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Harsh Parenting in Military Versus Civilian Families: Does Military Culture Moderate the Influence of Socioeconomic Status and Race?

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HARSH PARENTING IN MILITARY VERSUS CIVILIAN FAMILIES: DOES MILITARY CULTURE MODERATE THE INFLUENCE OF SOCIOECONOMIC STATUS AND RACE?

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ABSTRACT

HARSH PARENTING IN MILITARY VERSUS CIVILIAN FAMILIES: DOES MILITARY CULTURE MODERATE THE INFLUENCE OF SOCIOECONOMIC STATUS AND RACE?

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Harsh parenting techniques such as yelling and spanking are commonly used in the United States to discipline children, despite the evidence that harsh parenting has a negative sequalae for children that can persistent into adulthood. Socioeconomic status (SES) and race/ethnicity have been identified as two key determinants of harsh parenting. The stressors associated with military service and parenting within military culture place families at increased risk for harsh parenting and child maltreatment. Having a better understanding of how sociodemographic factors influence parenting behaviors within the military culture may help to develop psychoeducational and parenting programs as well as therapeutic interventions to decrease rates of harsh parenting, and ultimately reduce the rates of child abuse and neglect in this population. Therefore, the current study explored the relationships between SES and harsh parenting, race, and harsh parenting in a sample of military and civilian parents. The influence of military culture, parenting beliefs, marital conflict, psychological distress, and parenting stress on harsh parenting practices was also investigated. Data were examined from 501 parents and no significant differences were found between military and civilian parents. However, hypotheses were partially supported as exploratory analyses found significant mediating effects of marital conflict and parenting stress on the relationship between psychological distress and harsh parenting. Higher levels of psychological distress were associated with higher levels of martial conflict and parenting stress which were related to reporting higher rates of harsh parenting. Overall, the findings provide support for the process model of parenting and spillover theories.

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CHAPTER I

INTRODUCTION

In the United States, about 702,000 children per year are identified as victims of maltreatment (U.S. Department of Health and Human Services, 2016). Child maltreatment encompasses physical abuse, emotional abuse, sexual abuse, and neglect and has been associated with a number of negative child outcomes such as depression, increased aggression, and low self-esteem, all of which can persist into adulthood (Bender et al., 2007). Similarly, socially permissible harsh parenting behaviors (e.g., spanking, yelling, or threatening) are also associated with negative social, emotional, and behavioral outcomes for children (Coley, Kull, & Carrano, 2014; Erath, El-Sheikh, & Cummings, 2009) and can lead to increased risks for child maltreatment (Crouch & Behl, 2001; Gershoff, 2002). Despite these negative effects, harsh parenting strategies are commonly used by parents in United States to discipline their children (Straus & Field, 2003).

Cultural and social contexts impact the socialization goals and values of parents as well as the standards for ideal parenting (Mandara & Murray, 2002; Rudy & Grusec, 2006). For example, minority parents (African American, Asian American, and Latino) typically value obedience and deference to authority, whereas Caucasian parents value independence and self-expression (Sorkhabi & Mandara, 2013). The influence of culture on parenting behaviors such as harsh discipline can also be understood through cultural spillover theory (Baron & Straus, 1987,1989; Baron, Straus, & Jaffee, 1988) which asserts that culturally sanctioned behavior in one area of life such as work (e.g., rigidity and violence) can "spillover" into other areas of life such as family relationships in which it is not appropriate or applicable. Marital conflict between

parents can also spillover into parent-child relationships and negatively impact parenting behavior and increase harsh parenting (Erel & Burman, 1995).

The etiology of harsh parenting has been well-studied, and many researchers have come to the consensus that there are multiple determinants of parenting (Abidin, 1992; Belsky, 1984; Belsky & Jaffee, 2006). According to Belsky's (1984) process model, the multiple determinants of parenting fall into three categories: parent characteristics, child characteristics, and contextual factors. Socioeconomic status (SES) and race/ethnicity are also related to other determinants such as parenting beliefs and stress, which also influence the use of harsh parenting (Cox, Paley, & Harter, 2001; Davis-Kean, 2005; Haskett, Ahern, Ward & Allaire, 2006; Lansford, Wager, Bates, Dodge, & Pettit, 2012; McLearn, Minkovitz, Strobino, Marks, & Hou, 2006). Of note, race and ethnicity are used interchangeable in the literature and refer to the biological factors and physical characteristics of specific groups and geographical and ancestral origins (e.g., cultural traditions and language) respectively (Bhopal, 2004). The current study assessed both race and ethnicity and for consistency the term race/ethnicity is used in this paper.

Military service members and their families constitute a unique subculture within the United States. Military families are experiencing issues surrounding child abuse, and the rates of child maltreatment in this population have increased in recent years (Jowers, 2015). The military is steeped in tradition that espouses an authoritarian culture that demands conformity and rigidity. This is often reflected within structure of military families and their parenting beliefs (Hall, 2011a; Kelty, Kleykamp, & Segal, 2010). Furthermore, military personnel face stiff penalties and consequences for misbehavior or not adhering to explicit rules (Coll, Weiss, & Yarvis, 2011; Hall, 2011b). Military families have unique experiences and stressors associated with military service that place them at higher risk for harsh parenting and child maltreatment

(Taft, Vogt, Marshall, Panuzio, & Niles, 2007; Vaughn-Coaxum, Smith, Iverson, & Vogt, 2015). Some experiences encountered by military families include multiple deployments and separations from family, frequent moves, financial strain, and distance from support systems (Kelley, Herzog-Simmer, & Harris, 1994; Sogomonyan & Cooper, 2010) which can lead to increased stress to include parenting stress, marital conflict, and psychological distress. Similarly, researchers identified depression, parental distress, and family conflict as common predictors of child abuse potential in a sample of Army soldiers and their spouses (Schaeffer, Alexander, Bethe, & Kretz, 2005). Deployments have a significant impact on the entire military family. Further, deployments have been linked to psychological distress (e.g., PTSD, substance use) in service members, increased parental stress and psychological distress (e.g., depression) in military spouses at home as well as behavioral and emotional adjustment problems for children (Everson, Darling, & Herzog, 2013; Lara-Cinisomo et al., 2012; Lester et al., 2010; Mansfield et al., 2010). Military spouses are typically children's primary caregivers and are responsible for disciplining children during their partners' military service. This responsibility may place them at risk for using harsher parenting techniques and child maltreatment (Gibbs, Martin, Kupper, & Johnson, 2007; McCarthy et al., 2015; Schaeffer et al., 2005).

Harsh parenting strategies have been identified as a risk factor for child maltreatment (Crouch & Behl, 2001; Gershoff, 2002) and are associated with negative outcomes for children; nevertheless, these techniques are still commonly used by parents in the United States (Bender et al., 2007; Erath et al., 2009; Grogan-Kaylor and Otis, 2007; Straus & Field, 2003). Although harsh parenting is a concern for all American families, military families are especially vulnerable to using harsh parenting strategies given the culture of the military and significant stressors associated with military service.

The current study explored relationships between SES and harsh parenting, race/ethnicity and harsh parenting, and the moderating effects of military status on these two relationships in a sample of parents that includes military spouses and their civilian counterparts. Additionally, the indirect effects of SES and race/ethnicity on several other factors linked to harsh parenting, such as parenting beliefs and stress, were examined. Having a better understanding of how sociodemographic factors influence parenting behaviors within the military culture may help to develop psychoeducational and parenting programs and inform therapy with military families to decrease rates of harsh parenting, and ultimately reduce the rates of child abuse and neglect in this population.

Harsh Parenting

Harsh parenting has been defined in different ways in the parenting literature, but typically refers to specific discipline strategies used to manage a child's behavior. For instance, harsh verbal (e.g., swearing, yelling, threatening) and physical (e.g., spanking, pinching, hitting) strategies are used to inflict discomfort with the goal of correcting a child's behavior (Erath et al., 2009; Straus & Field, 2003). For the purposes of this study, harsh parenting included both verbal and physical discipline. The parenting literature has consistently provided evidence that harsh parenting has negative sequalae for children that can persistent into adulthood (Bender et al., 2007; Eamon, 2001; Erath et al., 2009; Gershoff, 2002; Lansford et al., 2009; MacKenzie, Nicklas, Brooks-Gunn, & Waldfogel, 2015; McKee et al., 2007). Erath and colleagues (2009) found that higher levels of harsh parenting (parent and child reported) were associated with higher levels of externalizing behaviors such as impulsivity, disruptive behavior, and noncompliance. Similarly, McKee and colleagues (2007) found that harsh verbal and physical discipline by parents was related to externalizing problems of delinquency and aggression in

children. This study also revealed that harsh physical discipline by mothers and fathers and fathers' harsh verbal discipline were associated with child internalizing problems, including hopelessness, worry, depression, and anxiety. Notably, for parents reporting high levels of harsh physical discipline, positive parenting behaviors of high maternal warmth served as a buffer and related to substantially lower rates of internalizing problems in children compared to those that exhibited low levels of warmth (McKee et al., 2007). In a study of harsh physical discipline and developmental outcomes in adolescence, researchers found a history of harsh discipline was linked to depression, anxiety, and externalizing behavior in children (Bender et al., 2007).

Despite the evidence that harsh parenting is associated with adverse effects for children, harsh parenting techniques such as spanking and yelling are still commonly used in the United States and reports have reflected rates of harsh parenting that range from 35 % to as high as 90% (Grogan-Kaylor & Otis, 2007; Lansford & Dodge, 2008; Straus & Field, 2003; Taylor, Hamvas, Rice, Newman, & Delong, 2011). A significant portion of harsh parenting (particularly physical harsh parenting) occurs with younger children. Based on statistics from 1995, the data revealed that 94% of toddlers, over 50% of 12-year-olds, and 35% of infants were physically disciplined in the preceding year (Straus & Stewart, 1999). Researchers examined the trends of harsh parenting in the United States from 1975 to 2002 and found an 18 percent decrease in the use of spanking to discipline children (Zolotor, Theodore, Runyan, Chang, & Laskey, 2011). Despite lower rates, harsh parenting is still a widely used disciplinary technique (Finkelhor & Jones, 2006; Zolotor et al., 2011).

Extensive research has examined predictors or determinants of harsh parenting and a multitude of factors have been linked to the use of harsh parenting techniques to discipline children (Abidin, 1992; Belsky, 1984). Although this list is not exhaustive, parent characteristics,

lower SES (e.g., income, education), race/ethnicity, higher stress, marital relationship strain, younger age (parents and children), parenting beliefs, favorable attitudes toward spanking, lower psychological well-being, and developmental history (e.g., a history of abuse) are frequently-identified determinants of parent's discipline strategies (Begle, Dumas, & Hanson, 2010; Belsky, 1984; Carr & Pike, 2012; Coley et al., 2014; Dietz, 2000; Grogan-Kaylor & Otis, 2007; Kim, Trickett, & Putnam, 2010; Lansford et al., 2009; Leyendecker, Harwood, Comparini, & Yalçinkaya, 2005). The current study will examine the sociodemographic factors of SES and race/ethnicity which are key determinants of harsh parenting (Bornstein, Hahn, Suwalsky, & Haynes, 2003) as well as parenting beliefs, stress (parenting, marital, psychological) in a sample of parents from both military and civilian families.

Given the important implications for using harsh parenting strategies to discipline children, additional research is needed to better understand the relationships among the determinants of harsh parenting and how these relationships operate in different cultures. A theoretical framework is needed to understand how the relationships among cultural norms and values, sociodemographic factors (e.g., SES and race/ethnicity), and contextual factors such as stress are related and influence parenting beliefs and behaviors within the military culture. For this study, an integrated framework of spillover theories (Baron & Straus, 1987,1989; Erel & Burman, 1995) and the process model of parenting (Belsky, 1984) provide a foundation from which to understand the effects of military culture on the relationships among SES, race/ethnicity, and harsh parenting, as well as the impact of military culture on parenting beliefs and stress which in turn are hypothesized to influence parenting behaviors.

Socioeconomic Status and Harsh Parenting

Socioeconomic status is a multifaceted sociodemographic variable that has a significant impact on parenting to include parenting beliefs and discipline strategies as well as and child outcomes such as academic achievement and cognitive abilities (Conger, Conger, & Martin, 2010; Dietz, 2000; Leyendecker et al., 2005). The indirect effects of SES on parenting practices and child development are seen in aspects such as the neighborhood quality and the availability of resources (e.g., toys, books, nutrition, and childcare). However, SES more directly affects parents' education level to include access to education, parenting beliefs, and discipline styles (Leyendecker et al., 2005).

Numerous studies have reported a negative relationship between SES and harsh parenting. Higher SES is typically associated with lower rates of harsh parenting (Berger, 2005; Bluestone & Tamis-LeMonda, 1999; Pinderhughes et al., 2000), whereas lower SES is usually associated with higher rates of harsh parenting (Eamon, 2001; Hoff, Laursen, Tardif, & Bornstein, 2002). Furthermore, higher SES has been associated with more adaptive or positive aspects of parenting beliefs, parental warmth, the home learning environment, and the social climate at home (Davis-Kean, 2005; McKee et al., 2007). In regards to parenting beliefs, higher SES has been linked to the optimal parenting style (authoritative) in which parents are more likely to provide explanations rather than depend on strict orders (Conger et al., 2010). On the other hand, lower SES has been associated with more frequent use of physical discipline, authoritarian beliefs, and a focus on conformity and obedience (Dodge, Pettit, & Bates, 1994; Hoff et al., 2002, Pinderhughes et al., 2000).

There are different views on how SES functions to influence parenting behaviors, but all provide support for the relationship between SES and parenting found in the literature. Hoff and colleagues (2002) discussed two main views and indicated that:

> "One is that SES is convenient proxy for a host of specific factors that bear individual relations to parenting. The alternative view is that SES operates as a single, coherent variable that broadly affects most aspects of the daily lives of parents and children..." (p. 242).

