



UNIFORMED SERVICES UNIVERSITY, SCHOOL OF MEDICINE GRADUATE PROGRAMS
 Graduate Education Office (A 1045), 4301 Jones Bridge Road, Bethesda, MD 20814



FINAL EXAMINATION/PRIVATE DEFENSE FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
 IN THE DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY

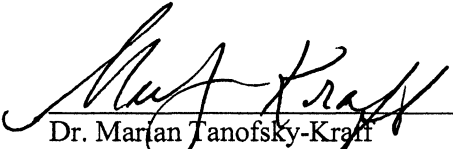
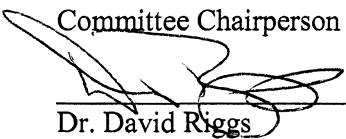
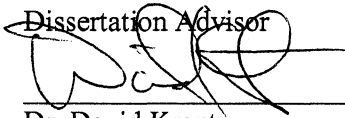
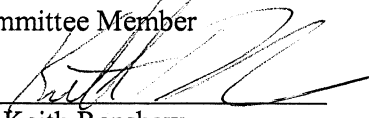
Name of Student: Kimberly Speck

Date of Examination: August 30, 2012

Time: 10:00am

Place: B4004

DECISION OF EXAMINATION COMMITTEE MEMBERS:

	PASS	FAIL
 _____ Dr. Marian Tanofsky-Kraff DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY Committee Chairperson	<input checked="" type="checkbox"/>	<input type="checkbox"/>
 _____ Dr. David Riggs DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY Dissertation Advisor	<input type="checkbox"/>	<input type="checkbox"/>
 _____ Dr. David Krantz DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY Committee Member	<input checked="" type="checkbox"/>	<input type="checkbox"/>
 _____ Dr. Keith Renshaw GORGE MASON UNIVERSITY Committee Member	<input checked="" type="checkbox"/>	<input type="checkbox"/>



UNIFORMED SERVICES UNIVERSITY, SCHOOL OF MEDICINE GRADUATE PROGRAMS
Graduate Education Office (A 1045), 4301 Jones Bridge Road, Bethesda, MD 20814




DISSERTATION APPROVAL FOR THE DOCTORAL DISSERTATION IN THE DEPARTMENT OF
MEDICAL AND CLINICAL PSYCHOLOGY

Title of Dissertation: "Parenting styles of military and civilian families: The impact of deployment, mood, and marital satisfaction"

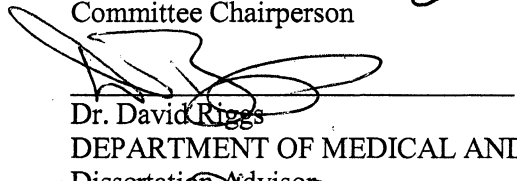
Name of Candidate: Kimberly Speck
Doctor of Philosophy Degree
August 30, 2012

DISSERTATION AND ABSTRACT APPROVED:



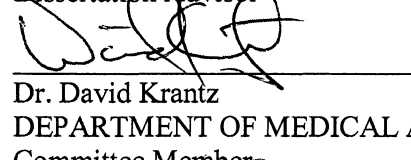
Dr. Marian Tanofsky-Kraff
DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY
Committee Chairperson

DATE:
8/30/12



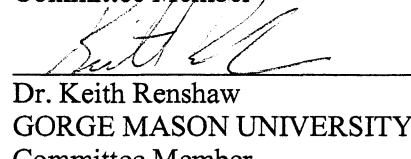
Dr. David Riggs
DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY
Dissertation Advisor

9/11/12



Dr. David Krantz
DEPARTMENT OF MEDICAL AND CLINICAL PSYCHOLOGY
Committee Member

09-11-12



Dr. Keith Renshaw
GORGE MASON UNIVERSITY
Committee Member

8/30/12

The author hereby certifies that the use of any copyrighted material in the thesis manuscript entitled:

Parenting styles of military and civilian families:
The impact of deployment, mood, and marital satisfaction

is appropriately acknowledged and, beyond brief excerpts, is with the permission of the copyright owner.



Kimberly Speck
Medical and Clinical Psychology Program
Uniformed Services University
9/12/12

Parenting styles of military and civilian families:
The impact of deployment, mood, and marital satisfaction

by

Kimberly A. Speck

Dissertation submitted to the Faculty of the
Department of Medical and Clinical Psychology
Graduate Program of the Uniformed Services University
of the Health Sciences in partial fulfillment
of the requirements for the degree of
Doctorate of Philosophy 2012

Abstract

This study compared military and civilian parenting styles on the dimensions of nurturance and restrictiveness. It also examined the relationship between deployment, anxiety, depression, and marital satisfaction and military parenting styles. Participants were 114 military mothers, 202 civilian mothers, 65 military fathers, and 32 civilian fathers of children 12-18 years old. The Modified Child Rearing Practices Report (CRPR) was used to measure parenting, the Depression Anxiety Stress Scale (DASS) was used to measure anxiety and depression, and the Couples Satisfaction Index was used to measure marital satisfaction. The military mothers were significantly younger, had lived in their current location less time, had been married fewer years, had moved more frequently, were less educated, had more children, and had lower household income than the civilian participants. Independent sample t-tests indicated that military mothers are significantly more restrictive than civilian mothers. Civilian mothers had significantly higher levels of nurturance. The military mothers reported using a mostly authoritarian parenting style while the civilian mothers reported using a mostly permissive parenting style. No relationship was found between deployment and parenting style. Deployment was not related to anxiety, depression, or marital satisfaction for the military mothers. There was no relationship between parenting style and anxiety, depression, or marital satisfaction in the military mother respondents; but anxiety, depression and marital satisfaction were related to parenting style in the civilian mother sample. Implications and future directions in this area are discussed.

Author Note

Major Kimberly A. Speck, Department of Medical and Clinical Psychology, Uniformed Services University of the Health Sciences.

Major Speck is now at Dwight David Eisenhower Army Medical Center.

This research was supported in part by a grant from Uniformed Services University Graduate Education Program.

Correspondence concerning this paper should be addressed to Major Kimberly Speck, E-mail: kimberly.a.speck@us.army.mil

The views and opinions expressed in this publication are those of the author and are not necessarily the official opinions of the Department of the Army, Department of Defense, or the Uniformed Services University.

Table of Contents

Introduction	2
Historical Perspective on Parenting Styles	4
Description of Parenting Styles	6
Parenting in Military Families	9
Factors that Impact Parenting	11
Depression, Anxiety and Parenting	11
Marital Satisfaction and Parenting	13
Impact of Deployment on Military Families	15
Service members.	15
Spouses.	16
Children.	18
Deployment and marital satisfaction	19
Other Factors Related to Parenting Styles	21
Effects of Parenting	22
Effect of parenting style on academic performance.	26
Effect of parenting style on psychological functioning.	27
Effect of parenting style coping skills.	28
Summary	30
Study Purpose and Rationale	30
Specific Aims and Hypotheses	31
Specific Aim One: Compare military and civilian families' parenting	32
Specific Aim Two: Examine the relationship between time deployed and parenting in military families (see Figure 2).	32
Specific Aim Three: Examine if anxiety, depression, and marital satisfaction as mediate the deployment to parenting relationship in military families (see Figure 2).	32
Method	33
Participants	33
Power analysis	34

Procedures	34
Measures	36
_Toc336782299Statistical Analyses	37
Data Screening	40
Missing Scales.	40
Missing or Incomplete Demographic Data.	41
Gender.	42
Children.	42
Determination of Military Status.	42
Final Sample	44
Creation of Scale Scores	45
Median Splits and Four Parenting Styles.	45
Data Screening and Descriptive Statistics.	49
Differences in Parenting Scores by Military/Civilian Status.	50
Description of Equivalence Testing of Parenting Scores in Military and Civilian Groups.	50
Demographic Factors and Parenting Scores.	51
Deployment Variables	45
RESULTS	47
Aim 1: Military vs. Civilian Parenting Style	52
Females.	52
Males	53
Equivalence Testing Results.	54
Description of the Samples	55
T-Tests and Chi Squares.	55
<i>Females</i>	55
<i>Males</i>	57
ANOVAs and ANCOVAs.	58
Regression Analysis of Demographic Variables.	63
Aim 2: Deployment and Military Parenting Style	64
Description of Deployment Variables	64
Correlations.	65

Regression of Parenting Domains on Deployment Variables.	67
Aim 3: Mediators of the Deployment to Parenting Relationship	68
Relationship between Deployment and Potential Mediators of Parenting.	68
Summary of Hypothesis Testing	69
DISCUSSION	70
Implications	76
Limitations	78
Future research	79
References	120

List of Tables

Table 1. Continuous demographic variables according to military status (FEMALES)...	81
Table 2. Categorical demographic variables according to military status (FEMALES)...	82
Table 3. Age and gender of eldest child according to military status (FEMALES).....	84
Table 4. Continuous demographic variables according to military status (MALES)	85
Table 5. Categorical demographic variables according to military status (MALES)	86
Table 6. Age and gender of eldest child according to military status (MALES)	88
Table 7. Parenting styles for the FEMALE Military Sample	91
Table 8. Parenting styles for the FEMALE Civilian Sample	91
Table 9. Parenting styles for the MALE Military Sample.....	91
Table 10. Parenting styles for the MALE <u>Civilian</u> Sample.....	92
Table 11. Parenting styles by military status, based on the combined group medians (FEMALES)	92
Table 12. Parenting styles by military status, based on the combined group medians (MALES)	92
Table 13. Descriptive statistics of CRPR Scales by military status (FEMALES)	93
Table 14. Tests of Normality and Homogeneity of Variance for CRPR Scales, according to military status (FEMALES)	94
Table 15. Descriptive statistics of CRPR Scales by military status (MALES)	95
Table 16. Tests of Normality and Homogeneity of Variance for CRPR Scales, according to military status (MALES)	96
Table 17. Independent samples t-tests comparing CRPR scores according to military status	97

Table 18. Mann Whitney U tests comparing CRPR scores according to military status..	97
Table 19 Inferential Confidence Intervals for CRPR scores according to military status	98
Table 20. Relationship between continuous demographic variables and CRPR scores (FEMALES)	100
Table 21. Interaction between continuous demographic variables and military status on CRPR scores (FEMALES).....	101
Table 22. Relationship between categorical demographic variables and CRPR scores (FEMALES)	102
Table 23. Interaction between categorical demographic variables and military status on CRPR scores (FEMALES).....	103
Table 24. Relationship between continuous demographic variables and CRPR scores (MALES).....	104
Table 25. Interaction between continuous demographic variables and military status on CRPR scores (MALES).....	105
Table 26. Relationship between categorical demographic variables and CRPR scores (MALES).....	106
Table 27. Interaction between categorical demographic variables and military status on CRPR scores (MALES).....	107
Table 28. Regression model fit of CRPR Restrictiveness Scores on demographic variables (FEMALES).....	108
Table 29. Regression coefficients for CRPR Restrictiveness Scores on demographic variables (FEMALES).....	108

Table 30. Regression model fit of CRPR Nurturance Scores on demographic variables (FEMALES)	109
Table 31. Regression coefficients for CRPR Nurturance Scores on demographic variables (FEMALES)	109
Table 32. Descriptive statistics of study variables for military sample (FEMALES).....	110
Table 33 Descriptive statistics of study variables for military sample (MALES)	111
Table 34. Correlation among scales for military sample (FEMALES).....	112
Table 35. Correlation among scales for civilian sample (FEMALES)	113
Table 36. Correlation among scales for military sample (MALES)	114
Table 37. Results of Linear Regression of CRPR parenting scores on deployment variables (FEMALES).....	115
Table 38. Results of Linear Regression of CRPR parenting scores on deployment variables (MALES)	115
Table 39. Correlation among deployment variables and potential mediators of parenting (FEMALES).....	116
Table 40. Correlation among deployment variables and potential mediators of parenting (MALES).....	117
Table 41. Summary of hypothesis testing results (FEMALES only).....	118
Table 42. Summary of exploratory analysis results (MALE only).....	119

List of Figures

Figure 1. Parenting Styles.....	6
Figure 2. Study Model.....	33
Figure 3. Box plots CRPR Restrictiveness.....	89
Figure 4. Box plots CRPR Nurturance.....	90
Figure 5. Inferential CI CRPR Females.....	99
Figure 6. Inferential CI CRPR Males.....	99

Parenting styles of military and civilian families: The impact of deployment, mood, and marital satisfaction

Introduction

The U.S. military force is comprised of more than 2.2 million service members (Department of Defense; DoD, 2011). Since 2001, approximately two million service members have been deployed in support of the wars in Iraq and Afghanistan (Chandra et al., 2011). Service members are outnumbered by their three million dependent family members. Over 1.2 million of these family members are children and adolescents and more than 700,000 children have experienced a parent deploying since 2001 (Johnson, et al., 2007 and Kelley, Finkel, & Ashby, 2003). This study compared how military and civilian families parent. It focused on similarities and differences in parenting style as well as examining how deployment, mood, anxiety, and marital satisfaction relate to parenting among military parents.

As the wars in Iraq and Afghanistan continue, the United States Armed Forces find themselves engaged in the longest continuous conflict since Vietnam (Kelley, 2002a). The deployments related to these conflicts differ- from previous deployments in that many service members have been deployed multiple times, sometimes with little quality time at home between deployments (Chandra et al., 2011; Lemmon & Chartrand, 2009; Mansfield et al., 2010). The experience of deployments in the context of the current wars is also different from earlier combat deployments in that the use of unpredictable counterinsurgency tactics raise constant concerns for service members' safety (Spera, 2009) and the availability of frequent contact from the war zone via email,

phone, and even webcam allows for more communication between home and deployed family members (National Military Family Association, 2005).

The current wars are not only having an impact on military members, but their families as well. During deployment, military families must deal with shifts in roles and responsibilities as well as worry about the deployed member's safety. Chanda and colleagues (2009) found that military children and adolescents who had a parent currently or previously deployed endorsed significantly more problems, both emotional and behavioral, than civilian children and adolescents. They also found that older children (15-17 y) had more difficulty adjusting to deployment than younger children (11-14 y) and that all children had a more difficult time adjusting the longer the deployments lasted. These findings suggest that "it behooves us as a society to learn how best to assist military children as they face the stresses of war" (Mabe, 2009, p. 350).

Extensive research indicates that certain parenting styles may lead to better outcomes in children and adolescents (Baumrind, 1991; Brand, Hatzinger, Beck & Holsboer-Trachsler, 2009; Lamborn, Mounts, Steinberg, & Dornbushch, 1991; Luycky, et al., 2011; Steinberg et al., 1991; Wolfradt, Hempel, & Miles, 2003). This suggests that parenting styles may help to lessen the impact of deployments on children and adolescents. There is also substantial research that documents the negative impact of parental anxiety (Herwig, Wirtz & Bengel, 2004), depression (Bluestone & Tamis-LeMonda, 1999; Breznitz & Sherman, 1987; Cohen, Campbell, Matias & Hopkins, 1990; Feng, Zhang & Xie, 2007; Herwig, et al., 2004; Koblinsky, Kuvalanka & Randolph, 2006; Lovejoy, Craczyk, O'Hare & Neuman, 2000; Silberg & Rutter, 2002), and marital

distress (Bond & McMahon, 1984; Cox, Owen, Lewis, & Henderson, 1989; Easterbrooks & Emde, 1988; Harrist & Ainslie, 1998; Jouriles, Pfiffner & O’Leary, 1989) on parenting style. Data indicating that military deployments are associated with increased spousal anxiety and depression (Mental Health Advisory Team VI Report, 2009; Hoge et al., 2004; Milkliken et al., 2007; Seal et al., 2009; Lawer, 1997) and decreased marital satisfaction (Renshaw, Rodrigues, & Flores, 2009; McLeland & Sutton, 2005) suggest possible mechanisms through which parenting may suffer in the face of deployment. However, parenting style and its relationship to children’s adjustment has not been explored with military families or in the context of deployment.

Historical Perspective on Parenting Styles

Although researchers define parenting style somewhat differently, it is generally seen as a psychological construct that reflects how parents approach raising children. Over the years, parenting research has focused on three aspects of parenting style: the emotional relationship between parent and child, parents’ behaviors, and parents’ belief system. The examination of parenting has largely been approached from one of two theoretical traditions: psychodynamic and learning. The psychodynamic model focuses on the emotional relationship between the parent and the child and posits that development of the child (psychosocial, psychosexual, and personality) is impacted by the parents’ attitudes. In contrast, the learning model focuses on the parents’ behaviors and practices and their effect on the child’s development (Darling & Steinberg, 1993). Early efforts to explore parenting styles include those of Watson (1928) who based his approach on the learning model and focused on the issue of parental control. At about

the same time, Freud (1960), using a psychodynamic approach, focused on the construct of nurturance (Darling & Steinberg, 1993). In reality, the two approaches are closely interrelated and perhaps could best be thought of as capturing the same construct from slightly different directions, as behaviors are determined by attitudes and attitudes are expressed through behaviors.

Historically, many researchers and theorists have converged on the idea that two main dimensions can be used to describe parenting (Thomas, Gecas, Weigert, & Rooney, 1974), though they do not agree on exactly what to call these dimensions. Symonds (1939) described the two core constructs as acceptance versus rejection and dominance versus submission. Baldwin (1948) defined them as emotional warmth versus hostility and detachment versus involvement. Schaefer (1959) identified the two dimensions of parenting style as love versus hostility and restrictiveness versus permissiveness. Straus (1964) and Rollins & Thomas (1979) termed the two dimensions “support” and “control” (power) (as cited in Thomas et al., 1974). Regardless of these different labels, parenting styles largely have been defined by two dimensional constructs that continue to guide much of the research on parenting.

Research in the area of parenting styles was greatly expanded in the late 1960s and early 1970s led by the work of Diana Baumrind. She believed that the key parental role was socializing children to conform to necessary demands of others while maintaining a sense of personal integrity (Baumrind, 1966). Baumrind’s early studies were based on Lewin’s (1939) work looking at authoritarian, democratic and laissez-faire leaders. The publication of “The Authoritarian Personality” (Adorno, Freudal-

Brunswick, Levinson, & Sanford, 1950), as well as the introduction of the authoritarian personality syndrome, provided a label for Baumrind to apply to the controlling parent style that she identified (Baumrind, 1989).

In developing this parenting style, Baumrind (1971) compared 134 middle class families classified on the basis of the parents' patterns of behavior. She conducted a factor analysis of each parent's scores on 75 parent behavior-rating scales, and identified three qualitatively different parenting styles: authoritative, authoritarian, and permissive.

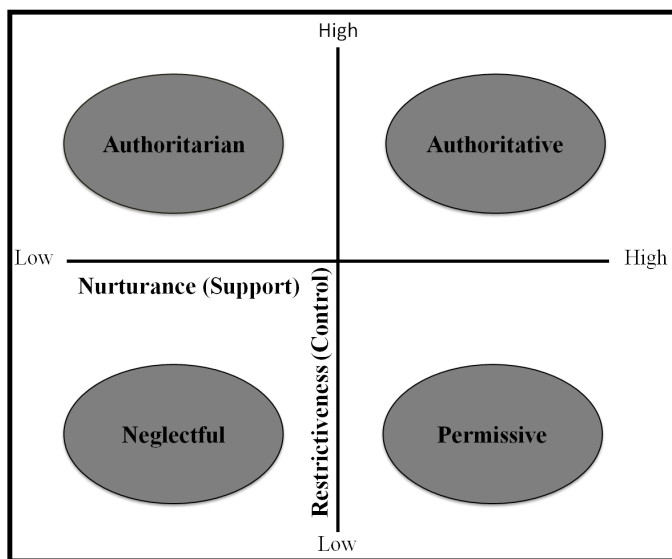


Figure 1, Parenting Styles

Later, Maccoby and Martin (1983) integrated the existing research on the two dimensional conceptualization of parenting style with Baumrind's original three style topology and added a fourth style (neglectful). These four styles are widely accepted and have been researched extensively over the

years.

Description of Parenting Styles

The most widely accepted and researched styles of parenting are based on four categories and classified by two dimensions of support (nurturance) and control (restrictiveness) (see Figure 1). Nurturance indicates flexible child-rearing practices where parents show intent to pay attention to and share feelings and experiences with

their children (Rickel & Biasatti, 1982). Restrictiveness refers to the control-related attitudes and practices of child-rearing and includes trying to control how the child feels (Rickel & Biasatti, 1982). The identified styles include one, high on control and low on support, is labeled as authoritarian. A second style, one that is high on support and low on control, is termed permissive. A third style, high on both control and support is labeled authoritative. Finally, the fourth style, which is low in both control and support, is typically referred to as neglectful. The present study examines the two dimensions of parenting- nurturance and restrictiveness. Measuring parenting on a continuum, rather than categorizing, allows for a more accurate description of each parent's parenting style. It is, however, still important to be familiar with the basic parenting style labels for comparability with previous research, as many past studies use this conventional naming system when describing their results.

The authoritarian parent is low in nurturance and high in restrictiveness. This type of parenting is characterized by rigidly enforced rules, evaluation of behavior and attitudes in accordance with the parents' standards, and obedience, which is highly valued. There is little "give and take" between parents and children, and physical punishment is more likely in these homes (Holmbeck, Paikoff, & Brooks-Gunn, 1995).

The authoritative parenting style is high in both nurturance and restrictiveness. Parents who use this style use reasoned control, support and concern. They set firm limits, but explain why these limits are set and encourage parent-child discussion about rules. Verbal communication between parents and children is encouraged. Parents foster

independence and autonomy by supporting children to express their own opinions, and enforce rules when necessary (Holmbeck et al., 1995).

The permissive parenting style is low in restrictiveness and high in nurturance. Parents utilizing this style of parenting are less controlling, less punitive and act as resources available to their children, but do not actively try to shape their child's behavior. In this parenting style, children and adolescents regulate their own activities much of the time and parents are tolerant of a wide range of behaviors (Holmbeck et al., 1995).

The fourth style characterizes parents who are low in both nurturance and restrictiveness. This style is most often called neglectful, but is also referred to as indifferent (Wolfradt, et al., 2003), a problem parent-child relationship (Schucksmith, Hendry & Glendinning, 1995), or unengaged (Radziszewska, Richardson, Dent & Flay, 1986). Parents utilizing this parenting style limit the amount of time they devote to parenting, and many important functions of parenting are absent from the home (Holmbeck et al., 1995).

Over the years, some theorists and researchers have advocated for a third dimension to more fully describe parenting style. Each of the proposed models includes the two basic dimensions of support and control, and then each researcher adds a somewhat different third dimension. For example, Becker's (1964) third dimension represents an affective variable: anxious emotional involvement versus calm detachment. Similarly, Rollins (1979) termed his third dimension anxiety. In comparison, Bronfenbrenner's (1961) third factor is labeled punishment. Slater and Power (1987)

termed their third variable structure, stating that the characteristics of parental involvement, parental consistency, and organization are important but do not appear to fit within the dimensions of support and control. Currently, there is no agreement in the literature as to (1) whether a third dimension is necessary for describing parenting styles, (2) how to best characterize this dimension, or (3) the impact of this additional dimension on parent-child relationships or child adjustment and development. Because of the lack of agreement on the need or definition of a third parenting dimension and the inconsistency of research examining additional dimensions of parenting, this study examined the two generally recognized parenting dimensions of nurturance and restrictiveness.

Parenting in Military Families

To date, no studies have looked at parenting styles among military families. Military life has a unique combination of characteristics that may impact parenting: frequent moves, temporary absences, and living life under the “mission must come first” motto, a need for family to adapt to rigidity, regimented lifestyle and expected conformity, early retirement, rumors and threat of loss during deployment, feeling detached from mainstream society, security of a vast system that exists to meet the families’ needs, and the lack of personal control over pay, promotion, and other benefits (Hall, 2008). With all these unique circumstances as part of daily life, it would be reasonable to expect that parents may have beliefs and practices that differ from their civilian counterparts.

