feel, if any, is the most influential factor (or factors) in military-dependent child(ren)'s grades (this could include things such as number of deployments, length of deployments, parental involvement, the soldier's attitude toward deployment, deployed spouse's attitude toward deployment, or child(ren)'s own attitude toward deployment)? Why?

Appendix E.

Confidentiality Statement



Grand Canyon University
College of Doctoral Studies
3300 W. Camelback Road
Phoenix, AZ 85017
Phone: 602-639-7804
Fax: 602- 639-7820

(Persons assisting the researcher should complete this document.
If the study includes sensitive information, it must also be utilized by the researcher.)

CONFIDENTIALITY STATEMENT

A Qualitative Case Study of Perceptions of Parental Deployment on Academic Performance

As a researcher working on the above research study at Grand Canyon University, I understand that I must maintain the confidentiality of all information concerning research participants. This information includes, but is not limited to, all identifying information and research data of participants and all information accruing from any direct or indirect contact I may have with said participants. In order to maintain confidentiality, I hereby agree to refrain from discussing or disclosing any information regarding research participants, including information described without identifying information, to any individual who is not part of the above research study or in need of the information for the expressed purposes on the research program.

Signature of Researcher	Lienne Hill (Printed Name)	10-11-2016 (Date)
Signature of Witness	Cathy Young (Printed Name)	10-11-2016 (Date)

Appendix F.

Coding Matrix

Data Analysis Matrix

1. Soldier-level of stress before deployment	Higher stress level reported by soldier	Scheduling/ Routines	Changes in schedule/routines influence stress levels
		Attitude	Attitude about deployment influenced stress levels
		Communication	Communication (lack of/frequency) influenced stress levels
		Length of deployment	Length (number of months) influenced stress levels
		Number of deployments	how many/# of deployments influenced stress levels
2. Nondeployed Spouse – level of stress before deployment	Higher stress level reported by spouse	Scheduling/ Routines	Changes in schedule/routines influence stress levels
		Attitude	Attitude about deployment influenced stress levels
		Communication	Communication (lack of/frequency) influenced spouse stress levels
		Length of deployment	Length (number of months) influenced spouse stress levels
		Number of deployments	how many/# of deployments influenced spouse stress levels
3. Student grades before deployment	Lower student grades just before deployment	Scheduling/ Routines	Changes in schedule/routines influence student grades
		Parental Attitude/Support	Negative parental attitude before deployment results in perceived decrease in student performance
		Communication	Limited or lack of communication about upcoming deployment caused perceived decrease in student performance
	Same grades	Routines/support	consistent routine/parental involvement maintained student

			performance
4. Student grades during deployment	Lower student grades during deployment	Communication	Limited communication with soldier during deployment results in perceived changes in student performance
		Parental Attitude	Negative parental attitude during deployment results in perceived decrease in student performance
		Routines/Schedule	change in student routine/parental support during deployment resulted in perceived decrease in student performance
	Student grades the same during deployment	Routines/support	Consistent student routine/parental involvement perceived to keep student performance at same level
5. Student grades after deployment	Lower student grades after soldier returns from deployment	Communication	Limited communication during reintegration results in perceived decrease in student performance
		Parental Attitude	Parental Attitude during reintegration results in perceived decrease in student performance
		Routines/schedule	Change in student routine/schedule results in perceived negative influence on student performance
	Same grades after deployment	Routines/Schedule	Consistent student routine/Schedule results in perceived positive influence in student performance
6. Soldier - Length of Deployment	Soldier reports longer deployments are worse	Length of deployment	Soldiers believe that they miss out on so much time with student and they perceive student performance decreases
	Soldier reports longer deployments are better	Length of deployment	One long deployment and then more time home to make up for it is perceived as resulting in better student performance than multiple, shorter deployments
7. Nondeployed Spouse - Length of Deployment	Spouse reports longer deployments are worse	Length of deployment	Some nondeployed spouses believe that the student misses out on so much time with one long deployment of the soldier and perceive that results in decreased student performance
	Spouse reports longer deployments are better	Length of deployment	Some nondeployed spouses believe one long deployment and then more time home to make up for it improves student performance overall