In the first view, researchers examine the individual components (e.g., family income and education level) that encompass SES and have found that these factors have influences and relationships to different aspects of parenting (DeGarmo, Forgatch, & Martinez Jr, 1999; Hoff et al., 2002). For example, family income has been related to the home learning environment (Klebanov, Brooks-Gunn, & Duncan, 1994), whereas education affects discipline practices, how parents talk to children, and overall parenting styles (Hoff et al., 2002). Additionally, the Family Stress Model (FSM) developed by Conger and Elder (1994) provides an explanation for how SES (specifically economic difficulties) can impact romantic relationships and parenting practices. According to the FSM, economic difficulties to include low income, high debt, and lower education are associated with increased stress leading to marital discord which impacts family function. Similarly, this model has found links between economic hardship and the use of harsh parenting strategies (Conger et al., 2010; Newland, Crnic, Cox, & Mills-Koonce, 2013).

Given the importance of SES in parenting research, it is necessary to have reliable and valid ways to assess this construct. This is problematic in the literature, however, as there is not consistency in assessing the construct of SES nor are there well-established measures that have good psychometric properties (Duncan & Magnuson, 2003; Ensminger & Fothergill, 2003;

Hoffman, 2003). Although there is no gold standard in SES measurement, the Hollingshead Index (Hollingshead, 1957) is one of the most commonly used tool. As the name implies, the Four-Factor Hollingshead Index uses four factors (education and occupation for the father and mother) to create a composite score of SES that can be categorized into different classes (e.g., lower class, middle class, and upper class). Many researchers agree that using categorical classes to assess SES loses some of the nuance that each component provides and suggests that SES be measured by individual components and used as a continuous variable (Entwisle & Astone, 1994; Hoff et al., 2002). Similarly, Ensminger and Fothergill (2003) reported that there is a consensus that multiple components should be measured when assessing SES and used as separate variables in analyses.

Entwisle and Astone (1994) provided practical guidelines for measuring SES and suggested that research involving family and child development assess variables that address the following three types of resources that affect children: financial capital, human capital, and social capital. *Financial capital* refers to having the financial means to buy the things children need; *human capital* addresses educational attainment to include effectively communicating high academic aspirations and specific help in achieving those aspirations; and *social capital* is the capacity of parents to provide their children with connections to the larger community (Entwisle & Astone, 1994). Furthermore, they assert that these components of SES are best measured using three variables: family income, maternal education, and family structure/size (e.g., number of people in the household). More recently, researchers have suggested that education, income, and occupational status are three indicators of SES that cover the domains of SES described above (Bradley & Corwyn, 2002; Conger et al., 2010; Conger & Donnellan, 2007; Ensminger & Fothergill, 2003). However, in one study researchers decided not to use occupation as an

indicator of SES since many of the mothers in the study identified as homemakers and much of the data on paternal occupation was missing (Braveman, Cubbin, Marchi, Egerter, & Chavez, 2001). Poverty level is another important aspect of SES that is frequently measured in studies examining SES. Research has found that living in poverty reduces positive parenting behaviors and is linked to harsher discipline and parenting practices (Pinderhughes, Nix, Foster, & Jones, 2001). A family's poverty level is determined by using both family income and structure and is generally assessed according to annual federal poverty thresholds provided by the U.S. Census Bureau (Entwisle & Astone, 1994; Erath et al., 2009; Hanson, McLanahan, & Thomson, 1998). Ultimately, when determining what components of SES will be used in their studies, researchers should consider which aspects of SES are most important for their study and have the greatest impact on the outcome variables being examined (Hoffman, 2003).

Bornstein and colleagues (2003) investigated the individual factors of SES to determine the variable(s) that had the greatest impact on parenting behavior. They found that maternal education was the most reliable predictor of parenting behavior, which is consistent with findings across several studies (Augustine & Crosnoe, 2010; Carr & Pike, 2012; Dubow, Boxer, & Huesmann, 2009; Magnuson, 2007). Higher parent education has been associated with less harsh discipline responses, wheras less education is associated with harsher discipline responses and child abuse (Belsky & Jaffee, 2006; Davis-Kean, 2005; Fox, Platz, & Bentley, 1995; Simons et al., 1993). Family income has been linked to harsh discipline and physical violence toward children with low income parents having a significantly higher probability of engaging in these behaviors (Berger, 2005). Researchers suggest that low income is likely linked to the harsh parenting behavior directly through economic hardship and indirectly through other factors such as increased stress (Berger, 2005; Paxson & Waldfogel,1999, 2003). Although the number of

indicators used to assess SES varies across studies, the use of two or three indicators has been supported in the parenting literature (Bradley & Corwyn, 2002; Ceballo & Hurd, 2008; Klebanov, Brooks-Gunn, & Duncan, 1994; Davis-Kean, 2005). For example, Wissow (2001) investigated the use of physical and non-physical punishment and nurturing activities such as reading and listening to music using education as a predictor in a sample of mothers. Education and income was associated physical discipline along with depression and frustration, while age and ethnicity were only marginally significant predictors. Specifically, parents of higher education and income reported lower rates of using spanking to discipline their children compared to those with less education and lower income. Davis-Kean (2005) used education, income, and family size as the three components that comprised SES when examining the relationships among SES, parenting beliefs and behaviors, and children's academic achievement. The results showed that the SES factors of education and income were indirectly associated with children's academic achievement through parenting beliefs and behaviors. Although SES is complex, its link to parenting is well-established however, there is still a need for continued research on how SES operates and to influence parenting practices in different populations and cultures.

Race and Harsh Parenting

Race/ethnicity is another important sociodemographic factor in the parenting literature, as there is overwhelming evidence of a relationship between race/ethnicity and harsh parenting. The literature supports the existence of racial and ethnic differences in harsh parenting practices, with African American parents endorsing higher rates of harsh parenting compared to their counterparts in Caucasian other racial/ethnic groups (Berlin et al., 2009; Grogan-Kaylor & Otis, 2007; Pinderhughes et al., 2000; Slade & Wissow, 2004; Taillieu, Afifi, Mota, Keyes & Sareen,

2014). For instance, African Americans as well as other minorities may view spanking as a normative parenting behavior and a socially acceptable way to discipline children (Chao, 1994; Ibanez, Borrego, Pemberton, & Terao, 2006). The findings in the literature examining harsh parenting in Hispanic/Latino parents has produced mixed findings. Some studies found that Latina mothers endorsed lower levels of harsh parenting compared to their Caucasian and African American counterparts (Domenech Rodríguez, Donovick, & Crowley, 2009; Lee & Altschul, 2015). In contrast, Berlin and colleagues (2009) reported no differences between Latina and Caucasian parents in the endorsement of spanking and verbal punishment, whereas Coley and associates (2014) found similar levels of spanking for Hispanic/Latina and African American parents. Although the literature predominantly supports that there are racial differences in harsh parenting, the viewpoints regarding the effects of harsh parenting on children across racial and ethnic groups has been widely debated.

On one side, researchers purport that the harmful effects harsh parenting vary by race/ethnicity; and harsh parenting (e.g., spanking) may serve as a protective factor against externalizing problems for African American and Hispanic children (Christie-Mizell, Pryor, & Grossman, 2008; Deater-Deckard, Dodge, Bates, & Pettit, 1996; Horn, Joseph, & Cheng, 2004; Slade & Wissow, 2004; Stacks, Oshio, Gerard & Roe, 2009; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; Whaley, 2000). Furthermore, some assert that positive or adaptive parenting such as maternal warmth can moderate the relationship between the use of harsh parenting and negative child outcomes (McKee et al., 2007). When examining racial differences in the link between physical discipline and child externalizing behaviors in a sample of European American and African American mothers, researchers found that physical discipline was associated with higher externalizing behaviors for European American children but not for

African American children (Deater-Deckard et al., 1996). Lansford and colleagues (2004) replicated these results and asserted that African American children who experienced physical discipline during childhood and early adolescence exhibited lower levels of behavior problems in the 11th grade.

Alternatively, researchers contend that race/ethnicity and positive parenting does not mitigate negative child outcomes (internalizing and externalizing problems) associated with harsh parenting (Amato & Fowler, 2002; Coley et al., 2014; Gershoff, Lansford, Sexton, Davis-Kean, & Sameroff, 2012; McLoyd & Smith, 2002). The results of earlier studies that minimized the negative child outcomes associated with harsh parenting have been strongly refuted by Gershoff and colleagues (2012). Using a large, nationally representative sample of Caucasian, African American, Hispanic, and Asian American families, Gershoff and colleagues (2012) examined racial /ethnic differences in the frequency of parent spanking and the association with externalizing behaviors in children. Their findings revealed that African American mothers reported significantly more spanking compared to Caucasian, Asian, and Hispanic mothers. Furthermore, spanking predicted child externalizing difficulties across all racial/ethnic groups and African American children were rated by teachers as having the highest levels of externalizing behaviors. The claims that maternal warmth serves as a buffer to negative child outcome were not supported in this study. A longitudinal study assessing the moderating effects of maternal warmth on the relationship between maternal spanking and child aggression found that maternal spanking predicted child behavior problems and these effects were not moderated by maternal warmth (Lee, Altschul, & Gershoff, 2013).

The Intersection of SES and Race/Ethnicity

The literature consistently provides evidence and support for the relationship among SES, race/ethnicity, and harsh parenting (Bornstein et al., 2003; Gershoff et al., 2012; Hoff et al., 2002, Lansford et al., 2012; Leyendecker et al., 2005; Pinderhughes et al., 2000). Race/ethnicity and SES are both multifaceted, complex sociodemographic factors and are likely interrelated in regards to their influence on family dynamics and parenting. The complexity and confounding effects of these two factors make it difficult to disentangle the influence of each on harsh parenting practices (Hill, 2006; Le, Ceballo, Chao, Hill, Murry, & Pinderhughes, 2008). The Integrative Theory for the Study of Minority Children (García et al., 1996) and the Developmental Niche Theory (Super & Harkness, 1986) both describe how SES and race/ethnicity can be interrelated. The Integrative Theory for the Study Minority Children views cultural factors such as SES and race/ethnicity as proximal factors and asserts that adaptive cultural practices (e.g., traditions) directly influence parenting behaviors (García et al., 1996). According to Super and Harkness (1986) culture is viewed as "...directly influencing parenting by shaping beliefs about appropriate or effective child rearing practices, the nature and needs of children, and parental and community endorsed developmental goals for children," (p. 7). Additional studies that aim to disentangle SES and race/ethnicity are still needed to examine the within-group differences that exist across various levels of SES and racial groups to gain additional knowledge about the unique nuances and interactions between the two. The different configurations of the interrelationship between SES and race/ethnicity are explored below.

As previously discussed, higher SES is usually associated with more adaptive parenting and less harsh parenting, but studies examining within group differences across levels of SES have produced mixed results (Hill & Adams, 2005; LaReau, 2003; Luthar, 2003). For example,

when examining parents of high SES, a positive relationship was found between family income and harsh parenting for Caucasians parents, but not for African Americans (Hill & Adams, 2005). Specifically, among Caucasian parents of higher SES and under higher family stress, more harsh parenting was observed than what appeared in other configurations of these variables. In contrast, among African American parents who were of higher SES and under higher family stress, more adaptive parenting (e.g., decreased maternal rejection) was observed. In a sample of African American and European American parents matched across different levels of SES (low income to high income), Hill and Bush (2001) found no ethnic differences in discipline strategies and parental affection. Using a similar sample, Hill (2001) examined achievement outcomes in children and found many similarities in the relationship between parenting strategies and achievement across ethnicities though some differences were revealed. However, the relationship between parenting behavior and academic performance was stronger for lower income families compared to higher income families. Furthermore, ethnicity moderated the relationship between parents' involvement in school and academic performance in math and African American parents' involvement improved their children's performance. All of these results highlight the influence of race/ethnicity on parenting behavior and how difficult it can be to disentangle the complex relationship among SES, race/ethnicity, and parenting.

Pinderhughes and colleagues (2000) examined discipline responses in a large sample of mothers and fathers with children in kindergarten. Using an integrated theoretical model that combined Belsky's process model with cognitive-emotional process theory, they explored the direct and indirect relationships among SES, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes, and discipline responses. Cognitive-emotional processes included "hostile attributions, emotional upset, worry about child's future, available alternative

disciplinary strategies, and available preventative strategies," (Pinderhughes et al., 2000, p. 380). The researchers developed two conceptual models to examine these associations as a function of SES and ethnicity. Findings from the SES-discipline model indicated that parents with low income endorsed more harsh discipline, which was related to stronger beliefs that value spanking and experiencing higher levels of stress. Additionally, more negative perceptions of children and more intense cognitive-emotional processes (e.g., increased worry about child's future and increased upset affect) were associated with higher levels of stress. On the other hand, the ethnicity-discipline model revealed that ethnicity predicted harsh discipline and stress levels. African American parents reported harsher discipline strategies and higher levels of stress, but researchers acknowledged that these effects were modest (Pinderhughes et al., 2000). They noted that the interaction between SES and ethnicity may interact and reduce the true effects of ethnicity especially when considering the impact of stress. Due to power limitations, Pinderhughes and associates (2000) were unable to fully examine the moderating effects of SES on the relationship between ethnicity and stress across all SES levels. For low income families, ethnicity predicted harsher discipline responses, increased stress, and less positive perceptions of children and this relationship was stronger for African American parents. The results of this study provide support for the relationship among SES, ethnicity, and harsh parenting as well as the use of integrated theories to explain parenting behaviors. Continued research is needed to determine if these relationships can be replicated in different cultures and to work toward having a better understanding of the complexities and entanglement of SES and race/ethnicity.