Unlike most civilian families, military families move every two to three years. Because of this, these families often live in many different cultures and climates and their children may attend multiple schools before graduation. These moves may also isolate military families from their extended families. Related to this, military communities tend to be extremely close-knit in which military families feel a common sense of mission, face similar difficulties such as deployments and moves, and seemingly understand each other more than civilian communities. Besides providing connections, these close knit communities often promote conformity. Wertsch (1991) relates growing up in a military household to living in a fortress, an authoritarian society. She states that in military families “the notion of conformity, order, and obedience reign supreme” (p.24). The rigidity, regimentation, and conformity required of the service member from the military often extend from the “work place” into the structure of the home (Hall, 2011).

Military families also must deal with the forced separations due to deployments, training schedules, and temporary duty assignments. Although there are no studies specifically on military parenting styles, some research has touched on how deployment impacts parenting. A qualitative study was conducted by Lapp and colleagues (2010) with 18 National Guard spouses living in rural Wisconsin. In this study, participants indicated that one of the most prevalent stressors during the deployment was single parenting that was characterized as “pulling double duty” (p. 52).

Because of the unique aspects faced by military families, it is possible that they use different parenting styles than civilian families. Discipline and control are the heart and soul of the military, and many members of the military may not only accept these

concepts, but thrive on them. Therefore, it would not be unusual for this way of life to generalize into their home life and present itself as restrictiveness. In fact, 80% of the military brats Wertsch interviewed (1991) described their families as very disciplined with high expectations of conformity.

Factors that Impact Parenting

Belsky (1984) developed a model in which parenting is directly influenced by three variables. The first is the individual parent him/herself (personality), the second is the individual child (child characteristics), and the third is the broader social context in which the parent-child relationship exist. This social context includes: marital relations, social networks, and jobs influence the individual personality and occupational experiences of the parents. Belsky did not report on how these three factors interacted with each other, but how each impacted parenting. Belsky found that of the three determinants parental personality and psychological wellbeing had the most impact on parenting styles. Furthermore he found that the broader social context had a greater influence on parenting than did the child characteristics. He found that risk associated with characteristics of the child were relatively easy to overcome if the other two determinants were not at risk.

Depression, Anxiety and Parenting

Several researchers have examined the impact of depression on parenting. Bluestone & Tamis-LeMonda (1999) found that maternal depression is inversely associated with child-centered parenting styles. Child-centered parenting is characterized by flexibility, willingness to allow the child to express his/her opinion, and firmness on

discipline and is similar to authoritative parenting (high on nurturance and control). Depressive symptoms have effects on mothers' responsiveness and communication (Breznitz & Sherman, 1987; Cohen et al., 1990). Mothers who are depressed are also less likely to discipline, provide structure, or enforce rules when compared to non-depressed mothers (Goodman & Brumley, 1990). Mothers who are depressed have also been shown to be less emotionally responsive to their children (Feng et al., 2007; Lovejoy et al., 2000; Silberg & Rutter, 2002) and more likely than non-depressed mothers to engage in neglectful behaviors (Egami, et al., 1996; Tyler, Allison & Winsler, 2006).

Herwig, et al. (2004) found a positive correlation between maternal depression, as measured by the Hospital Anxiety and Depression Scale (HADS) and parenting laxness ($r=.35$) and over reactivity ($r=.37$). Koblinsky and colleagues (2006) found a negative correlation between maternal depression and positive parenting as measured on the four aspects of nurturance, responsiveness, consistency, and control on the Parental Dimensions Inventory (PDI). It is thought that many depressed caregivers depart from active parenting, or perceive childrearing as a demanding, disappointing task; this may result in greater hostility and over-reliance on aversive discipline techniques (Gelfand & Teti, 1990).

Simons, Lorenz, Wu, and Conger (1993) conducted a study with 451 two-parent families to examine the relationships between depression and supportive parenting. They defined supportive parenting as "showing concern about their child's feelings, taking an interest in his or her daily activities, manifestations of love and acceptance, encouraging

appropriate behaviors to help with problems and reinforcing accomplishments” (p. 372). Their original model indicated modest negative correlations between depression and supportive parenting for both husbands and wives. When they reduced the model and removed the extraneous variables, depression and supportive parenting showed a strong negative association ($B=-.39$).

In comparison to the numerous studies that report an inverse relationship between depression and effective parenting styles, very little research has examined the relationship of parental anxiety and parenting style. The few published studies show mixed results with regards to the impact of anxiety on parenting style. For example, Moore, Whaley, and Sigman (2004) examined parenting and anxiety in cross sectional sample of 68 mother-child dyads with children ranging in age from 7-15 years. Results indicated that there was no significant relationship between maternal anxiety and parenting warmth or granting of autonomy. Herwig, et al. (2004) found a positive correlation between maternal anxiety, as measured by the Hospital Anxiety and Depression Scale (HADS) and parenting laxness ($r=.36$) and parenting over reactivity ($r=.36$). Despite the inconsistent findings relating parental anxiety to parenting style, anxiety is a potentially important variable to examine in the proposed study because of the increased anxiety associated with the deployment of a loved one (MHAT, 2009; Lester et al., 2001).

Marital Satisfaction and Parenting

Extensive research indicates that a satisfying and supportive marital relationship is related to positive parenting behaviors, particularly nurturance (Cox, et al., 1989; Bond

& Mahon, 1984; Easterbrooks & Emde, 1988; Harrist & Ainslie, 1998; Jouriles, et al., 1988). Additionally, marital hostility is correlated with parenting styles characterized by less nurturance and more restrictiveness (Dielman, Barton & Cattell, 1977; Jouriles et al., 1988; Stoneman, Brody & Cattell, 1989). The “spillover hypothesis” speculates that the observed relationship between marital satisfaction and parenting arises because parents’ negative mood, affect, and behavior resulting from the marital discord are redirected onto the child (Easterbrooks & Emde, 1988). A meta-analysis conducted by Erel and Burman (1995) that included 65 studies found significant support for the positive relationship between marital relationship quality and parent-child relationship quality with a composite mean weighted effect size of .46.

In one longitudinal study, Bonds and Gondoli (2007) followed 148 mothers over three years. They found that marital adjustment at year one was correlated with great maternal warmth at that assessment and also with measures of maternal warmth two years later. This was true for both the mother’s report of warmth and the child’s report of warmth.

Goldberg and Easterbrooks (1984) examined 75 families and found that mother’s marital adjustment scores were significantly related to the parenting attitudes of warmth and encouragement of independence and the parenting behaviors of emotional support and quality of assistance. Similarly, Simons et al. (1993) in the study of parenting and mood described above found that spouse support was both directly associated with supportive parenting and also had an indirect relationship through depression for both mothers and fathers. Kachadourian, Eiden, and Leonard (2009) examined 197 new

parents at three time periods over the first 24 months of their child's life and found that families with more marital dissatisfaction had less warm and sensitive parenting (e.g. less nurturing) than families with less marital dissatisfaction. The researchers reported that marital satisfaction was associated with warm/sensitive parenting for fathers at each time point (12, 24, 36 months), but for mothers only at 24 and 36 months.

Impact of Deployment on Military Families

Service members.

Military deployment is commonly associated with increased psychological difficulties among those who deploy into combat. The Mental Health Advisory (MHAT) VI Report (2009) found that about nine percent of deployed soldiers report acute stress, five percent report depression, and five percent report anxiety (2009). Hoge et al. (2004) reported that rates for post-traumatic stress disorder (PTSD), major depressive disorder, and generalized anxiety disorder for 2,530 surveyed soldiers ranged from 15-17% following deployment to Iraq and 11% following deployment to Afghanistan. In another study with similar results, Hoge, Auchterlonie, and Milliken (2006) examined health assessment data completed by Marines and soldiers returning from Iraq and Afghanistan between May 2003 and April 2004. They found that 19% of those returning from Iraq were experiencing symptoms of PTSD, depression, or other related mental disorders. Of those returning from Afghanistan, 11% reported these symptoms (Hoge et al., 2006).

In a longitudinal study conducted by Milkliken and colleagues (2007), it was reported that over 20% of active duty soldiers and more than 42% of reserve soldiers

screened positive for a mental health disorder. A Veterans' Administrative (VA) study conducted between April 2002 and March 2008 found that of the veterans of the wars in Iraq and Afghanistan using the VA health care system for the first time, 36% received at least one mental illness diagnosis, 22% received a diagnosis of PTSD, 17% were diagnosed with depression, 7% received a diagnosis of an alcohol use disorder, and 3% were diagnosed with a substance abuse disorder (Seal et al., 2009). As this highlighted research illustrates, deployment has been linked to an increase in psychological problems for service members.

Spouses.

Deployment has been shown to cause disruption in the military family and have a negative impact on the spouses and partners of service members. During deployment, roles and responsibilities of family members often change. The stay-behind parent tends to report increased parenting stress and changes in expectations and parenting rules (Kelley, 2002b; Kelley, Herzog-Simmer & Harris, 1994). Warner, Appenzeller, Warner, and Grieger (2009) studied 295 spouses of a deployed brigade combat team (BCT). Spouses in this study indicated that some of the most significant stressors they faced during deployment included: raising young children alone (63%), childcare issues (40%), and caring/raising and disciplining children while their spouse was gone (56%). The authors found that these spouses dealing with a deployment had a mean Perceived Stress Scale (PSS) score of 26.05, which was well above the established norm of 19.62. Each point that the Perceived Stress Scale increased was related to a 1.21 times greater risk of

meeting criteria for clinical depression. In fact, nearly half of the spouses in the study met criteria for depression (Warner et al., 2009).

Mansfield and colleagues (2010) examined electronic medical records of 250,626 wives of active duty Army soldiers between 2003 and 2006. They found that length of a spouse's deployment was positively correlated with mental health diagnoses. Wives whose spouse was deployed 1-11 months had more diagnoses of depression, sleep disorders, anxiety, and acute stress reaction and adjustment disorders than wives whose husbands did not deploy. Among wives whose husbands deployed for more than 11 months, researchers found even more cases of depression, sleep disorders, anxiety, and acute stress reaction and adjustment disorders than among those coping with shorter deployments.

Lester et al. (2001) found that at-home-civilians (AHC) and active duty (AD) members of recently deployed and currently deployed families had elevated levels of global distress, anxiety, and depression compared to norms from community samples. Rank was significantly related to distress, with enlisted families having more distress than officer families, though this difference was only significant for the AD and not the AHC. Again, the duration of the deployment was related to distress, such that longer deployment was significantly related to more global distress and more depressive symptoms for the AHC.

Lawer (1997) surveyed 450 spouses of Oklahoma National Guard members who were mobilized to the Persian Gulf War. They found that compared to civilian controls, these spouses reported more feelings of depression and anxiety and lower sense of

psychological well-being. In general, deployment appears to be related to increased anxiety and depression in the stay-behind spouse.

Children.

When a family member deploys, children and adolescents may be faced with significant changes in their lives. LaGrone (1978, as cited in Schumm, Bell, & Tran, 1994) commented that probably the most extreme stress a military family faces is enforced separation from the father. Research has indicated that deployment can have a negative impact on multiple areas of a child/adolescent's life including: emotional well-being, social functioning, academic performance, and even physical health. Using a focus group strategy, Huebner and Mancini (2005) found that adolescents ages 12-18 years reported a loss of interest in activities, social withdrawal, changes in sleeping and eating patterns, sadness, crying, and worry about their deployed parent's safety since their parent had deployed. Chandra and colleagues (2010a) had similar findings using focus group strategies with school staff of Army families. These staff members reported that when parents deployed that children and adolescents became more angry and sad which had a negative impact on academic performance and peer relationships.

In other studies, Chandra and colleagues (2009 & 2011) found that children ages 11-17 who were applying to Operation Purple (a free camp sponsored by association for children and military service members) endorsed higher levels of emotional difficulties as measured by the Strengths and Difficulties Questionnaire than national samples. The researchers also found a positive relationship between total months of parental deployment and child difficulties. Older children were found to report more difficulties

with deployment and reintegration than younger children. It was speculated that this was due to increased household responsibilities and more of a role shift both prior to and after deployment (Chandra et al., 2009). These findings were consistent with earlier research conducted by Jensen and colleagues (1989) who found that children of Army officers and senior enlisted personnel who had fathers that were away reported higher levels of depressive and anxiety symptoms than children whose fathers were present. They also reported that length of absence, but not number of absences was related to children's symptoms.

Barnes and colleagues (2007) found that adolescents who had a parent deployed to Iraq during OIF in 2003 had significantly higher levels of perceived stress, systolic blood pressure, and heart rate than their civilian counterparts. Engel and colleagues (2006) reported that children with a parent deployed to Iraq or Afghanistan had a decrease in test scores across multiple academic areas.

Deployment and marital satisfaction

Deployment has also been shown to be negatively associated with marital satisfaction. The Mental Health Advisory Team (MHAT) VI report (2009) states that levels of marital satisfaction have been declining since 2003 among both Non-Commissioned Officers (NCOs) and lower enlisted ranks. Similarly, the MHAT VI found a significant increase in the number of married soldiers who indicate that they had considered divorce or separation over the past six years.

One measure of marital satisfaction is divorce rate. Data shows that between 2000 and 2010 the divorce rate for active duty enlisted personnel rose steadily from 2.9%

to 4.1%. For active duty officers the divorce rate increased from 1.4% in 2000 to 1.9% in 2005 and then has held steady around 1.9% since 2005 (DMDC Active Duty Military Personnel Master File, September 2000, 2005, 2006, 2007, 2008, 2009, 2010). Karney & Crown (2007) found that these increases actually just represented a slow return to prior levels, following a large drop from 1999 to 2000. The 2005 levels were similar to 1996 levels. Similar trends have been indentified among reservists. For enlisted reservists, the divorce rate has increased from 2.4% in 2000 to 2.8% in 2010. Divorce rates of reserve officers increased from 1.6% in 2000 to 2.5% in 2008 and then decreased to 1.9% in 2010 (DMDC Reserve Component Common Personnel Data System, 2000, 2005, 2006, 2007, 2008, 2009, 2010).

McLeland and Sutton (2005) conducted a study comparing 23 military men and 23 non-military men. They found that military men reported lower relationship satisfaction than the non-military men. Further analysis showed that the military men who were on deployment alert status (prepared to leave on short notice) reported less marital satisfaction than those who were not on alert status. The authors speculated that the military men on deployment alert status experienced more anxiety that, in turn, lowered marital satisfaction.

Not all studies support the negative relationship between deployment and marital satisfaction. Renshaw et al. (2009) studied 50 Utah National Guard soldiers who had recently returned from a 12-month deployment to Iraq and found that 14% of soldiers indicated possible marital distress. This was not significantly different than the 6-26% of community samples that typically indicate marital distress. Although there is some

disagreement in recent research, historical evidence tends to support a negative relationship between deployment and marital satisfaction particularly between 2000-2007 with a leveling off or decrease in more recent years (Demographics, 2010).

Other Factors Related to Parenting Styles

Although the majority of studies have looked at Caucasian, middle class parents to examine parenting style, a small number of studies provide insight about how parenting styles relate to gender, ethnicity, and socioeconomic status. Russell, Hart, Robinson, and Olsen (2003) found that, in general, mothers are more authoritative and fathers are more authoritarian. They reported little difference between mothers from the United States and Australia, but found that U.S. fathers were more authoritarian than Australian fathers. Querido, Warner, and Eyberg (2002) found that income and education level were associated with parenting style of African American mothers. They reported that families with higher incomes had mothers who were more likely to utilize an authoritative parenting style. Mothers with lower education levels tended to use authoritarian parenting styles and mothers with lower education who also were from lower income families indicated they used permissive parenting styles. The authors speculated that the parenting style difference was due to environmental variables such as how safe the neighborhood is. Park and Bauer (2002) conducted a study of parenting style in 873 Asian Americans, 1,449 Hispanics, 1,176 African Americans and 8,292 European Americans. They found that European Americans were more authoritative than other ethnic groups and that an observed positive relationship between authoritative

parenting and children's academic achievement was only found among the European Americans.

While the bulk of the existing research focuses on how parents impact children, given the cross-sectional nature of studies, identified relationships are more likely bidirectional or involve a circular process and children also impact their parents' parenting. The focus of the research examining these child-to-parent effects is on infants and younger children. Wright (1967) found that children initiate many of the interactions with parents. Correlations between children's temperament characteristics and parental behavior reflect bidirectional interactive processes as well as characteristics due to genetic links between parent and child (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2003).

Later parenting studies used short-term longitudinal designs to better separate parenting effects from the child's characteristics. These studies show that the impact of parenting on child development exists even after controlling for child characteristics (Collins, et al., 2003). Two independent studies (Reti et al., 2002 and Oshino, Suzuki, Ishii & Otani, 2007) have suggested that parenting influences not only the character dimensions but also the temperament of the child. As it is put by one researcher, "Children affect their environments and environments affect children. Children are neither doomed nor protected by their own characteristics or the characteristics of their caregivers alone" (Sameroff, 2009).

Effects of Parenting

Research has demonstrated a link between parenting style and the adjustment of children and adolescents. Numerous studies have examined the impact of different parenting styles on various child outcomes including behavior, psychological functioning, academic performance and coping. A majority of these studies suggest that an authoritative parenting style, one that is high in both restrictiveness and nurturance, is associated with the most positive child outcomes. Symonds (1939) stated that homes where parents were warm, provided clear guidelines with autonomy, and clearly communicated expectations and the reasons behind their decisions produced “model children.” He defined a model child as one who was socialized, cooperative, friendly, loyal, emotionally stable, cheerful, honest, straightforward, and dependable. He said these children were good citizens and good scholars. Baumrind (1971) later called these model children “instrumentally competent children.” Baldwin (1948) reports that children whose parents used a democratic parenting style showed increased activity level, were fearless, playful, and likely to be a leader at nursery school, but also more cruel than other children of a similar age. It can be speculated that these children are allowed to participate and give input into some of the decision making at home which then translates to more participation and leadership when not at home. Baldwin (1948) also found that children whose parents used a controlling parenting style were less quarrelsome, negative, disobedient, and aggressive, and also showed less playfulness, tenacity, and fearlessness. It is possible that children who have more controlling parents are less playful and tenacious and more fearful because, in their home environment, these things are not tolerated and may even be punished.

Most studies of parenting style and the broad adjustment of children have focused on young children, but Baumrind (1991) examined the impact of parenting style on older children. In this study of 139 15-year-old adolescents and their parents, Baumrind found that authoritative parents, high in restrictiveness and nurturance, had adolescents that were most competent and least susceptible to problem drug use (Baumrind, 1991). Similarly, a 12 year longitudinal study of children and adolescents age 6-18 found that authoritative parenting was associated with children who were less likely to drink alcohol and smoke cigarettes, less likely to exhibit antisocial behavior, and less likely to have internalizing symptoms than their peers whose parents did not use authoritative parenting. This study also indicated that the authoritative parents used less monitoring as their children reached adolescence, suggesting that authoritative parents somewhat relinquish their monitoring in response to adolescents' increasing demands for independent decision making (Luyckx et al., 2011). Overall, it appears that parents who are high in restrictiveness and nurturance have children who are more likely to be more active, be leaders, and be less fearful. Adolescents from a highly nurturing and restrictive parenting environment are less susceptible to drug use.

During their teenage years, adolescents spend less time with families (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996) due to increased opportunities for recreational, academic and social activities outside the family setting. Peer relationships take on a greater importance (Berndt, 1989; Buhrmester, 1996; Savin-Williams & Berndt, 1990) as they become confidantes (Gottman & Mettetal, 1986), provide advice and guidance (Buhrmester, 1996) and serve as influential models of behavior and attitude

(Sussman et al., 1994). Adolescents conform to peers on day-to-day issues, such as clothing style preference, but conform to parents in matters that have lasting implications, such as educational aspirations (Brittain, 1963; Brown 1990, 2004). Peer influence is usually greater in regards to transient attitudes such as matters of taste, style, and appearance while parents' thoughts and beliefs remain important source of influence regarding long-term issues like career choices and moral issues and values (Smetana, Camione-Barr, & Metzger, 2006).

Parental and peer influence appears to be complementary not contradictory (Savin-Williams & Berndt, 1990). Adolescents have been found to be very similar to their friends across many variables including school performance (Epstein, 1983), aggression (Cairns, Cairns, Neckerman, Gest, & Garipey, 1988), internalized distress (Hogue & Steinberg, 1995), and drug use (Kandel, 1978). This is thought to be due mostly to the inclination for individuals to select like-minded friends. Adolescents' friends are typically very similar with regards to background, values, orientation to school and peer culture, and antisocial behavior (Hartup, 1996). Adolescents whose parents are authoritative are less swayed by peer pressure to misbehave than are adolescents whose parents are permissive (Deereux, 1970) or authoritarian (Fuligni & Eccles, 1993). Adolescents from authoritative households have been found to be more susceptible to positive peer pressure (do well in school) and less prone to antisocial pressure (use drugs and alcohol) (Mounts & Steinberg, 1995). Baumrind's (1978) notion that adolescents whose parents use the authoritative style internalize parental norms and then generalize them to other context is consistent with these findings.

While it is generally believed that parents play a role in how children “turn out,” some researchers have suggested that parents play little or no role in this process. The two main proponents of the thought that parents play little or no role in child development are Rowe and Harris. Harris’ position (1995, 1998) is that: parents have little or no power to shape their children’s personalities. Children resemble their parents in personality and behavior for two reasons: because they inherit their genes from their parents and because they usually belong to the same culture or subculture. Children are socialized and their personalities formed by the experiences they have with peers outside the home. Much of the alleged relation between parenting and adolescent adjustment is due to genetic transmission, well-adjusted teenagers elicit warm parenting from their mothers and fathers, and that research underestimates the influence of peers and other nonfamilial-socialization agents such as mass media. Rowe (1994) postulates that “family rearing effects (and other family-tied environmental influences) are, on the whole, limited in their effects on children’s developmental outcomes” (pp. 5). He contends that the inheritance of trait-determining genes cloud the interpretation of parenting styles and child outcomes, and the link between parenting and children’s traits is “spurious non-causal”. These criticisms often focus on parenting studies published in the early 1980s that overstated conclusions from correlational findings (Collins, et al., 2003). Contemporary research indicates that the expression of heritable traits depends on experiences, including specific parental behaviors (Collins, et al., 2003).

Effect of parenting style on academic performance.

Research indicates that parenting high in nurturance and restrictiveness is associated with better school performance. Steinberg, Elmen, and Mounts (1989) found that children/ adolescents with authoritative (high nurturance and restrictiveness) parents had higher school grades (as measured by grade point average), even after controlling for achievement test scores and demographic factors. Dornbush, Ritter, Leiderman, Roberts, and Fraleigh (1987) concluded that both authoritarian (low nurturance and high restrictiveness) and permissive (high nurturance and low restrictiveness) parenting styles were negatively associated with grades, while authoritative parenting was positively associated with school performance as measured by grades.

Effect of parenting style on psychological functioning.

Studies have indicated that parenting high in nurturance and restrictiveness is associated with better psychological functioning among adolescents. For example, Maccoby and Martin (1983) found that parenting characteristics of warmth, firm control and autonomy in the authoritative parent were related to higher psychological and social functioning in the child. Hall and Bracken (1996) found that adolescents who had authoritative mothers, reported better relationships with their mother as well as with female peers than the adolescents whose parents who were permissive or authoritarian. Radziszewska, Richardson and Dent (1996) suggested that an authoritative parenting style, as indicated by high levels of restrictiveness and nurturance, was associated with lower levels of depressive symptoms in adolescents; conversely, they found that the unengaged parenting style (low levels of restrictiveness and nurturance) was associated with the highest level of depressive symptoms in adolescents.

Lamborn, et al. (1991) found that adolescents who scored highest on psychosocial competence and had the lowest scores on psychological and behavioral dysfunction were those who characterized their parents as authoritative (high nurturance and restrictiveness). The adolescents who rated their parents as neglectful (low nurturance and restrictiveness) had scores that indicated low psychosocial competence and high psychological and behavioral dysfunction. Adolescents who described their parents as authoritarian (high restrictiveness and low nurturance) had poorer concept of themselves than they did of their peers. Adolescents with indulgent parents (high nurturance and low restrictiveness) had strong self-confidence, but also had a higher incidence of substance abuse and school misconduct and were less engaged in school than their peers.

