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Military connections

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Military Connections

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An Honors Program Project Presented to
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by Shannon Marie Malloy
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Accepted by the faculty of the Department of Psychology, James Madison University, in partial fulfillment of the requirements for the Honors Program.

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PUBLIC PRESENTATION

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Abstract

There is a long tradition of research on children from military families, which has focused on observations that these children often exhibit both internalizing and externalizing problem behaviors. One of the emphases over that last several decades as the military moves to an all-volunteer force, is a recognition that the military is no longer largely staffed by single males. An emphasis on military families has been exhibited at many different levels. This research compared university students with and without a parental history of military service on extroversion, self-esteem, and attachment style. The hypothesis regarding higher rates of extroversion among children from military families follows from an analysis that extraversion would be a highly desirable trait among service personnel. I also assumed that individuals with a military connection would score higher on self-esteem due to findings that the long-term impact of frequent relocation is high self-esteem. Finally, my hypotheses regarding attachment came from suggestions in the clinical literature that parental absences may lead to insecure attachment patterns. Results indicated that individuals from military families did not differ significantly from individuals without a military connection on any of these personality variables. The results of this study may indicate a greater level of attention to the lives of military families that has positively impacted the attachment and self-esteem of children from military families. These results may also indicate that parental military service does not have a long-lasting effect on the personality variables that were studied.
Chapter One: Introduction

The purpose of this research is to fill a gap that has been found in literature concerning military families. As an institution, the military has undergone many changes in the last forty years. Since the military has become an all-volunteer force there has been a movement from regarding the military as a predominantly single-male occupation to a livelihood that allows for familial obligation (Kelty, Kleykamp, & Segal, 2010). The number of families with at least one parent or guardian in the armed forces has grown significantly. In recent decades, military service has also come to signify more frequent deployments, which brings along a host of changes in the nature of military service and family life. The military has also recently opened its gates to women, even allowing them to engage in combat roles from which they historically had been barred. This greater female presence has led to the development of “dual career” families in which both guardians are service members. The changes in the organization and composition of this population brings to the forefront questions about the impact on those individuals who did not choose their military life, the children.

The long-term effects of military deployment are not something that have been studied to a great degree. In my research I wanted to determine what variables would demonstrate differences between college-age students with and without a military connection. Following the path of the literature concerning military children I found that several interventions had been developed to assist military children build their self-esteem (Brendel, Maynard, Albright, & Bellomo, 2014). The research also indicated a large focus on issues of attachment, although this was mostly related to attachment in service members. And finally, as an outgrowth of the studies focused on the military population I hoped to develop an
understanding of the connection of extroversion to military service (as it is seen the children of military personnel).

**Effects of Military Experiences on Children’s Development**

A large portion of the literature on military families centers on the developmental outcomes of children as they relate to the deployment of one or more guardians. Most of the literature on this topic emphasizes the negative impact military life can have on a child’s social, emotional, and behavioral development. I will review a sample of these studies.

Hooper, Moore, and Smith, (2014) describes the phenomena of “parentification,” a role reversal in which children take on adult responsibilities that do not fit their stage of maturation. The idea of parentification was first introduced by Minuchin, Montalvo, Guerney, Rosman, and Schumer (1967). These researchers were exploring the structure and treatment of families living in “slums” when they adopted this term. There are two types of parentification that are currently described in the literature: emotional parentification and instrumental parentification (Jurkovic, 1997). The former describes a situation in which a child attempts to fill an emotional void left by a guardian whereas the latter describes an attempt on the behalf of the child to engage in activities that were formerly responsibilities of the absent parent to help the guardian and/ or other children left behind (Hooper, Moore, & Smith, 2014).

Parentification has been associated with both psychopathology and resiliency in children and adolescents. Parentification can lead to psychopathology by introducing developmentally inappropriate stressors into children’s lives. However, by emphasizing social roles, confidence, and concern about the family and group, it can be argued that some degree of parentification may produce a resilient individual. Due to the ambiguous nature of existence as part of a military
family (i.e. constant deployments and reunifications) the idea of parentification has particular salience for study in this population. Military families also often encourage an increased rate of maturation in children, which may make this idea of parentification more prevalent in the military family population.

The literature on parentification provides an excellent foundation from which I began my research into the three variables of interest (attachment, extroversion, and self-esteem). In the literature above parentification can be a factor of resilience by teaching confidence to the individual. In military families this confidence may be the driving force for the greater level of extroversion that we hypothesize will be found in military children. Parentification also emphasizes the importance of social roles that can lead to greater resilience in military children. This focus may manifest itself as a greater degree of self-esteem in military children who are subject to the phenomena of parentification. And finally, our concern with attachment can be drawn from idea that parentification in resilient individuals may stem from concern about the group (or in this case the military family). Military families, especially to the extent that they engage in multiple relocations must rely on one other to achieve a semblance of stability in an otherwise tumultuous experience. Along with the literature on parentification, researchers have considered the impact of military service on certain developmental outcomes in children.

Lester, Aralis, Sinclair, Kiff, Lee, Mustillo, and Wadsworth (2016) demonstrated that military children ages 3-5 had higher rates of 3 different types of anxiety (separation, general, and total) when compared to the national sample. Children of school age, (6-10 years), had more emotional difficulties overall when compared to a national sample. The same study also found that greater deployment exposure predicted greater dysfunction within the families. This dysfunction was evident in measures of: disordered affection, communication modes, problem
solving and overall family functioning. According to the authors, life as a military child does not always lend itself to providing an ideal environment in which a child may avoid the pitfalls of mental and emotional turmoil. Along with behavioral health, the literature on military children considers the impact of military service on children in an academic context.