Additional Influences on Harsh Parenting

Parenting beliefs. The link between parenting beliefs and parenting behaviors has been studied extensively. It has been determined that parenting beliefs are significant predictors of

harsh parenting (Ateah & Durrant, 2005; Bower-Russa, 2005; Clément & Chamberland, 2009; Crouch & Behl, 2001; Kawabata, Alink, Tseng, Van Ijzendoorn, & Crick, 2011; O'Brien & Peyton, 2002; Taylor et al., 2011; Vittrup et al., 2006). The formation of parenting beliefs has been found to be heavily influenced by cultural factors, SES, and race/ethnicity (Simons & Conger, 2007; Vittrup, Holden, & Buck, 2006). The terms *beliefs* and *attitudes* have been used interchangeably in the literature, and for this study parenting beliefs will refer to "parents' global attitudes about childrearing and generalizable patterns of interacting with their children and managing the family" (Coplan, Hastings, Lagacé-Séguin, & Moulton, 2002, p. 1). Traditional parenting beliefs (e.g., authoritarian) are associated with harsher parenting strategies, whereas progressive parenting beliefs (e.g., authoritative) are associated with less harsh parenting strategies (Grogan-Kaylor & Otis, 2007; Schaefer & Edgerton, 1985). Traditional or authoritarian parenting attitudes are typically characterized by favorable beliefs about corporal punishment and value strict obedience, whereas progressive or authoritative attitudes are more like to encourage autonomy and use other forms of discipline such as redirection (Baumrind, 1971; Coplan et al., 2002; Maccoby & Martin, 1983, Coplan et al, 2002; Morris, Cui, & Steinberg, 2013). An important aspect of parenting beliefs that are related to harsh parenting is parents' attitudes toward spanking. More favorable attitudes toward spanking are associated with higher rates of spanking and less favorable attitudes toward spanking are linked to lower rates of spanking (Bower-Russa, 2005; Crouch & Behl, 2001; Taylor et al., 2011; Vittrup et al., 2006). Research suggests that parents of lower SES tend to have more traditional beliefs about parenting and parents of higher SES tend to have more progressive beliefs (Bornstein et al., 2003; Hill, 2006; Hoff et al., 2002; Le et al., 2008; Leyendecker et al., 2005). Racial and ethnic differences in parenting beliefs have emerged in the literature as well, and studies have found that Caucasian

parents typically have more progressive parenting beliefs and less favorable attitudes toward spanking, whereas African American parents typically have more traditional beliefs and favorable attitudes toward spanking (Taylor et al., 2011).

Stress. The process model of parenting (Belsky, 1984) and spillover theory both highlight the importance and influence of stress on family functioning and parenting. The connection between stress and parenting behaviors is well-established in the research, and increased levels of stress have repeatedly been correlated with higher rates of harsh parenting and less adaptive parenting (Burrell, Thompson, & Sexton, 1994; Deater-Deckard, 2005; Haskett et al., 2006; Peterson & Hawley, 1998; Rodriguez, 2009; Tucker & Rodríguez, 2014; Whipple &Webster-Stratton, 1991). Furthermore, because stress has been associated with more ineffective and harsh discipline and can undermine a parent's ability to use more adaptive and positive parenting behaviors, it has been identified as a mediator of harsh parenting behaviors (Huth-Bock & Hughes, 2008; Pinderhughes et al., 2000). As such, it can significantly affect the associations typically found among SES, race/ethnicity, parenting beliefs, and harsh parenting (Clément & Chamberland, 2009; Crnic et al., 2005; Hill & Adams, 2005; Peterson & Hawley, 1998). Specifically, stress is associated with more ineffective and harsh discipline and can undermine a parent's ability to use more adaptive and positive parenting behaviors (Huth-Bock & Hughes, 2008; Pinderhughes et al., 2000). The current study will focus on three types of stress commonly associated with harsh parenting: marital conflict, psychological distress, and parenting stress.

Marital conflict and conflict between partners have a substantial impact on parenting behaviors and harsh parenting (Erel & Burman, 1995; Fincham & Hall, 2005; Gerard et al., 2006; Yu & Gamble, 2008). A meta-analysis assessing the association between interparental

conflict and parenting found that interparental conflict has a significant effect (d = -.62) on parenting behaviors with the strongest impact on harsh discipline and acceptance (Krishnakumar & Buehler, 2000). As previously discussed, the family system spillover theory suggests that conflict and negative affect in the marital or parental relationship is transferred to the parent-child relationship and influences parenting behavior (Erel & Burman, 1995). The relationship between psychological distress (e.g., depression and anxiety) in parents and harsh parenting is also well documented in the literature (Eamon, 2001; Jansen et al., 2012; Lee, 2009; McLearn et al., 2006). In a sample of two-parent families, Eamon (2001) found that poverty was related to maternal depression, which had a significant relationship with mothers' frequent use of physical discipline. Other research has found that negative affect and emotional dysregualtion were associated with increased harsh parenting and child abuse (Smith, Cross, Winkler, Jovanovic, & Bradley, 2014). Finally, parenting stress is related to the difficulties associated with parenting demands and encompasses aspects such as responsibilities, role satisfaction, and parent-child interactions (Anthony et al., 2005). The literature overwhelmingly supports the relationship between parenting stress and parenting behavior, particularly harsh parenting (Berry & Jones, 1995; Clément & Chamberland, 2009; Simons et al., 1993). In a sample of parents of preschoolers, Anthony and colleagues (2005) found that parenting stress was significantly related to parents' discipline practices, nurturance, and expectations of their children.

Although not the primary focus of the current study, parental age has also been identified as an important correlate of harsh parenting. The literature indicates that younger parents are more likely to use harsh parenting than older parents (Berlin et al., 2009; Fox et al., 1995; Jansen et al., 2012; Lee & Guterman, 2010; Speck & Riggs, 2015). When examining maternal harsh parenting in young mother-father dyads, Lee and Guterman (2010) found that younger mothers

were at higher risk for harsh parenting behaviors compared to older mothers. They suggested that younger mothers are more likely to have less education, more finanicial difficulties, and are at increased risk for depression which may contribritue to their use of harsh parenting strategies.

Military Families

The military has its own unique culture that impacts family dynamics, family functioning, and parenting behavior. Upon entering the military, service members are inducted into an authoritarian culture that demands conformity and rigidity, which often comes to be reflected within military families (Hall, 2011a; Kelty, Kleykamp, and Segal, 2010). Although military families face some of the same stressors as civilian families, they also face unique stressors of deployments, frequent relocations, and separation from their families and support within a structured environment (Drummet, Coleman, & Cable, 2003; Lara-Cinisomo et al., 2012; Kelley et al., 1994; Sogomonyan & Cooper, 2010). Based on the culture of the military and the associated stressors, military parents are at increased risk for using harsh parenting strategies to discipline their children (Gibbs et al., 2007). Additionally, the risk of harsh parenting in military are compounded by the populations' demographics. That is, service members are typically young and have young children. Statistics show that approximately 50% of U.S. military population is under the age of 25 (Kelty et al., 2010). Furthermore, nearly 50% of active duty service members are married and 42% have young children (41.9% of service members' children are younger than five years old; Defense Manpower Research Center, 2014).

The demands of a military lifestyle are related to family outcomes and can influence the physical and psychological well-being of the whole family (Burrell, Adams, Durand & Castro, 2006). Military spouses are also affected by the military culture and their spouse's service, and a common saying within military communities is "...When one person joins, the whole family

serves" (Park, 2011, p. 65). According to Weiss and colleagues (2010), the military culture requires service members to adhere to specific standards of conduct, and military families and spouses feel the pressure to also commit to the military values, norms, and traditions (Drummet, et al., 2003). Immersion within the military culture also requires civilian spouses to learn a new language (e.g., military acronyms). and must become knowledgeable and comfortable navigating military installations (Blaisure, Saathoff-Wells, Pereira, Wadsworth, & Dombro, 2015). The research demonstrates that civilian spouses are an integral part of the military family, and the well-being and mental health of the military spouse can predict the health of the family unit (Gambardella, 2008).

Deployments are one of the biggest stressors faced by military families and are frequently studied in the military parenting literature. Typically, the service member deploys and the civilian spouse remains at home (with the exception of dual-military families), but the entire family is significantly impacted by the deployment process (Gewirtz, Erbes, Polusny, Forgatch, & DeGarmo, 2011; Lester et al., 2010; Lowe, Adams, Browne, & Hinkle, 2012; Paley, Lester, Mogil, 2013; Renshaw, Rodrigues, & Jones, 2008). The deployment cycle has four distinct phases (pre-deployment, deployment, reunion, and post-deployment) each of which has its own set of stressors that begins at notification of an upcoming deployment and continues even after service members return home. Each phase of deployment comes with unique stressors for the entire family (APA, 2007; Flake, Davis, Johnson, & Middleton, 2009; Kelley, 2002; Lowe et al., 2012). Some of the negative outcomes associated with deployments for service members include increased risks for elevated stress, symptoms of post-traumatic stress disorders, traumatic brain injury, increased marital conflict, and aggression (Davis, Hanson, Zamir, Gewirtz, & DeGarmo, 2015; Lester et al., 2011; Renshaw et al., 2008). Similarly, civilian spouses of service members

who remain at home during deployments are at risk for increased stress (including parenting stress), depression, anxiety, sleep disorders, and acute stress reactions, while children also are at risk for internalizing and externalizing issues (Creech, Hadley, & Borsari, 2014; Dekel & Monson, 2010; Dekel, Solomon, & Bleich, 2005; Dirkzwager, Bramsen, Ader, & van der Ploeg, 2005; Lev-Wiesel & Amir, 2001; Mansfield et al., 2010; Renshaw et al., 2008). For example, in a study of deployments in National Guard families, at-home caregivers reported increased hassles (e.g., household and relationship) and significantly poorer emotional well-being as the total duration of deployment increased (Lara-Cinisomo et al., 2012). In a sample of Army and Marine families, Lester and colleagues (2010) explored the impact of combat deployment and parent distress on children's emotional and behavioral adjustment. Deployment was associated with increased symptoms of global distress, depression, and anxiety for both parents, and the duration of the deployment was a significant predictor of spouses' depressive symptoms, posttraumatic stress, and global distress. Similarly, the length of deployment predicted internalizing and externalizing behaviors in children; longer deployments were associated with increases in symptoms (Lester et al., 2010). Of note, the findings indicated that the parents' psychological distress was a strong predictor of child depression as well as other internalizing and externalizing disorders.

Parenting behaviors are undoubtedly influenced by the experiences and stressors associated with living in a military family, and military culture is a part of this stress. Military parents are typically strict, authoritarian in nature and likely to administer harsh discipline in response to their children's misbehavior (Coll et al., 2011; Hall, 2011a, 2011b; Kelty et al., 2010). Furthermore, increased stress (parenting and psychological), marital conflict, and combat deployments have been linked to child maltreatment in military families and these rates have

increased in recent years (Cozza, et al., 2010; Gibbs et al., 2007; Jowers, 2015; McCarthy et al., 2015; Schaeffer et al., 2005; Sogomonyan & Cooper, 2010). Speck and Riggs (2015) examined the impact of deployment, mood, and marital satisfaction on parenting styles in military and civilian families with adolescents but did not find any associations between deployment and parenting styles. However, they did find small differences in restrictiveness (e.g., setting limits), as military mothers were more restrictive than civilian mothers. Furthermore, more restrictiveness and less nurturance (e.g., high levels of support) in parenting style was observed in younger mothers that had less time in their current residence, and experienced more moves (Speck & Riggs, 2015). Parenting stress increases substantially during deployments in military families and can affect how military spouses' cope with their responsibilities. Research on parenting stress in military families found that parenting stress increased as the total duration of deployment increases and was associated with less favorable perceptions of coping, sense of coherence in the family, and contentment with life, particularly in families with young children (Everson et al., 2013). Notably, racial differences emerged in their study and Caucasian parents had older children, less parenting stress, and more favorable perceptions of coping, increased sense of coherence, and life contentment compared to all racial groups (African Americans, Hispanics/Latinos, Asian Americans, multi-ethnic, Pacific Islanders, and Native Americans were grouped together in this comparison).

Military stressors and deployments can have a negative impact on marital relationships and create distress that spills over into the relationships with children (Carter et al., 2015; Lowe et al., 2012; Paley et al., 2013). Renshaw and associates (2008) examined psychological symptoms and marital satisfaction in spouses of combat veterans. Their results revealed that spouses of combat veterans diagnosed with posttraumatic stress disorder (PTSD) endorsed

higher rates of psychological and marital distress than the spouses of combat veterans who did not have PTSD. Additionally, studies indicate that military couples have higher rates of intimate partner violence (IPV) than their civilian counterparts (Stamm, 2009), and the rates of IPV among service members increase for those experiencing psychological distress and marital conflict (Kelley, Stambaugh, Milletich, Veprinsky, & Snell, 2015; Marshall, Panuzio, & Taft, 2005).

An association between deployments and increased rates of child maltreatment has also been identified. In a sample of Army families, researchers found the rates of child maltreatment perpetrated by civilian spouses were three times higher during deployments compared to rates during non-deployments (Gibbs et al., 2007). Furthermore, researchers reported controlling for socioeconomic status, parental substance use, and children's age in the analyses, which provides evidence that increased rates of child maltreatment found in the sample were specifically associated with deployments. Similarly, a more recent study by McCarthy and colleagues (2015) found that there was a 52% increase in child maltreatment perpetrated by civilian spouses during deployment compared to pre- and post-deployment.