Punamäki, Qouta, and El Sarraj (1997) reported that children who perceived their parents as more punishing, rejecting and controlling appeared more vulnerable to traumatic conditions and suffered from high neuroticism and low self-esteem. Brand, et al. (2009) found that adolescents who had parents that used positive parenting (high in nurturance and low restrictiveness) reported better sleep quality, less anxiety, less depression, better ability to concentrate, and less daytime sleepiness than those whose parents used negative parenting (low nurturance and high restrictiveness).

Effect of parenting style coping skills.

Several studies identify a link between parenting and the ability of children and adolescents to cope in both everyday situations as well as more traumatic situations.

Hardy, Power, and Jaedicke (1993) found that high levels of support from parents were related to the use of a greater variety of coping responses in children. The researchers

also found that children in high structure families had fewer behavior problems, were more responsible, and used fewer aggressive coping strategies when faced with stressful events.

Dusek and Danko (1994) reported that adolescents who described their parents as neglectful (low nurturance and restrictiveness) engaged in less problem-focused coping and more emotion-focused and cognitive coping than adolescents who indicated that their parents had higher levels of nurturance and restrictiveness. Adolescents who described their parents as authoritative used more problem- focused coping than adolescents who indicated their parents used a different parenting style. Those individuals with indulgent (low restrictiveness and high nurturance) and authoritarian (high restrictiveness and low nurturance) parents tended to use mixed coping strategies.

Wolfradt et al. (2003) reported that parental warmth was positively associated with active coping and negatively associated with anxiety in high school students. These researchers found that students with authoritarian (high restrictiveness and low nurturance) parents had higher levels of depersonalization, anxiety, and passive coping, as well as lower levels of active coping than students with parents using other parenting styles. Students whose parents were authoritative (high nurturance and restrictiveness) or permissive (high nurturance and low restrictiveness) had high levels of active coping and low levels of depersonalization. Permissive parenting style was also correlated with low levels of anxiety, while the authoritative style was linked with moderate levels of anxiety. The authors found that the indifferent or neglectful parenting style (low nurturance and restrictiveness) related to low levels of active coping and moderate levels of

depersonalization and anxiety. The research seems to clearly link more adaptive coping strategies with more nurturing parenting styles.

In summary, the existing research suggests that students whose parents display high levels of nurturance and restrictiveness have better outcomes. Steinberg et al. (1991) concluded that “virtually regardless of their ethnicity, class, or parents’ marital status, adolescents whose parents are accepting, firm and democratic earn higher grades in school, are more self-reliant, report less anxiety and depression, and are less likely to engage in delinquent behavior” (pp. 19).

Summary

Parenting style theory relies on two main constructs: nurturance and restrictiveness. Research indicates that parenting styles that are high in both nurturance and restrictiveness are associated with many positive outcomes for children and adolescents. Research has also shown that depression and marital satisfaction are related with less effective parenting styles. Multiple studies have reported the link between deployment and increased psychopathology for both the service member and the spouse. Because deployment has been linked to increased anxiety and depression and decreased marital satisfaction and these things have been associated with less effective parenting, it was hypothesized that deployment may play a significant role in how military families parent.

Study Purpose and Rationale

The purpose of this study was to examine how military families parent and how deployment, mood, and marital satisfaction relate to parenting characteristics of

nurturance and restrictiveness. Although the literature on parenting style dates back over 70 years to Symonds's work, there are no previous studies that have examined parenting styles within military families. Military children and adolescents experience a much different lifestyle than their peers, as they generally grow up in a very supportive community but are also exposed to a great deal of stress including frequent moves and deployments of their parent(s). Since mood, and marital satisfaction have been found to impact parenting and deployment has been associated with increased depression and decreased marital satisfaction, it was predicted that parenting in military families will differ from that of their civilian counterparts.

Based on past research, parenting styles that are high in nurturance and restrictiveness appear to be related to better outcomes with adolescents, including academic performance, psychosocial skills, and coping. Parenting styles are therefore one area that military commands and communities could focus on before, during, and after deployments to help military children and adolescents effectively cope with the unique stress surrounding deployments.

Specific Aims and Hypotheses

This study had three specific aims. The first is to compare parenting styles in civilian and military families. This information will increase current understanding of how military families parent. The second aim was to examine the potential relationship between deployment and parenting for military families. The third aim was to test the prediction that parental anxiety, depression, and marital satisfaction serve to mediate the relationship between deployments and parenting style within military families. It was

anticipated that mostly mothers would respond to and complete the survey. Additionally, most of the previous research has been conducted with mothers and it is likely that mothers and fathers parent differently. Although the original intention of this study was to conduct separate analysis on females and males response data, the sample size of fathers was relatively small. Therefore, the primary analysis was conducted only with data collected from mothers and the data collected from fathers was used for exploratory analysis.

Specific Aim One: Compare military and civilian families' parenting.

There have been no previous studies of parenting styles in military families. Because of what is known about military families regarding their unique stressors and the close communities they often live in, it was hypothesized that military families will report similar levels of nurturance (**Hypothesis 1a [H1a]**) and higher levels of restrictiveness (**H1b**) when compared to civilian families.

Specific Aim Two: Examine the relationship between time deployed and parenting in military families (see Figure 2).

Just as there is no available research on military families and parenting styles, there was no research on the relationship between deployment and parenting style. It was hypothesized that increased total months of deployment will be related to parenting style characterized by less nurturance and more control (**H2a and H2b**).

Specific Aim Three: Examine if anxiety, depression, and marital satisfaction as mediate the deployment to parenting relationship in military families (see Figure 2).

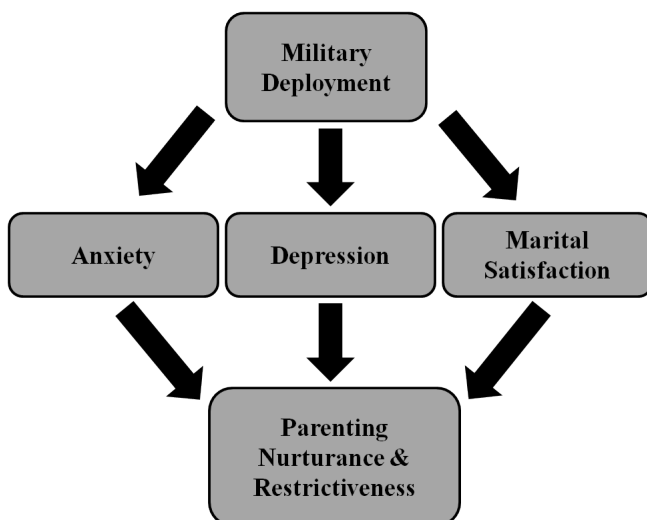


Figure 2. Study Model

Previous studies have reported an inverse relationship between parental depression and child-centered parenting styles (Bluestone & Tamis-LeMonda, 1999) and a correlation between parent's depression and parenting laxness and over reactivity (Herwig et al., 2004).

Research has also indicated a consistent negative relationship between marital satisfaction and parenting. It was expected that the relationship between months of deployment and parenting will be mediated by the level of parental depression (**H3a**), anxiety (**H3b**), and marital satisfaction (**H3c**).

Method

Participants

Between January 2011 and February 2012 military and civilian parents were recruited from local high schools through announcements at PTA meetings and letters sent home to parents. Additional recruitment was conducted online sources through social networking sites targeting parents and military members; PTA group listservs, parenting support groups, and military resources. Recruitment also included flyers on local community bulletin boards at supermarkets, coffee shops, etc; newspaper advertisements, and flyers at three different military medical facilities. Interested participants responded by logging on to the survey website or contacting the principal

investigator via email. Participants were required to have at least one child age 12-18 years living at home 10 months out of the year.

Power analysis

Prior to data collection, power analyses were run using nQuery 6.01. These analyses indicated that a sample size of 139 participants per group would be needed to show a moderate effect size for specific aim one and two. It was determined that a sample size of 157 military participants would be needed to detect a moderate effect for specific aim three.

Procedures

All data was collected via online survey. Instructions for access to the online survey were provided in the recruiting materials (e.g., advertising, written announcements, flyers) or a direct link was provided (e.g., electronic newsletter, webpage, etc.). Parents logged on to a secure site. They were prompted to electronically acknowledge that they consent to participate in the research project by clicking a “Yes, I agree to participate in this study” box. If they did not affirm their interest in participating in the survey, the web browser redirected them away from the online survey to another web page that thanked them for their consideration. Parents then completed an online survey including the instruments listed below, which took about 20-30 minutes. The participants answered questions one at a time as they appeared on the screen. Participants had the option to skip questions or to quit at any time. The participants were provided contact information for the primary researcher in case they have any questions or concerns about the study, as well as a list of community and Army resources.

There were 659 potential respondents that accessed the survey. There were 236 respondents that had no valid scale data. Additionally, one individual did not list their gender and nine did not have children ages 12-18 years. Therefore, the final sample consisted of 413 respondents (63% response completion). There were 179 military participants and 234 civilian participants.

There were 316 females in the sample. Of these, 114 were classified as military and 202 were civilian. The male sample of 97 respondents consisted of 65 military and 32 civilians. The demographic characteristics of females by military status are shown in Tables 1 to 3, and for males are in Tables 4 to 6.

Many of the demographic variables were “fill-in” responses that required coding prior to analysis. Where possible, the continuous nature of these variables was retained (rather than collapsing into categories). Some screening and editing of the demographic responses was required. For example, for age only plausible responses were considered (i.e., over 18 and less than 90 years of age).

For the categorical variables, the responses across all categories were examined and are generally reported in the tables; however, some collapsing across categories was conducted as deemed prudent on a variable by-variable-basis. Ethnicity and Race were multiple response variables (i.e., respondent could select more than one category). For Ethnicity, there was a paucity of respondents that selected any Hispanic, Latino, or Spanish origin, and thus these were collapsed into one group. Those that reported they were not of any Hispanic origins were classified as a separate group. For Race, the 14

possible races contained in the survey were collapsed into five groupings (White, Black/African American, American Indian/Alaska Native, Asian, and Pacific Islander). Those respondents that selected more than one racial category were categorized into a sixth grouping termed “Multi-Racial”.

Measures

The Child Rearing Practices Report (CRPR; Rickel & Biasatti, 1982) is a 40 item self-report measure that yields a Nurturance score (22 items) and a Restrictiveness score (18 items). The original CRPR was Q-sort of 91 parenting statements. It has since been made into a questionnaire that uses a 6-point Likert-type scale (range 6=highly descriptive of me to 1=not at all descriptive of me). Higher scores indicate greater levels of nurturance and restrictiveness respectively. The questionnaire format of the CRPR has been shown to have good reliability and construct validity (Dekovic, Janssen, & Gerris, 1991).

The Depression Anxiety Stress Scales (DASS; Antony, Bieling, Cox, Enns, & Swinson, 1998) is a 42 item self-report measure that yields three subscales (14 questions each). The Depression Scale (DASS-D) measures symptoms typically associated with depressed mood (e.g. sadness or worthlessness). The Anxiety Scale (DASS-A) assesses symptoms of physical arousal, panic attacks, and fear. The Stress Scale (DASS-S) measures symptoms such as tension and irritability. The DASS has been shown to have excellent internal consistency with Cronbach alphas of .94 for Depression, .87 for Anxiety, .91 for Stress. The Depression Scale is correlated with the BDI ($r=.79$) and the Anxiety Scale is correlated with the BAI ($r=.85$) (Antony et al., 1998).

The Couples Satisfaction Index (CSI4; Funk & Rogge, 2007) is a four item self-report questionnaire to measure the level of marital satisfaction. Participants answer three questions on a scale of 0-5 and one question on a 0-6 scale, with higher scores indicating more satisfaction. This measure has been found to have increased validity over the Marital Adjustment Test (MAT) and similar to the Dyadic Adjustment Scale (DAS), the two most frequently used marital satisfaction measures in research (Funk & Rogge, 2007).

Demographic Questionnaire asked the participant to provide information including: age, rank (if applicable), gender, race/ethnicity, marital status, number of years married, total number of marriages, number of years associated with the military, total number of military deployments since 2001, total number of months deployed since 2001, and number of years living in the current location. They were also asked to provide information regarding the number, ages, gender, and school year of their children, as well as if any of their children are special needs children.

Statistical Analyses

The survey was administered using the Survey Monkey site. Data were extracted from Survey Monkey and imported into SPSS v.17 in order to perform the statistical analyses. The following analyses were conducted to evaluate the data and address the research objectives. All analyses were conducted separately on female and male respondents.

Data were initially screened for accuracy and completeness. Cases with an excess of missing data were excluded from further consideration. Any discrepancies encountered

during the coding of string variables were manually examined to ensure valid and accurate data.

Scale scores on the CRPR, DASS, and CSI-4 were created by taking the mean or total of the constituent items provided a minimum number of items were responded to (see scoring procedures below).

Descriptive statistics were used to characterize the responses to the demographic items of the survey. Means, standard deviations and ranges were used for continuous variables, and frequencies and percentages were used to characterize the responses to categorical items. Independent samples t-tests and chi-square tests were used to determine whether there were any differences in demographic variables according to military status (i.e., military or civilian).

Study aim one was to compare military and civilian families' parenting, as measured by the CRPR. The following methodologies were employed to evaluate this objective. Median splits were calculated for each group (military & civilian) on each of the two parenting domains (restrictiveness and nurturance) as measured by the CRPR to find the percentage of each group that fell in each of the four parenting styles (see Figure). Median splits based on the combined group medians were also calculated to determine whether this resulted in an appreciably different categorization. Recoding responses from each dimension into dichotomous groups leads to a loss of information specificity, so for most of the calculations parenting was assessed as a continuous variable. Independent samples t-tests were conducted to examine mean differences between military and

civilian parents on the parenting domains of restrictiveness and nurturance as measured by the CRPR. The independent variable was military or civilian status and the dependent variable was the scores on each of the two domains. It was hypothesized that military and civilian families would not differ on the parenting domain of nurturance. To evaluate this hypothesis, an Inferential Confidence Interval (ICI) was calculated to test the statistical equivalence of the military and civilian groups on the parenting dimension of nurturance. Limits of equivalence were defined as a difference of no more than 0.2 standard deviations. ICIs were also calculated on restrictiveness scores for comparison purposes. The relationship between the various demographic characteristics collected in this study and the parenting domains was examined. Differences in the demographic variables according to military status as conducted in the description of the sample portion of this study were also reviewed. Analyses of covariance (ANCOVA) with interactions were used to evaluate any mediating or moderating influences of the demographic variables on the association between military/civilian status and parenting styles.

The goal of study aim 2 was to determine the relationship between deployment and the parenting domains of restrictiveness and nurturance, as assessed by the CRPR. These analyses were conducted only on the military sample. First, deployment variables were calculated from the survey responses. These included the number of deployments, the total months of deployment since 2001, and the ratio of deployment time to total time in the military. Only deployments since 2001 were counted. Descriptive statistics (mean, SD, range) were used to characterize the responses to the deployment variables and the

study scales (CRPR, CSI4, and DASS). Correlations between the parenting scales and the other study scales were calculated. Linear regression was used to evaluate the relationships between the deployment variables and the parenting variables. The two parenting domains (restrictiveness and nurturance) were used as the dependent variables. The three deployment variables served as independent variables. Each analysis was conducted separately.

The third aim of this study was to determine whether anxiety, depression or marital satisfaction, as assessed by the DASS and CSI4, were significant mediators of the relationship between deployment and parenting style. This involved: (a) determining if any of the deployment variables were significant indicators of parenting (study aim 2), (b) determining if deployment was correlated with the potential mediator (anxiety, depression, marital satisfaction), and (c) determining if the potential mediator was correlated to the parenting domains of nurturance and restrictiveness. If there were no significant associations, no further exploration of the mediating relationship with linear regression would be conducted.

Data Screening

Data were screened in a series of steps to ensure the analyses were conducted on a valid and accurate sample. There were 659 potential respondents that initially accessed the survey.

Missing Scales.

The survey consisted of a demographic questionnaire and three scales: the Modified Child Rearing Practices Report (CRPR), consisting of two subscales, the Depression Anxiety Stress Scales (DASS), consisting of three subscales, and the Couples Satisfaction Index – 4 item version (CSI4). If *no* scores on any of these scales were calculable due to missing responses, the respondent was removed from the sample. The acceptable missing items per scale were determined as follows:

There were no published guidelines on the number of acceptable missing items for the CRPR. The judgment was made that a respondent needed to have answered at least 80% of the scale items for scores to be created. This equated to no more than 4 missing items for the Restrictiveness Scale (total of 22 items) and no more than 3 missing items for the Nurturance Scale (total of 18 items).

Given that the CSI-4 was only comprised of 4 items, it was determined that all 4 items would need to have been completed in order to score the scale.

For the DASS, the rule-of-thumb for missing items presented in the manual was used. This stated to allow up to 2 missing items per 14 item scale.

There were 236 respondents that had no valid scale data. These respondents were removed from the data set, which left a sample size of 423.

Missing or Incomplete Demographic Data.

Cases were then screened to ensure they could be adequately characterized according to the variables of interest in this study. At a minimum, this included being

able to determine the respondents' gender and their status (i.e., military or civilian), and reporting at least one child aged 12 – 18 living in the home.

Gender.

One individual did not reveal their gender and was removed (leaving 422 cases). There were 102 males and 320 females in the remaining sample.

Children.

It was a requirement of the survey that all participants have children in the home between the ages of 12-18 years. Nine participants did not report any children within this age range living in their home, and were removed from the sample (leaving 413 cases).

Determination of Military Status.

Respondents were classified as military families if they were currently or had ever been in the military, or if their spouse was currently or had ever been in the military. However, responding on the survey was not restricted based on previous responses (i.e., the respondent could answer all questions, even if subsequent responses contradicted previous ones), and there were some discrepancies in reporting. The discrepancies were carefully examined by hand, in an attempt to decipher the issues. The outcomes are reported below and in Table 1.

Current Status.

The first demographic question on the survey asked respondents to indicate their military status. There were 73 respondents that selected “military” and 348 respondents that selected “civilian”. One respondent declined to answer this question. Based on this

individual's responses to remainder of the demographic items (did not complete rank etc., reported no prior military experience, and reported that spouse had no military experience), it was determined that this individual should be counted as a civilian.

Out of the 348 civilians, 10 of these cases went on to report their military status in the following question (7 Active Duty, 2 Reserve, and 1 National Guard). These 10 cases warranted further exploration. Nine of the 10 respondents reported a spouse in the military with the same details and status, and therefore likely answered the initial questions as if they were reporting for their spouse. Since respondents with military spouses were counted as military families in this study, these were counted as military. The one individual (AD) that did not report spousal military experience completed the rank and years of service question, and thus was also counted as military. Therefore, all 10 of these individuals were counted in the military group.

One respondent selected that they were in the military, but did not complete their rank or any additional information about their deployments. However, this individual then reported that their spouse was in the military, and completed those items. It is likely that they responded to the first question in relation to their spouse. Since respondents with military spouses are counted as military families, this individual was counted in the military group.

Prior Military Status.

Respondents were asked if they had ever been in the military. There were 44 civilians that answered "yes" to this question. These were all counted as military. Four

civilians stated they were not previously in the military, yet responded to the date last served and deployment questions. For each of them, they reported that their spouses had military experience but were no longer in the military. Thus, they were likely answering the question on behalf of the spouse. These were counted in the military group.

Spousal Military Status.

Respondents were asked whether their spouse was in the military. Twelve individuals did not respond to this question, presumably because they did not have a spouse. Each of these respondents had answered the original status question (military or civilian) and thus could be appropriately classified. There were 39 respondents that stated their spouse was no longer in the military, and responded with a date of last service.

There were 74 respondents with spouses currently in the military. However, one of these gave a date of last service for their spouse. From inspection of the deployment dates it appears this individual mistakenly thought the question asked for the date that the spouse *entered* the military. This individual was treated as a current military respondent.

Final Sample

When all the above factors were taken into consideration, the final sample of 413 respondents included 179 military families and 234 civilian families. All available data points were used for each analysis. Thus, the number of respondents in each analysis differed according to which variables were included. The number of cases involved in each analysis is reported in the relevant data tables.

Creation of Scale Scores

The CRPR is comprised of 40 items, divided into two scales –the Restrictiveness scale (22 items) and the Nurturance scale (18 items). Each item is rated on a 6-point scale from 1 (*Not at all descriptive of me*) to 6 (*Highly descriptive of me*). The two scale scores were created by averaging across the constituent items, provided that the respondent had completed a minimum of 80% of the items in each scale.

The CSI-4 is comprised of one item scored between 0-6 and three items scored between 0-5. The total score is created by summing the four items. Thus, the total score could range from 0 to 21.

The DASS has three scales of 14 items each: Stress, Anxiety and Depression. Each item is rated from 0 (*Did not apply to be at all*) to 3 (*Applied to me very much, or most of the time*). Scale scores were created by averaging across the relevant items (provided there were no more than 2 missing items per scale).

Deployment Variables.

Deployments were calculated based on the respondents currently in the military, previously in the military, or with a spouse in the military. The variables were calculated manually from the survey responses using the following parameters:

- Only deployments after 2001 were counted.
- All deployments for the respondent and/or spouse were counted, and summed together if both partners had deployments within the applicable range.

- If more than one end of service date was provided (i.e., for respondent and spouse), the end of service date for the partner with the latest applicable deployments was used. For example, if the respondent left the military in 2003 and the spouse left the military in 2009, the latter date was used (assuming that deployments within the years 2003-2009 were counted). However, in this example the respondent's deployments between 2001 and 2003 were also counted and summed to the spouse's deployments.
- The survey requested information on a limited number of deployments. Details were provided on up to four deployments for those currently in the military or regarding a spouse, and up to three deployments for those that were previously in the military. If the respondent reached the maximum number of surveyed deployments, the end date was calculated as the end of their last deployment. For example, a respondent that reported a fourth deployment starting January 2006 for 5 months was given an end date of June 1, 2006. This was deemed to be a preferable alternative to assuming they had not deployed again.
- The start date was used as January 1, 2001 and the end date was either: (a) the end of service date, (b) the end of their last deployment (as described above), or (c) March 1, 2012, if neither (a) nor (b) applied.

The calculated variables included the number of deployments, the total months of deployment, and the ratio of deployment time to total time in the military (expressed as a

percentage). Respondents without any relevant deployments after 2001 were not included in the total months of deployment or the ratio of deployment time variable, in order to not artificially skew the variable with an excess of zero points. Months of deployment was calculated in whole months (16 days or more rounded up, 15 days or less rounded down).

RESULTS

Median Splits and Four Parenting Styles.

Median splits were calculated separately for each group (military or civilian) on each parenting domain (restrictiveness and nurturance). Analyses were conducted separately for males and females. For these analyses, listwise deletion was used to ensure the sample size was the same for all cross tabulations. This only resulted in the removal of one Restrictiveness score for a female respondent from the military sample. Values were rounded to two decimal places and counted as “low” if they were below the median, and “high” if they were at or above the median. Due to scores *at* the median, the number of values falling within each “low” and “high” category is not exactly equal.

The two parenting domains were then cross tabulated to determine the number of respondents within each group falling into each of the four parenting styles (see Figure 1). The Authoritarian style is characterized by high restrictiveness and low nurturance. Authoritative parenting is characterized by high restrictiveness and nurturance. Neglectful parenting is low in each domain, while permissive parenting is characterized by low restrictiveness and high nurturance. The results are shown in Tables 7-10.

In both female samples, Authoritarian and Permissive parenting styles were observed more frequently than Neglectful or Authoritative styles (Tables 7-8). However, differences in the distribution of the four parenting styles were only significant in the civilian sample $\chi^2 (1, N=199) = 9.32, p = .002$. There were disproportionately more respondents falling in the Authoritarian and Permissive categories than the Neglectful or Authoritative styles.