Other researchers have considered the relationship between children’s academic success and parental absence as part of the military experience. De Pedro, Astor, Benbenishty, Estrada, Smith, and Esqueda (2011) determined that a parent’s absence negatively affects the child’s standardized test scores. They also discovered that there is a higher rate of learning, physical and emotional disabilities that are subsequently identified when a parent was deployed. This signifies the gravity of a military deployment even in a domain (such as school) where the parent may have little to no direct interaction with the child. The importance of social connections for children evinced by this study echo the sentiments of the researchers of the following study on social capital.

The impact that military life has on the social development of military children has not gone unnoticed. A study conducted by Mancini, Bowen, O’Neal, and Arnold, (2015) measured the self-efficacy, youth outcomes, and relationship provisions of military children through self-report instruments. Youth outcomes that were measured included depression, anxiety, personal wellbeing, and academic outcomes. Relationships provisions are those aspects that indicate an individual’s “social capital,” which enable them to progress in a developmentally appropriate manner. In this study these provisions included six dimensions: reliable alliance, sense of attachment, guidance, social integration, reassurance of worth, and opportunity for nurturance in their relationships (Cutrona & Russell, 1987). Participants of this study were children living on an Army base who were between the ages of 11-17 with at least one active duty parent.
According to this study the more relationship provisions available to youth the more positive youth outcomes were observed including less anxiety, less depressive symptoms, higher levels of personal wellbeing, and better academic performance. The relationships were stronger for the former three outcomes than for the more cognitive outcome of academic performance signifying the importance of relationship provisions for psychological health in military children. This study further confirmed the hypothesis that self-efficacy was a moderator between relationship provisions and youth outcomes. This may suggest that relationship provisions may endorse self-efficacy which then affects positive youth development. Mancini et al.’s (2015) study also found differences in youth outcomes based on sex and age of the participants. While older youth experienced more anxiety and less ideal academic results, girls in the study experienced greater anxiety, more depressive symptoms and lower rates of personal well-being. Because this study looked at children from ages 11-17, and older youth demonstrated poorer outcomes, it follows that a study of college-aged students would be especially important to determine if this trend continues with age. Other studies have combined these two areas (social development and academic involvement) in their study of military children.

Another study that aimed to understand the role of peer relationships in military family functioning utilized focus groups made up of military children, their parents, and relevant school personnel (Bradshaw, Sudhinaraset, Mmari, & Blum, 2010). Their objective was to determine how social connectedness (in this case defined as feelings of closeness, perceived bond between others, and a sense of belonging) helps military families cope. The focus group method was used to get more of a flexible, in-depth, and “insider” perspective. Participants were selected from eight different military bases and were enrolled in a public middle school or public high school. The parents of the children were all involved in different ranks of the military. One of the most
common stressors according to the focus group was the frequent relocations and subsequent loss of peer connections. Military children also explained some of their coping strategies for dealing with these stressors. Participants elaborated that new student orientations their schools offer, where they get together with current students and other military children, helps ease the transition of relocation and introduces them to their new community. Additionally, simply being part of the military culture has helped them to become more social and have an easier time making friends while also learning to deal with constantly new surroundings. Having the opportunity for meeting and sharing personal experiences with those of similar backgrounds seems to make a significant difference in a military child’s quality of life.

**Behavioral Problems and Combat Deployment**

The literature on academic success, social connectivity and behavioral health led to an uncovering of multiple studies on the behavioral problems associated with military children. Some studies have suggested a distinct relationship between a parent’s war service and increased rates of behavioral problems in children (Maršanić, Margetić, Jukić, Matko, & Grgić 2014). The researchers of this study proposed the idea of “secondary traumatization”. This phenomena holds that the service member’s trauma creates dysfunction in the family environment which becomes its own sort of trauma for the child or guardian that is left behind. This distress of the service member is linked to a greater prevalence of behavioral and academic problems in their offspring. Secondary traumatization has been linked to an interruption of sleeping and eating patterns, irritability, school failure, or even oppositional behavior in children. Here it seems the idea of parentification can be implicated in these less than optimal outcomes because of the stressor of the parent’s trauma (Hooper, Moore, & Smith, 2014). Other literature has looked more directly at
military deployment rather than effects of that deployment which is discussed in the next section of this literature review.

Due to the military’s movement toward multiple, extended deployments for service members, research has accumulated discussing the possible impact of these changes on the familial unit, specifically the children. A study conducted by Chandra et al. (2010) discussed the influence that this change in frequency and duration of deployment has on children across social and academic domains. The children in this study ranged from age 11 to age 17. Behavioral difficulties were measured using the Problem Behavior Frequency Scale (PBFS) which looks at the number of times a behavioral issue is reported, ranging from 0 to 20 or more times. The instrument questions the respondent on a range of behaviors including: stealing, being suspended, skipping school, cheating, shoplifting, vandalism and other “delinquent” behaviors. Compared to the general population, children from military families had higher rates of emotional difficulties (especially problems of anxiety). The study also indicated a positive relationship between the number of deployments (or accumulated time) and behavioral difficulties. This seems to indicate that the more time the guardian is deployed the heavier the stressors become to the child who is left behind which can again related to those more negative aspects of parentification (Hooper, Moore, & Smith, 2014).