The research substantiates the detrimental effects military stress and deployments can have on military families without the proper support and resources. Most studies have examined the rates and determinants of child maltreatment in military families, but few studies have specifically explored harsh parenting. It is important to examine harsh parenting in military families, since harsh parenting has been identified as a potential precursor to child maltreatment. A better understanding of the rates and can help to develop programs and treatment that may reduce the rates of child maltreatment in this population and improve outcomes for military children.

Each branch of the U.S. military (i.e., Army, Air Force, Coast Guard, Marines, and Navy) and their families have their own unique culture and experiences to include duty assignments and deployments (e.g., location, length, frequency, and combat exposure). These differences have been recognized as clinicians have developed strategic therapy techniques (for couples and families) that consider and address the distinct needs across the military branches (Everson & Herzog, 2010; Everson, Herzog, & Haigler, 2011; Hall, 2011a). For instance, Marines are typically described as a particularly proud, loyal, and high disciplined group. Additionally, all Marines are trained in combat as infantrymen and are likely to be the first on the ground during conflicts and wars (Catherall, 2011). On the other hand, members of the Air Force are older than their counterparts in other branches, more educated (a higher percentage of enlisted members hold bachelor and master's degrees), and likely to have fewer, shorter deployments than other branches (Herzog, Boydston, & Whitworth, 2010). To my knowledge, there currently are not any studies that have specifically compared the rates of harsh parenting among the different branches of the military.

Theoretical Framework

Spillover theories. Generally, "spillover" theories posit that behavior, mood, or affect in one relationship can be transferred to another relationship (Almeida, Wethington, & Chandler, 1999), but this theory has been conceptualized from various other perspectives such as sociological and systems theories (Gerard, Krishnakumar, & Buehler, 2006). For the current study, the cultural spillover theory of violence and spillover theory rooted in family systems theory provide the best understanding of parenting behavior of in military families.

The cultural spillover theory (Baron & Straus, 1987,1989; Baron et al., 1988), states that the culturally appropriate use of violence in one area of life increases the likelihood that violence

will be used in another area of life where it is not appropriate. For example, the use of violence in combative sports or war may lead to the use violence in romantic relationship or harsh discipline of children (Lansford & Dodge, 2008). According to Bradley (2007), when people join the military they are re-socialized to the military culture (e.g., values, norms, and customs) during basic training and "central to these new norms and values is the understanding that violence is sometimes necessary to achieve military goals" (p.198). He asserted that military members exposure to violence during combat deployments is linked to increased violence in marital relationships and this association would persist even after service member leaves the military. However, the results in the literature have been mixed with some studies reporting an association between deployments and increased rates of interpersonal violence (IPV) in military couples (Elbogen, 2014; Rabenhorst et al., 2012), but other studies have not supported the association (Bradley, 2007; Schmaling, Blume, & Russell, 2011).

Spillover theory in a family systems context asserts that conflict and negative affect in the marital relationship is transferred to the parent-child relationship and influences parenting behavior (Erel & Burman, 1995). The transfer of interparental conflict to parenting relationships has been associated with the use of harsh parenting techniques (Cox et al., 2001; Krishnakumar & Buehler, 2000; Yu & Gamble, 2008) as well as internalizing and externalizing problems in children (Benson, Buehler, & Gerard, 2008; Berlin et al., 2009; Coley et al., 2014; McLoyd & Smith, 2002). The spillover theory is well supported in the literature. Erel and Burman (1995) identified a positive relationship between the quality in the marital relationship and parent-child relationship, and an association between marital conflict and poor parenting behaviors. Similarly, a meta-analysis conducted by Krishnakumar and Buehler (2000) examined the link between marital quality and parenting and found a moderate negative relationship (effect size -.62)

between marital conflict and negative parenting behaviors. Further support for the spillover theory has been found in both cross-sectional (Nelson, O'Brien, Blankson, Calkins, & Keane, 2009; Ponnet et al., 2013) and longitudinal (Davies, Sturge-Apple, Woitach, & Cummings, 2009; Gerard et al., 2006) studies.

Process model of parenting. Belsky (1984) developed a process model of parenting to explain the mechanisms associated with the development of parenting behaviors. His model posits that there are multiple determinants of parenting behavior and these determinants are categorized into three domains: parent characteristics, child characteristics, and contextual factors. Parent characteristics are the personal and psychological resources available to parents such as personality and psychological well-being (Belsky, 1984). Child characteristics are the individual characteristics exhibited by the child that impacts the parent-child relationship. Contextual factors include stress and support, as well as the broader social contexts that parenting relationships exist to include sociodemographic factors (SES and race/ethnicity), occupational experiences, marital relationships, and psychological stress. Additionally, Belsky (1984) asserts that parents' developmental history (e.g., history of abuse and family of origin experiences) is a distal factor that influences the individual parent characteristics and parenting behaviors.

Belsky (1993) further defined and developed his theory of child maltreatment by exploring the various contexts in which child maltreatment occurs, to include the developmental context (parent and child characteristics), the immediate interactional context (parenting and parent-child interactions), and the broader contexts of community, culture, and evolutionary influences. In this context, Belsky argues that parents' psychological resources and attributes are parent characteristics that have significant contributions to harsh parenting and child

maltreatment. Negative affect such as depression as well as negative reactivity are linked to harsher parenting strategies. His paper indicated that the literature shows that in families that engage in harsh parenting and child maltreatment the parent-child interactions are generally more negative and characterized by certain attributes such as being more controlling, less supportive, and having lower rates of social interaction/communication (Belsky, 1993). Figure 1 depicts Belsky's process model of parenting. The current study will examine the culture of the military and how it may influence harsh parenting. When examining the broader contexts (culture and community) of that influence child maltreatment, Belsky (1993) notes the importance of community and social support. Social support and strong community ties to be a buffer against stress and has a positive influence on parenting behaviors. A lack of social support, social isolation, and limited community ties are associated with harsher parenting, neglect, and physical child abuse (Belsky, 1993). Furthermore, he asserts that cultural influences can shape parenting in numerous ways to include but not limited to parenting and discipline beliefs, attitudes toward children, and the tolerance of violence. Cultural attitudes regarding disciplining children vary across racial and ethnic groups and some groups (e.g., African Americans) have been found to use harsher discipline techniques such as spanking more frequently than other groups (e.g., Caucasians).

Strong empirical support for the process model of parenting has been established through extensive research and parenting behavior is largely believed to be determined by multiple factors such as maternal education, parenting stress, developmental history, social support, economic circumstances, psychological distress, and parenting attitudes (Carr & Pike, 2012; Crnic, Gaze, & Hoffman, 2005; Kim et al., 2010; Simons, Beaman, Conger, & Chao, 1993; Thompson et al., 1999). Simons and colleagues (1993) tested the process model of parenting

through exploration of the mediating and moderating effects of social networks and marital support on the impact of stress and depression on parenting behavior. The results of their study largely supported the model. Economic pressure influenced parenting behavior through increases in depression and reduced levels of spousal support. For mothers in the sample, support from spouses indirectly moderated the impact of economic strain on parenting through depression. Additionally, when support from the social network was low, spousal support was a more influential determinant of parenting quality. Crouch and Behl (2001) examined the association among parenting beliefs, stress, and the propensity for physical child abuse through Belsky's model. The theory was supported, and the findings supported a significant interaction between parenting stress and beliefs that value corporal punishment. For parents who valued corporal punishment, the level of parenting stress was positively associated with physical child abuse potential. However, this association was not evident for parents who put less value on corporal punishment (Crouch & Behl, 2001).

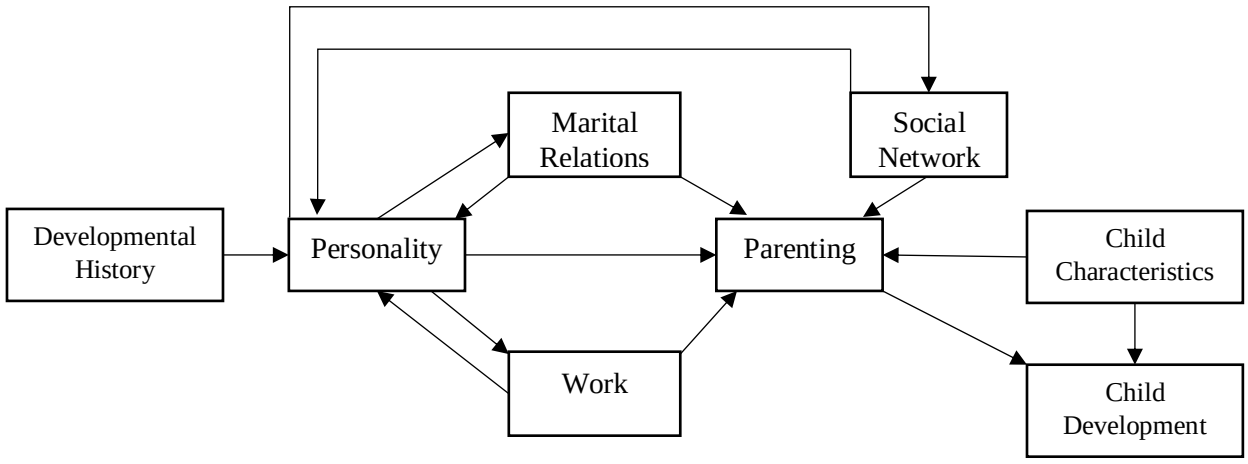

Figure 1. Belsky's Process Model of the Determinants of Parenting.

Integrating spillover theories and the process model of parenting provides a theoretical framework that can provide an explanation of how military culture and experiences may influence the use of harsh parenting in military families. The current study will focus primarily on the broader contextual factors such as the sociodemographic influences of SES and race/ethnicity as well as the contextual factors of stress (relationship distress, parenting stress, and psychological distress) and parent characteristics (parenting beliefs) that exist within the broader context of the military. Researchers have found that the military culture can provide a strict, authoritarian atmosphere and many stressors such as deployment that influence parenting beliefs and practices (Everson & Herzog, 2010; Everson, Herzog, & Haigler, 2011; Hall, 2011a, 2011b). Furthermore, the culture and work-related experiences of military service members that influence parenting behavior are believed to spill over into their family life particularly their romantic relationships and parenting behaviors (Bradley, 2007; Erel & Burman, 1995; Krishnakumar & Buehler, 2000; Yu & Gamble, 2008). The integration of spillover theories and the process model of parenting create a theoretical framework that can help explain the

relationships between SES, race/ethnicity, and harsh parenting as well as the influence of parenting beliefs and stress on parenting practices (see Figure 2).

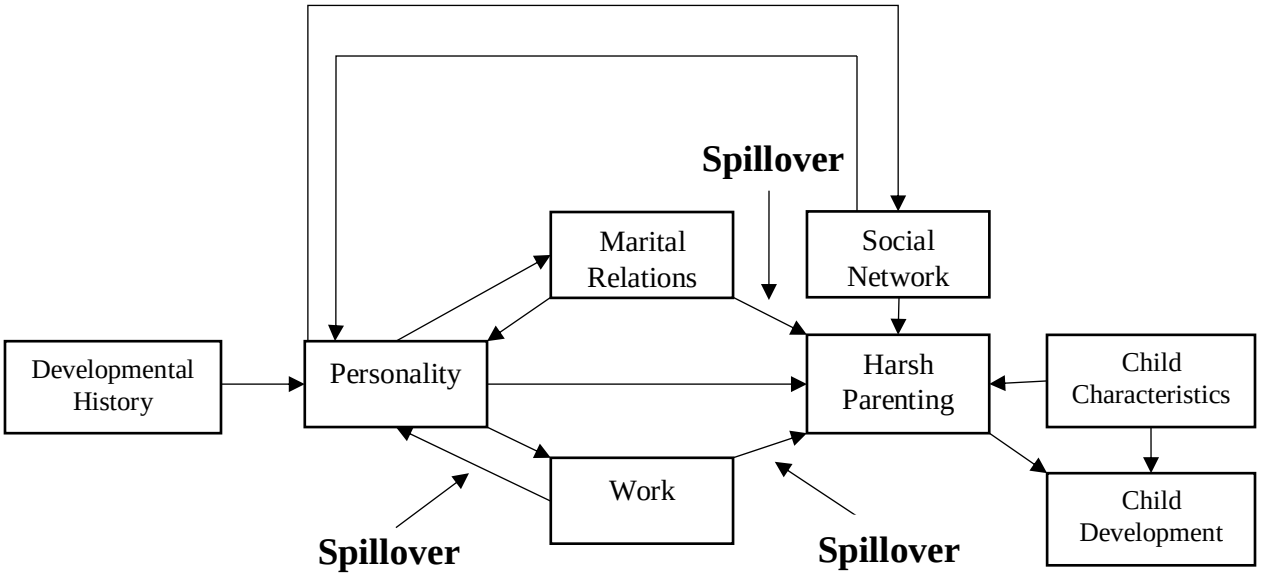

Figure 2. An Integrated Framework of Spillover and the Process Model of Parenting.

The Current Study

Harsh parenting strategies continue to be widely used in the United States despite the research that documents significant negative consequences for children (Straus & Field, 2003). These negative consequences include both internalizing issues such as depression and externalizing issues like aggression that can persist into adolescence and adulthood (Bender et al., 2007; Chang, Schwartz, Dodge, & McBride-Chang, 2003; Coley et al., 2014; Erath et al., 2009). Harsh parenting practices are multiply determined but are heavily influence by sociodemographic factors such as SES and race/ethnicity, in addition to contextual factors like

stress (Belsky, 1984). Numerous studies have reported a negative relationship between SES and harsh parenting and assert that as SES increases the rates of harsh parenting decrease (Berger, 2005; Bluestone & Tamis-LeMonda, 1999; Eamon, 2001; Hoff et al., 2002; Pinderhughes et al., 2000). Similarly, racial differences in harsh parenting have been well-established and the literature reports that African American parents endorse higher rates of harsh parenting than Caucasian parents. Although, the relationships among SES, race/ethnicity, and harsh parenting in civilian parents have been well studied in the literature, these factors have not yet been examined in a military population. The current study will use an integrated theoretical framework using spillover theory and Belsky's process model of parenting to explore how the military culture, sociodemographic factors of SES and race/ethnicity, and the contextual factors of stress influence harsh parenting in a sample of parents comprised of military spouses and their civilian counterparts.