In the male military sample, there was (approximately) equal representation across the four parenting styles. The male civilians had slightly more respondents falling into Authoritative and Neglectful groups than the Authoritarian or Permissive styles, although the differences were not statistically significant.

Parenting styles were also evaluated according to a *combined group median* split (i.e., military and civilian together) on the two parenting domains. In the female sample, the median for restrictiveness was 2.73 and for nurturance, the median was 5.44. In the male sample the median was 3.07 for restrictiveness and 5.25 for nurturance. Cross-tabulation was conducted to determine whether the distribution of parenting styles according to military/civilian status. Using this methodology, there was a significant difference in the distribution in the female groups $\chi^2 (3, N=311) = 20.47, p < .001$. More Authoritarian styles were seen in the military group (42.9%). In contrast, Permissive parenting styles were the most frequently observed in the civilian group (36.7%). No differences in the distribution of parenting styles according to status were observed in the male sample.

Data Screening and Descriptive Statistics.

Prior to data analysis, the dependent variables (CRPR Restrictiveness and Nurturance scales) were screened to detect outliers and to evaluate the distributional assumptions for statistical testing. Graphical and statistical methods were employed. To detect outliers, standardized scores (i.e., Z scores) were calculated within each gender, for the military and civilian groups separately. Those respondents with Z scores greater than $Z \pm 3.29$ ($p < .001$, two-tailed) were considered outliers.

The box plots of restrictiveness scores are shown in Figure 3. As seen in the figure, the distributions and variances of scores for the CRPR Restrictiveness scale appeared relatively equal and symmetric across status, for each gender. There were two high outliers in the female civilian group with Z -scores in excess of $+3.29$. These participants were removed from the analyses.

The distribution of CRPR Nurturance scale scores are shown in Figure 4. Nurturance scores were significantly negatively skewed (i.e., most responses were at the high end of the scale, with a few lower scores). An attempt at inverse square root transformation did not adequately normalize the variable. Thus, the original data was used in analyses. There was one extremely low outlier in the female military group that was removed and one outlier in the female civilian group with a Z score lower than -3.29 that was also removed. The remaining outliers depicted in the figure had Z -scores under the selected cut-off point and were retained in the sample. However, analyses using the nurturance score should be interpreted with some caution given the ceiling effect and negatively skewed distribution.

Following removal of the four outliers in the female sample (no outliers were detected in the male sample), the descriptive statistics for the two CRPR scores were calculated. These are shown in Table 13 for females and Table 15 for males. Formal tests of normality and homogeneity of variance are reported in Tables 14 and 16 for females and males, respectively.

Differences in Parenting Scores by Military/Civilian Status.

Independent samples t-tests were conducted to evaluate whether there were significant mean differences in restrictiveness or nurturance, as measured by the CRPR, according to military status. Analyses were run separately on males and females. Effect sizes were calculated to determine the strength of the relationships. Both Cohen's *d* and Pearson's *r* were calculated. For Cohen's *d*, rule-of-thumb effect size conventions are as follows: small = 0.2, medium = 0.5 and large = 0.8. For Pearson *r*, conventions are typically 0.1, 0.3, and 0.5 for small, medium and large respectively (Cohen, 1992). The results are shown in Table 17.

Description of Equivalence Testing of Parenting Scores in Military and Civilian Groups.

An alternative to null hypothesis statistical testing between groups is to use equivalence testing, to determine whether data from two samples are functionally equivalent. The methodology employed in this study was described by Tryon (2001). This approach involves the use of inferential confidence intervals (ICI). These differ from ordinary confidence intervals in that they use a reduced critical value, such that non-overlap of the two group's ICIs about their respective means suggests statistical

difference (at the specified alpha level) equivalent to the null hypothesis test between two means.

First, a minimum difference deemed to be inconsequential is selected (denoted as Δ : “Delta”). In this study, this was defined as a difference of no more than 0.2 standard deviations.

To test equivalence, one takes the lower bound of the lesser mean’s ICI and the upper bound of the greater mean’s ICI to establish a range of the difference between them, termed the maximum probable mean difference estimate (eRg). If this estimate is less than that established for non-equivalence (the above Δ), statistical equivalency is concluded among the groups. Statistical difference is said to exist between the two means if the ICIs do not overlap. Finally, there is a third possible outcome (indeterminacy), when neither equivalence nor difference can be established statistically.

Demographic Factors and Parenting Scores.

Multiple regression analyses were used to evaluate the simultaneous relationship between a group of demographic variables and the CRPR scores, as well as the unique contribution of each demographic variable in the presence of the remaining variables. Analyses were conducted on the Restrictiveness and Nurturance scores separately. The following demographic variables were used as predictors: Military status (categorical: military or civilian), age (continuous), race (categorical: White, Black, other), number of years married (continuous), number of children (continuous), number

of years in current location (continuous), and income (categorical: <\$49,999, \$50,000-\$89,999, \$90,000+). The analyses were conducted only on the female group.

Aim 1: Military vs. Civilian Parenting Style

The goal of study aim 1 was to compare military and civilian families' parenting styles, as measured by the CRPR. It was hypothesized that military families would report similar levels of nurturance (**Hypothesis 1a [H1a]**) and higher levels of restrictiveness (**H1b**) when compared to civilian families. A number of statistical approaches were employed to evaluate this study objective, the results of which are reported below.

Females.

For females, the scores for restrictiveness ranged from approximately 1-5 for both groups, with means between 2 and 3 (Table 13). The relative symmetry of the distributions was reflected in median values close to the means, and acceptable skewness and kurtosis values (i.e., values divided by their respective standard errors less than about 3). As seen in Table 14, formal tests of normality (Shapiro-Wilk) were not statistically significant, indicating acceptance of the normal-distribution null hypothesis for both groups. In addition, the homogeneity of variance assumption for restrictiveness was met (Table 14).

For nurturance, scores in both groups ranged from about 3 to the maximum scores of 6.0. The means were between 5 and 6 and there were relatively small standard deviations (about 0.5), representing a prevalence of scores towards the high end of the

possible distribution and little variability in responding. The skewness values indicated significantly negatively skewed distributions for both groups (Skewness/SE. Skewness = -6.53 for military, and -4.37 for civilian, both significant at $p < .001$, two-tailed). This is reflected in the significant deviations from normality as detected by the Shapiro-Wilk Statistics (Table 14). However, there was no difference in the variance distribution between groups.

In summary, some caution should be used in interpretation of parametric statistics of nurturance scores as these do not follow a normal distribution. Transformation did not adequately normalize the distribution and there is a ceiling effect evident. While removal of all outliers was a possibility to ameliorate this problem, it was felt that this might compromise the integrity of the data without a clearer rationale for doing so. This may have artificially removed valid sources of variance, and both restricted and normalized the sample scores, when in fact they may not have come from an underlying normal distribution (as assessed by this measure).

Males.

For males, restrictiveness mean scores were at about 3 on the 0-6 point scale, for both groups (Table 15). There was a slight deviation from normality in the military group (Table 16). Variances in restrictiveness scores were equal between groups (Table 16).

Average nurturance scores were at about 5 for both groups with evident negative skewness, as was observed with the female sample. The distributions deviated

significantly from normality for both groups. Furthermore, the variance in the civilian group scores was significantly smaller than in the military group (Table 16, Figure 4).

Thus, an unequal variances t-test was used for this particular comparison.

Significant differences were observed for females on the restrictiveness domain $t(310) = 5.05, p < .001$. The mean score of military females was significantly higher than the mean restrictiveness score of civilians (Table 17). The effect size calculations ($d = .57$ and $r = .28$) denoted that this difference represented a “medium” effect. Significant differences were also observed for the nurturance domain $t(309) = -2.22, p = .027$. In this case, civilian scores were significantly higher than military scores (Table 17). The effect sizes ($d = .25, r = .13$) indicated that this difference was “small” effect. There were no significant differences between military and civilian males on either the restrictiveness or the nurturance domains (Table 17).

Due to the skewed distribution of the nurturance scores, it was deemed prudent to repeat these analyses using non-parametric tests. Mann-Whitney tests were calculated, in which the ranks of scores are compared between groups, rather than the actual values. The results are shown in Table 18. The results were comparable to the results from the parametric tests with the exception of the female nurturance scores, which were no longer statistically significant at a .05 level ($p = .069$). Thus, the difference in female nurturance scores according to military status was not particularly robust to alterations in statistical methodology.

Equivalence Testing Results.

The results of equivalence testing for CRPR restrictiveness and nurturance scores are shown in Table 19. The results are also displayed graphically in Figures 3 and 4. For females, restrictiveness scores were determined to be statistically different. As observed in Figure 3, there was clear non-overlap of the confidence intervals. Nurturance scores were also concluded to be not statistically equivalent. However, the differences in the confidence intervals were much closer and almost overlapping (Figure 3). In fact, the difference between the top of the military confidence interval and the low point of the civilian confidence interval was only 0.007. For males, the differences in restrictiveness and nurturance scores between the groups were “statistically indeterminate”. As observed in Figure 4, the confidence intervals for both scores were overlapping. However, the size of the maximum probable difference (eRg) was larger than the acceptable minimum difference (Delta).

Description of the Samples

T-Tests and Chi Squares.

Independent samples t-tests were used to determine whether there were mean differences between military and civilian respondents on continuous demographic variables. Chi-square statistics were used to evaluate differences in the distribution of categorical demographic variables. In the statistical analyses, the descriptive categories generally needed to be collapsed to ensure adequate representation within each of the cells. These are detailed in the footnote to the tables.

Females.

The responses to the continuous variables are presented in Table 1. Both groups of respondents were in their 40s, and the civilian personnel were on average about seven years older than the military respondents $t(210) = -8.67, p < .001$. The civilian group had been married about four years longer than the military group $t(263) = -5.62, p < .001$. There were more household members for the military group than civilians $t(311) = 4.11, p < .001$, reflecting the fact that military families had more children on average than civilians ($p < .001$). There were substantially fewer years spent in their current location for the military group than civilian families $t(312) = -8.96, p < .001$ due to the significantly more moves experienced by military families $t(313) = 10.49, p < .001$.

Categorical variables are shown in Table 2. The comparison of marital status (married vs. all other categories) approached statistical significance $\chi^2(1, N=315) = 3.27, p = .071$, with a slightly higher percentage of married respondents in the military group compared to the civilians. The majority of respondents in both groups were not of Hispanic, Latino or Spanish origin and there were no differences in the distribution of ethnicity according to status $\chi^2(1, N=265) = 2.21, p = .137$. There was a significantly larger proportion of White individuals in the civilian group, while more Black/African American and other races were represented in the military group $\chi^2(2, N=312) = 12.97, p = .002$.

When examining the distribution of education, there were disproportionately more respondents with higher education levels in the civilian group in comparison to the military group $\chi^2(2, N=316) = 12.65, p = .001$. The income levels were also

significantly higher in the civilian group compared to the military personnel χ^2 (2, N=312), $p < .001$.

The characteristics of the respondents' eldest child are shown in Table 3. There was no difference in the distribution of the age χ^2 (2, N=316) = 2.82, $p = .244$ or gender χ^2 (1, N=302) = 0.03, $p = .875$ of the eldest children between the two groups.

Males.

The males' responses to the continuous "fill-in" variables are shown in Table 4. As with the female sample, the male military respondents were significantly younger than the civilians $t(93) = -3.54$, $p < .001$ and had been married for fewer years than non-military respondents $t(94) = -2.20$, $p = .031$. There were more household members for military respondents $t(95) = 2.06$, $p = .042$, and they had more children than civilians $t(95) = 2.44$, $p = .016$. Military respondents had lived in their current location for substantially fewer years than civilians $t(95) = -5.02$, $p < .001$, and had moved significantly more times $t(95) = 5.09$, $p < .001$.

Responses to categorical variables are shown in Table 5. All male respondents except for one were married, and as expected the two groups did not differ on the distribution of marital status χ^2 (1, N=87) = 2.05, $p = .152$. Males did not differ between groups in the distribution of ethnicity χ^2 (1, N=94) = 0.40, $p = .526$ or race χ^2 (2, N=96) = 4.98, $p = .083$, although there was a trend for more white participants in the military group.

Education did not differ significantly $\chi^2(2, N=97) = 5.45, p = .066$ although there was a trend for the civilian group to have higher education levels than the military group. Income was higher for the civilians than the military personnel $\chi^2(2, N=95) = 10.27, p = .006$. There was no difference in the distribution of the age $\chi^2(2, N=97) = 4.23, p = .121$ or gender $\chi^2(1, N=91) = 1.11, p = .292$ of the eldest children between male military and civilian respondents (Table 6).

ANOVAs and ANCOVAs.

Earlier in this section, a relationship was demonstrated between military/civilian status and parenting (Table 17). In addition, significant relationships were observed between military status and many of the demographic variables (Tables 1 to 6). In this section, the relationships between the demographic variables and the parenting scores were examined. In addition, the effects of the demographic variables on the prediction of parenting scores by military/civilian status were evaluated. Mediation was determined by reduction (to non-significance) of the effect of status on parenting on the presence of a significant demographic variable. Moderation was determined by significant interaction effects. For continuous variables, interaction terms were manually specified between the categorical variable and continuous independent in each ANOVA. Full-factorial ANOVAs were used for categorical variables and interactions.

The results are presented below separately for females and males, and divided by continuous or categorical demographics to mirror the order presented in the demographic tables. It should be kept in mind that a high number of comparisons were conducted,

resulting in an elevated likelihood of type 1 error. Thus the results should be viewed with some caution and individually discrepant results should not be over interpreted.

Females.

Continuous variables.

Correlations were used to examine the relationships between the continuous demographic variables and the parenting scores. The results are shown in Table 20. Restrictiveness scores were significantly negatively correlated with age, years married, years in current location, and positively correlated with number of moves. Thus, higher restrictiveness was associated with younger age, fewer years married, fewer years spent in the current location, and a higher number of moves. Nurturance scores were positively associated with age and years in current location, and negatively correlated with the number of moves. In other words, higher nurturance was associated with older age, greater number of years spent in current location, and fewer moves.

The results of the ANCOVAs are shown in Table 21. Interaction terms were manually specified. None of the interaction terms were significant, indicating an absence of moderating influences. However, there was evidence of mediation. For restrictiveness, age and years in current location were significant mediators, in that they reduced the relationship between military/civilian status and restrictiveness scores to non-significance. As reported in Table 1, military families were significantly younger and had lived significantly fewer years in their current location than civilian families. Years

married and number of moves could also be considered partial mediators in that they reduced the size of the relationship between status and restrictiveness.

In summary, military families exhibited higher restrictiveness scores than civilian families, and this appeared at least partially explained by the military families' younger ages (and fewer years married) and the number of years in their current location (and number of moves).

For nurturance, age and the number of moves represented mediating variables in the relationship between military/civilian status and nurturance scores (Table 21). Civilian parents were older and had moved significantly fewer times than military parents (Table 1), and both these factors were significant indicators of nurturance scores (Table 20).

Categorical variables.

For the analyses involving categorical variables, collapsed group levels as indicated in the footnotes to the demographic tables were used (Tables 2-3). Significant relationships were observed between the restrictiveness score and relationship status, race, education, income, and the age of the eldest child (Table 25). For relationship status, participants that were unmarried had higher restrictiveness scores than married participants. In terms of race, Black participants had the highest restrictiveness scores, followed by "other" races, and White respondents had the lowest restrictiveness ratings. For education, the restrictiveness scores decreased with advancing education. Thus, participants with high school/some college had the highest restrictiveness scores,

followed by those with associates/bachelor's degrees, while the participants with master's and doctorate degrees had the lowest restrictiveness scores. Income was also inversely related to restrictiveness: the lowest income group (< \$49,999) had the highest restrictiveness scores while the highest income group (> \$90,000) had the lowest mean restrictiveness score. Regarding the age of the eldest child, those with younger children (age 12-14) had higher restrictiveness scores than those with older children (age 17-18+). Significant differences between military and civilian families were seen in race, education, and income (Table 2), which could thus serve as possible mediators in the association between status and restrictiveness.

Mediation is determined by a reduction in the relationship between the independent and dependent variables in the presence of the mediator variable. As seen in Table 23, race was a significant mediator, since the relationship between status and restrictiveness was no longer significant with race in the equation. As observed in Table 2, there were significantly fewer White respondents in the military group compared to the civilian group, and more Black respondents and those with "other" races. Furthermore, Black participants and those with other races had higher restrictiveness ratings than did White participants. Partial mediation was also evident in the presence of education and income variables, as evidenced by reduction in the size of the effects (Table 23). Thus, military families had significantly higher restrictiveness scores than did civilian families, which was at least partially explained by the different racial composition in the samples, and their lower education and income levels as compared to the civilian families.

For nurturance scores, none of the categorical demographic variables were significant indicators of nurturance (Table 22-23).

Males.

Continuous variables.

For the male sample, inspection of the correlations among continuous variables in Table 24 indicated a negative relationship between restrictiveness and age, years married, years in current location, and a positive relationship with the number of people in the household. In other words, higher restrictiveness was associated with younger age, fewer years married, fewer years in the current location, and a higher number of people in the household. None of the relationships between continuous demographic variables and nurturance scores were significant (Table 24).

The relationship between military/civilian status and parenting scores were not significant, thus there could be no mediation of the relationship per se. Nonetheless, the results of the ANCOVAs are shown in Table 25.

Categorical variables.

For the categorical variables, age of the eldest child was significantly related to restrictiveness scores (Table 26). Those participants with younger children had higher restrictiveness scores than participants with older children. For nurturance, education was a significant factor. Nurturance scores were higher as the education levels increased. The effects of adding the categorical demographic variables to the predictions of parenting scores by status are shown in Table 27.

Regression Analysis of Demographic Variables.

Multiple regression analyses were used to evaluate the simultaneous relationship between demographic variables and the CRPR scores of the female sample. The group of demographic variables were significantly related to the CRPR restrictiveness domain ($p < .001$), and accounted for 15.3% of the variance in the scale. However, when examining the regression coefficients for the individual demographic variables, only age was a significant predictor ($p = .001$). The regression coefficient for age was negative, indicating that advancing age was predictive of lower restrictiveness scores. Results are presented in Tables 28 and 29.

One possibility for the lack of significant predictors in the presence of an overall significant effect is multicollinearity. Multicollinearity can be indicated by a drop between zero-order and the part and partial correlations of a predictor with other predictors. Collinearity statistics can also be computed. The tolerance indicates the percentage of variance in a given predictor that cannot be explained by the other predictors. Thus, small tolerances indicate that a variable is highly related to the others in the equation. Variance inflation factors (VIF) represent the inverse of tolerance. Tolerance values of 0.1 to 0.2 or VIF values above 5 or 10 indicate a problem with multicollinearity. These statistics are shown in the regression coefficients table. There were no indications of significant multicollinearity in these data.

Thus, when multiple demographic factors were examined simultaneously, only age emerged as a significant, unique predictor of the restrictiveness domain.

The group of demographic variables was not significantly predictive of CRPR nurturance scores ($p = .112$). Examination of the individual coefficients revealed that

only age was a significant predictor of nurturance ($p = .044$), with advancing age being predictive of higher nurturance scores. The lack of significant predictors did not appear due to multicollinearity. Results are presented in Tables 30 and 31.

Aim 2: Deployment and Military Parenting Style

The objective of this study aim was to examine the relationship between deployment and parenting in military families. It was hypothesized that increased total months of deployment would be related to parenting style characterized by less nurturance and more restrictiveness (**H2a and H2b**). It was also hypothesized that total number of deployments would be related to parenting characterized by less nurturance and more restrictiveness (**H2c and H2d**). Finally, it was hypothesized that the ratio of time deployed would be related to parenting characterized by less nurturance and more restrictiveness (**H2e and H2f**).

The relationships were examined using linear regression and are reported below. First, it was necessary to create the deployment variables as follows.

Description of Deployment Variables.

After data screening as described in previous sections, there remained 178 military respondents in the sample (113 females, 65 males). The descriptive statistics for the study variables are shown in Tables 32 and 33 for females and males, respectively.

Females.

For females, the number of deployments ranged from 0-5 ($M = 1.57$). Of the 113 respondents, 82 had dealt with at least one deployment (either deploying themselves or

having a spouse who had deployed). Of these, the average number of months deployed was 20.66, and the average percentage of deployment time was 18.53%.

The CRPR restrictiveness and nurturance scores for the sample have been described in previous sections. The CSI4 scores were represented across the range of possible scores from 0 – 21, with an average of 13.95. The mean DASS Stress, Anxiety, and Depression scores were each below a score of 1 (possible range 0-3), indicating average responses corresponding to response options between “Did not apply to be at all” (0) and “Applied to me to some degree, or some of the time” (1).

Males.

The average number of deployments for males was 1.48 (range 0-4). There were 51 male respondents with deployments, and the total months deployed for these was 18.33. The average percent of time deployed was 16.91%. The average CSI4 score was 15.52 out of a possible total of 21, while the three mean DASS scores were each between 0 and 1.

Correlations.

The correlations between the scale variables are shown in Tables 34-36 for military females, civilian females and military males, respectively.

Military Females.

The CRPR restrictiveness and nurturance scales were negatively correlated $r(110) = -.207, p=.028$. However, none of the other scales from the CSI or the DASS were significantly related to either the restrictiveness or nurturance scales. The CSI score was negatively related to the DASS, reflecting an expected inverse relationship between

marital satisfaction and anxiety $r(101) = -.246, p=.012$ and depression $r(100) = -.411, p<.01$. In addition, the DASS scores were highly correlated, reflecting the comorbidity between stress, anxiety, and depressive symptomatology.

Civilian Females

In the female civilian sample, the CRPR restrictiveness and nurturance scales were negatively correlated $r(197) = -.314, p=.000$. Restrictiveness was positively related to the DASS Stress $r(193) = .156, p=.029$, DASS Anxiety $r(194) = .155, p=.03$, and DASS Depression $r(194) = .172, p=.016$ scales. Thus, higher endorsement of mental health symptomatology on the DASS was associated with higher scores in parenting restrictiveness. In contrast, the CRPR nurturance scale was negatively correlated with DASS Stress $r(193) = -.357, p=.00$, DASS Anxiety $r(194) = -.276, p=.000$, and DASS Depression $r(194) = -.348, p=.000$. This indicates that lower scores on these scales were associated with higher parenting nurturance. There was also a significant, positive correlation between the nurturance scale and the CSI4 $r(184) = .323, p=.000$ indicating a positive relationship between parenting nurturance and marital satisfaction.

The CSI4 was significant negatively related to all three DASS scores, reflecting an inverse relationship between marital satisfaction and stress, anxiety, and depression. There were significant positive correlations among the three DASS scores.

Males.

For males, the correlation between restrictiveness and nurturance was not statistically significant. For the remaining scales, only the DASS Anxiety score was negatively related to the nurturance domain $r(56) = -.310, p=.018$. The expected inverse

relationships between the CSI and the DASS, indicating the negative relationships between marital satisfaction and stress $r(56) = -.439, p < .01$, anxiety $r(56) = -.405, p < .01$, and depression $r(56) = -.589, p < .01$. The expected positive relationships (intercorrelations) between the three DASS scores were also observed.

Regression of Parenting Domains on Deployment Variables.

Linear regression analyses were conducted to determine whether the parenting domains of restrictiveness and nurturance could be significantly predicted by the deployment variables. Each analysis was conducted individually. The results are shown in Tables 37 and 38.

Females.

None of the deployment variables were significant indicators of the restrictiveness scores. Months deployed and the ratio of time deployed were also not significant indicators of nurturance. However, the number of deployments was significantly and negatively related to nurturance scores. Thus, more deployments were associated with lower nurturance scores. Due to the limited variability of this deployment variable (whole numbers between 0 and 5) further inspection was warranted using ANOVA and diagnostic analysis of regression residuals. It was discovered that there was only one respondent with five deployments, and this respondent had an unusually low nurturance score (3.11). With this one respondent removed, the relationship was no longer statistically significant, $F(1, 109) = 1.762, p = .187, \beta = -.126$. Group differences using an ANOVA approach (with the one outlier of 5 deployments removed) also did not yield a significant relationship between these two variables, $F(4, 106) = 0.751, p = .559$.