Barker and Berry (2009) hypothesized that as the number of parent deployments increased the rate of child behavioral problems also increased. Participants were recruited at Family Readiness Groups (FRGs) and invited to participate if they met two conditions: having a spouse who was recently deployed and having a child between 0 and 47 months of age. Participants were then divided into two groups: single deployment groups and multiple deployment groups. Parents were asked retroactively to consider child observed behavior
responses (OBR) which were rated on a four point Likert scale. Common OBRs recorded in this study included: clinginess, high need for attention, increased frequency of temper tantrums, greater desire to control things, appetite changes, prolonged crying, sleep problems, arguments and asking a lot of questions about the deployed parent. The researchers found that while children did not demonstrate a significant increase in behavior problems related to number of deployments, there was a significantly larger number of behavior problems during deployment than during pre-deployment.

The connections mentioned earlier between behavioral health and military service come into play again with this next article. In their study researchers conducted a retroactive study in which they aimed to determine whether or not a parent’s deployment was related to the rate of outpatient visits for mental and behavioral health issues (Gorman, Eide & Hisle-Gorman, 2010). The study utilized the records of active duty personnel to determine their deployment status and mental and behavioral health visits were documented. In the study researchers found an 11% increase in outpatient mental and behavioral health complaints for children during a military parent’s deployment. Behavioral and stress disorder diagnoses increased by 18% and 19% respectively during a parent’s deployment. However, researchers also found that there was an 11% decrease in rates of health care visits, which may be related to the greater demands placed on the caregiver who remains at home. Researchers also found a significant interaction between gender of the military parent and outpatient health care rates with children of military fathers having increased rates compared with children of military mothers. They also discovered that older children and children of married military parents had increased rates of outpatient visits.
Self Esteem in Military Children

Following the literature presented on parentification we aimed to determine what connection could be found between the military experience and self-esteem. Our literature did not produce many studies of self-esteem that provided clear-cut evidence as to its significance for this population. Many interventions were implemented for use with the military population that had an objective of bolstering self-esteem. However, the literature indicates that this variable may not play a large role in success of military child development. Our study hoped to provide evidence for future researchers to determine the importance (or lack thereof) of creating interventions that focus on this variable.

The literature found concerning self-esteem and the military was seriously lacking in depth, however we did find a few studies that were useful in portraying the ambiguous nature of this variable. Kelley (1994) was an early investigator of the role of self-esteem among children of military families. She studied children aged 5 to 13 who had been separated from their father by wartime or peacetime deployments. The focus of her study was internalizing and externalizing behaviors, which became less severe with time during a peacetime deployment, but which stayed constant during separations during the Persian Gulf War. The self-esteem of the children was a good predictor of their levels of both externalizing and internalizing behaviors, with those with having higher self-esteem having lower levels of both. Mothers’ depression was positively related to problem child behavior and low self-esteem.

No difference was found between the self-esteem of Australian adolescent and young adult children whose parent was being treated for PTSD ascribed to Vietnam service and a non-military sample. This was in contrast to the veteran’s spouses who had much lower self-esteem than the women in the control group. Likewise, Davidson and Mellor (2001) found that the
children of Australian Vietnam veterans had similar levels of self-esteem to those of a comparison groups (children of noncombat veterans and nonmilitary families). This lack of difference in self-esteem was in sharp contrast to the high levels of reported school and community problems exhibited by the children whose parents were Vietnam War combat veterans. However, researchers Finkel, Kelley, and Ashby (2003) alternatively found that lower self-esteem was associated with the number of family relocations among a sample of military families, but there was no civilian control group with which to compare this data.

Often when studying the military family researchers consider the close-knit unit of the immediate family to be the most important support group for children. And while this is largely true, many scholars also tend to ignore the importance of peer relationships in this population. Just as with other children of their developmental age, military children spend an increasing amount of time with their peers leading to greater levels of reliance on this population. In many cases it is the peer group for children ages 6 and older that hold the most significance as this is where they learn to socialize and compare their abilities leading to a burgeoning sense of identity and self-esteem (Bigner & Gerhardt, 2014). Peers are essential for healthy development in this respect and the population of military children are not exception to this rule.

Beyond the basic importance for children of this developmental age, peers seem to hold special significance for children in the military population. In one study, military children who have moved around more often were noted as having a more difficult time leaving their old friends and making new friends (Finkel, Kelley, & Ashby, 2003). Additionally the researchers explained that peer relationships act as important social supports during times of stress. For military children who experience stressors such as deployment and uncertainty surrounding a parent’s safety this support system may hold an even greater degree of significance. This same
article highlights that as children age, they often form friendships beyond the boundaries of their classrooms. The departure from friendships based on physical proximity is especially important for military children, as this may be the only manner in which they can conduct peer relationships due to the unstable nature of a parent’s military career.

Brendel, Maynard, Albright, and Bellomo (2014) attempted to conduct a meta-analysis on the effectiveness of school-based interventions for military children that effectively promotes social, emotional, behavioral, or educational well-being. The requirements to be qualified for inclusion in this analysis were as follows:

1. Intended to assistant students with parents that are active duty, reserved or retired personnel of a branch of the U.S. military.
2. Interventions aimed at assisting with the effects of parental deployment, parental reintegration, parental military related trauma/death or frequent moves.
3. Studies employed randomized or quasi-experimental design.
4. Studies measure at least one behavioral, social, emotional, or education-based outcome where effect size can be computed.
5. Studies were conducted in public or private K-12 school settings in the United States.

Both published and unpublished studies were considered, but research was limited to those studies conducted between 1990 and 2013. In their exhaustive search they found only one intervention meeting their criteria.