The current study explored how being a parent in a military family (at least one parent served in military) influenced the association between socioeconomic status and race/ethnicity on harsh parenting. Gaining a better understanding of how sociodemographic factors influence parenting behaviors within the military culture may help to develop psychoeducational and parenting programs and inform therapy with military families to decrease rates of harsh parenting, and ultimately reduce the rates of child abuse and neglect in this population. Additionally, a research question was posed to explore differences that may exist in the rates of harsh parenting among the different branches of the military. The following aims, hypotheses, and research question were examined in the current study:

Aim 1. Examined the relationship between socioeconomic status, race, and harsh parenting. The current study expected to replicate the findings in the extant literature that SES and race/ethnicity are directly related harsh parenting.

Hypothesis 1 (H1). Socioeconomic status would be negatively associated with harsh parenting. Higher SES would be associated with lower rates of harsh parenting, whereas lower SES would be associated with higher rates of harsh parenting.

Hypothesis 2 (H2). Race would be associated with harsh parenting. African American parents were expected to report the higher rates of harsh parenting compared to Caucasian parents.

Aim 2. Examined the moderating effects of military status on the relationships between SES, race, and harsh parenting. The current study examined the moderating effects of military status on the relationships among SES and harsh parenting and race/ethnicity and harsh parenting.

Hypothesis 3 (H3). Military status would moderate the relationship between socioeconomic status and harsh parenting. Military status was expected to weaken the relationship between SES and harsh parenting. Compared to civilian parents, who were expected to show differences in harsh parenting that vary with SES, parents in military families were expected to report similar rates of harsh parenting across all levels of SES (see Figure 3).

Hypothesis 4 (H4). Military status would moderate the relationship between race and harsh parenting. Military status was expected to weaken the relationship between race/ethnicity and harsh parenting. Compared to civilian parents, were expected to show differences in harsh parenting that vary with race/ethnicity, parents in military families were expected to report similar rates of harsh parenting across all racial groups (see Figure 4).

Aim 3. Examined the direct and indirect relationships among military status, parenting beliefs, marital distress, psychological distress, parenting stress, and harsh parenting (See Figure 5).

Hypothesis 5 (H5). Military status would have a direct relationship with harsh parenting. Parents within military families would report higher rates of harsh parenting compared to their civilian counterparts.

Hypothesis 6 (H6). Parenting beliefs would mediate the relationship between military status and harsh parenting. The association between military status and harsh parenting would be mediated through parenting beliefs, and parents from military families would endorse more traditional (authoritarian) parenting beliefs and therefore report higher rates of harsh parenting than parents from civilian families.

Hypothesis 7 (H7). Marital distress would mediate the relationship between military status and harsh parenting. The association between military status and harsh parenting would be mediated through marital stress, and parents from military families would report experiencing higher levels of marital stress and therefore report higher rates of harsh parenting compared to civilian parents.

Hypothesis 8 (H8). Psychological distress would mediate the relationship between military status and harsh parenting. The association between military status and harsh parenting would be mediated through psychological distress, and parents from military families would report experiencing higher levels of marital stress and therefore report higher rates of harsh parenting compared to civilian parents.

***Hypothesis 9 (H9)*.** Parenting stress would mediate the relationship between military status and harsh parenting. The association between military status and harsh parenting would be mediated through parenting stress, and parents from military families would report experiencing higher levels of parenting stress and therefore report higher rates of harsh parenting compared to civilian parents. In addition, I expected a mediational pathway from military status to harsh parenting in which military status affected marital and psychological distress, marital and psychological distress affected parenting stress, parenting stress affected harsh parenting.

Research question (RQ). Are there differences in discipline strategies in military families based on branch of service? This research question examined how discipline strategies and harsh parenting might vary as a function of branch of service (Air Force, Army, Marines, and Navy). To my knowledge, there has not been any studies examining differences among military branches in harsh parenting practices. Given the paucity of research in this area, no specific hypotheses were proposed but differences were expected among the branches of services. Based on the available information, Marine families may have reported the highest rates of harsh parenting among all military branches and the Air Force families might have reported the lowest.

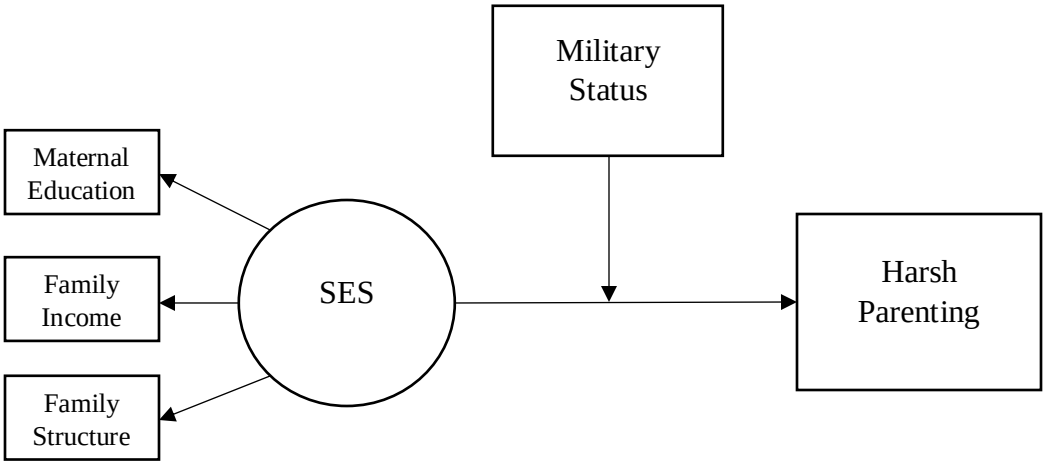

Figure 3. Conceptual Model of the Moderating Effects of Military Status on the Relationship between SES and Harsh Parenting.

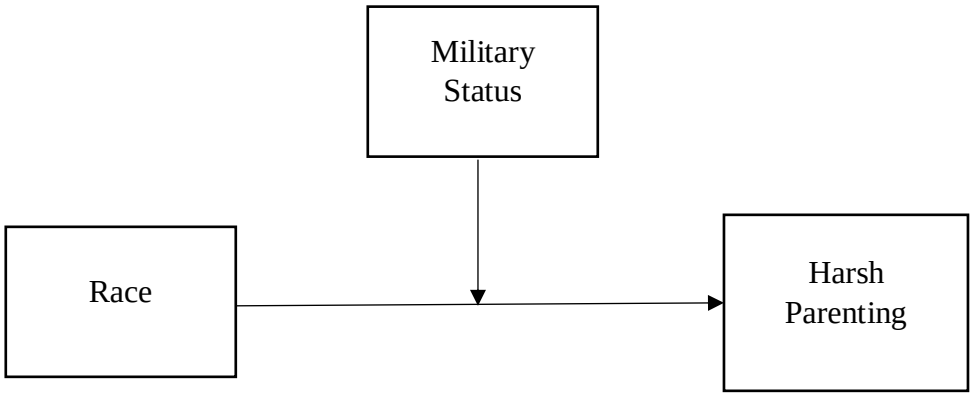

Figure 4. Conceptual Model of the Moderating Effects of Military Status on the Relationship between Race and Harsh Parenting.

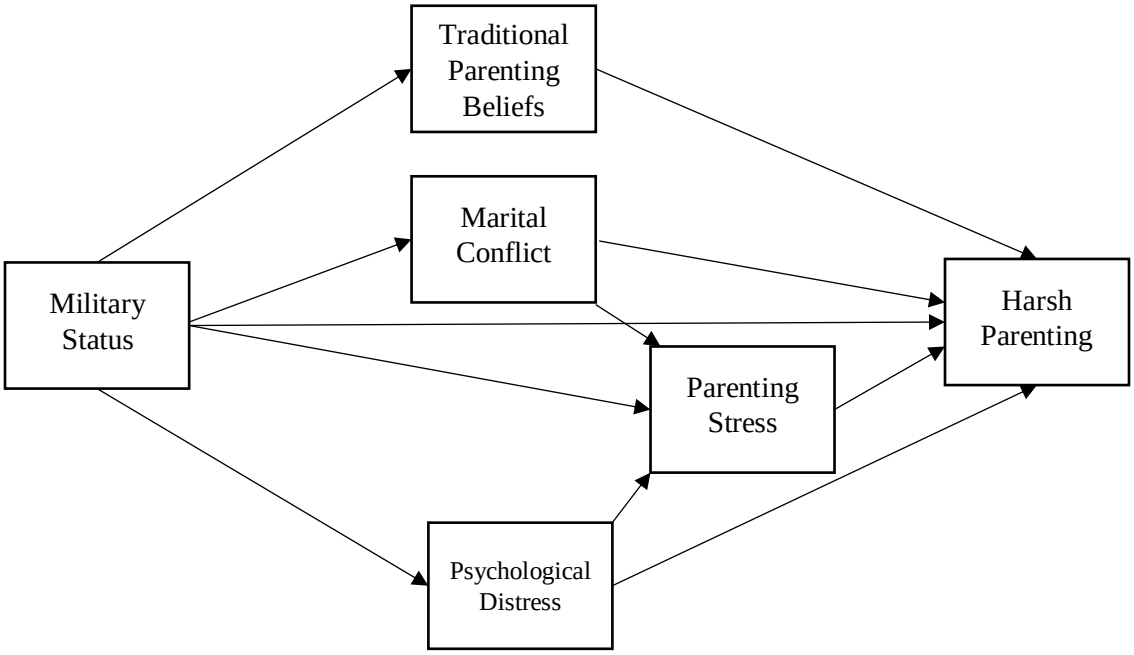

Figure 5. Conceptual Model of the Direct and Indirect Relationships among Military Status, Parenting Beliefs, Marital Conflict, Psychological Distress, Parenting Stress, and Harsh Parenting.

CHAPTER II

METHOD

Participants

Participants had to identify as a parent with at least one child under the age of five in the home and currently living in a two-parent household (e.g., married or cohabitating). Military affiliated participants had to identify as a civilian spouse or partner of an active duty military service member or veteran. Additionally, participants had to be 18 years old or older to be eligible to participate in this study. No additional exclusionary criteria were enforced. The most recent data reported by the Defense Manpower Research Center (2014) indicated the racial/ethnic demographics of the Active Duty U.S. military is 68.9% Caucasian, 17.2% African American, 12% Hispanic or Latino, 4% Asian, 1.4% American Indian or Alaska Native, 1.1% Native Hawaii or Other Pacific Islander, and approximately 3.2% Multi-racial (the Army does not report multi-racial, so this percentage is likely to be higher). Based on this information, the current study expected to primarily examine African American and Caucasian parents. A total of 501 individuals were in the final sample. The participants were 18-57 years old with a mean age of 31.35 (SD = 6.14). The sample was largely Caucasian (n = 423; 78%), female (n = 446; 52%), and civilian (n = 335; 67%). Detailed demographics characteristics of the entire sample are reported in Table 1, detailed demographics characteristics of military and civilian sample are reported in Table 2, and bivariate correlations between demographic, predictor, and outcome variables can be found in Table 3.

Table 1

Demographic Characteristics of Sample by Race.

	African American N = 78		Caucasian N = 423		Total N = 501	
Characteristic	*M*	*SD*	*M*	*SD*	*M*	*SD*
Age	30.85	7.68	31.44	5.82	31.35	6.14
	n	%	*n*	%	*n*	%
Race						
African American	78	100%	--	--	78	16%
Caucasian	--	--	423	100%	423	84%
Gender						
Male	8	10%	44	10%	52	10%
Female	70	90%	376	89%	446	89%
Transgender	0	0%	1	<1%		
Relationship Status						
Married/Civil Union	56	72%	374	88%	430	86%
Separated, Legally Married	1	1%	2	<1%	3	<1%
Divorced	0	0%	2	<1%	2	<1%
Living with Partner	13	17%	26	6%	39	8%
In a Committed Relationship	5	6%	16	4%	21	4%
Other	3	4%	3	<1%	3	<1%
Maternal Education						
Less than High School	0	0%	3	<1%	3	<1%
High School/GED	4	5%	25	6%	29	6%
Some College	28	36%	93	22%	121	24%
Associates	19	24%	80	19%	99	20%
Bachelor's	13	17%	107	25%	120	24%
Master's	11	14%	89	21%	100	20%
Doctorate/Professional	3	4%	20	5%	23	5%
Family Income						
Less than $10,000	3	4%	6	1%	9	2%
$10,000-$19,999	4	5%	16	4%	20	4%
$20,000-$29,999	7	9%	42	10%	49	10%
$30,000-$39,999	12	15%	40	10%	52	10%
$40,000-$49,999	8	10%	33	8%	41	8%
$50,000-$59,999	9	12%	46	11%	55	11%
$60,000-$69,999	5	6%	44	10%	49	10%
$70,000-$79,999	5	6%	36	9%	41	8%

Table 1 Continued

	African American N = 78		Caucasian N = 423		Total N = 501	
	n	%	*n*	%	*n*	%
Family Income (continued)						
$80,000-$89,999	10	13%	36	9%	46	9%
$90,000-$99,999	1	1%	33	8%	34	7%
$100,000-$149,999	11	14%	67	16%	78	16%
More than $150,000	3	4%	18	4%	21	4%
	M	*SD*	*M*	*SD*	*M*	*SD*
Family Structure	4.23	1.39	4.02	1.06	4.05	1.12
	n	%	*n*	%	*n*	%
Employment Status						
Unemployed	2	3%	8	2%	10	2%
Stay at home parent	13	17%	114	27%	127	25%
Part-time student	3	4%	11	3%	14	3%
Full-time student	12	15%	37	9%	49	10%
Employed Part-time	12	15%	57	14%	69	14%
Employed Full-time	36	46%	196	46%	232	46%
Number of Children						
1	32	41%	178	42%	210	42%
2	28	36%	150	36%	178	36%
3	6	8%	62	15%	68	14%
4	8	10%	21	5%	29	6%
5	3	4%	9	2%	12	2%
6	1	1%	1	<1%	2	<1%
7	0	0%	2	<1%	2	<1%
8 or more	0	0%	0	0%	0	0%
	M	*SD*	*M*	*SD*	*M*	*SD*
Child Age (in months)	31.69	24.18	28.07	20.52	28.58	21.07
	n	%	*n*	%	*n*	%
Mental Health Diagnosis						
Yes	13	17%	129	31%	142	28%
No	64	82%	293	69%	357	71%

Table 2

Demographic Characteristics of Sample by Military Status.