Males.

For males, total months deployed had a significant positive relationship with restrictiveness, $F(1,48) = 4.224$, $p=.045$, $\beta=.284$. Thus, greater number of months deployed was predictive of higher restrictiveness. Regression diagnostics did not indicate any cases with unusually high residuals or points of leverage. Number of deployments and the ratio of deployment time were not significantly related to restrictiveness. Nurturance scores were not significantly predicted by any of the deployment variables.

Aim 3: Mediators of the Deployment to Parenting Relationship

The goal of the third study aim was to examine if anxiety, depression, and marital satisfaction mediated the deployment to parenting relationship in military families. It was expected that the relationship between months of deployment and parenting would be mediated by the level of parental depression (**H3a**), anxiety (**H3b**), and marital satisfaction (**H3c**). However, it was determined that this should only be investigated if there were significant effects of deployment on parenting, as assessed by study aim 2. Given the general absence of these effects, mediating relationships were unlikely.

Relationship between Deployment and Potential Mediators of Parenting.

Although there were few significant effects of deployment on parenting, analyses were conducted to evaluate the second and third conditions of potential mediation. This involved evaluating whether there were significant relationships between the independent variable (deployment) and the possible mediators of parenting. These included marital satisfaction (CSI4), and stress, anxiety, and depression (DASS). In addition, the relationship between the mediators and the dependent variable (parenting) was examined.

For these analyses the one participant with 5 deployments was removed due to its spurious effect in the analyses above.

The correlations between the deployment variables and the potential mediators are shown in Tables 39 and 40, for females and males respectively. No significant relationships between any of the deployment variables and any of the potential mediating variables were observed, for males or females.

Furthermore, there was little evidence of significant relationships between the mediator variables and the parenting scores (Tables 30 & 32). The only exception was a significant, negative relationship between anxiety scores and nurturance scores in the male sample. However, given that nurturance scores were not significantly related to any of the deployment variables in this sample, it is untenable that anxiety represents a mediating variable in the analysis.

Summary of Hypothesis Testing

Table 41 presents a summary of the hypotheses that were evaluated in this study with respect to the female participants. While parallel analyses were run for mothers and fathers, the male analyses were considered exploratory and conclusions will be drawn primarily from the women's data. The results of the exploratory analysis for the male participants are summarized in Table 42. The hypotheses in study aim one predicted that military mothers would report higher restrictiveness and equal levels of nurturance in comparison to civilian mothers. Higher restrictiveness was indeed observed in the military sample. However, civilian respondents reported higher levels of nurturance than the military sample.

The second goal of this study aimed to evaluate the relationship between deployment variables and parenting in military families. It was hypothesized that more significant deployment (as characterized by number of deployments, months of deployment, or deployment time ratio) would be predictive of higher restrictiveness and lower nurturance. These hypotheses were not supported in the female sample. There was insufficient evidence to confirm a relationship between any of the deployment variables and the parenting domain scores in the female sample.

The third aim of this study was to evaluate possible mediators of the deployment to parenting relationship. However, there was insufficient evidence to support any mediating relationships.

For the male participants, with regard to the first hypothesis, the difference between military and civilian families was “statistically indeterminate.” For the second aim, evaluating the relationship between deployment and parenting in the male sample, total months deployed was significantly related to higher restrictiveness and nurturance scores were not significantly related to any of the deployment variables. As with the female sample, there was insufficient evidence to support any mediating relationships between deployment and parenting (third aim).

DISCUSSION

This study compared the parenting styles of military and civilian parents of 12-18 year olds, and examined the potential impact of deployment on parenting styles. As predicted by the second hypothesis of this study, military mothers reported higher levels

of restrictiveness in their parenting than civilian mothers. It had been hypothesized that this difference would be due to the nature of military culture. The military mothers in this sample were significantly different demographically than the civilian mothers in the sample. The military mothers were younger, moved more frequently and thus had less time in their current location, had been married fewer years, were more likely to be Black/African American, were less educated, and had lower household incomes. This group of demographic factors was related to more restrictive parenting. This could lead to many potential explanations. Because military families move, on average, every two to three years and therefore have less time in their current location and more moves because of the military lifestyle. It could be that as these families face frequent moves, they may focus their energy on establishing a safe environment for their children. Most of the respondents to the survey are living in off-post housing. Since mothers may not be knowledgeable of the areas that they are living in, they may find it necessary to restrict their adolescent's behavior as a safety mechanism, as speculated by Querido, et al. (2002). The findings of this study are similar to what Querido, et al. (2002) found in that parents with less education are more likely to use authoritarian parenting. It could be speculated that these younger and less educated mothers may not have learned alternative parenting skills and use restriction as their main parenting mechanism. Another possible explanation is that low education is typically related to lower socioeconomic status which is related to increased child maltreatment and physical punishment (Afifi, 2007 & Black et al., 2001). Results indicated that mothers who had children who were in the lower end of the age range examined in the present study were more restrictive than those with

children in the higher end of the age range. This is consistent with developmental research that indicates that as children get older and seek more independence that it is not unusual for parents to have less impact on daily decision (Brittain, 1963, Brown 1990, 2004, Smetana, et al, 2006).

However, when examined more closely, only age was a significant predictor of restrictive parenting. This is consistent with previous research. Scaramella, Neppl, Ontai, & Conger (2008) found a relationship between younger parents and the likelihood of using harsher punishment. For males there was no significant difference on the restrictiveness scale between the military and civilian samples.

Since there is no previous research on military parenting styles, it was hypothesized that military mothers and civilian mothers would have similar levels of nurturance. Both the military and civilian mothers reported high level of nurturance with a small standard deviation within each group. Two of three statistical analyses run indicated that the civilian mothers had a higher level of nurturance. This difference was not due to demographic differences between the samples. The high level of nurturance reported by mothers of military families may be a product of the unique environment that is created by units and communities to help support military families. Members of the military and their families have access to a variety of services and resources not always available to civilian families. The civilian mothers also reported a high level of nurturance. This may be attributed to the fact that the sample was highly educated with nearly two-thirds of the sample having a bachelor's or master's degree and the majority (73%) of the families making more than \$90,000 annually. Previous research indicates a

strong negative correlation between socioeconomic status and nurturance as measured by maltreatment and physical punishment (Afifi, 2007; Black, Heyman, & Slep, 2001; Courtney, 198; Lee & George, 1999). For males there was no significant difference on the nurturance scale between the military and civilian samples.

Median splits to identify the distribution of civilian and military mothers in each of the four parenting styles. It was found that the military group had significantly more authoritarian high restrictiveness and low nurturance) mothers (42.9%) and civilian mothers were found to most frequently report permissive (low restrictiveness and high nurturance) parenting styles (36.%). Again, it is important to keep in mind that this study looked at parents of 12-18 year olds. This is the age when children are starting to spend more time with their peers (Larson, et al., 1996), and it would not be unexpected for parents to start to allow their children/adolescents to have more freedom. The military mothers on the whole appear to be younger, have more children, move more frequently, and have less education. Any one of these variables may lead to more restrictive parenting. As previously stated, the higher level of restrictiveness in the military sample may be due to the fact that they do not know other parenting techniques or because they do not know the neighborhood, group of friends, etc and they are attempting to keep their child safe. The fact that the military sample was younger and reported lower income is in-line with previous research that indicates that young parents of lower socioeconomic status are frequently associated with harsh discipline (one component of the authoritarian parenting style) (Barkin, Scheindlin, Ip, Richardson, & Finch, 2007; Frias-Armenta & McCloskey, 1998; Guttman & Eccles, 1999; Jansen, et al., 2012, Regalado, Sareen,

Inkelas, Wissow, & Halfon, 2004; Weis & Toolis, 2008). Another explanation may also be that the military authoritarian structure extends into parental practices. The culture of the military lifestyle is one that is rigid, regimented, and expects conformity (Hall, 2011). If these characteristics are carried-over into parenting style-they would highlight the characteristics of an authoritarian parent who emphasizes rigidly enforced rules and obedience. The military males were split almost evenly among the four parenting styles.

The second aim of this study was to examine the relationship between deployment and parenting within the military sample. No reliable relationships were found between deployment variables (months deployed, number of months deployed, or percentage of time deployed) and restrictiveness or nurturance. There are no previous studies that report relationships between parenting and deployment. It may be that after more than 10 years at war, this is all that these military families know. With multiple deployments now a common place in their lives and do not have an impact on their parenting style. Another explanation is that the parenting instruments used were not sensitive enough to detect a difference, or that any changes in parenting style that were made during deployment were not long lasting and after the deployment ended, the parent returned to their baseline parenting style.

The final aim of this study was to examine the relationship between deployment and parenting was mediated by anxiety, depression, and marital satisfaction. Since there was no significant relationship between deployment and parenting the first criteria for mediation was not met. Additionally, no significant correlations were found between the deployment variables and anxiety, depression, and marital satisfaction. These findings

were not in-line with previous research that has shown a relationship between deployment and depression and anxiety (Mansfield, 2010; Warner et al., 2009; Lester et al., 2001). The lack of relationship between deployment and marital satisfaction is contrary to most previous research (MHAT VI, 2009; McLeland & Sutton, 2005); but is in line with findings reported by Renshaw et al., (2009) which indicated a similar level of marital stress between returning troops and community samples.

While on the surface, this may seem surprising that more deployment (by number, total number of months, or percentage of time) is not related to anxiety or depression. This may be an indication that our military families are more resilient than they are sometimes perceived. Chapin (2011) states that military families show positive resilience in the wake of many deployments. He believes that deployment is a “normative crisis” for military members; and that military families prepare for deployment similar to how civilian families prepare for a new baby, a move, or a retirement. It is also important to note that in this sample the reported level of anxiety and depression is quite low and the reported level of marital satisfaction is high, in both the male and female military samples. There are a few explanations for this. It could be that there is some remission of symptoms after redeployment. Lester et al. (2010) found lower rates of anxiety among wives of recently returned service members. However, the most probable explanation is that the restricted response ranges are due to survey response bias. Because this was an internet based survey that offered no incentive to complete it, it would be reasonable to expect that individuals who were suffering from significant anxiety and/or depression would be less likely to take the initiative to participate in this study. It is also possible that

individuals, who did complete the survey, may not have been completely forthcoming about negative psychological symptoms when answering the survey questions. Three common traits of members of military family are secrecy, stoicism, and denial (Hall, 2011; Wertsch, 1991). The military culture emphasizes the importance of keeping up appearances, especially stability and the ability to handle any situation as well as keeping feelings and fears to oneself (Hall, 2011). Given this culture, along with negative stigma about mental health problems, it is easy to speculate that even in an anonymous survey, military participants may not have been completely honest.

Finally, the relationship between the mediators (anxiety, depression, and marital satisfaction) and the parenting domains was explored. For the female military sample, there were no significant relationships between the mood and marital satisfaction variables and the parenting domains. This is contrary to past research that has consistently indicated relationships between depression and parenting as well as marital satisfaction and parenting. When these relationships were examined in the civilian sample, the expected relationships did emerge. In the military sample parenting style appears to be a trait, consistent regardless of mood state or marital satisfaction. The civilian sample in the study showed to have parenting style that appears to be more dependent on their mood and/or marital satisfaction at that time.

Implications

This project was proposed on the premise that military children face numerous stressors and that positive parenting style may be one method to support them. As discussed, years of research indicates that children raised by authoritative parents perform

better academically (Steinburg et al., 1989 & Dornbush et al., 1987), have better psychological and social functioning (Lamborn, et al., 1991; Maccoby & Martin, 1983), have less depressive symptoms Radziszewska, et al., (1996), and have better coping skills (Dusek & Dank, 1994, Hardy, et al., 1993; Wolfradt, et al., 2003). It was thought that by identifying how military parents parent and how factors such as deployment, anxiety, depression, and marital satisfaction relate to parenting that interventions could be developed to help military children and adolescents better deal with the stress of deployment by intervening through their parents' parenting practices.

Findings of this study indicate that military mothers do use more restrictive parenting styles and that the majority of military mothers use an authoritarian parenting style (high restrictiveness, low nurturance). This parenting style seems to be related to demographic factors particularly age. It would be important to examine the impact of this type of parenting on military children. It is possible that authoritarian parenting is the most effective and has the best outcomes for children as they deal with a deployment. If other parenting styles are shown to be more effective with military children, psychoeducation classes for military parents may be one way to help these parents learn new parenting skills to optimize their parenting practices. Various parent training programs have been shown to have a positive effect on reducing negative parenting behavior as well as increasing positive parenting behavior (Hahlweg, Heinrichs, Kuschel, Bertram, & Naumann, 2010; Kamnski, Valle, Filene, Boyle, 2007; Hahlweg, Heinrich, Kuschel, & Feldmann, 2008). Potentially a parenting program could be developed specifically focused on military families and the unique experiences that they face.

However, it may be found that authoritative parenting is not the best way to help children handle deployments.

Limitations

The present study has limitations. First, this was a cross sectional study consisting of a convenience sample. Data for this survey were collected online and web-based surveys are limited in that even though more people are using the internet each year, those who use the internet are more likely to be white and younger (Gosling, Vazire, Simine, & John, 2004). Additionally, individuals who chose to participate may have been more pro-social (willing to help others or empathetic). It is also likely that individuals with more significant levels of anxiety or depression would be unlikely to take the initiative to log on and complete a survey. This limits the generalizability of this research. Other factors that limit how this research can be generalized include the fact that people were classified as military or non-military based on whether they or their spouse had any past military experience. Prior and current military was not delineated. The study also did not look at if the military experience was active duty or reserve/national guard. The study did not examine how long it had been since the family last experienced a deployment. It is possible that changes in anxiety, depression, and marital satisfaction as well as parenting are related to where the family is in the deployment cycle, or how long the deployer has been home. In addition, online surveys allow for no control of the environment in which the survey was taken and to monitor how “seriously” participants were when completing the task. This study consisted of all self-report measures. It is possible that survey takers answered in a manner that they

thought was “right” or presented them in a better light. Previous research indicates that part of the military culture includes difficulties admitting to problems (Hall, 2011). This is particularly true with the level of anxiety and depression reported by this sample. The level of anxiety and depression reported in this sample was low compared to many previous studies that looked at similar participants. It is also possible that the participants were not 100% forthcoming when answering the parenting style questions.

Unfortunately, because there is no previous research on military parenting style, we have no data with which to directly compare the present findings.

This study also only collected parenting data from one individual. Previous research has shown some disagreement between children and parent reports of parenting behavior (Gayord et al., 2003; Schwarz et al., 1985; Sessa et al., 2001; Tein, Roosa, & Michaels, 1994).

Future research

This was the first study on parenting styles and military families. This area should be further explored. Ideally, future research should be a longitudinal design with multiple informants to determine parenting styles (parent self-report, adolescent report, behavioral observations). Multi-source reports of parenting have been shown to give more stable estimates of parenting and are often necessary to obtain valid information (Lock & Prinz, 2002). Future research should also look at military children of all ages. It would be interesting to explore if parenting styles of the stay behind parent remain constant or fluctuate throughout a deployment cycle. An interesting study would look at parenting style through a complete deployment cycle (pre-deployment, deployment, and

post-deployment/re-integration) to see if parenting style of the deploying or stay behind parent changes during this time. It would also be useful to explore if these parenting changes are related to changes in parents' symptoms of depression, anxiety or marital satisfaction through the deployment cycle. It would be useful to examine if active duty or reserve/national guard families respond differently to a deployment. It is also possible that there are differences based on what kind of work or level of danger the deployer experiences. Assessing the child's response to deployment may also shed light on the question of if parenting practices matter in the context of such a significant stressor. It would be important to look at child/adolescent outcomes such as mental health, academic performance, coping, etc. It is possible that authoritative parenting does not have the best outcomes for children and adolescents who experience a deployment.

Table 1. Continuous demographic variables according to military status (FEMALES)

		Military	Civilian	<i>t</i> (<i>p</i>)
Age (years)	N	112	200	-8.67 (<.001)
	M (SD)	40.70 (6.93)	47.29 (6.16)	
	[Range]	[27 – 61]	[27 – 67]	
Years married	N	102	163	-5.62 (<.001)
	M (SD)	14.77 (6.61)	18.98 (5.47)	
	[Range]	[1 – 29]	[1 – 38]	
Number of people in household	N	113	200	4.11 (<.001)
	M (SD)	4.53 (1.38)	3.94 (1.12)	
	[Range]	[2 – 9]	[2 – 9]	
Years in current location	N	113	201	-8.96 (<.001)
	M (SD)	4.65 (4.91)	10.90 (6.43)	
	[Range]	[0 – 22]	[1 – 29]	
Number of moves since eldest child was born	N	113	202	10.49 (<.001)
	M (SD)	5.19 (3.15)	2.02 (2.18)	
	[Range]	[0 – 15]	[0 – 13]	
Number of children	N	114	202	
	M (SD)	2.52 (1.31)	1.93 (0.89)	4.74 (<.001)
	[Range]	[1 – 6]	[1 – 6]	

Note. Independent samples t-tests were used to compare the means of military and civilian groups. Significant differences at $p < .05$ are in bold font.

Table 2. Categorical demographic variables according to military status (FEMALES)

	Military		Civilian		χ^2 (p)
	N	%	N	%	
Relationship Status	(113)		(202)		3.27^a (.071)
Married	101	89.4	165	81.7	
Divorced	8	7.1	9	4.5	
Single, never married	0	--	10	5.0	
Separated	1	0.9	5	2.5	
Widowed	1	0.9	6	3.0	
Living together, not married	2	1.8	7	3.5	
Ethnicity	(101)		(164)		2.21 (.137)
Not of Hispanic, Latino, or Spanish Origin	98	97.0	152	92.7	
Any Hispanic, Latino or Spanish Origin	3	3.0	12	7.3	
Race	(111)		(201)		12.97^b (.002)
White	80	72.1	177	88.1	
Black / African American	18	16.2	12	6.0	
American Indian / Alaska Native	2	1.8	1	0.5	
Asian	5	4.5	6	3.0	
Pacific Islander	0	--	0	--	
Multi-Racial	6	5.4	5	2.5	
Education	(114)		(202)		12.65^c (.002)
Less than 12 th grade	0	--	2	1.0	
High school graduate / GED	2	1.8	4	2.0	
Some college education	23	20.2	19	9.4	
Associates degree / community or technical	21	18.4	10	5.0	

college (2 yr)				
Bachelor's or nursing degree	35	30.7	69	34.2
(4 yr)				
Master's degree or R.N.	27	23.7	72	35.6
Doctorate or medical degree	6	5.3	26	12.9
Household Income	(114)		(198)	14.81^d (<.001)
Under \$29,999	1	0.9	7	3.5
\$30,000 - \$49,999	20	17.5	12	6.1
\$50,000 - \$69,999	14	12.3	19	9.6
\$70,000 - \$89,999	20	17.5	15	7.6
\$90,000 or more	59	51.8	145	73.2

Note. Chi square tests of independence were used to compare the distribution of categorical demographic variables between military and civilian groups. ^a Two groups: married vs. all other categories; ^b Three groups: White, Black, "Other"; ^c Three groups: high school/some college; Associates or Bachelor's degree; Masters or doctorate; ^d Three groups: under \$49,999, \$50,000 - \$89,999, \$90,000 or more. Significant differences at $p < .05$ are in bold font.

Table 3. Age and gender of eldest child according to military status (FEMALES)

	Military		Civilian		$\chi^2 (p)$
	N	%	N	%	
Age of Eldest Child	(114)		(202)		2.82^a (.244)
12	18	15.8	27	13.4	
13	21	18.4	30	14.9	
14	13	11.4	28	13.9	
15	16	14.0	25	12.4	
16	16	14.0	21	10.4	
17	12	10.5	44	21.8	
18	10	8.8	16	7.9	
Over 18	8	7.0	11	5.4	
Gender of Eldest Child	(107)		(195)		0.03 (.875)
Male	63	58.9	113	57.9	
Female	44	41.1	82	42.1	

Note. Chi square tests of independence were used to compare the distribution of categorical demographic variables between military and civilian groups. ^a Three groups: 14 years and under, 15-16 years, 17 years and older. Significant differences at $p < .05$ are in bold font.

Table 4. Continuous demographic variables according to military status (MALES)

		Military	Civilian	<i>t</i> (<i>p</i>)
Age (years)	N	64	31	-3.54 (<.001)
	M (SD)	42.08 (7.56)	47.42 (5.23)	
	[Range]	[23 – 62]	[39 – 61]	
Years married	N	65	31	-2.20 (.031)
	M (SD)	15.56 (6.94)	18.51 (4.01)	
	[Range]	[1 – 30]	[5 – 26]	
Number of people in household	N	65	32	2.06 (.042)
	M (SD)	4.65 (1.27)	4.13 (0.94)	
	[Range]	[2 – 8]	[3 – 7]	
Years in current location	N	65	32	-5.02 (<.001)
	M (SD)	4.51 (6.11)	11.91 (8.10)	
	[Range]	[0 – 35]	[1 – 47]	
Number of moves since eldest child was born	N	65	32	5.09 (<.001)
	M (SD)	5.37 (3.49)	1.94 (2.17)	
	[Range]	[0 – 20]	[0 – 8]	
Number of children	N	65	32	2.44 (.016)
	M (SD)	2.66 (1.31)	2.03 (0.90)	
	[Range]	[1 – 6]	[1 – 5]	

Note. Independent samples t-tests were used to compare the means of military and civilian groups. Significant differences at $p < .05$ are in bold font.

Table 5. Categorical demographic variables according to military status (MALES)

	Military		Civilian		χ^2 (p)
	N	%	N	%	
Relationship Status	(65)		(32)		2.05^a (.152)
Married	65	100.0	31	96.9	
Divorced	0	--	1	3.1	
Single, never married	0	--	0	--	
Separated	0	--	0	--	
Widowed	0	--	0	--	
Living together, not married	0	--	0	--	
Ethnicity	(63)		(31)		
Not of Hispanic, Latino, or Spanish Origin	59	93.7	30	96.8	0.40(.526)
Any Hispanic, Latino or Spanish Origin	4	6.3	1	3.2	
Race	(64)		(32)		4.98^b (.083)
White	54	84.4	24	75.0	
Black / African American	8	12.5	3	9.4	
American Indian / Alaska Native	0	--	0	--	
Asian	1	1.6	5	15.6	
Pacific Islander	0	--	0	--	
Multi-Racial	1	1.6	0	--	
Education	(65)		(32)		5.45^c (.066)
Less than 12 th grade	1	1.5	0	--	
High school graduate / GED	5	7.7	1	3.1	
Some college education	11	16.9	1	3.1	
Associates degree / community or technical college (2 yr)	4	6.2	0	--	
Bachelor's or nursing degree (4 yr)	14	21.5	12	37.5	
Master's degree or R.N.	22	33.8	13	40.6	
Doctorate or medical degree	8	12.3	5	15.6	
Household Income	(63)		(32)		10.27^d (.006)
Under \$29,999	2	3.2	0	--	
\$30,000 - \$49,999	5	7.9	4	12.5	
\$50,000 - \$69,999	12	19.0	1	3.1	
\$70,000 - \$89,999	11	17.5	1	3.1	
\$90,000 or more	33	52.4	26	81.3	

Note. Chi square tests of independence were used to compare the distribution of categorical demographic variables between military and civilian groups. Collapsed comparisons as follows: ^a Two groups: married vs. all other categories; ^b Three groups: White, Black, "Other"; ^c Three groups: high school/some college; Associates or Bachelor's degree;

Masters or doctorate; ^d Three groups: under \$49,999, \$50,000 - \$89,999, \$90,000 or more. Significant differences at $p < .05$ are in bold font.