The single study (matching the criteria described above) was conducted by Mitchum (1999) and studied the effects of a group counseling intervention on self-esteem, trait and state anxiety, and internalizing and externalizing behaviors in children. Researchers used a pretest-
posttest, quasi-experimental design to look at how effective the Children of Deployed Parents-Group was. This group counseling method was used with children whose parents were scheduled to be or had been deployed by the military. Participants were students in third through fifth grade and the intervention consisted of five sessions. Session one goals included introduction to the group along with a discussion of the group’s purpose. Goals of the second session included providing information about phases of the deployment cycle (anticipation, leaving, and reintegration) and learning how to recognize emotions and the behavioral reactions connected to these. The third session taught children about possible support networks and how to use them effectively. Session four involved giving all children a chance to share their concerns about deployment and to learn new coping skills for problems faced during deployment. In the fifth session children learned how to come up with and evaluate possible solutions to their problems and received feedback from the other children in the group. A follow-up session involved feedback from other participants on their present coping strategies and gave the students to learn how they helped others in the group, and gave them the opportunity to consider how the group effected their coping skills. At the conclusion of the study the effect of the intervention on all outcomes (anxiety, self-esteem, internalizing and externalizing behaviors) was measured. The researchers found that the intervention was not effective in cultivating higher functioning in the children in terms of these specific outcomes. In short, despite the comprehensive nature of this search only one intervention was seen to be appropriate for analysis. Even then, this single study did not provide results that would indicate the intervention was a success. The absence of effective military family interventions in the literature despite the fact that the military population continues to grow reveals the need for greater research into military family life.
Attachment in the Military Families

Our review of attachment was built from the idea proposed in the parentification articles mentioned previously (Hooper, Moore, & Smith, 2014). Resilience may be built from parentification so long as they are taught to be concerned about the family. And it is this concern about the family that brought me to investigate the relationship of attachment to military service.

Attachment can be thought of as the emotional bonds that connect people to each other (Clarke-Stewart & Parke, 2011). Attachment between an infant and its primary care-givers can be seen after the first months of life and during childhood most individuals form an attachment style that influences their relations outside of the family. The original attachment with parents forms an internal working model, which is a template for subsequent relationships. If parents are available and predictable and allow their children to explore their social environment, children develop a secure attachment. If parents are unavailable or unpredictable or overly anxious about allowing the child freedom, the child likely will develop an insecure attachment. Individuals who have a secure attachment style, while sad or anxious to move away from current attachments, are capable of forming new, trusting relationships. Conversely, those who are insecure may either cling onto past relationships or form very shallow new relationships because of fear of being abandoned (Bowlby, 1958).

Some researchers have attempted to determine how military family attachment can be used to develop resiliency within the military family and avoid the problems that military children often endure during deployment. One important aspect in creating this resiliency is the need for the family systems to have a “secure family base” (Riggs & Riggs, 2011). By creating this secure base the family provides its members with a reliable network of attachment relationships in which they can share the responsibility of support and exploration needed for
healthy development during a deployment. Simply the perception of a secure family base has been related to better mental health. And in an environment in which the familial structure is constantly shifting (either due to deployment or reintegration) establishing this secure base leads to enhanced familial functioning.

Attachment research related to the military has focused largely on the effects of military service on attachment styles in service members. One study attempted to delve into the relationship between PTSD symptomology and attachment style. Shura, Rutherford, Fugett, and Lindberg (2015) demonstrated a moderate negative correlation between scores on the Avoidant Mother and Ambivalent Mother scales of the Attachment and Clinical Issues Questionnaire (ACIQ). However, scores on the Avoidant Partner scale revealed a moderate positive correlation with PTSD symptoms. Scores on the Ambivalent Partner scale was not related to PTSD symptoms at a significant level. This may demonstrate a tendency for military personnel to shut down during crisis to avoid any sort of conflict. Interestingly, this study found that service member’s scores on attachments to their fathers did not predict PTSD symptoms – providing evidence for the idea that individuals do not attach to all caregivers in the same manner. Shura et al.’s (2015) study provides an elementary sketch of attachment in military service members.

Other recent literature regarding attachment in the military includes Kruse, Hagerty, Byers, Gatien, and Williams, (2014). In this study the researchers found that attachment status was a good predictor of adjustment problems in navy recruits. Those individuals who entered training with insecure attachments had higher rates of interpersonal conflict, higher rates of loneliness and depression, and a lowered sense of belonging. Unfortunately, it seems that information regarding attachment in the children of military service members was less abundant.
One study of adolescents whose parents were in the military attended camps run by the National Military Life Association. At the camp, 107 individuals from 12 to 18 years of age were surveyed and reported feelings of “ambiguous loss” and “uncertainty” in relation to their parent’s deployment (Huebner, Mancini, Wilcox, Grass, & Grass, 2007). It seems that even with increased frequency and ease of communication children still experience anxiety over their military parent’s safety and this could translate into their attachment style.

After reviewing the literature I determined a need to examine the differences between certain aspects of attachment styles. The measure used to ascertain attachment was further divided into three subscales (Close, Depend, Anxiety). These three scales can be used to ascertain a more nuanced view of the attachment data, while also providing the four overarching categories from which an attachment style is specified. We expected that on the close and depend scales military children may score differently than the control group due to the greater need for a secure family base and due to the higher level of community involvement. Along the same lines our literature review indicated a heightened sense of anxiety connected to military service, and so here too we expected that individuals with a military connection would score differently than the control group.