	Military Affiliated N = 166		Civilians N = 335	
Characteristic	*M*	*SD*	*M*	*SD*
Age	31.36	6.49	31.35	5.97
	n	%	*n*	%
Race				
African American	28	17%	50	15%
Caucasian	138	83%	285	85%
Gender				
Male	18	11%	34	10%
Female	148	89%	298	89%
Transgender	0	0%	1	<1%
Relationship Status				
Married/Civil Union	153	92%	277	83%
Separated, Legally Married	2	1%	1	<1%
Divorced	1	<1%	1	<1%
Living with Partner	6	4%	33	10%
In a Committed Relationship	2	1%	19	6%
Other	2	1%	1	<1%
Maternal Education				
Less than High School	1	<1%	2	<1%
High School/GED	6	4%	23	7%
Some College	57	34%	64	19%
Associates	39	24%	60	18%
Bachelor's	33	20%	87	26%
Master's	24	15%	76	23%
Doctorate/Professional	6	4%	17	5%
Family Income				
Less than $10,000	1	<1%	8	2%
$10,000-$19,999	3	2%	17	5%
$20,000-$29,999	9	5%	40	12%
$30,000-$39,999	24	15%	28	8%
$40,000-$49,999	19	11%	22	7%
$50,000-$59,999	17	10%	38	11%
$60,000-$69,999	25	15%	24	7%
$70,000-$79,999	17	10%	24	7%

Table 2 Continued

	Military Affiliated N = 166		Civilians N = 335	
	n	%	*n*	%
Family Income (continued)				
$80,000-$89,999	18	11%	28	8%
$90,000-$99,999	4	4%	27	8%
$100,000-$149,999	21	13%	57	17%
More than $150,000	5	3%	16	5%
	M	*SD*	*M*	*SD*
Family Structure	4.25	1.28	3.96	1.01
	n	%	*n*	%
Employment Status				
Unemployed	1	<1%	9	3%
Stay at home parent	48	29%	79	24%
Part-time student	5	3%	9	3%
Full-time student	35	21%	14	4%
Employed Part-time	23	14%	46	14%
Employed Full-time	54	33%	178	53%
Number of Children				
1	66	40%	144	43%
2	53	32%	125	38%
3	23	14%	45	13%
4	15	9%	14	4%
5	5	3%	7	2%
6	2	1%	0	0%
7	2	1%	0	0%
8 or more	0	0%	0	0%
	M	*SD*	*M*	*SD*
Child Age (in months)	29.50	22.59	28.07	20.52
	n	%	*n*	%
Mental Health Diagnosis				
Yes	52	31%	90	27%
No	113	68%	244	73%

Table 3

Bivariate Correlations of Demographic, Predictor, and Outcome Variables.

Variable	1	2	3	4	5	6	7	8	9
1. Age	--								
2. Gender	-.153**	--							
3. Race	.035	.011	--						
4. NumCh	.415**	-.082	-.039	--					
5. ChAge	.279**	-.037	-.060	.042	--				
6. Relshp	-.299**	.088*	-.163**	-.170**	.043	--			
7. MilSt	.001	.071	.007	-.110*	-.025	.107*	--		
8. MilBr	.046	-.261**	-.016	-.031	.112	.096	.216*	--	
9. MHDx	.231	-.068	-.110*	.003	.058	-.019	.021	-.117	--
10.SlfEmp	-.120**	-.120**	-.040	-.094*	.240**	-.011	.162**	.112	.106*
11. MomEd	.390**	-.072	.097*	.019	.036	-.302**	.109*	.027	.120**
12. FamInc	.436**	-.064	0.75	.076	.132**	-.300**	.002	.082	.099*
13. FamStr	.240**	-.080	-.068	.821**	.020	-.035	-.116*	.001	-.005
14. CTS	.017	.052	-.087	-.021	.151**	.095*	-.059	.098	-.068
15. PMI	-.202	-.094*	-.237**	-.044	.031	.291**	-.015	.037	.114*
16. PSS	.052	-.068	.032	.066	-.026	.056	.027	.082	-.146**
17. CPS_S	-.097*	.012	-0.16	-.042	-.002	.019	.060	.092	-.139**
18. CPS_C	.213**	-.002	.010	.264**	.111*	-.056	.041	.134	-.099*
19. CPS_V	-.034	.050	-.062	.015	-.035	.030	.034	-.058	-.155**
20. CPS_P	-.126**	.025	-.085	-.049	-.079	.053	-.016	.068	-.123*
21. MHI	.166**	-.024	-.070	.012	-.004	-.074	-.051	-.085	.451**
22. MCSD	.046	-.028	-.179**	.042	.061	.018	.023	-.022	.240**
N	492	492	492	417	492	417	492	165	490

Note. NumCh = Number of Children; ChAge = Child Age; Relshp = Relationship Status; MilSt = Military Status; MilBr = Military Branch; MHDx = Mental Health Diagnosis; SlfEmp = Employment Status; MomEd = Maternal Education; FamInc = Family Income; FamStr = Family Structure; CTS = Conflict Tactic Scale; PMI = Parental Modernity Inventory; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; CPS_C = Conflicts and Problem-Solving Scales- Child Involvement; CPS_V = Conflicts and Problem-Solving Scales- Verbal Aggression; CPS_P = Conflicts and Problem-Solving Scales- Physical Aggression; MHI = Mental Health Inventory-18; MCSD = Marlowe-Crowne Social Desirability Scale- Form C.
*p < 0.05, **p < 0.01.

Table 3 Continued

Variable	10	11	12	13	14	15	16	17	18
1. Age									
2. Gender									
3. Race									
4. NumCh									
5. ChAge									
6. Relashp									
7. MilSt									
8. MilBr									
9. MHDx									
10. EmpSt	--								
11. MEdu	.264**	--							
12. FmInc	.330**	.541**	--						
13. FmStr	-.132**	-.019	-.006	--					
14. CTS	.033	-.052	-.051	-.007	--				
15. PMI	-.079	-.334**	-.237**	.016	.020	--			
16. PSS	-.034	.040	-.006	.074	.184**	-.016	--		
17. CPS_S	.041	-.002	-.013	-.082	.171**	-.068	.166**	--	
18. CPS_C	.024	.086	.016	.192**	.172**	-.152**	.174**	.406**	--
19. CPS_V	-.002	-.067	-.105*	-.022	.234**	-.051	.175**	.495**	.528**
20. CPS_P	-.048	-.091*	-.129**	-.071	.026	-.004	.083	.198**	.216**
21. MHI	.053	.124**	.165**	.010	-.145**	.000	-.491**	-.239**	-.190**
22. MCSD	.021	-.058	-.002	.053	-.081	.176**	-.345**	-.199**	-.158**
N	492	486	486	463	492	492	492	492	492

Note. NumCh = Number of Children; ChAge = Child Age; Relshp = Relationship Status; MilSt = Military Status; MilBr = Military Branch; MHDx = Mental Health Diagnosis; SlfEmp = Employment Status; MomEd = Maternal Education; FamInc = Family Income; FamStr = Family Structure; CTS = Conflict Tactic Scale; PMI = Parental Modernity Inventory; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; CPS_C = Conflicts and Problem-Solving Scales- Child Involvement; CPS_V = Conflicts and Problem-Solving Scales- Verbal Aggression; CPS_P = Conflicts and Problem-Solving Scales- Physical Aggression; MHI = Mental Health Inventory-18; MCSD = Marlowe-Crowne Social Desirability Scale- Form C.
*p < 0.05, **p < 0.01.

Table 3 Continued

Variable	19	20	21	22
1. Age				
2. Gender				
3. Race				
4. NumCh				
5. ChAge				
6. Relashp				
7. MilSt				
8. MilBr				
9. MHDx				
10. EmpSt				
11. MEdu				
12. FmInc				
13. FmStr				
14. CTS				
15. PMI				
16. PSS				
17. CPS_S				
18. CPS_C				
19. CPS_V	--			
20. CPS_P	.377**	--		
21. MHI	-.353**	-.298**	--	
22. MCSD	-.313**	-.138**	.421**	--
N	492	492	492	492

Note. NumCh = Number of Children; ChAge = Child Age; Relshp = Relationship Status; MilSt = Military Status; MilBr = Military Branch; MHDx = Mental Health Diagnosis; SlfEmp = Employment Status; MomEd = Maternal Education; FamInc = Family Income; FamStr = Family Structure; CTS = Conflict Tactic Scale; PMI = Parental Modernity Inventory; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; CPS_C = Conflicts and Problem-Solving Scales- Child Involvement; CPS_V = Conflicts and Problem-Solving Scales- Verbal Aggression; CPS_P = Conflicts and Problem-Solving Scales- Physical Aggression; MHI = Mental Health Inventory-18; MCSD = Marlowe-Crowne Social Desirability Scale- Form C.
*p < 0.05, **p < 0.01.

Procedure

Prior to collecting any data, the proposed study was approved by the Institutional Review Boards (IRB) at Old Dominion University and Norfolk State University. The participants for this study were recruited through university announcements, SONA (university research participation system), a series of email announcements, and Facebook advertising to obtain a diverse sample of participants across different levels of SES and racial/ethnic groups. Per the current demographics reported by Facebook, there were 6,400,000 users that identified as married and had at least one child five years old or younger and 100,000 service members that identified as married with a child in the same age range. The participants were largely recruited through Facebook advertising (*n* = 259; 52%), followed by Old Dominion University Announcements (*n* = 115; 23%).

Participants were invited to participate anonymously in the study and provided with an online survey link. First, they were provided with a notification that contained a study description, researchers and IRB contact information, exclusionary criteria, risks and benefits, confidentiality (that included specific confidentiality for military-affiliated participants), voluntary consent, withdrawal privilege, and referral resources (see Appendix A). Participants were informed that the study was voluntary, and they could choose to discontinue the survey without penalty at any time. After reading this notification, participants could begin the study by clicking "yes" to proceed. Participants were asked to complete several self-report measures regarding their demographic information, parenting behaviors, parenting beliefs, stress, relationship satisfaction, negative affect, and a social desirability measure. At the end of the survey, participants were provided with a list of resources to include websites with information regarding child abuse, domestic violence, and parenting. Upon completion of the survey,

participants were entered into a random drawing for one of four $25 gift cards for study participation. A random number generator was used for the drawing. The participants recruited through SONA were not be eligible for the raffle but received one Psychology Department SONA research credit, which was applied to course requirements or extra credit in certain Psychology courses. Participants' survey responses were collected through Qualtrics Survey Software (Qualtrics, 2014).

Power Analysis

A structural equation modeling (SEM) framework was used to test the proposed hypotheses for the current study. As such, the existing rules of thumb provided in the literature for SEM models were used to determine the sample size needed to test the proposed models. As a rule of thumb, SEM analyses require large sample sizes (greater than or equal to 200) to detect hypothesized effects (Kline, 2015). Additionally, the N:q rule of thumb states that researchers should aim to collect 10 observations (participants) per parameter estimated in the model (Kline, 2015; Nunnally,1967). This ratio provides the lower-bound estimation of the sample size needed for sufficient statistical power. The current study estimated 17 parameters (11 paths and 6 measurement errors) in the most complex structural equation model proposed (see Figure 3) and required a minimum sample size of 170 participants.

Measures

Demographic questionnaire. A demographics questionnaire, created for this study, was used to gather descriptive information about the participants. Demographic information included items to assess age, gender, race/ethnicity, sexual orientation, relationship status, number of children, information about their children (e.g., gender, age, relationship to respondent), and mental health diagnoses. See Appendix B.

Military demographic questionnaire. Additionally, demographic information was collected for military families. Participants that identified as military spouses/partners were asked questions about their spouse or partner's military status (e.g., active-duty, retired), branch of service, time in service, rank, and deployments. See Appendix C.

Socioeconomic status. Socioeconomic status (SES) is a multifaceted construct that is comprised of several components and measures various domains of social position and economic resources (Hoff et al., 2002; Liu, Ali, Soleck, Hopps, & Pickett Jr, 2004; Oakes & Rossi, 2003). Socioeconomic status has been defined as "an individual's location in multiple environmental hierarchies, usually involvement economic resources, educational achievement, and occupational status," (Conger & Donnellan, 2007, p. 77). The literature supports using multiple components to measure SES and encourages researchers to choose components that are most relevant to their specific outcome variables (Hoffman, 2003). In the parenting literature, income, education and family structure have been linked to harsh parenting (Bradley & Corwyn, 2002; Ceballo & Hurd, 2008; Klebanov, Brooks-Gunn, & Duncan, 1994; Davis-Kean, 2005), and these three variables were used as SES indicators in this study. For the current study, family income, maternal education, and family structure were proposed to comprise a latent variable in the analysis. The literature supports using the components of SES as a latent variable (Cohen, Vigoda, & Samorly, 2001; Shumow & Lomax, 2002).