Table 6. Age and gender of eldest child according to military status (MALES)

	Military		Civilian		χ^2 (p)
	N	%	N	%	
Age of Eldest Child	(65)		(32)		4.23^a (.121)
12	12	18.5	1	3.1	
13	11	16.9	5	15.6	
14	7	10.8	4	12.5	
15	8	12.3	4	12.5	
16	9	13.8	11	34.4	
17	5	7.7	5	15.6	
18	8	12.3	1	3.1	
Over 18	5	7.7	1	3.1	
Gender of Eldest Child	(62)		(29)		1.11 (.292)
Male	33	53.2	12	41.4	
Female	29	46.8	17	58.6	

Note. Chi square tests of independence were used to compare the distribution of categorical demographic variables between military and civilian groups. ^a Three groups: 14 years and under, 15-16 years, 17 years and older. Significant differences at $p < .05$ are in bold font.

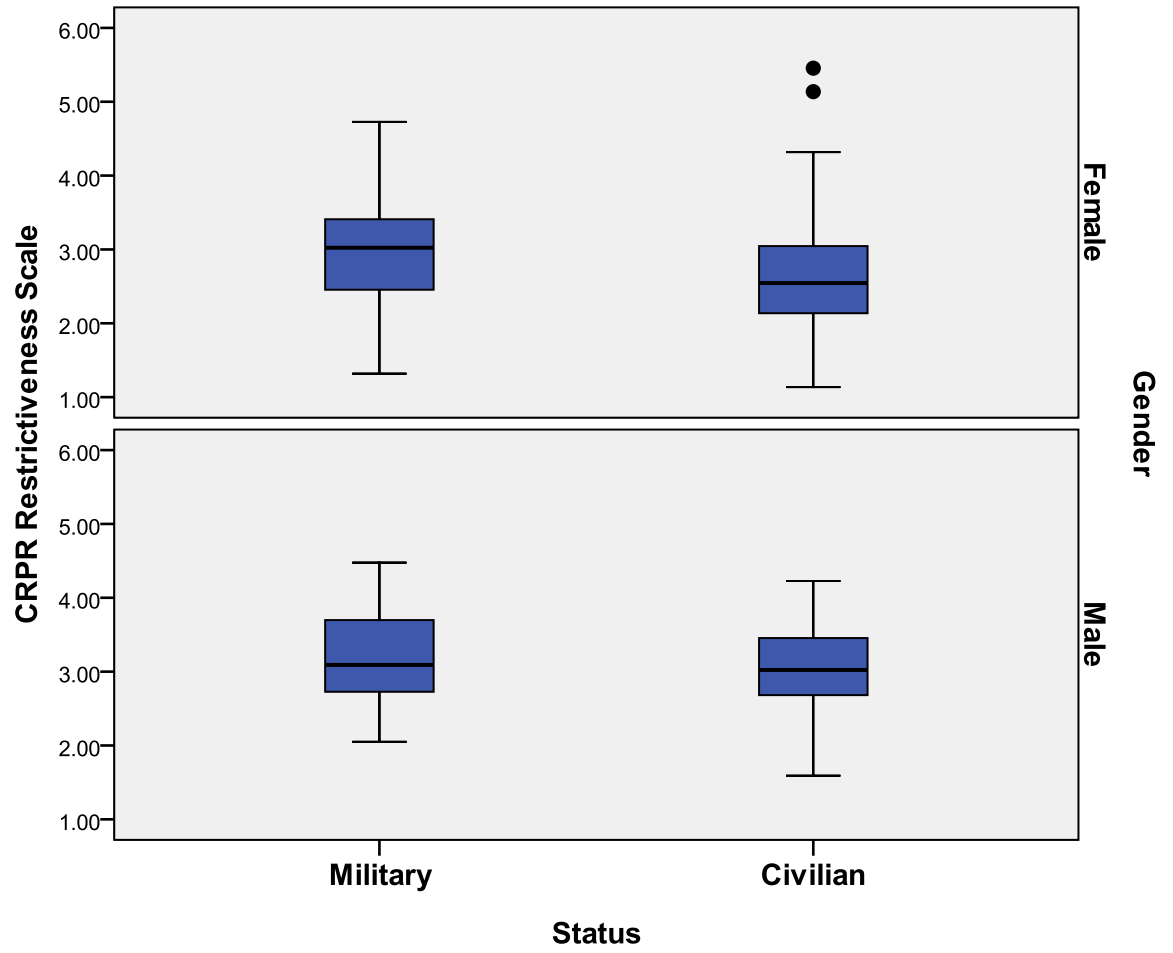


Figure3. Boxplots of CRPR Restrictiveness scores by military status and gender.

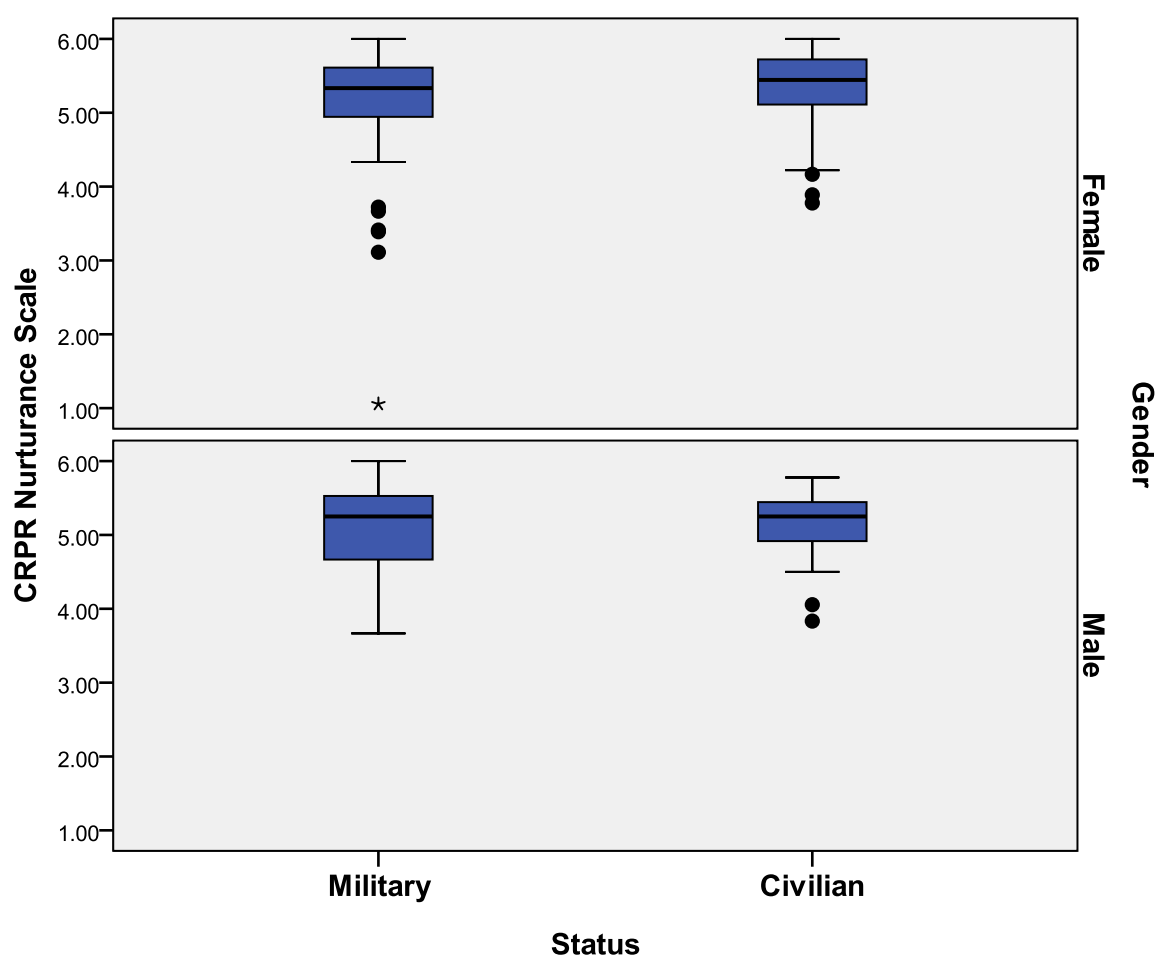


Figure 4. Boxplots of CRPR Nurturance scores by military status and gender.

Table 7. Parenting styles for the FEMALE Military Sample

		Nurturance	
		Low	High
Restrictiveness	High	<i>Authoritarian</i> 30.4% (n = 34)	<i>Authoritative</i> 22.3% (n = 25)
	Low	<i>Neglectful</i> 19.6% (n = 22)	<i>Permissive</i> 27.7% (n = 31)

Note. $\chi^2(1) = 2.901, p = .089$.

Table 8. Parenting styles for the FEMALE Civilian Sample

		Nurturance	
		Low	High
Restrictiveness	High	<i>Authoritarian</i> 29.6% (n = 59)	<i>Authoritative</i> 20.6% (n = 41)
	Low	<i>Neglectful</i> 18.6% (n = 37)	<i>Permissive</i> 31.2% (n = 62)

Note. $\chi^2(1) = 9.318, p = .002$.

Table 9. Parenting styles for the MALE Military Sample

		Nurturance	
		Low	High
Restrictiveness	High	<i>Authoritarian</i> 26.6% (n = 17)	<i>Authoritative</i> 26.6% (n = 17)
	Low	<i>Neglectful</i> 23.4% (n = 15)	<i>Permissive</i> 23.4% (n = 15)

Note. $\chi^2(1) = 0.000, p = 1.000$.

Table 10. Parenting styles for the MALE Civilian Sample

		Nurturance	
		Low	High
Restrictiveness	High	<i>Authoritarian</i> 18.8% (n = 6)	<i>Authoritative</i> 31.3% (n = 10)
	Low	<i>Neglectful</i> 31.3% (n = 10)	<i>Permissive</i> 18.8% (n = 6)

Note. $\chi^2 (1) = 2.000, p = .157$.

Table 11. Parenting styles by military status, based on the combined group medians (FEMALES)

	Military	Civilian
Authoritarian	42.9% (n = 48)	25.6% (n = 51)
Authoritative	24.1% (n = 27)	15.1% (n = 30)
Neglectful	9.8% (n = 11)	22.6% (n = 45)
Permissive	23.2% (n = 26)	36.7% (n = 73)

Note. $\chi^2 (3) = 20.469, p < .001$

Table 12. Parenting styles by military status, based on the combined group medians (MALES)

	Military	Civilian
Authoritarian	26.6% (n = 17)	18.8% (n = 6)
Authoritative	26.6% (n = 17)	25.0% (n = 8)
Neglectful	23.4% (n = 15)	31.3% (n = 10)
Permissive	23.4% (n = 15)	25.0% (n = 8)

Note. $\chi^2 (3) = 1.085, p = .781$

Table 13. Descriptive statistics of CRPR Scales by military status (FEMALES)

	Military	Civilian
<i>Restrictiveness Scale</i>		
N	113	199
Mean	2.9732	2.5812
SE. Mean	0.06323	.04624
Median	3.0000	2.5238
SD	0.67212	0.65234
Minimum	1.32	1.14
Maximum	4.73	4.32
IQR	1.02	0.91
Skewness	-0.004	0.165
SE. Skewness	0.227	0.172
Kurtosis	-0.270	-0.385
SE. Kurtosis	0.451	0.343
<i>Nurturance Scale</i>		
N	112	199
Mean	5.2343	5.3643
SE. Mean	.05312	0.0312
Median	5.3611	5.4444
SD	0.56216	0.45308
Minimum	3.11	3.89
Maximum	6.00	6.00
IQR	0.65	0.61
Skewness	-1.490	-0.752
SE. Skewness	0.228	0.172
Kurtosis	2.772	-0.33
SE. Kurtosis	0.453	0.343

Note. Statistics reported following removal of four outliers with Z scores ± 3.29 . SE. = Standard error, IQR = interquartile range.

Table 14. Tests of Normality and Homogeneity of Variance for CRPR Scales, according to military status (FEMALES)

	Statistic	Military	Civilian
<i>NORMALITY</i>			
Restrictiveness	Shapiro-Wilk	0.990	0.992
	Df	113	199
	Sig.	0.619	0.333
Nurturance	Shapiro- Wilk	0.881	0.943
	Df	112	199
	Sig.	<.001	<.001
<i>HOMOGENEITY OF VARIANCE</i>			
Restrictiveness	Levene (based on mean)		0.102
	Df		1, 310
	Sig.		0.750
Nurturance	Levene (based on mean)		2.606
	Df		1, 309
	Sig.		0.108

Note. Significant results at $p < .05$ are in bold font.

Table 15. Descriptive statistics of CRPR Scales by military status (MALES)

	Military	Civilian
<i>Restrictiveness Scale</i>		
N	64	32
Mean	3.2358	3.0374
SE. Mean	0.07980	0.11620
Median	3.0909	3.0227
SD	0.63844	0.65734
Minimum	2.05	1.59
Maximum	4.48	4.23
IQR	0.98	0.80
Skewness	0.348	-0.261
SE. Skewness	0.299	0.414
Kurtosis	-0.828	-0.114
SE. Kurtosis	0.590	-0.809
<i>Nurturance Scale</i>		
N	64	32
Mean	5.0404	5.1326
SE. Mean	0.7752	0.07893
Median	5.2500	5.2500
SD	0.62014	0.44648
Minimum	3.67	3.83
Maximum	6.00	5.78
IQR	0.87	0.54
Skewness	-0.761	-1.122
SE. Skewness	0.299	0.414
Kurtosis	-0.463	1.600
SE. Kurtosis	0.590	0.809

Note. SE. = Standard error, IQR = interquartile range.

Table 16. Tests of Normality and Homogeneity of Variance for CRPR Scales, according to military status (MALES)

	Statistic	Military	Civilian
NORMALITY			
Restrictiveness	Shapiro-Wilk	0.958	0.975
	Df	64	32
	Sig.	0.029	0.636
Nurturance	Shapiro- Wilk	0.914	0.923
	Df	64	32
	Sig.	<.001	.025
HOMOGENEITY OF VARIANCE			
Restrictiveness	Levene (based on mean)		0.239
	Df		1, 94
	Sig.		0.801
Nurturance	Levene (based on mean)		6.466
	df		1, 94
	Sig.		0.013

Note. Significant results at $p < .05$ are in bold font.

Table 17. Independent samples t-tests comparing CRPR scores according to military status

		t	df	Sig.	Cohen's d	Effect size r
Females	Restrictiveness	5.045	310	<.001	0.57307	0.27545
	Nurturance	-2.223	309	.027	-0.25292	0.12546
Males	Restrictiveness	1.422	94	.158	0.29333	0.14511
	Nurturance	-.833 ^a	82.073	.407	-0.18389	0.09156

Note. Cohen's $d = 2t/\sqrt{(df)}$; $r = \sqrt{(t^2 / (t^2 + df))}$. ^aUnequal variances t-test due to violation of Levene's statistic for homogeneity of variance. Significant results at $p < .05$ are in bold font.

Table 18. Mann Whitney U tests comparing CRPR scores according to military status

		Mean Rank		Mann-Whitney U	Sig.
		Military	Civilian		
Females	Restrictiveness	188.53	138.31	7624.0	<.001
	Nurturance	143.67	162.94	9763.0	.069
Males	Restrictiveness	50.48	44.53	897.0	.323
	Nurturance	48.21	49.08	1005.5	.886

Note. Significant results at $p < .05$ are in bold font.

Table 7 Inferential Confidence Intervals for CRPR scores according to military status

	Military 95% ICI		Civilian 95% ICI		Delta	eRg	Conclusion
	Lower	Upper	Lower	Upper			
FEMALES							
Restrictiveness	2.884	3.062	2.516	2.646	.136998	.546	Statistically Different
Nurturance	5.158	5.311	5.318	5.410	.099636	.252	Statistically Different
MALES							
Restrictiveness	3.123	3.348	2.870	3.205	.129638	.478	Indeterminate
Nurturance	4.933	5.148	5.021	5.245	.113488	.312	Indeterminate

Note. Delta = Minimum inconsequential difference, calculated as $0.2 * \text{pooled standard deviation}$. eRg = Maximum probable mean difference. See Tryon (2001) for formulas.

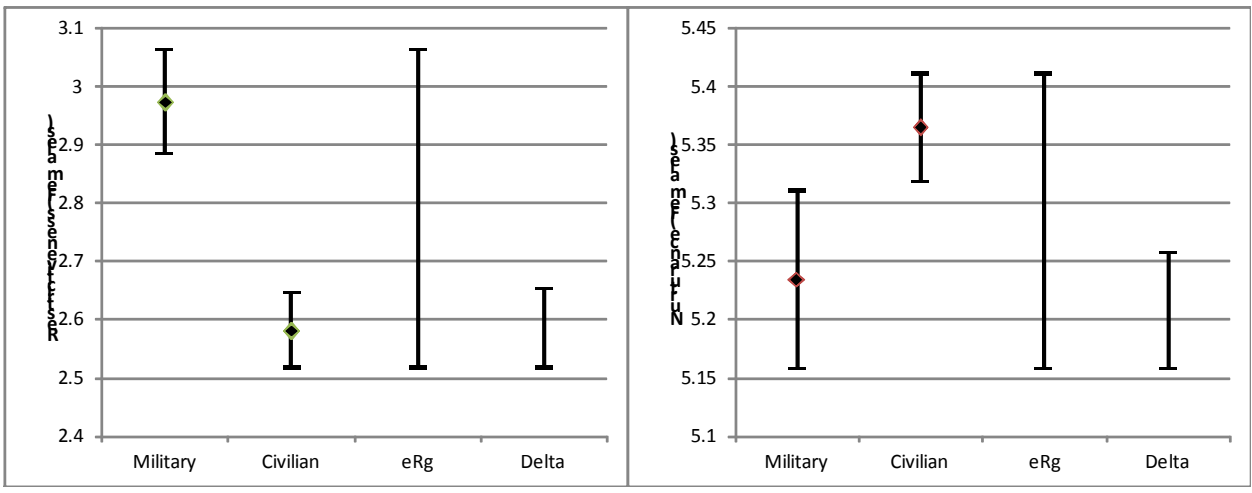


Figure 5. Inferential Confidence Intervals for CRPR Restrictiveness and Nurturance Scores, for Military and Civilian Females. eRg = Maximum probable mean difference. Delta = minimum inconsequential difference (0.2 SD). For calculation details see Tryon (2001).

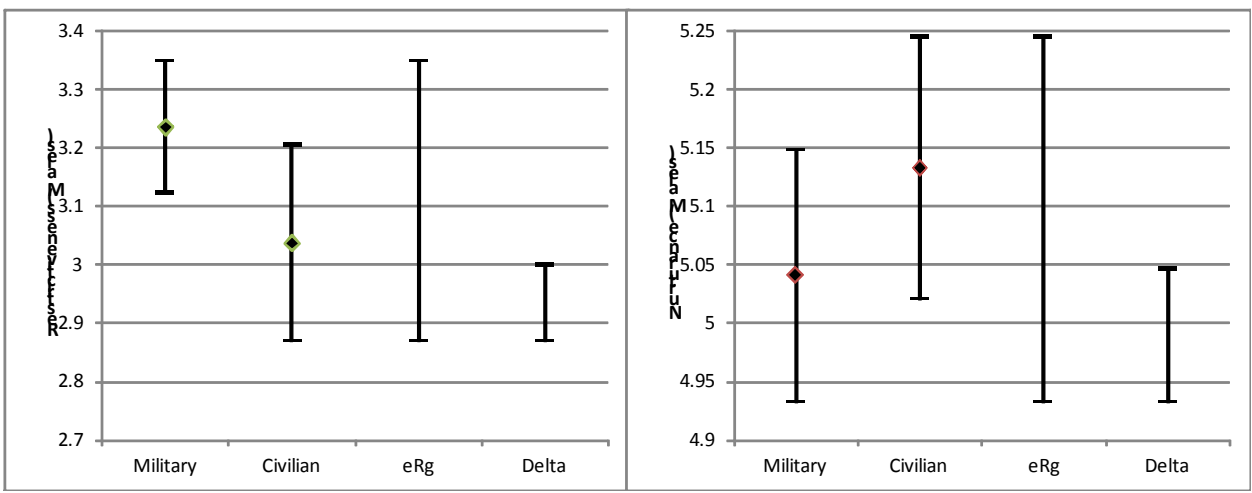


Figure 6. Inferential Confidence Intervals for CRPR Restrictiveness and Nurturance Scores, for Military and Civilian Males. eRg = Maximum probable mean difference. Delta = minimum inconsequential difference (0.2 SD). For calculation details see Tryon (2001).

Table 20. Relationship between continuous demographic variables and CRPR scores (FEMALES)

		Restrictiveness	Nurturance
Age (years)	N	312	307
	Correlation	-.338	.207
	Sig.	<.001	<.001
Years married	N	264	263
	Correlation	-.247	.065
	Sig.	<.001	.295
Number of people in household	N	309	308
	Correlation	.080	-.044
	Sig.	.162	.447
Years in current location	N	310	309
	Correlation	-.305	.154
	Sig.	<.001	.007
Number of moves since eldest child was born	N	311	310
	Correlation	.225	-.164
	Sig.	<.001	.004
Number of children	N	312	311
	Correlation	.094	-.069
	Sig.	.096	.223

Note. Significant results at $p < .05$ are in bold font.

Table 21. Interaction between continuous demographic variables and military status on CRPR scores (FEMALES)

		Restrictiveness	Nurturance
		F (p)	
Age (years)	Status	F = .829 (.363)	F = 0.950 (.331)
	Age	F = 17.595 (<.001)	F = 9.630 (.002)
	Interaction	F = 1.924 (.166)	F = 0.777 (.379)
Years married	Status	F = 5.958 (.015)	F = 3.785 (.053)
	Years Married	F = 8.055 (.005)	F = 0.070 (.791)
	Interaction	F = 1.418, p = .235	F = 1.328 (.250)
Number of people in household	Status	F = 3.725 (.055)	F = 0.689 (.407)
	Num. People	F = 0.074 (.786)	F = 0.176 (.675)
	Interaction	F = .263 (.608)	F = 2.182 (.141)
Years in current location	Status	F = 2.303 (.130)	F = 0.252 (.616)
	Years	F = 8.990 (.003)	F = 2.724 (.100)
	Interaction	F = 0.304 (.582)	F = 0.031 (.860)
Number of moves since eldest child was born	Status	F = 13.455 (<.001)	F = 0.450 (.503)
	Num. Moves	F = 3.904 (.049)	F = 4.204 (.041)
	Interaction	F = 3.585 (.059)	F = 0.008 (.928)
Number of children	Status	F = 9.145 (.003)	F = 0.430 (.512)
	Num. Children	F = 0.264 (.608)	F = 0.253 (.616)
	Interaction	F = 0.901 (.343)	F = 3.103 (.079)

Note. Status = civilian or military. Each analysis conducted separately. Significant results at $p < .05$ are in bold font.

Table 22. Relationship between categorical demographic variables and CRPR scores (FEMALES)

		Restrictiveness	Nurturance
Relationship status	<i>F</i>	5.312	1.945
	<i>Df</i>	1,309	1,308
	<i>p</i>	.022	.164
Ethnicity	<i>F</i>	0.689	0.199
	<i>Df</i>	1,262	1,262
	<i>p</i>	.407	.656
Race	<i>F</i>	18.767	1.226
	<i>Df</i>	2,305	2,305
	<i>p</i>	<.001	.295
Education	<i>F</i>	15.743	2.398
	<i>Df</i>	2,309	2,308
	<i>p</i>	<.001	.093
Income	<i>F</i>	6.211	1.139
	<i>Df</i>	2,305	2,304
	<i>p</i>	.002	.321
Age of Eldest Child	<i>F</i>	4.608	0.133
	<i>Df</i>	2,309	2,308
	<i>p</i>	.011	.876
Gender of Eldest Child	<i>F</i>	0.345	0.198
	<i>Df</i>	1,296	1,295
	<i>p</i>	.558	.657

Note. Significant results at $p < .05$ are in bold font.