**Personality and the Military**

Features of military personnel’s personality also have a prominent place in psychological research, although whether personality is changed by military service or growing up in a military family or whether the military selects for personality type, remains a concern. Our literature review did not reveal a large number of articles that focused on military children. Instead, the literature focused on the service member’s personality. However, parental levels of extroversion provided the foundation from which we built our hypothesis regarding extroversion.
For example, Klee and Runner (2016) looked at how personality affected adaptation to military service (and the likelihood of joining) as well as the effect of military service on personality. This survey included 235 soldiers who were receiving military medical training or studying at a military university. The “Big 5” traits of openness, conscientiousness, extroversion, agreeableness, and neuroticism were measured. At the conclusion of their study the researchers found that, in line with their hypotheses, soldiers were lower on neuroticism, openness and agreeableness but higher on extraversion and conscientiousness than their “normal” sample used for comparison. Low scores on neuroticism have been considered to be indicative of the need to suppress fear responses to make instantaneous possibly-life altering decisions in the military domain (Campbell, Moore, Poythress, & Kennedy, 2009).

Research done by Jackson, Thoemmes, Jonkmann, Lüdtke, and Trautwein (2012) revealed decreased levels of openness may be due to the rigidity that is associated with military operations while low agreeableness may be related to the soldier prototype that highlights strength and toughness. The higher levels of extraversion found in service members has been replicated in other studies and was seemingly the norm as the participants engaged their group members at a highly consistent rate in the study by Klee and Renner (2016) mentioned above. Increased levels of conscientiousness can be traced back to the fact that soldiers are often involved in incredibly challenging tasks and given a large amount of responsibility in which mistakes can be costly (Campbell et al., 2009; Skomorovsky & Lee, 2012).

Higher levels of extroversion in military parents denoted previously in the literature may also be connected to the constant relocation and value of self-sufficiency that is associated with a military upbringing. Other literature has highlighted the importance of “stoicism” to the military culture (Hall, 2011). This ideal coupled with the survivalist notion that pervades this population,
military adolescents seem to learn to refine their communication skills and become more independent in order to meet their own need (Milburn & Lightfoot, 2013). Some studies indicated that these specific coping strategies have been found to be positively correlated with the number of relocations a child experiences (Bradshaw, Sudhinaraset, Mmari, & Blum, 2010).

However, other literature has been found to dispute these findings. Barclay, J., Stilwell, and Barclay, L., (1972) analyzed the relationship of paternal occupation as it relates to social interaction, along with teacher expectations of children in grades 3-5. 1386 participants were included in the study at a school in Texas and completed the Barclay Classroom Climate Inventory which integrates self-report, socio-metric, vocational, and teacher reports into a computerized report. Male children of fathers who were military personnel demonstrated more shyness and withdrawn behavior and demonstrated less social effectiveness. Teachers tended to label these specific children as unstable extroverts. Female children of military personnel were noted as more depressed and having a higher interest in artistic and creative occupations although a discussion of extroversion was not a major feature for this group. This study does not include the consideration of the female parent’s occupation as effecting personality variables. And due to the dated nature of the article it may not be relevant for consideration with the current military population.

**Hypotheses**

As the military changes it is important to understand whether those changes manifest themselves in the psychological well-being of children from military families. We note that there is a shortage of literature on young adults who have grown up in military families. The proposed study will attempt to replicate findings from research on children done during the period of the older military model. Specifically, we are interested in examining personality characteristics that
may relate to the positive outcomes of parentification of strong social roles, confidence, and concern about the family and group. These may translate into examining introversion-extraversion (strong social roles), self-esteem (self-confidence), and attachment (concern about family and group) (Hooper, Moore, & Smith, 2014).

Hypothesis 1: College students who grew up in military families will be more extroverted than those who grew up in civilian families. This hypothesis is based on findings that extroversion is connected with multiple relocations.

Hypothesis 2: College students who grew up in military families will have higher levels of self-esteem than those who grew up in civilian families. Although differences between children of combat deployed fathers and control did not produce differences in self-esteem, self-esteem has been shown to be related to the number of deployments. Moreover, many interventions with children of military families use self-esteem as their underlying model.

Hypothesis 3: College students from military families will have higher levels of insecure attachment. This will be further broken down into the Close, Depend, and Anxiety scales that make up attachment measure. There has been multiple demonstrations of the disruptive effects of parental absence and loss on attachment. In fact, Attachment Theory was derived from observations by John Bowlby (e.g., 1958) when children were separated from the parents by war or illness.
Hypothesis 4: Among college students from military families with deployments there will be higher rates of insecure attachment than among those who do not recall deployments.
Chapter Two: Method

Participants

One hundred students participated in the study. There were 84 women, 15, men, and one “fluid gender” in the sample. Seventy-six students identified as being White. Forty-two participants had one or more parents in the active military during their childhood. Fifty-eight participants without an immediate family connection to the military served as the comparison group. Military connected individuals indicated which branch of service their parent or guardian had served in or was currently serving in. Nineteen participants had a guardian in the Navy; 18 participants had a guardian serving in the Army; and 5 participants had a guardian in the Air Force. Participants were enrolled in introductory psychology courses and completed the survey for research participation credit.

Procedure

Students were recruited through the psychology department’s participant pool. They elected to participate through one of two surveys. The first survey, titled Military Connections included the assessment measures on extroversion, attachment, and self-esteem, as well as demographic questions about gender, age, and ethnicity. The other group of participants selected the survey titled Military Connections 2 and along with the same questions that the comparison group was asked these students were asked questions detailing their parent/guardian(s) experiences as part of the military. Additionally, participants completed an informed consent statement and were given information on how to access the final results of the study.