8. Soldier - # of Deployments	Soldier reports more short deployments are worse	Number of deployments	There is no time to develop routines during short, multiple deployments, and once it settles down it is time to change again so the soldier perceives there is a decrease in student performance
	Soldier reports more short deployments are better	Number of deployments	There are lots of short ones so no long amount of time missed at one shot and student performance is perceived to be better
9. Nondeployed Spouse - # of Deployments	Spouse reports that more short deployments are worse	Routine/schedules	There is no routine/ once it settles down it is time to change again and student performance is perceived to decrease
	Spouse reports more short deployments are better	Routine/schedules	There are lots of short deployments so no long amount of time missed at one shot and student performance is perceived to be better
10. Soldier - Perceived worst factor of deployment	Soldiers report that ineffective communication is the worst part of deployments	Communication	Some soldiers believe that when there is limited or no communication this is the most influential factor of deployment on student performance
	Soldiers report changes in routine/scheduling	Routine/scheduling	Some soldiers believe that when there are changes to the routine this is the most influential factor of deployment on student performance
	Soldiers report parental attitudes make deployments worse sometimes	Parental attitudes	Some soldiers believe that when parental attitudes are negative this is the most influential factor of deployment on student performance
	Soldiers report #/time between deployments are the worst part of deployments	Number of deployments	Some soldiers believe that when there are multiple deployments back to back this is the most influential factor of deployment on student performance
	Soldiers report length of deployments make it worse	Length of deployments	Some soldiers believe that when deployments are longer than one year this is the most influential factor of deployment on student performance
	Soldiers report no/limited help with children make deployments worse	Childcare/support	Some soldiers believe that changes to childcare/parental support with student routines this is the most influential factor of deployment on student performance
11.	Spouses report	communication	Some nondeployed spouses

Nondeployed Spouse - Perceived worst factor of deployment	ineffective communication make deployments worse		believe that when there is limited or no communication this is the most influential factor of deployment on student performance
	Spouses report changes in routine/scheduling make deployments worse	Routine/scheduling	Some nondeployed spouses believe that when there are changes to the routine this is the most influential factor of deployment on student performance
	Spouses report parental attitudes make deployments worse	Parental attitudes	Some nondeployed spouses believe that when parental attitudes are negative this is the most influential factor of deployment on student performance
	Spouses report #/time between deployments make deployments worse	Number of deployments	Some nondeployed spouses believe that when there are multiple deployments back to back this is the most influential factor of deployment on student performance
	Spouses report length of deployments make deployments worse	Length of deployments	Some nondeployed spouses believe that when deployments are longer than one year this is the most influential factor of deployment on student performance
	Spouses report no/limited help with children make deployments worse	Childcare/support	Some nondeployed spouses believe that changes to childcare/parental support with student routines this is the most influential factor of deployment on student performance
12. Soldier - Perceived best factor to improve deployment	Soldiers report that effective communication can help improve deployments	communication	Some soldiers believe that when there is positive communication this is the most influential factor of deployment on student performance
	Soldiers report help with routine/scheduling can help improve deployments	Routine/scheduling	Some soldiers believe that when there are consistent routines this is the most influential factor of deployment on student performance
	Soldiers report parental attitudes can make deployments better	Parental attitudes	Some soldiers believe that when parental attitudes are positive this is the most influential factor of deployment on student performance
	Soldiers report #/more time between	Number of deployments	Some soldiers believe that when there are multiple deployments

	deployments can help improve deployments		back to back (shorter in length) this is the most influential factor of deployment on student performance
	Soldiers report length of deployments can help improve deployments	Length of deployments	Some soldiers believe that when deployments are longer than one year (and there are fewer deployments) this is the most influential factor of deployment on student performance
	Soldiers report help with children can make deployments better	Childcare/support	Some soldiers believe that changes to childcare/parental support with student routines this is the most influential factor of deployment on student performance
13. Nondeployed Spouse - Perceived factor to help improve deployment	Spouses report effective communication can make deployments better	communication	Some nondeployed spouses believe that when there is positive communication this is the most influential factor of deployment on student performance
	Spouses report changes in routine/scheduling can make deployments better	Routine/scheduling	Some nondeployed spouses believe that when there are consistent routines this is the most influential factor of deployment on student performance
	Spouses report parental attitudes can make deployments better	Parental attitudes	Some nondeployed spouses believe that when parental attitudes are positive this is the most influential factor of deployment on student performance
	Spouses report #/ more time between deployments can make deployments better	Number of deployments	Some nondeployed spouses believe that when there are multiple deployments back to back (but shorter than one year each) this is the most influential factor of deployment on student performance
	Spouses report length of deployments can make deployments better	Length of deployments	Some nondeployed spouses believe that when deployments are longer than one year (and there are fewer deployments) this is the most influential factor of deployment on student performance
	Spouses report help with children can make deployments better	Childcare/support	Some nondeployed spouses believe that consistent childcare/parental support with student routines is the most

			influential factor of deployment on student performance