Table 23. Interaction between categorical demographic variables and military status on CRPR scores (FEMALES)

		Restrictiveness	Nurturance
		F (p)	F (p)
Relationship status	Status	F = 15.438 (<.001)	F = 0.485 (.487)
	Relationship	F = 7.796 (.006)	F = 0.806 (.370)
	Interaction	F = .294 (.588)	F = 1.418 (.235)
Ethnicity	Status	F = 4.352 (.038)	F = 0.290 (.591)
	Ethnicity	F = .027 (.869)	F = .230 (.632)
	Interaction	F = .106 (.745)	F = .281 (.597)
Race	Status	F = 3.130 (.078)	F = .002 (.961)
	Race	F = 15.184 (<.001)	F = 1.315 (.270)
	Interaction	F = 1.362 (.258)	F = 2.015 (.135)
Education	Status	F = 12.799 (<.001)	F = 1.542 (.215)
	Education	F = 12.327 (<.001)	F = 2.314 (.101)
	Interaction	F = .890 (.412)	F = 1.535 (.217)
Income	Status	F = 9.374 (.002)	F = 1.712 (.192)
	Income	F = 4.276 (.015)	F = .542 (.582)
	Interaction	F = 4.021 (.019)	F = .474 (.623)
Age of Eldest Child	Status	F = 22.061 (<.001)	F = 5.242 (.023)
	Child. Age	F = 2.838 (.060)	F = 0.198 (.821)
	Interaction	F = .152 (.859)	F = .095 (.909)
Gender of Eldest Child	Status	F = 21.558 (<.001)	F = 4.033 (.046)
	Child. Gender	F = .534 (.465)	F = 0.514 (.474)
	Interaction	F = .382 (.537)	F = 1.006 (.317)

Note. Significant results at $p < .05$ are in bold font.

Table 24. Relationship between continuous demographic variables and CRPR scores (MALES)

		Restrictiveness	Nurturance
Age (years)	N	94	94
	Correlation	-.435	.061
	Sig.	<.001	.561
Years married	N	95	95
	Correlation	-.252	.156
	Sig.	.014	.131
Number of people in household	N	96	96
	Correlation	.210	.064
	Sig.	.040	.534
Years in current location	N	96	96
	Correlation	-.274	-.055
	Sig.	.007	.592
Number of moves since eldest child was born	N	96	96
	Correlation	.158	.077
	Sig.	.124	.455
Number of children	N	96	96
	Correlation	.187	.091
	Sig.	.068	.379

Note. Significant results at $p < .05$ are in bold font.

Table 25. Interaction between continuous demographic variables and military status on CRPR scores (MALES)

		Restrictiveness	Nurturance
Age (years)	Status	F = 1.228 (.271)	F = 0.037 (.849)
	Age	F = 16.401 (<.001)	F = 0.022 (.882)
	Interaction	F = 1.281 (.261)	F = 0.008 (.931)
Years married	Status	F = 2.093 (.151)	F = 2.777 (.099)
	Years Married	F = 0.378 (.540)	F = 0.046 (.830)
	Interaction	F = 1.694 (.196)	F = 2.551 (.114)
Number of people in household	Status	F = 0.091 (.764)	F = 0.065 (.800)
	Num. People	F = 2.332 (.130)	F = 0.840 (.362)
	Interaction	F = 0.003 (.954)	F = 0.227 (.635)
Years in current location	Status	F = 1.632 (.205)	F = 0.729 (.395)
	Years	F = 4.970 (.028)	F = 0.987 (.323)
	Interaction	F = 2.410 (.124)	F = 0.014 (.905)
Number of moves since eldest child was born	Status	F = 0.259 (.612)	F = 1.041 (.310)
	Num. Moves	F = 0.432 (.513)	F = 0.639 (.426)
	Interaction	F = 0.011 (.918)	F = 0.025 (.876)
Number of children	Status	F = 0.350 (.556)	F = 0.009 (.926)
	Num. Children	F = 1.732 (.191)	F = 1.145 (.287)
	Interaction	F = 0.031 (.860)	F = 0.127 (.722)

Note. Status = civilian or military. Significant results at $p < .05$ are in bold font.

Table 8. Relationship between categorical demographic variables and CRPR scores (MALES)

		Restrictiveness	Nurturance
Relationship status	<i>F</i>	1.397	0.103
	<i>Df</i>	1,94	1,94
	<i>p</i>	.240	.749
Ethnicity	<i>F</i>	0.074	0.032
	<i>Df</i>	1,91	1,91
	<i>p</i>	.786	.860
Race	<i>F</i>	1.895	0.375
	<i>Df</i>	2,92	2,92
	<i>p</i>	.156	.688
Education	<i>F</i>	0.502	3.382
	<i>Df</i>	2,93	2,93
	<i>p</i>	.607	.038
Income	<i>F</i>	1.291	0.232
	<i>Df</i>	2,91	2,91
	<i>p</i>	.280	.793
Age of Eldest Child	<i>F</i>	4.744	0.364
	<i>Df</i>	2,93	2,93
	<i>p</i>	.011	.696
Gender of Eldest Child	<i>F</i>	0.132	1.362
	<i>Df</i>	1,89	1,89
	<i>p</i>	.717	.246

Note. Significant results at $p < .05$ are in bold font.

Table 27. Interaction between categorical demographic variables and military status on CRPR scores (MALES)

		Restrictiveness	Nurturance
		F (p)	F (p)
Relationship status	Status	F = 1.594 (.210)	F = .640 (.426)
	Relationship	F = 0.980 (.325)	F = .188 (.666)
	Interaction	n/a	n/a
Ethnicity	Status	F = .027 (.871)	F = .029 (.865)
	Ethnicity	F = .304 (.583)	F = .173 (.679)
	Interaction	F = .452 (.503)	F = .294 (.589)
Race	Status	F = 1.338 (.250)	F = 4.031 (.048)
	Race	F = 1.317 (.273)	F = 1.323 (.271)
	Interaction	F = .279 (.757)	F = 1.624 (.203)
Education	Status	F = 1.177 (.281)	F = .538 (.465)
	Education	F = .226 (.798)	F = .650 (.525)
	Interaction	F = .186 (.831)	F = .420 (.658)
Income	Status	F = 1.599 (.209)	F = 1.017 (.316)
	Income	F = 0.367 (.694)	F = 0.015 (.985)
	Interaction	F = .175 (.840)	F = 0.469 (.627)
Age of Eldest Child	Status	F = 1.971 (.164)	F = .574 (.451)
	Child. Age	F = 3.408 (.037)	F = .247 (.782)
	Interaction	F = .048 (.954)	F = 1.405 (.251)
Gender of Eldest Child	Status	F = 2.117 (.149)	F = 0.505 (.479)
	Child.	F = .347 (.558)	F = 2.243 (.138)
	Gender		
	Interaction	F = .081 (.776)	F = 1.827 (.180)

Note. Significant results at $p < .05$ are in bold font.

Table 98. Regression model fit of CRPR Restrictiveness Scores on demographic variables (FEMALES)

Model	Sum of Squares	df	Mean Square	F	Sig.	R Square	Adjusted R Square
Regression	20.889	9	2.321	6.092	.000	.183	.153
Residual	92.962	244	.381				
Total	113.851	253					

Note. Dependent variable = CRPR Restrictiveness Scale.

Predictors: (Constant), Military status, Age, Race – White, Race – Black, Years married, Number of children, Years in current location, Income – Under \$49,999, Income \$50,000 -\$89,999.

Table 29. Regression coefficients for CRPR Restrictiveness Scores on demographic variables (FEMALES)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)	4.394	.389		11.296	.000					
Military Status	-.113	.101	-.082	-1.116	.265	-.285	-.071	-.065	.623	1.604
Race - White	-.076	.155	-.039	-.493	.622	-.205	-.032	-.029	.527	1.899
Race - Black	.288	.213	.108	1.355	.177	.205	.086	.078	.531	1.882
Income – Under \$49.999	-.073	.152	-.031	-.481	.631	.096	-.031	-.028	.821	1.218
Income – \$50k to \$89.999	.030	.107	.017	.279	.780	.079	.018	.016	.894	1.119
Age	-.028	.009	-.290	-3.230	.001	-.371	-.202	-.187	.414	2.417
Years married	-.002	.008	-.018	-.247	.805	-.251	-.016	-.014	.605	1.652
Number of children	-.054	.039	-.089	-1.364	.174	.092	-.087	-.079	.786	1.272
Years in current location	-.009	.008	-.087	-1.132	.259	-.313	-.072	-.065	.562	1.779

Note. Dependent Variable: CRPR Restrictiveness Scale

Table 30. Regression model fit of CRPR Nurturance Scores on demographic variables (FEMALES)

Model	Sum of Squares	df	Mean Square	F	Sig.	R Square	Adjusted R Square
Regression	3.469	9	.385	1.613	.112 ^c	.056	.021
1 Residual	58.320	244	.239				
Total	61.790	253					

Note. Dependent variable = CRPR Nurturance Scale.

Predictors: (Constant), Military status, Age, Race – White, Race – Black, Years married, Number of children, Years in current location, Income – Under \$49,999, Income \$50,000 -\$89,999.

Table 31. Regression coefficients for CRPR Nurturance Scores on demographic variables (FEMALES)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)	4.796	.308		15.564	.000					
Military Status	.061	.080	.059	.755	.451	.158	.048	.047	.623	1.604
Race - White	-.098	.123	-.069	-.802	.423	.037	-.051	-.050	.527	1.899
Race - Black	-.177	.168	-.090	-1.050	.295	-.072	-.067	-.065	.531	1.882
Income – Under \$49,999	.080	.120	.046	.665	.507	.005	.043	.041	.821	1.218
Income – \$50k to \$89,999	-.090	.085	-.070	-1.063	.289	-.098	-.068	-.066	.894	1.119
Age	.014	.007	.196	2.025	.044	.184	.129	.126	.414	2.417
Years married	-.007	.006	-.087	-1.087	.278	.052	-.069	-.068	.605	1.652
Number of children	.010	.031	.023	.324	.746	-.077	.021	.020	.786	1.272
Years in current location	.003	.006	.041	.498	.619	.145	.032	.031	.562	1.779

Table32. Descriptive statistics of study variables for military sample (FEMALES)

	N	Mean	SD	Range
Number of Deployments	113	1.57	1.30	[0 – 5]
Months of Deployment	82	20.66	11.80	[5 – 72]
Deployed/Total Time (%)	82	18.53	12.42	[3.73 – 63.64]
CRPR Restrictiveness	113	2.97	0.67	[1.32 – 4.73]
CRPR Nurturance	112	5.23	0.56	[3.11 – 6.00]
CSI4	109	13.95	5.25	[0 – 21]
DASS Stress	107	0.61	0.53	[0 – 2.43]
DASS Anxiety	107	0.21	0.30	[0 – 1.71]
DASS Depression	106	0.32	0.41	[0 – 2.21]

Table 33 Descriptive statistics of study variables for military sample (MALES)

	N	Mean	SD	Range
Number of Deployments	65	1.48	1.11	[0 – 4]
Months of Deployment	51	18.33	12.16	[2 – 46]
Deployed/Total Time (%)	51	16.91	12.99	[1.49 – 62.50]
CRPR Restrictiveness	64	3.24	0.64	[2.05 – 4.48]
CRPR Nurturance	64	5.04	0.62	[3.67 – 6.00]
CSI4	63	15.52	4.48	[0 – 21]
DASS Stress	58	0.55	0.44	[0 – 1.57]
DASS Anxiety	58	0.15	0.21	[0 – 1.21]
DASS Depression	58	0.29	0.43	[0 – 2.50]

Table 34. Correlation among scales for military sample (FEMALES)

		CRPR Restrict.	CRPR Nurtur.	CSI4 Total	DASS Stress	DASS Anxiety	DASS Depress.
CRPR Restrictiveness Scale	Correlation	1	-.207*	-.113	.054	-.046	.005
	Sig.		.028	.240	.583	.636	.960
	N	113	112	109	107	107	106
CRPR Nurturance Scale	Correlation	-.207*	1	.128	-.116	-.079	-.063
	Sig.	.028		.187	.236	.419	.522
	N	112	112	108	107	107	106
CSI4 Total	Correlation	-.113	.128	1	-.163	-.246*	-.411**
	Sig.	.240	.187		.100	.012	.000
	N	109	108	109	103	103	102
DASS Stress Scale	Correlation	.054	-.116	-.163	1	.772**	.737**
	Sig.	.583	.236	.100		.000	.000
	N	107	107	103	107	107	106
DASS Anxiety Scale	Correlation	-.046	-.079	-.246*	.772**	1	.678**
	Sig.	.636	.419	.012	.000		.000
	N	107	107	103	107	107	106
DASS Depression Scale	Correlation	.005	-.063	-.411**	.737**	.678**	1
	Sig.	.960	.522	.000	.000	.000	
	N	106	106	102	106	106	106

Note. * p < .05 (2-tailed), **p < .01 (2-tailed).

Table 35. Correlation among scales for civilian sample (FEMALES)

		CRPR Restrict.	CRPR Nurtur.	CSI4 Total	DASS Stress	DASS Anxiety	DASS Depress
CRPR	Correlation	1	-.314**	-.098	.156*	.155*	.172*
Restrictiveness	Sig.		.000	.185	.029	.030	.016
Scale	N	199	199	186	195	196	196
CRPR	Correlation	-.314**	1	.323**	-.357**	-.276**	-.348**
Nurturance	Sig.	.000		.000	.000	.000	.000
Scale	N	199	199	186	195	196	196
CSI4 Total	Correlation	-.098	.323**	1	-.309**	-.220**	-.343**
	Sig.	.185	.000		.000	.003	.000
	N	186	186	186	182	183	183
DASS Stress	Correlation	.156*	-.357**	-.309**	1	.509**	.637**
Scale	Sig.	.029	.000	.000		.000	.000
	N	195	195	182	195	195	195
DASS Anxiety	Correlation	.155*	-.276**	-.220**	.509**	1	.545**
Scale	Sig.	.030	.000	.003	.000		.000
	N	196	196	183	195	196	196
DASS	Correlation	.172*	-.348**	-.343**	.637**	.545**	1
Depression Scale	Sig.	.016	.000	.000	.000	.000	
	N	196	196	183	195	196	196

Note. * p < .05 (2-tailed), **p < .01 (2-tailed).

Table 36. Correlation among scales for military sample (MALES)

		CRPR Restrict.	CRPR Nurtur.	CSI4 Total	DASS Stress	DASS Anxiety	DASS Depress.
CRPR Restrictiveness Scale	Correlation	1	-.099	.055	.110	.119	-.089
	Sig.		.438	.668	.411	.375	.507
	N	64	64	62	58	58	58
CRPR Nurturance Scale	Correlation	-.099	1	.188	-.040	-.310*	-.025
	Sig.	.438		.143	.765	.018	.852
	N	64	64	62	58	58	58
CSI4 Total	Correlation	.055	.188	1	-.439**	-.405**	-.589**
	Sig.	.668	.143		.001	.002	.000
	N	62	62	63	58	58	58
DASS Stress Scale	Correlation	.110	-.040	-.439**	1	.700**	.597**
	Sig.	.411	.765	.001		.000	.000
	N	58	58	58	58	58	58
DASS Anxiety Scale	Correlation	.119	-.310*	-.405**	.700**	1	.607**
	Sig.	.375	.018	.002	.000		.000
	N	58	58	58	58	58	58
DASS Depression Scale	Correlation	-.089	-.025	-.589**	.597**	.607**	1
	Sig.	.507	.852	.000	.000	.000	
	N	58	58	58	58	58	58

Note. * $p < .05$ (2-tailed), ** $p < .01$ (2-tailed).

Table 37. Results of Linear Regression of CRPR parenting scores on deployment variables (FEMALES)

		Restrictiveness	Nurturance
Number of Deployments	β	-.062	-.204
	F (df)	.435 (1, 111)	4.786 (1, 110)
	Sig.	.511	.031
Months Deployed	β	.027	-.129
	F (df)	.060 (1, 80)	1.328 (1,79)
	Sig.	.807	.253
Deployed/Total Time (%)	β	-.093	-.029
	F (df)	.692 (1, 80)	.068 (1, 79)
	Sig.	.408	.795

Note. Each regression conducted separately. In bivariate regression, Beta equals the zero order correlation between the two variables. Significant results at $p < .05$ are in bold font.

Table 38. Results of Linear Regression of CRPR parenting scores on deployment variables (MALES)

		Restrictiveness	Nurturance
Number of Deployments	β	0.156	.116
	F (df)	1.551 (1, 62)	0.848 (1,62)
	Sig.	0.218	.361
Months Deployed	β	.284	.063
	F (df)	4.224 (1. 48)	.189 (1, 48)
	Sig.	.045	.666
Deployed/Total Time (%)	β	.222	-.021
	F (df)	2.478 (1, 48)	.022 (1, 48)
	Sig.	.122	.883

Note. Each regression conducted separately. In bivariate regression, Beta equals the zero order correlation between the two variables. Significant results at $p < .05$ are in bold font.

Table 39. Correlation among deployment variables and potential mediators of parenting (FEMALES)

		CSI4 Total	DASS Stress	DASS Anxiety	DASS Depression
Number of Deployments	Correlation	-.046	.060	.071	.068
	Sig.	.636	.543	.470	.490
	N	108	106	106	105
Months Deployed	Correlation	-.116	.128	.111	.127
	Sig.	.305	.268	.336	.270
	N	80	77	77	77
Deployed/Total Time (%)	Correlation	.046	.030	.037	-.044
	Sig.	.687	.798	.749	.703
	N	80	77	77	77

Note. * $p < .05$ (2-tailed), ** $p < .01$ (2-tailed).

Table 40. Correlation among deployment variables and potential mediators of parenting (MALES)

		CSI4 Total	DASS Stress	DASS Anxiety	DASS Depression
Number of Deployments	Correlation	.034	.239	-.025	.011
	Sig.	.793	.070	.850	.934
	N	63	58	58	58
Months Deployed	Correlation	.005	.202	-.011	.115
	Sig.	.973	.189	.942	.458
	N	49	44	44	44
Deployed/Total Time (%)	Correlation	.051	.163	-.014	.000
	Sig.	.729	.289	.931	.999
	N	49	44	44	44

Note. * $p < .05$ (2-tailed), ** $p < .01$ (2-tailed).

Note. Dependent Variable: CRPR Nurturance Scale

Table 4110. Summary of hypothesis testing results (FEMALES only)

Hypothesis Number	Independent Variable	Dependent Variable	Expected Result	Outcome
<i>Aim 1: Military vs. civilian parenting style</i>				
H1a	Group (military or civilian)	Nurturance	Military \approx Civilian	Not supported in all analyses (Military < Civilian)
H1b	Group (military or civilian)	Restrictiveness	Military > Civilian	Supported
<i>Aim 2: Deployment vs. military parenting style</i>				
H2a	Total months of deployment	Nurturance	Negative Relationship	Not supported
H2b	Total months of deployment	Restrictiveness	Positive Relationship	Not supported
H2c	Number of deployments	Nurturance	Negative Relationship	Not supported
H2d	Number of deployments	Restrictiveness	Positive Relationship	Not supported
H2e	Deployment time ratio	Nurturance	Negative Relationship	Not supported
H2f	Deployment time ratio	Restrictiveness	Positive Relationship	Not supported
<i>Aim 3: Mediators of the deployment to parenting relationship</i>				
H3a	Depression	Deployment – Parenting relationship	Mediator	Not supported
H3b	Anxiety	Deployment – Parenting relationship	Mediator	Not supported
H3c	Marital Satisfaction	Deployment – Parenting relationship	Mediator	Not supported

Table 42. Summary of exploratory analysis results (Males only)

Hypothesis Number	Independent Variable	Dependent Variable	Expected Result	Outcome
<i>Aim 1: Military vs. civilian parenting style</i>				
H1a	Group (military or civilian)	Nurturance		Military=Civilian
H1b	Group (military or civilian)	Restrictiveness		Military=Civilian
<i>Aim 2: Deployment vs. military parenting style</i>				
H2a	Total months of deployment	Nurturance		No relationship
H2b	Total months of deployment	Restrictiveness		Total mo. of deployment + indicator of restrictiveness
H2c	Number of deployments	Nurturance		Not supported
H2d	Number of deployments	Restrictiveness		No relationship
H2e	Deployment time ratio	Nurturance		No relationship
H2f	Deployment time ratio	Restrictiveness		No relationship
<i>Aim 3: Mediators of the deployment to parenting relationship</i>				
H3a	Depression	Deployment – Parenting relationship	Mediator	Not supported
H3b	Anxiety	Deployment – Parenting relationship	Mediator	Not supported
H3c	Marital Satisfaction	Deployment – Parenting relationship	Mediator	Not supported

References

- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York, NY: Harper and Row.
- Afifi, T.O. (2007). Child abuse and adolescent parenting: Developing a theoretical model from an ecological perspective. *Journal of Aggression, Maltreatment & Trauma, 14* (3), 89-105.
- Antony, M.M., Bieling, P.J., Cox, B.J., Enns, M.W., & Swinson, R.P. (1998). Psychometric properties of the 42-Item and the 21-Item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment, 10* (2), 176-181.
- Baldwin, A.L. (1948). Socialization and the parent-child relationship. *Child Development, 19*(3), 127-136.
- Barkin, S., Scheindlin, B., Ip, E.H., Richardson, I., & Finch, S. (2007). Determinants of parental discipline practices: A national sample from primary care practices. *Clinical Pediatrics, 46*, 64-69.
- Barnes, V.A., Davis, H., & Treiber, F.A. (2007). Perceived stress, heart rate, and blood pressure among adolescents with family members deployed in Operation Iraqi Freedom. *Military Medicine, 172* (1), 4.
- Baumrind, D. (1966). Effects of authoritative control on child behavior. *Child Development, 37*, 887-907.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monographs, 41*, 1-103.
- Baumrind, D. (1978). Parental disciplinary patterns and social competence in youth. *Youth and Society, 9*, 239-276.

- Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.) *Child Development Today and Tomorrow* (pp. 349-378). San Francisco, CA: Jossey-Bass.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*, 56-95.
- Becker, W.C. (1964). Consequences of parental discipline. In M.L. Hoffman & L.W. Hoffman(Eds.), *Review of child development research* (Vol. 1, pp. 169-208). New York, NY: Russell Sage.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development, 55*, 83-96.
- Berndt, T.J. (1989). Obtaining support from friends during childhood and adolescence. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 308-331). New York, NY: Wiley.
- Black, D.A., Heyman, R. E. & Slep, A.M. (2001). Risk factors for child physical abuse: A review and appraisal. *Journal of Family Psychology, 12* (4), 578-599.
- Bluestone, C. & Tamis-LeMonda, C.S. (1999). Correlates of parenting styles in predominantly working and middle class African American mothers. *Journal of Marriage and the Family, 61*, 881-893.
- Bonds, D.D. & Gondoli, D.M. (2007). Examining the process by which marital adjustment affects maternal warmth: The role of coparenting support as a mediator. *Journal of Family Psychology, 21* (2), 288-296.
- Bond, C.R. & Mahon, R.J. (1984). Relationships between marital distress and child behavior problems, maternal personal adjustment, maternal personality, and maternal parenting behavior. *Journal of Abnormal Psychology, 93* (3), 348-351.