Instruments

Three instruments, described below, were given to all participants in the order described:
1. Revised Adult Attachment Scale: Close Relationships Version. To measure attachment we used the Revised Adult Attachment Scale: Close Relationship Version (AAS-R; Brennan, Clark, & Shaver 1998). This measure has 18 items and uses a scale that ranges from 1 “is not at all characteristic of me” to 5 “is very characteristic of me.” This AAS-R includes three subscales, each with six items, one which measures how comfortable a person is with closeness and intimacy in a relationship (“Close” subscale), a second which measures whether a person feels others can be depended on in a relationship (“Depend” subscale) and a third which measures whether a person is worried about being rejected or unloved in a relationship (“Anxiety” subscale).

Collins and Read (1990) found Cronbach's alpha coefficients of 0.69 for Close, 0.75 for Depend, and 0.72 for Anxiety, and test-retest correlations of 0.68 for Close, 0.71 for Depend, and 0.52 for Anxiety, thus demonstrating the subscales’ reliabilities. Domingo and Chambliss (1998) found a moderate level of concurrent validity when the AAS-R was compared to the Adolescent Relationship Questionnaire (r = .42).

In order to determine a participant’s attachment style, those who had a mean score greater than 3.00 on the Close and Depend scales along with a score of less than 3.00 on the Anxiety scale were designated “Secure.” Participants with a score of greater than 3 on the combination of Close and Depend scales as well as a score on the Anxiety scale greater than 3.00 were designated as having a “Preoccupied” attachment style. For participants with a Close and Depend mean score of less than 3.00 and an Anxiety scale score of less than 3.00 the attachment style called “Dismissive” was applied. And finally, participants whose Close and Depend mean score is less than 3.00 and Anxiety scale of greater than 3.00 were designated as having a “Fearful”
attachment style. Participants whose mean scores were exactly 3.00 on either of the sub-scales were not included as attachment styles cannot be effectively computed within this framework.

2. Revised Eysenck Personality Questionnaire. To determine a participants’ level of extroversion the Revised Eysenck Personality Questionnaire was used. This is a 12-item inventory in which participants indicate either agreement or disagreement with a phrase (Francis, Brown, & Philipchalk 1992). Responses are then coded as “1” or “0” respectively, with 12 as the highest possible score of extroversion and 0 as the lowest score. Cross-cultural studies using the EPQR-A in Canada, the United States, Australia, and, England have demonstrated an alpha coefficient of between .74 and .84. The Eysenck Personality Questionnaire has been used in nearly a 1,000 studies of introversion-extroversion listed in PSYCNET.

3. Texas Social Behavior Inventory. For the measure of self-esteem the Texas Social Behavior Inventory, For A (TSBI) was used. This is a 16-item scale that was revised from the original TBSI (Helmreich & Stapp 1974). For each question there is an accompanying 5-point rating scale that ranges from “not at all characteristic of me” to “very characteristic of me”. The two short forms (A and B) of the TBSI were highly correlated with their parent form (the original TBSI), indicating a correlation coefficient of 0.89 for both. Therefore the reliability of this measure makes this measure an appropriate tool for the proposed study. In addition convergent validity was established when comparing scores on the TBSI and the Ghiselli Self-Assurance Scale with a .76 correlation reported between the two instruments.
Chapter Three: Results

Hypothesis 1: Extroversion

We hypothesized that there would be a difference on level of extroversion between individuals with a military connection and those without a military connection. Participants with a military connection \((N = 42)\) had a mean extroversion score of 15.14 \((SD = 3.10)\), while participants without the military connection \((N = 58)\) had mean score of 15.62 and \(SD = 3.18\). The difference between the two groups was not statistically significant, \(t (98) = -.75, p = .46\).

Hypothesis 2: Self-Esteem

We hypothesized that students from military families would have higher levels of self-esteem than individuals from civilian families. Participants from military families \((N = 42)\) scored a mean of 56.50 \((SD = 8.65)\) on the TBSI, while participants without a military connection \((N = 58)\) had a mean score of 55.71 \((SD = 8.20)\). This difference, too, was not statistically significant, \(t (98) = 0.47, p = .64\).

Hypothesis 3: Attachment

Table 1, shows the attachment classifications for the military and comparison groups. To determine whether there was a possible difference in these arrays, a 1 degree of freedom Chi-square was computed, collapsing the secure and preoccupied categories and the dismissive and fearful categories. The categories were collapsed because of the small number of participants. We combined the “Secure” and “Preoccupied” groups because both exhibited high scores on the “Close” and “Depend” subscales.
Table 1. *The Attachment Style Classifications of Families with and Without a Military Connection.*

<table>
<thead>
<tr>
<th></th>
<th>Military</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>37</td>
<td>44</td>
</tr>
<tr>
<td>Secure</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>Dismissive</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Fearful</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

The resultant value of 0.78 was well below the critical value of 3.64.