Education. Education has been identified of as a robust predictor of parenting behavior to include harsh parenting (Augustine & Crosnoe, 2010; Belsky & Jaffee, 2006; Bornstein et al., 2003; Carr & Pike, 2012; Davis-Kean, 2005; Dubow, Boxer, & Huesmann, 2009; Magnuson, 2007). Respondents were asked to report self and spouse/partner level of education completed. Level of education was categorized into seven groups: less than high school, high school

diploma/GED, some college (no degree obtained), Associate's degree, Bachelor's degree, Master's Degree, and Doctoral/Professional Degree.

Income. Family income provides information about economic resources available to families and is both directly and indirectly linked to the home environment and parenting behavior (Berger, 2005; Davis-Kean, 2005). Participants were asked to report their total family income on a scale ranging from under $5,000 to $500,000.

Family structure. Family structure is comprised of the number of people living in the household (family size) and their relationships. Family structure was assessed by asking respondents to identify the number of adults and children currently living in the household and their relationships (e.g., biological parent or stepparent). Family structure was determined by adding together the number of children and adults that reside in the household.

Additional measures of SES. The current study also collected data on other components of SES to include employment status. Current employment status was assessed by asking participants to indicate if they are a homemaker, unemployed, employed full-time or part-time, retired, or full-time or part-time students. Participants had the opportunity to select all that apply (e.g., stay at home parent and part-time student). See Appendix D.

Harsh parenting. The Parent-Child Conflict Tactics Scale (CTSPC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) is a 22-item measure that assesses discipline strategies across different domains. The three main scales are Non-violent Discipline (4-items), Psychological Aggression (5-items), and Physical Assault (13-items). The Physical Assault scale is comprised three subscales: Minor Assault (Corporal Punishment; 5-items), Severe Assault (Physical Abuse; 4-items), and Very Severe Assault (Severe Physical Abuse; 4-items). Sample items from the Non-violent Discipline scale are "Explained why something was wrong" and

"Took away privileges or grounded him/her". The Psychological Aggression scale contains items such as "Shouted, yelled, or screamed at him/her" and "Threatened to spank or hit him/her but did not actually do it". Sample items from the CTSPC Minor Assault (Corporal Punishment) subscale include "Spanked him/her on the bottom with something like a belt, hairbrush, a stick, or some other hard object" and "Pinched him/her". While the Very Severe Assault (Severe Physical Abuse) contains items such as "Burned or scalded him/her on purpose" and "Threatened him/her with a knife or gun". Respondents are prompted to report what they have done in a specified time frame (typically in the past year) in response to their children's behavior (Straus et al., 1998). All items are rated on a 7-point scale ranging from 0 (*never)* to 6 (*more than 20 times*). The CTSPC can be scored in different ways and guidelines are provided to obtain these scores to include total, prevalence, and chronicity scores (Straus et al., 1998; Straus, Hamby, Boney-McCoy & Sugarman, 1996). A total score can be obtained by adding the midpoints for each item based on the response category and the midpoints are as follows: Category 0 = 0 points, Category 1 = 1 point, Category 2 = 2 points, Category 3 = 4 points, Category 4 = 8 points, Category 5 = 15 points, and Category 6 = 25 points. Prevalence is measured as a dichotomous variable of 1 (the act occurred one or more times) or 0 (the act did not occur) for each scale, and prevalence rates are the percentage of the sample who reported engaging in one or more acts in each scale over the past year (Straus, 2006; Straus & Field, 2003). On the other hand, chronicity assesses the frequency of reported acts by each scale (Straus et al., 1996, Straus & Stewart, 1999). For the current study, an adapted version of the CTSPC was used to assess harsh parenting, and the 5-items on Psychological Aggression scale and six items that assesses legal corporal punishment (the Minor Assault subscale and 1-item from the Severe Physical Assault scale).

The CTSPC is a well-established measure of family violence. In the initial study conducted by Straus and colleagues (1998) reported the following internal consistencies: Non-violent Discipline scale (α = .70), Psychological Aggression scale (α = .60), and Physical Assault scale (α =.55). Straus and associates (1998) note that the low reliability of the Physical Assault scale can be attributed to the rare occurrence of these events especially on the Severe Assault subscale even in abusive parents. For example, the rare endorsements on items such as "threatened him/her with a knife or gun" results in extremely skewed distributions which lower correlations between items, and ultimately reduces alpha coefficients. However, the researchers argue that even though a measure can have low internal consistency it can still have temporal consistency and be valid (Straus et al., 1998). Test-retest reliability of the CTSPC has been reported as .80 (Lopez, Bonenberger, & Schneider, 2001).

Despite the low reliability, the CTPC has demonstrated discriminant and construct validity (Dietz, 2000; Straus et al., 1998). The CTSPC also correlates with variables related to corporal punishment such as age (parent and child), race/ethnicity, and gender (Lopez et al., 2001; Straus et al., 1998; Straus & Field, 2003). Validity of the CTSPC has also been well established in the literature and has relationships with the original Conflict Tactics Scale (CTS), Child Abuse Potential Inventory, measures of stress, and increased rates of externalizing and internalizing problems in children (Bennett, Sullivan, & Lewis, 2006; Caliso & Milner, 1992; Jouriles & Norwood, 1995). Furthermore, the literature supports using subscales of the CTSPC to assess harsh parenting and studies reported Cronbach's alphas ranging from .62 to .76 for composite scores from the Psychological Aggression and Physical Assault scales (Dietz, 2000; Graham, Kim, Fisher, 2012; Kim, Pears, Fisher, Connelly, & Landsverk, 2010). In the current study, harsh parenting was assessed using the mean of the Psychological Aggression and

modified Corporal Punishment subscales and this adapted composite score demonstrated marginal internal consistency (α = .62). The Non-violent Discipline subscale demonstrated marginal internal consistency with Cronbach's alpha values of .63, while Psychological Aggression and Corporal Punishment demonstrated low internal consistency reliability (α = .45 and α = .41 respectively). The Cronbach's alphas for the current study are similar to those reported in past research. See Appendix E.

Parenting beliefs. The Parental Modernity Inventory (PMI; Schaefer & Edgerton, 1981; Schaefer & Edgerton, 1985) is a 30-item scale that measures both traditional and progressive attitudes about parenting (Fraley, Griffin, Belsky, & Roisman, 2012; Leve & Fagot, 1997). Traditional parenting attitudes reflect authoritarian beliefs about raising and educating children and includes items such as "Children should always obey their parents" and "Children will be bad unless they are taught what is right". Sample items that reflect more progressive beliefs include "A child's ideas should be seriously considered in making family decisions" and "Children should be allowed to disagree with their parents if they feel their own ideas are better". Respondents are asked about their level of agreement with each statement on a 5-point Likert-type scale ranging from 1(*strongly disagree*) to 5 (*strongly agree*). A total score can be calculating by summing all items together with lower scores indicative of more progressive beliefs and high scores indicative of traditional beliefs (O'Brien & Peyton, 2002). Additionally, scores can be obtained for the traditional and progressive composite scales.

In the original studies (Schaefer & Edgerton, 1981; Schaefer & Edgerton, 1985), the composite scores demonstrated moderate to high internal consistency with Cronbach's alphas of .89 for the traditional attitudes composite and .62 for the progressive attitudes composite. The two composite scores were found to be negatively correlated (r = -.35) to one another. O'Brien

and Peyton (2002) reported the Cronbach's alpha for the total score as .90 for wives and .87 for husbands. Additionally, the test-retest reliability coefficient has been reported as .84 for the PMI. Schaefer, Edgerton, and Hunter (1983) reported evidence of validity and indicated that the PMI is correleated to child academic competence, maternal locus of control, and parent demographic variables. In the current study, the PMI total score and traditional beliefs subscale demonstrated good internal consistency with Cronbach alphas of .87, while the progressive beliefs subscale demonstrated marginal internal consistency ($\alpha = .59$) which is very consistent with past research. See Appendix F

Parenting stress. The Parenting Stress Scale (PSS; Berry & Jones, 1995) is an 18-item self-report instrument that measures level of stress associated with parenting. The PSS takes into account both positive and negative aspects of parenting and sample items include "Caring for my child(ren) sometimes take more time and energy than I have to give" and "I am happy in my role as a parent". Items are rated on a 5-point Likert scale ranging from 1 (*strongly disagree)* to 5 (*strongly agree*) and eight items are reversed scored. Higher scores are indicative of higher levels of parenting stress.

The initial psychometric properties reported by Berry and Jones (1995) were derived from multiple studies with a large sample ($N = 1276$) of parents (mothers and fathers). Internal consistency as measured by Cronbach's alpha was .83 for the total sample. Similar alpha levels have been found in subsequent studies with diverse populations (Firth & Dryer, 2013; Letiecq, Bailey, & Kurtz, 2008; Shapiro & Stewart, 2011). Additionally, Blow et al., (2013) reported Cronbach's alpha of .87 when using the PSS in a sample of National Guard Veterans and their spouses. The PSS demonstrated good test-retest reliability after six weeks ($\alpha = .81$; Berry & Jones, 1995). Validity was established through correlations with a measure of general stress, the

Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) and an established measure of parenting stress, the Parenting Stress Index (PSI; Abidin, 1990). As expected, the PSS was positively correlated (r = .50) with the Perceived Stress Scale and the PSI total score (r = .75). Furthermore, discriminate validity was established through correlations with relevant measures of emotion (e.g., guilt, anxiety, and loneliness) and role satisfaction (e.g., marital satisfaction and job satisfaction). In the current study, the PSS demonstrated good internal consistency (α = .83). See Appendix G.

Marital conflict. The Conflicts and Problem-Solving Scales (CPS; Kerig, 1996) assesses dimensions of couple conflict over the past year that can affect parenting behavior. The CPS measures the domains of frequency, severity, resolution, and efficacy as well as a variety of conflict strategies. The frequency scale assesses minor (e.g., "spats", "getting on each other's nerves") and major conflicts (e.g., "big fights", "blow-ups") on a 6-point ordinal scale ranging from *once a year or less* (scored 1 for minor conflicts and 2 for major conflicts) to *just about every day* (scored 6 for minor conflicts and 12 for major conflicts). These two items are summed together and the range of the frequency total score is 3 to 18 with higher scores indicative of more frequent conflict. The Severity and Efficacy domains are comprised of the same 21-items (marital problems) spread across different content domains such as "childrearing/issues concerning child(ren)" and "balancing demands of work and home life". The Severity scale is rated on a scale of 0 (*no problem*) to 100 (*a severe problem*), and the scores are averaged to create an overall score of problem severity (Kerig, 1996). Efficacy refers to the average proportion of marital problems that respondents report they can effectively solve and is measured from 0% to 100%. The overall Efficacy scale score is obtained by taking the average percentage of problems solved. The Resolution domain is comprised of 13-items that assesses the outcomes

of problem-solving efforts (positive to negative) and include items such as “we feel closer to one another than before the fight” and “we end up feeling angry and annoyed with each other”. Items are ranked on a 4-point Likert-type scale from 0 (*never*) to 3 (*often*), and the sum of all item ratings create a Resolution scale score. According to Kerig (1996), the CPS also assesses 44 conflict strategy tactics and that load onto six separate factors (scales): Collaboration (e.g., “Talk it out with your partner”) Avoidance-Capitulation (e.g., “Change the subject”), Stalemate (e.g., “Complain, bicker without really getting anywhere”), Verbal Aggression, (e.g., “Name-calling, cursing, insulting”), Physical Aggression (e.g., “threaten physical harm to partner”), and Child Involvement (e.g., “Become angry at child(ren) when angry at partner”). Respondents are asked to rate the frequency that they and their partner engage in these conflict strategies over the past year and items are rated on a 4-point Likert-type scale ranging from 0 (*never*) to 3 (*often*). Scores can be obtained for two subscales (participant and partner) and the items can be summed across both subscales for an overall description of relationship (Kerig, 1996). Research has demonstrated various subscales of the CPS can be used to assess the different aspects of interparental conflict as it relates to research interests (Davies & Lindsay, 2004; Kerig, 1998; McCoy, Cummings, & Davies, 2009). For the current study, the frequency of minor and major conflict, Verbal Aggression, Physical Aggression, and Child Involvement subscales was used to assess marital conflict as a latent variable.

The initial psychometric properties of CPS reported by Kerig (1996) were derived from a study with 273 couples with children. Internal consistencies were was obtained for all four domains and the six scales measuring conflict strategies for mothers and fathers respectively: Frequency (α = .75 and .78), Severity (α = .98), Resolution (α = .79), Efficacy (α = .94 and .91), Collaboration (α = .86), Avoidance-Capitulation (α = .70 and .74), Stalemate (α = .76 and .78),

Verbal Aggression (α = .85 and .84), Physical Aggression (α = .83 and .87), Child Involvement (α = .81 and .85). Similar alpha levels for all subscales have been found in subsequent studies (Fosco & Grych, 2008; George, Fairchild, Cummings, & Davies, 2014; Olson, Sameroff, Kerr, Lopez, & Wellman, 2005). In the same sample, Kerig (1996) reported that the test-retest reliability measured over three months ranged from .53 (Child Involvement) to .87 (Severity), with a median correlation of .63. The validity of the CPS has demonstrated through correlations with well-established measures of marital satisfaction and marital conflict to include the Dyadic Adjustment Scale (DAS), Conflict Tactics Scale (CTS), and the O'Leary-Porter Scale (OPS; O'Leary & Porter, 1980) which measures child exposure to interparental conflict. Additionally, the CPS was correlated with child assessment of interparental conflict, child internalizing and externalizing behaviors (as rated by parents), and child's report of anxiety. Furthermore, the CPS was found to be a strong predictor of global ratings of marital quality for both husbands and wives (Kerig, 1996). In the current study, the participants' ratings of themselves and their partner were combined to create an overall relationship score. The CPS subscales (Child Involvement, Verbal Aggression, Physical Aggression) demonstrated acceptable to good internal consistencies with Cronbach's alphas of .73, .85, and .69, respectively. See Appendix H.