- Brand, S., Hatzinger, M., Beck, J., &Holsboer-Trachsler, E. (2009). Perceived parenting styles personality traits and sleep patterns in adolescents. *Journal of Adolescence*, 32, 1189-1207.
- Breznitz, Z. & Sherman, T. (1987). Speech patterning of natural discourse of well and depressed mothers and their young children. *Child Development*, 58, 395-400.
- Brittain, C.V. (1963). Adolescent choices and parent-peer cross pressures. *American Sociological Review*, 28, 385-391.
- Bronfenbrenner, U. (1961). Some familial antecedents of responsibility and leadership in adolescents. In L. Petrullo & B.M. Bass (Eds.), *Leadership and interpersonal behavior* (pp. 239-271). New York, NY: Holt, Rinehart & Winston.
- Brown, B.B. (2004). Adolescents' relationships with peers. In R.M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* 2nd ed. (pp. 363-394). Hoboken, NY: Wiley.
- Brown, B.B., Mounts, N., Lamborn, S.D., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescents. *Child Development*, 64, 467-482.
- Brown, B.B. (1990). Peer groups and peer culture. In S. Feldman & C. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 171-196). Cambridge, MA: Harvard University Press.
- Buhrmester, D. (1996). Need fulfillment, interpersonal competence, and the developmental contexts of early adolescent friendship. In W. Bukowski, A. Newcomb, & W. Hartup (Eds.), *The company they keep* (pp. 158-185). New York, NY: Cambridge University Press.
- Cairns, R., Cairns, B., Neckerman, H., Gest, S., &Garipey, J.L. (1988). Social networks and aggressive behavior: Peer support or per rejection? *Developmental*

Psychology, 24, 815-823.

Chandra, A., Lara-Cinisomo, S., Jaycox, L.H., Tanielian, T., Burns, R.M., Ruder, T., &

Han, B. (2009). Children on the homefront: The experience of children from military families. *Pediatrics, 12* (1), 17-25.

Chandra, A. Martin, L.T., Hawkins, S.A., & Richardson, A. (2010a). The impact of parental deployment on child social and emotional functioning: Perspectives of school staff. *Journal of Adolescent Health, 46*, 218-223.

Chandra, A., Lara-Cinisomo, S., Jaycox, L.H., Tanielian, T., Han, B., Burns, R.M., & Ruder, T. (2011). Views from the homefront: The experiences of youth and spouses from military families. Santa Monica, CA: RAND Corporation.

Cohen, J. (1992). Quantitative methods in psychology. *Psychological Bulletin, 112* (1), 155-159.

Cohen, J.F., Campbell, S.B., Matias, R., & Hopkins, J. (1990). Face-to-face interactions of postpartum depressed and nondepressed mother-infant pairs at two months. *Developmental Psychology, 26*, 15-23.

Collins, W. A., Maccoby, E.E., Steinberg, L., Hetherington, E.M., & Bornstein, M.H. (2003). Contemporary research on parenting: The case for nature and nurture. In M.E. Herzig & E.A. Farber (Eds), *Annual Progress in Child Psychiatry and Child Development 2000-2001* (pp. 125-153). New York, NY: Brunner-Routledge.

Courtney, M.E. (1998). The costs of child protection in the context of welfare reform. *Future of Children, 8* (1), 88-103.

Cox, M.J., Owen, M.T., Lewis, J.M., & Henderson, V.K. (1989). Marriage, adult adjustment, and early parenting. *Child Development, 60*, 1015-1024.

Darling, N. & Steinberg, L. (1993). Parenting style as context: An integrative model.

Psychological Bulletin, 113 (3), 487-496.

Dekovic, M., Janssen, J., & Gerris, J.M. (1991). Factor structure and construct validity of the Block Child Rearing Practices Report (CRPR). *Psychological Assessment Journal of Consulting Clinical Psychology*, 3, 182-187.

Department of Defense (2011). Strengthening our military families: Meeting America's commitment. Retrieved from

http://www.defense.gov/home/features/2011/0111_initiative/Strengthening_our_Military_January_2011.pdf

Dielman, T.E., Barton, K. & Cattell, R.B. (1977). Relationships among family attitudes and childrearing practices. *The Journal of Genetic Psychology*, 130, 105-112.

Dornbush, S.M., Ritter, P.L., Leiderman, P.H., Roberts, D.F., & Fraleigh, M.J. (1987). The relation of parenting style to adolescent school performance. *Child Development*, 58, 1244-1257.

DMDC Active Duty Military Personnel Master File, September 2000, 2005, 2006, 2007, 2008, 2009, 2010.

DMDC Reserve Component Personnel Data System 2000, 2005, 2006, 2007, 2008, 2009, 2010.

Dusek, J.B. & Danko, M. (1994). Adolescent coping styles and perceptions of parental child rearing. *Journal of Adolescent Research*, 9 (4), 412-426.

Easterbrooks, M.A. & Emde, R. (1988). Marital and parent-child relationships: The role of affect in the family system. In R. Hinde & J. Stevenson-Hinde (Eds.) *Relationships within families: Mutual influence*. Oxford, England: Clarendon Press.

Egami, Y., Ford, D.E., Greenfield, S.F., & Crum, R.M. (1996). Psychiatric profile and sociodemographic characteristics of adults who report physically abusing and

- neglecting children. *American Journal of Psychiatry*, 153 (7), 921-928.
- Engel, R.C., Gallagher, L.B., & Lyle, D.S. (2006). Military deployments and children's academic achievement: Evidence from Department of Defense Education Activity schools. U.S. Military Academy.
- Erel, O. & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin*, 118 (1), 108-132.
- Epstein, J.L. (1983). The influence of friends on achievement and affective outcomes. In J.L. Epstein & N. Karweit (Eds.), *Friends in school* (pp. 177-200). New York, NY: Academic Press.
- Feng, X, Zhang, X., & Xie, Y. (2007). Relationships between personality, self-esteem and mental health in armyman serving at aviation. *Chinese Journal of Clinical Psychology*, 15 (4), 407-408.
- Freud, S. (1960). *The psychopathology of everyday life. The standard edition of the Complete works of Sigmund Freud* (Vol. 6). London, England: Hogarth.
- Frias-Armenta, M. & McCloskey, L.A. (1998). Determinants of harsh parenting in Mexico. *Journal of Abnormal Child Psychology*, 26, 129-139.
- Fuligni, A. & Eccles, J. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology*, 29, 622-632.
- Funk, J.L. & Rogge, R.D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology*, 21 (4), 572-583.
- Gelfand, D.M. & Teti, D.M. (1990). The effects of maternal depression on children. *Clinical Psychology Review*, 10, 329-353.
- Goldberg, W.A. & Easterbrooks, M.A. (1984). Role of marital quality in toddler

- development. *Developmental Psychology*, 20 (3), 504-514.
- Goodman, S.H. & Brumley, H.E. (1990). Schizophrenic and depressed mothers: Relational deficits in parenting. *Developmental Psychology*, 26, 31-39.
- Gosling, S.D., Vazire, S., Srivastava, S., & John, O.P. (2004). Should we trust web-based studies?: A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59 (2), 93-104.
- Gottman, J. & Mettetal, G. (1986). Speculations about social and affective development: Friendship and acquaintanceship through adolescence. In J. Gottman and J. Parker (Eds.), *Conversations with friends: Speculations on affective development* (pp. 192-237). New York, NY: Cambridge University Press.
- Guttman, L.M. & Eccles, J.S. (1999). Financial strain, parenting behaviors, and adolescents' achievement. Testing model equivalence between African American and European American single- and two-parent families. *Child Development*, 70, 1464-1476.
- Hahlweg, K., Heinrich, N., Kuschel, A., Bertram, H., & Naumann, S. (2010). Long-term outcomes of a randomized controlled universal prevention trial through a positive parenting program: is it worth the effort? *Child and Adolescent Psychiatry and Mental Health*, 4 (14).
- Hahlweg, K., Heinrich, N., Kuschel, A., & Feldmann, M. (2008). Therapist assisted self-administered bibliotherapy to enhance parental competence: Short and long-term effects. *Behavior Modification*, 32, 659-681.
- Hall, L.K. (2011). The military culture, language, and lifestyle. In R. B. Everson & C.R. Figley (Eds), *Families under fire: Systematic therapy with military families*. (pp. 31-52). New York, NY: Routledge Taylor and Francis Group.

- Hall, L.K. (2008). *Counseling military families: What mental health professionals need to know*. New York, NY: Routledge.
- Hall, W.N. & Bracken, B.A. (1996). Relationship between maternal parenting styles and African American and white adolescents' interpersonal relationships. *School Psychology International, 17*, 253-267.
- Hardy, D.F., Power, T.G., & Jaedicke, S. (1993). Examining the relation of parenting to children's coping with everyday stress. *Child Development, 64*, 1829-1841.
- Harris, J.R. (1998). *The nurture assumption: Why children turn out the way they do*. New York, NY: Free Press.
- Harris, J.R. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review, 102*, 458-489.
- Harrist, A.W. & Ainslie, R.C. (1998). Marital discord and child behavior problems: Parent-child relationship quality and child interpersonal awareness as mediators. *Journal of Family Issues, 19*, 140-163.
- Hartup, W.W. (1996). The company they keep: Friendships and their developmental significance. *Child Development, 67*, 1-13.
- Herwig, J.E., Wirtz, M., & Bengel, J. (2004). Depression, partnership, social support, and parenting: Interaction of maternal factors with behavioral problems of the child. *Journal of Affective Disorders 80*, 199-208.
- Hoge, C.W., Auchterlonie, J.L., & Milliken, C.S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of the American Medical Association, 295*, 1023-1032.
- Hoge, C.W., Castro, C.W., Messer, S.C., McGurk, D., Cotting, D.I., & Koffman, R.L.

- (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, *351*, 13-22.
- Hogue, A. & Steinberg, L. (1995). Homophily of internalized distress in adolescent peer Groups *Developmental Psychology*, *31*, 897-906.
- Holmbeck, G.N., Paikoff, R.L., & Brooks-Gunn, J. (1995). Parenting adolescents. In M.H. Bornstein (Ed.), *Handbook of parenting. Vol. 1: Children and parenting* (pp. 91-118). Mahwah, NJ: Erlbaum.
- Huebner, A.J. & Mancini, J.A. (2005). Adjustments among adolescents in military families when a parent is deployed. Final Report to the Military Family Research Institute and Depart of Defense Quality of Life Office. Retrieved from http://www.cfs.purdue.edu/mfri/pages/research/Adjustments_in_adolescents.pdf
- Jansen, P.W., Raat, H., Mackenbach, J.P., Hofman, A., Jaddoe, V., Bakermans-Kranenberug, M.J....Tiemeier, H. (2012). Early determinants of maternal and paternal harsh discipline: The generation R Study. *Family Relations*, *61*, 253-270.
- Jensen, P.S., Grogan, D., Xenakis, S.N., & Bain, M.W. (1989). Father absence: Effects on child and maternal psychopathology. *Journal of the American Academy of Child & Adolescent Psychiatry*, *28* (2), 171-175.
- Johnson, S.J., Sherman, M.D., Hoffman, J.S., James, L.C., Johnson, P.L., Lochman, J.E.,...Riggs, D. (2007). *The psychological needs of the U.S. military service members and their families: A preliminary report*. American Psychological Association Presidential Task Force on military deployment services for youth, families and service members.
- Jouriles, E.N., Pfiffner, L.J., & O'Leary, K.D. (1989). Interspousal aggression, marital discord, and child problems. *Journal of Consulting and Clinical Psychology*, *57*,

453-455.

- Kachadourian, L.K., Eiden, R.D., & Leonard, K.E. (2009). Paternal alcoholism, negative parenting, and the mediating role of marital satisfaction. *Addictive Behaviors, 34*, 918-927.
- Kaminski, J.W., Valle, L.A., Filene, J.H., & Boyle, C.L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychiatry, 36*, 567-589.
- Kandel, D. (1978). Homophily, selection, and socialization in adolescent friendships. *American Journal of Sociology, 84*, 427-436.
- Karney, B.R. & Crown, J.S. (2007). Families under stress: An assessment of data, theory, and research on marriage and divorce in the military. Santa Monica, CA: RAND Corporation.
- Kelley, M. (2002a). U.S. in longest war since Vietnam. Associated Press. Retrieved from <http://www.globalsecurity.org/org/news/2002/020309-attack01.htm>
- Kelley, M.L. (2002b). The effects of deployment on traditional and nontraditional military families: Navy mothers and their children. In M.G. Ender (Ed.), *Military brats and other global nomads: Growing up in organization families* (pp. 229-253). Westport, CT: Praeger.
- Kelley, M.L., Finkel, L.B., & Asby, J. (2003). Geographic mobility, family, and maternal variables as related to the psychosocial adjustment of military children. *Military Medicine, 168*, 12, 1019-1024.
- Kelley, M.L., Herzog-Simmer, P.A., & Harris, M.A. (1994). Effects of military-induced separation on the parenting stress and family functioning of deploying mothers. *Military Psychology, 6*, 125-138.

- Koblinsky, S.A., Kuvalanka, K.A., & Randolph, S.M. (2006). Social skills and behavior problems of urban, African American preschoolers: Role of parenting practices, family conflict, and maternal depression. *American Journal of Orthopsychiatry*, 76 (4), 554-563.
- Lamborn, S.D., Mounts, N.S., Steinberg, L., & Dornbusch, S.M. (1991). Pattern of competence and adjustment among adolescents from authoritative, authoritarian, indulgent and neglectful families. *Child Development*, 62, 1049-1065.
- Lapp, C.A., Taft, L.B., Tollefson, T., Hoepner, A., Moore, K., & Divyak, K. (2010). Stress and coping on the home front: Guard and reserve spouses searching for a new normal. *Journal of Family Nursing*, 16 (1), 45-67.
- Larson, R. W., Richards ,M.H., Moneta, G., Holmbeck, G., & Duckett, E. (1996). Changes in adolescent's daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*, 32, 744-754.
- Lawer, M.K., Flori, D.E., Volk, R.J., & Davis, A.B. (1997). Family health status of National Guard personnel deployed during the Persian Gulf War. *Families, Systems, and Health*, 151 (1), 65-73.
- Lee, B.J. & George, R.M. (199). Poverty, early childbearing, and child maltreatment: A multinomial analysis. *Children & Youth Services Review*, 21 (9/10), 755-780.
- Lemmon, K.L. & Chartrand, M.M. (2009). Caring for America's children: Military youth in time of war. *Pediatrics Review*, 30, e42-e48.
- Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C.,...Beardslee, W. (2010). The long war and parental combat deployment: Effects on military children and at-home spouses. *Journal of the American Academy of Child and Adolescent Psychiatry*, 49 (4), 310-320.

- Lewin, K., Lippitt, R. & White, R.K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology* 10: 271–301.
- Locke, T.F. & Newcomb, M.D. (2002). Measurement of parental discipline and nurturance. *Clinical Psychology Review*, 22, 895-929.
- Lovejoy, M.C., Graczyk, P.A., O’Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: a meta-analytic review. *Clinical Psychology Review*, 20 (5), 561-592.
- Luyckx, K., Tildesley, E.A., Soenens, B., Andrews, J.A., Hampson, S.E., Peterson, M., & Duriez, B. (2011). Parenting and trajectories of children’s maladaptive behaviors: A 12-year prospective community study. *Journal of Clinical Child and Adolescent Psychology*, 40 (3), 468-478.
- Mabe, P.A. (2009). War and children coping with parental deployment. In S.M. Freeman, B.A. Moore, & A. Freeman (Eds). *Living and surviving in harm’s way* (pp. 349-370). New York, NY: Taylor and Francis Group.
- Maccoby, E.E. & Martin, J.A. (1983). Socialization in the context of the family: parent-child interaction. In P.H. Mussen (Series Ed.) & E.M. Hetherington (Vol. Ed.), *Handbook of child psychology: Vol 4. Socialization, personality, and social development* (pp. 1-101). New York, NY: Wiley.
- Mansfield, A.J., Kaufman, J.S., Marshall, S.W., Gaynes, B.N., Morrissey, J.P., & Engel, C.C. (2010). Deployment and the use of mental health services among U.S. Army wives. *New England Journal of Medicine*, 362 (2), 101-109.
- McLeland, K.C. & Sutton, G.W. (2005). Military service, marital status, and men’s relationship satisfaction. *Individual Differences*, 3 (3), 177-182.
- Mental Health Advisory Team (MHAT) VI Report (2009). Office of the Surgeon

General, United States Army Medical Command.

- Milliken, C.S., Auchterlonie, J.L., & Hoge, C.W. (2007). Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *Journal of the American Medical Association, 298*, 2141-2148.
- Moore, P.S., Whaley, S.E., & Signman, M. (2004). Interactions between mothers and children: Impacts of maternal and child anxiety. *Journal of Abnormal Psychology, 113* (3), 471-476.
- Mounts, N.S. & Steinberg, L. (1995). An ecological analysis of peer influence on Adolescent grade point average and drug use. *Developmental Psychology, 31* (6), 915-922.
- National Military Family Association (2005). *Report on the cycles of deployment: An analysis of survey responses from April through September, 2005*. Alexandria, VA: National Military Family Association.
- Oshino, S., Suzuki, A., Ishii, G., & Otani, K. (2007). Influences of parental rearing on the personality traits of healthy Japanese. *Comprehensive Psychiatry, 28*, 465-469.
- Park, H.S. & Bauer, S. (2002). Parenting practices, ethnicity, socioeconomic status and academic achievement in adolescents. *School Psychology International, 23* (4), 386-396.
- Punamäki, R.L., Qouta, S., & El Sarraj, E. (1997). Models of traumatic experiences and children's psychological adjustment: The roles of perceived parenting and the children's own resources and activity. *Child Development, 64* (4), 718-728.
- Querido, J.G., Warner, T.D., & Eyberg, S.M. (2002). Parenting styles and child behavior in African American families of preschool children. *Journal of Clinical Child Psychology, 31* (2), 272-277.

- Radziszewska, B., Richardson, J.L., Dent, C.W., & Flay, B.R. (1996). Parenting style and adolescent depressive symptoms, smoking and academic achievement: Ethnic, gender, and SES differences. *Journal of Behavioral Medicine, 19* (3), 289-3050.
- Regalado, M., Sareen, H., Inkelas, M., Wissow, L.S., & Halfon, N. (2004). Parents' discipline of young children: Results from the National Survey of Early Childhood Health. *Pediatrics, 113* (6 Suppl), 1952-1958.
- Renshaw, K.D., Rodrigues, C.S., & Jones, D.H. (2009). Combat exposure, psychological symptoms, and marital satisfaction in National Guard soldiers who served in Operation Iraqi Freedom from 2005 to 2006. *Anxiety and Stress, 22* (1), 101-115.
- Reti, I.M., Sammuels, J.F., Eaton, W.W., Bienvuenu, O.J., Costa Jr, P.T., & Nestadt, G. (2002). Influences of parenting on normal personality traits. *Psychiatry Research, 111*, 55-64.
- Rickel, A.U. & Biasatti, L.L. (1982). Modification of the Block Child Rearing Practices Report. *Journal of Clinical Psychology, 38* (1), 129-134.
- Rollins, B.C. & Thomas, D.L. (1979). Parental support, power and control techniques in the socialization of children. In W.R. Burre, R. Hill, F.I. Nye, & I.L. Reiss (Eds.), *Contemporary theories about the family: Research-based theories* (pp. 317-364). New York, NY: Free Press.
- Rowe, D. (1994). *The limits of family influence: Genes, experience, and behavior*. New York, NY: Guilford.
- Russell, A., Hart, C.H., Robinson, C.C., & Olsen, S.F. (2003). Children's sociable and aggressive behaviour with peers: A comparison of US and Australia, and contributions of temperament and parenting styles. *International Journal of Behavioral Development, 27*(1), 74-86.

- Sameroff, A. (2009). The transactional model. In A. Sameroff (Ed) *The Transactional Model of Development* (pp. 3-21). Washington DC: American Psychological Association.
- Savin-Williams, R. & Berndt, T. (1990). Friendship and peer relations. In S. Feldman & G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 277-307). Cambridge, MA: Harvard University Press.
- Scaramella, L., Neppl, T., Ontai, L., & Conger, R. (2008). Consequences of socioeconomic disadvantage across three generations: Parenting behavior and child externalizing problems. *Journal of Family Psychology, 22*, 725-733.
- Seal, K.H., Metzler, T.J., Gima, K.S., Bertenthal, D., Maguen, S., & Marmar, C.R. (2009). Increasing prevalence of mental disorders among Iraq and Afghanistan veterans: trends and risk factors for mental health diagnoses in new users of VA healthcare. *American Journal of Public Health*, in press.
- Schaefer, E.S. (1959). A circumplex model for maternal behavior. *Journal of Abnormal and Social Psychology, 59*, 226-235.
- Schucksmith, J., Hendry, L.B. & Glendinning, A. (1995). Models of parenting: Implications for adolescent well-being within different types of family contexts. *Journal of Adolescence, 18*, 53-270.
- Schumm, W., Bell, D.B., & Tran, G. (1994). Family adaptation to the demands of Army life: A review of findings. U.S. Research Institute for the Behavioral and Social Sciences. Research Report 1658, Army Project Number 2Q263007A792.
Retrieved from www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA285952
- Silberg, J. & Rutter, M. (2002). Nature-nurture interplay in the risks associated with

- Parental depression. In S.H. Goodman & I.H. Gotlib (Eds), *Children of depressed parents: Mechanisms of risk and implications for treatment* (pp. 13-36). Washington, DC: American Psychological Association.
- Simons, R.L., Lorenz, F.O., Wu, C.I., & Conger, R.D. (1993). Social network and marital support as mediators and moderators of the impact of stress and depression on parental behavior. *Developmental Psychology, 29* (2), 368-381.
- Slater, M.A. & Power, T.G. (1987). Multidimensional assessment of parenting in single-parent families. *Advances in Family Intervention, Assessment and Theory, 4*, 197-228.
- Smentana, J.G., Campione-Barr, N. & Metzger, A. (2006). Adolescent development in interpersonal and societal contexts. *Annual Review of Psychology, 57*, 255-284.
- Spera, C. (2009). Spouses' ability to cope with deployment and adjust to Air Force family demands: Identification of risk and protective factors. *Armed Forces & Society, 35*, 286-306.
- Steinberg, L., Elmen, J.D., & Mounts, N.S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60*, 1424-1436.
- Steinberg, L., Mounts, N.S., Lamborn, S.D., & Dornbusch, S.M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. *Journal of Research on Adolescence, 1* (1), 19-36.
- Stoneman, Z., Brody, G.H., & Burke, M. (1989). Marital quality, depression, and inconsistent parenting: Relationship with observed mother-child conflict. *American Journal of Orthopsychiatry, 59*, 105-117.
- Straus, M.A. (1964). Power and support structure of the family in relation to

- socialization. *Journal of Marriage and the Family*, 26 (3), 318-326.
- Sussman, S., Dent, C., McAdams, L., Stacy, A., Burton, D., & Flay, B. (1994). Group self-identification and adolescent cigarette smoking: A 1-year prospective study. *Journal of Abnormal Psychology*, 103, 576-580.
- Symonds, P.M. (1939). *The psychology of parent-child relationships*. New York, NY: Appleton-Century-Crofts.
- Thomas, D.L., Gecas V., Weigert, A., & Rooney, E. (1974). *Family Socialization and the Adolescent*. Lexington, MA: Lexington Books.
- Tryon, W.W. (2001). Evaluating statistical difference, equivalence, and indeterminacy using inferential confidence intervals: An integrated alternative method of conducting null hypotheses statistical tests. *Psychological Methods*, 6 (4), 371-386.
- Tyler, S. Allison, K., & Winsler, A. (2006). Child neglect: Developmental consequences, interention, and policy implications. *Child & Youth Care Forum*, 35 (1), 1-20.
- Warner, C.H., Appenzeller, G.N., Warner, C.M., & Grieger, T. (2009). Psychological effects of deployments on military families. *Psychiatric Annals Online*, 39 (2), 56-63.
- Watson, J.B. (1928). *Psychological care of infant and child*. New York, NY: Norton.
- Wertsch, M.E. (1991). *Military brats: Legacies of childhood inside the fortress*. St. Louis, MO: Brightwell Publishing.
- Wolfradt, U., Hempel, S., & Miles, J.N.V. (2003). Perceived parenting styles, depersonalization, anxiety and coping behaviour in adolescents. *Personality and Individual Differences* 34, 521-532.
- Wright, H.F. (1967). *Recording and analyzing child behavior*. New York: Harper &

Row.