In measuring the subscales, 100 participants were surveyed, however, due to the cutoff scores used in data analysis, only 81 participants are included in the table. 42 participants had a military connection and 58 participants did not have this military connection. The mean for the Close subscale among students from military families was 3.14 (SD = .95), while the mean from those from civilian families was 3.12 (SD = .75). The mean for the Anxiety subscale for military connected students was 3.57 (SD = .57) and the mean for the civilian students was 3.47 (SD = .58). On the Depend subscale the military connected participants had a mean score of 2.99 (SD = .78) and the group without this connection had a mean score of 3.07 (SD = .79). None of these comparisons achieved statistical significance.
Hypothesis 4: Deployment and attachment style

Table 2, shows the attachment styles found in the military group which was further divided into deployed and non-deployed groups. Because there were only nine students in the “non-deployed” group, statistical analysis was not possible. However, we found that 2 of the nine students were securely attached, compared to 1 of the 33 students in the group with deployed parents.

Table 2. The Attachment Style Classifications on Individuals with Deployed and Non-deployed Military Parents

<table>
<thead>
<tr>
<th></th>
<th>Deployed</th>
<th>Non-deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>Secure</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Insecure</td>
<td>32</td>
<td>7</td>
</tr>
</tbody>
</table>
Chapter Four: Discussion

Although no significant differences were found between the two samples, the results of this study are useful in understanding and serving the military population. According to this study, self-esteem, extroversion, and attachment in the college-age population are not significantly related to a parent’s military service.

I developed my study on the literature found regarding issues of attachment, personality, and self-esteem. The hypotheses were built on the foundation parentification literature which implied these three variables as factors of resilience (Hooper et al., 2014; Jurkovic, 1997; Minuchin et al., 1967). I drew the conclusion that parentification may be more prevalent in military families due to the ambiguous nature of military service along with the greater need for maturation that pervades military childhood. It follows then that the aspects that combine to lead to greater levels of resilience (i.e. emphasizing social roles, confidence, and concern about the family and group) may be more prevalent in this group. These three dimensions of resilience via parentification are built on the ideas of self-esteem, extroversion, attachment that I subsequently studied.

Non-significant results on the measures of extroversion and attachment are not largely surprising. Many other researchers have documented the inborn nature of personality. Therefore, it follows logically that a parent’s military experience may not have a large bearing on a military child’s level of extroversion despite the fact that military service members exhibit greater levels of extroversion compared to control (Klee & Runner, 2016). The lack of significant results of attachment style did not conform to the expected hypotheses. To compute attachment style, I followed the lead of Bartholomew (1990) in which four attachment styles were developed from the three attachment dimensions measures (close, anxiety, depend). Researchers used cutoff
scores to determine these attachment styles and any mean score of 3 was not included in the sample as it was the exact median and therefore did not indicate an organized pattern of response on which to base an attachment style. This loss of data therefore may have affected the data. It would be pertinent to develop an alternate attachment rating with which future researchers could include these more moderate responses. However, the lack of apparent significant differences between the two samples in this study indicates that military service is not sufficient to determine a child’s later attachment style. Therefore results in this study do not indicate either long-standing negative impact in terms of anxiety using this attachment scale nor a greater preponderance of anxious or ambivalent attachment styles than is found in the control sample. This demonstrates an important finding for attachment research, a parent’s military service is not in and of itself a detriment to a child’s development. Finally, the non-significant results found utilizing the self-esteem survey was not expected by the researchers. Our research indicated that frequent relocations was related to lower self-esteem in military children (Finkel, Kelley, & Ashby, 2003). However, it again offers an aspect of hope for those who wish to work with the military population as it indicates that military service alone has no direct correlation to lower self-esteem.

The lack of significance results found in our study could be attributed to a myriad of factors, though two seem largely more influential than the others. It could be possible that the lack of difference between our two samples is an outcome of the increase in attention that has been paid to military families in recent years. Some interventions have been developed in order to help military families cope with the stressors that are associated with life as a part of this population.
Military connected children face a variety of unique stressors including: relocation, uncertainty of a parent’s safety, reintegration of a parent after deployment, and in severe cases parental injury, rehabilitation, or loss. Another aspect to consider in relation to this is that most military connected children do not go to schools that serve a large military population, especially with National Guard or Reserve parents. Because these schools do not generally deal with military children they are not knowledgeable or equipped to effectively deal with the stressors and issues unique to this population (Fletcher, 2012). It seems very pertinent then to provide resources and interventions to help students not only cope, but thrive in these exceptional circumstances.

There are several programs that have been created to help assist this population. The Military Child Educational Coalition (MCEC) was created to help students receive quality educational experiences (Military Child Education Coalition, 2013). This group developed the Student 2 Student program which is a program led by students that teaches military-connected and civilian students in middle and high school to be supports for students who are dealing with transition due to their parent’s military career. The MCEC has also built the Parent to Parent program that teaches parents how to advocate for their children’s needs as part of this population.

Operation Military Kids is an organization that focuses on community support for military children (Operation Military Kids, 2013). This group helps these children to get connected with formal networks to provide needed social capital and helps to build the local community’s ability to provide services for military children. OMK has worked with the American Legion, Boys and Girls Clubs of America and National 4-H, to name a few, in efforts to provide recreational and social activities as well as networking opportunities for military families. Although there seems to be a plethora of organizations working towards the goal of
helping military families, there has not been much success in finding specific techniques to use
to aide this population.

Perhaps another factor that may have influenced the lack of difference found between our
samples is the phenomena of geographic mobility. A few studies in our literature indicate the
impact that frequent relocations have on child development in terms of emotional and social
development. The U.S. Census Bureau (2016) collects data as part of their Annual Social and
Economic Supplement survey on geographic mobility and migration within and from the United
States. Historical tables provided by the Bureau demonstrate the trends from 1948-2015 of
geographic mobility in the overall population. Data from the 1969-1970 Census place the total
number of relocations (from a different state or a different country) at 38,095 individuals who
were at least one year old at the time of data collection. The 1975-1976 census survey
demonstrated a small decrease in relocations to 36,793 individuals. In the 1989-1990 survey this
number jumped to 43,381 total individuals and in 1996-1997 the data demonstrate a slight
increase with 43,391 relocations. It is during these last sets of years that our current sample
would have been mostly like been newborns or young children. It is due to this last insight that
the conclusion may be drawn that the general American population has endured more frequent
relocations lessening the gap between our samples in terms of their experiences with relocation.
This could be a factor leading to the insignificant results in terms of extroversion, attachment,
and self-esteem.

The increasing rate of divorce in the general American population may also have
influenced data results. Lewis, Feiring, & Rosenthal (2000) conducted a study to determine if
there was a relationship between divorce and attachment. They utilized the Strange Situation on
children who were 12 months old and found that those who had experienced parental divorced
were more likely to show an insecure attachment at eighteen years old. I assumed in creating the hypotheses that individuals with a military connection would demonstrate a greater propensity for the Anxiety subscale, which is one feature of the insecure attachment. It would follow that the same driving force for an insecure attachment i.e. an unavailable or inconsistent caregiver (Bowlby, 1958) could be found in either of these two populations. Therefore, if a greater proportion of the American population has experienced a divorce there may be less cause for difference between the two samples than was expected.

The lack of significance in our results could also be in part to the instruments chosen to measure the variables of interest. The cut-off scores suggested for data analysis in the Revised-Adult Attachment Scale: Close Relationships Version resulted in a loss of data. It could be that this data loss would have made a difference if it had possible to include all participants’ responses in data analysis. It may therefore be pertinent to conduct a similar study with a different attachment measure to assuage this doubt. The TBSI measure focused heavily on the social competency aspect of self-esteem. It could be that using a different measure of self-esteem would provide a more significant difference between the two samples. Finally, the EPQR-A was a shortened version of the original version and despite its high level relatedness with its parent form, it could be that using the complete form could provide different results than those collected in our study.

Finally, although our decision to focus on personality variables such as extroversion, attachment style, and self-esteem grew out of the focus of other military literature it may be important to determine the actual importance of these variables. Perhaps, although they are important features of child development, these variables should not be the major focus of interventions for military families. This study validates the importance of publishing studies that
do not produce the expected results. Hopefully this future researchers to study other aspects of military life that have a greater bearing on military child development.

Limitations

The current study had a number of limitations. By conducting the study on a single campus the level of generalizability is lower than would be ideal. Additionally, the university at which the study was conducted has competitive admission standards and therefore the population would be thought to have a higher level of coping skills and/or social competence than the general population which could also impact the ability to draw robust inferences from our study and apply them to the general population. Other limitations include the small sample size. It would therefore be appropriate for future researcher to attempt to complete the study with a larger set of participants.

After conducting this research it occurs to me that there are a few other questions that would have been beneficial to include in a study on this topic. Including a question on the rank of the military parent or guardian could also provide some interesting depth to our study. Perhaps a parent’s rank effects the intensity with which a parent’s deployment is felt. Following this same logic it would also be useful to consider a parent’s military occupational specialty (MOS) and area of deployment in future versions of this study. All three of these variables may impact the uncertainty with which a child may attend to a parent’s deployment, the ambiguous loss felt, and other such emotional and behavioral outcomes related to deployment. Finally, a question regarding the primary caregiving parent’s occupation may prove useful as other literature has explained that this individual’s effectiveness in their caregiving is important for a child’s healthy development. If the parent who remains at home is spread thin between their own occupation and
simultaneously becomes a (albeit temporary) single parent this could be impactful on the attachment style of the child.

**Future Research**

For this study only a small sample of students was surveyed to collect data, which may skew data analysis. A larger pool of participants or collecting data from several universities may be useful in increasing the generalizability of the results recorded in this study. Additionally, the participants were recruited using the university’s participant pool, which is largely utilized in lower-level introductory psychology classes. This may bias results as a large majority may be underclassmen and are therefore not representative of the overall college student population.

Following the lead of established attachment literature it may prove fruitful to consider more nuanced aspects of military service (MOS, area of deployment, length of deployment, proximity to combat). These features may have a greater impact on a guardian’s level of responsiveness and care and therefore be more indicative of a child’s attachment style. It may also prove useful to consider the nature and impact of (if there is one) the civilian parent at home. This parent may have a greater impact (positive or negative) on a military child’s self-esteem, attachment style, and extroversion if they are the more permanent caregiver. It would be useful to look at the civilian guardian’s parenting and attachment styles to determine the strength of the relationship between these two facets and the measures of child development we have considered in this study.

The research could provide mental health professionals with a more nuanced understanding of the personality, attachment, and self-esteem implications of military connections. This information may also be useful to school professionals who seek to connect
with and effectively aide their military students in the educational setting. In addition this information may indicate the importance for continued community outreach aimed at military populations. By understanding the relationship between military connections and our variables of interest, the community may provide more poignant and helpful programs and resources to serve the military population. On a more interpersonal note this research is important to military parents and guardians. By detailing the differences found in college-aged students’ parents may be made aware of how their service may affect their child in multiple arenas. In a very elemental way this research will provide the foundation for future research on college-aged students that have relations to the military. It may also direct future researchers to consider looking at different developmental outcomes associated with this population to provide a richer image. And finally, this study attempts to fill a void that is often found in regards to military literature by including positive aspects associated serving in the armed forces.
References