Psychological distress. The 18-item version of the Mental Health Inventory-18 (MHI-18; Rivto et al., 1997; Veit & Ware, 1983) was used to assess psychological distress. This inventory is derived from the original 36-item Mental Health Inventory (MHI-36) developed by Veit and Ware (1983) to assess overall emotional functioning to include psychological distress. The MHI-18 is comprised of four subscales: anxiety, depression, behavioral control, and positive affect (Rivto et al., 1997). Studies have combined the anxiety, depression, and behavioral control subscales to produce a psychological distress index (Cokley, McClain, Enciso, & Martinez,

2012; Pieterse & Carter, 2007), which was used in the current study. Sample items include "Have you been a very nervous person?", "Did you feel depressed?", "Have you felt emotionally stable?", and "Were you a happy person?". Respondents are asked how they felt and how things have been for the past four weeks and each item is rated on a Likert-type scale ranging from 1 (*all of the time*) to 6 (*none of the time*). The seven items that ask about positive emotions are reversed scored. Scores can be obtained for each subscale, index, and total score and all scores range from 0 to100 after the raw scores are transformed into standardized scores. Higher scores on the psychological distress index reflect more psychological distress.

The MHI-36 is a well-established measure that has demonstrated sufficient internal consistency reliability. Veit and Ware (1983) reported the Cronbach's alpha for full measure as .93, and the Cronbach's alphas for the subscales ranging from .83 to .91 in the original study. The MHI-18 has maintained the subscale structure as well as its reliability (Rivto et al., 1997). In study of couples experiencing infertility concerns, the MHI-18 demonstrated Cronbach's alphas of 0.94 (full measure), 0.83 (anxiety), 0.82 (depression), 0.82 (behavioral control), and 0.79 (positive affect). The psychological distress index has produced Cronbach's alphas of 0.89 (Pieterse & Carter, 2007) and 0.93 (Cokley et al., 2012). Additionally, construct and validity was established through positive correlations with similar measures to include the Positive and Negative Affect Schedule, Center for the Epidemiological Studies- Depression Scale, Dyadic Adjustment Scale as well as perceived stress and race-related stress measures (Manne & Schnoll, 2001; Pieterse & Carter, 2007; Siegel, Karus, Raveis, & Hagen, 1998). In the current study, the MHI total score and subscales demonstrated acceptable to excellent internal consistency with Cronbach's alphas ranging from .75 to .94. See Appendix I.

Social desirability. In social science research, participants may respond to questions in a manner that is consistent with social norms and likely to portray them in favorable ways (King & Bruner, 2000). As such, study results may be influenced by social desirability bias so the validity of self-reported information should be assessed and accounted for in research. For the current study, the Marlowe-Crowne Social Desirability Scale (MCSD; Crowne & Marlowe, 1960) was used as a validity check of participants' responses. The MCSD is comprised of 33-items that assess social desirability and response bias and utilizes a true-false format. There are 18-items that are keyed in the positive (true) direction and 13-items keyed in the negative (false) direction. If the positively keyed statements are answered true it reflects the tendency to attribute socially acceptable statements to oneself despite improbability, while false responses to negatively keyed items reflect the tendency to deny statements that are socially disapproved but are likely true (Loo & Thorpe, 2000; Robinson, Shaver, & Wrightman, 2013). Higher scores are indicative of more socially desirable responding.

In the initial study, researchers reported that the MCSD had a high internal consistency using the Kuder-Richardson Formula 20 (KR-20; .88) and test-retest reliability (r = .89) over a one-month time period (Crowne & Marlowe, 1960). They also reported that the MCSD demonstrated adequate validity as it was positively correlated with another measure of social desirability and validity scales on the Minnesota Multiphasic Personality Inventory (MMPI). Furthermore, as expected the MCSD was negatively correlated with the clinical scales on MMPI (Crowne & Marlowe, 1960).

Over the years, several shorter forms of the MCSD, ranging from 10 to 20 items, have been developed to reduce the length of time of completion particularly when being used as a part of larger self-report batteries (Reynolds, 1982; Van de Mortel, 2008; Strahan & Gerbasi,1972).

Reynolds (1982) developed three forms of the MCSD that were comprised on 11 items (Form A), 12 items (Form B), and 13 items (Form C). Internal consistency (KR- 20) across these three shorter forms were reported as .74 (Form A), .75 (Form B), and .76 (Form C). All three forms were positively correlated with the original 33-item MCSD and another well-established social desirability scale, with Form C having the highest correlations (r = .93 and .41; Reynolds, 1982). Based on the results of his study, Reynolds (1982) reported that the 13-item MCSD- Form C was an adequate substitute for the 33-item MSCD. Several research studies have used the 13-item MCSD (Form C) to assess social desirability (Cossette, Cara, Ricard, & Pepin, 2005; McParland, Noble, & Livingstone, 2004; Ojala & Nesdale, 2004; Straus, 2004). In the current study, the MCSD demonstrated adequate internal consistency $\alpha = .68$. See Appendix J.

Data Analytic Approach

Prior to conducting any analyses, data were checked for coding errors, missing data, outliers, normality, skewness, kurtosis, and all assumptions were tested. Additionally, the data were examined for missingness. Any problems detected in the data were addressed accordingly. Descriptive statistics to include means, standard deviations, ranges, and Cronbach's alphas were calculated for all measures. Furthermore, the relationships between, predictors, outcomes, and potential covariates (e.g., age) were examined in bivariate correlation matrices.

The hypotheses outlined in Aims 1-3 were examined through structural equation modeling (SEM) framework using M*plus* software (Version 8; Muthén & Muthén, 2017). The Full-Information Maximum Likelihood (FIML) method was used to estimate the SEM models proposed in the current study. First, separate Confirmatory Factor Analyses (CFA) were conducted on the proposed latent variables of SES and marital conflict. Model fit was assessed through the examination of the χ^2 goodness of fit (GOF) test for each CFA and the standardized

factor loadings were examined for significance. The hypothesized path models were estimated when the proposed factors were supported. To test the moderation hypotheses, interaction variables were created. Then, the hypothesized direct paths, moderation terms, correlations, and indirect paths were estimated.

Next, model fit was examined through multiple fit indices to include the χ^2 GOF test, root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), and the comparative fit index (CFI). Specifically, the χ^2 GOF test was assessed for non-significance, while the RMSEA and SRMR values was also reviewed to determine model fit. The CFI uses model comparison between the hypothesized model and the null model as an indicator of model fit and this was examined as well. In social sciences research, indicators of good model fit typically include a non-significant χ^2 GOF test, a RMSEA value less than .05, a SRMR values less than .08, and a CFI value greater than or equal to 0.95 (Hooper, Coughlan, Mullen, 2008; Hu & Bentler, 1999; Schumacker & Lomax, 2016). Because the χ^2 GOF test tends to be overly sensitive to moderate to large samples, preferential status was given to the RMSEA, SRMR, and CFI. If model fit was adequate, standardized path coefficients were interpreted for the hypotheses (*H1-H9)* in Aims 1-3.

Finally, the research question was analyzed using a series of analysis of variances (ANOVAs) using the most recent version of SPSS. The independent variable was be branch of service which had three levels: Air Force, Army, and Navy. The groups were compared on all demographic, predictor, and outcomes variables. Significant results were followed-up with post-hoc analyses.

CHAPTER III

RESULTS

Preliminary Analyses

Prior to conducting any analyses, data were examined for coding errors, missing data, and cleaned. A total of 889 individuals began the survey; not all participants were eligible based on the survey entrance criteria and were not included in the final sample. Participants were initially screened based on their status as a parent, age of children, living arrangements, and age. Individuals were not included as participants in the final sample if they were not parents (n = 77), parents with no children five years old or younger (n = 53), did not live in a two-parent household (n = 31), or were under the age of 18 (n = 2). Additionally, if individuals did not identify as either African American or Caucasian they were excluded from the sample (n = 59). Next, the data was examined for missingness and 98 participants were removed from the final sample due substantially incomplete date (i.e., did not complete any items, only completed demographic information, or did not complete any outcomes variables). Three attention check questions were built into the survey in order to assess for inattentiveness by participants. Questions were directed queries instructing the participants to respond in a certain way (e.g., “If you are a parent, select strongly agree), and participants were removed if they missed more than one attention check (n = 68). The final sample was comprised of 501 participants.

After missing data were examined, data were screened for outliers. Outliers were found on the harsh parenting (CTS) measure. A review of the data revealed that a small portion of the sample reported using harsh parenting, so it is likely that these participants are not outliers and were not removed from sample. This is consistent with procedure followed in past research. Variable distributions were examined with skewness, kurtosis, histograms, and descriptive

statistics. Most of the study variables demonstrated acceptable levels of skewness and kurtosis, except for the CTS and the Psychological Aggression subscale of the CPS. Specifically, the CTS had an acceptable level of skewness and slightly elevated kurtosis, which is also in line with prior observations of natural skew in the harsh parenting behaviors it captures. Since the level of skewness was within accepted guidelines (values under the absolute value of 3), no transformations were performed (Braitman, 2016). In the current study, the CPS Psychological Aggression subscale was used a component of the marital conflict latent variable, so no additional steps to address the non-normality of this scale. Descriptive statistics for each of the measures of interest are displayed in Table 4.

Table 4

Descriptive Statistics of Study Measures.

Measure	M (*SD*)	Range [Min, Max]	Skewness (*SE*)	Kurtosis (*SE*)
CTS	2.05 (4.21)	32 [0, 32]	2.95 (.109)	10.43 (.218)
PMI	69.22 (15.74)	94 [32, 126]	.396 (.109)	-.215 (.218)
PSS	37.10 (8.47)	51 [18, 69]	.456 (.109)	.562 (.218)
CPS_S	12.33 (2.21)	16 [2, 18]	.627 (.109)	.979 (.218)
CPS_C	2.62 (3.37)	17 [0, 17]	1.70 (.109)	3.11 (.218)
CPS_V	7.35 (6.21)	31 [0, 31]	1.14 (.110)	1.34 (.219)
CPS_P	.20 (.819)	11 [0, 11]	7.60 (.110)	77.92 (.219)
MHI	70.56 (16.28)	93 [7, 100]	-.861 (.110)	.538 (.219)
MCSD	7.33 (2.63)	12 [0, 12]	-.387 (.110)	-.519 (.220)

N = 501

Note. CTS = Conflict Tactic Scale; PMI = Parental Modernity Inventory; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; CPS_C = Conflicts and Problem-Solving Scales- Child Involvement; CPS_V = Conflicts and Problem-Solving Scales- Verbal Aggression; CPS_P = Conflicts and Problem-Solving Scales- Physical Aggression; MHI = Mental Health Inventory-18; MCSD = Marlowe-Crowne Social Desirability Scale- Form C.

Measurement Model

The proposed latent variables of socioeconomic status (SES) and marital conflict were examined though a Confirmatory Factor Analysis (CFA) using Mplus software (Version 8; Muthén & Muthén, 2017). For SES, factor loadings were derived from the maternal education, family income, and family structure variables. The model fit was poor, χ^2 (3) = .008, $p < .001$, RMSEA = 0.00, CFI = 1, SRMR =0.001, and the standardized factor loadings for the SES latent variable were weak, ranging from -0.02 to 1.04 (see Table 5). These results showed that these variables do not combine in a coherent SES latent variable. The proposed latent variable of marital conflict was comprised of select subscales of the Conflicts and Problem-Solving Scales (CPS) to include severity, child involvement, verbal aggression, and physical aggression. Results demonstrated adequate model fit, χ^2 (2) = 6.73, p = 0.03, RMSEA = 0.07, CFI = 0.99, SRMR =0.02 (see Table 5). The latent variable of marital conflict produced acceptable standardized factor loadings ranging from 0.41 to 0.88 (see Table 6).

Table 5

SES Latent Variable CFA Standardized Factor Pattern Loadings.

Item	Estimate	SE	*p*
Maternal Education	1.04	1.48	0.48
Family Income	0.52	0.74	0.48
Family Structure	-0.02	0.05	0.71

N = 495, FIML estimation.
SES Null: χ^2 (3, N = 495) = 171.21, Model AIC = 5503.66

Table 6

Marital Conflict Latent Variable CFA Standardized Factor Pattern Loadings.

Item	Estimate	SE	*p*
CPS Severity	0.59	0.04	< .001
CPS Child Involvement	0.62	0.04	< .001
CPS Verbal Aggression	0.86	0.04	< .001
CPS Physical Aggression	0.41	0.04	< .001

N = 500, FIML estimation.
SES Null: χ^2 (6, N = 500) = 396.82, Model AIC = 8898.11

Structural Equation Model

Model construction. A series of analyses were conducted/completed prior to model estimation to assess for potential covariates to include in the model. First, bivariate correlations between continuous variables and the outcome variable of harsh parenting were reviewed (see Table 2). The results suggested that child age was significantly correlated with harsh parenting. As such, child age was modeled as a covariate with harsh parenting.

Then, mean comparisons were conducted to examine the relationship between categorical variables and harsh parenting. An ANOVA was completed to evaluate the effect of relationship status on the use of harsh parenting and the results were not significant, $F(6) = 1.44$, $p = .198$. Thus, relationship status was not a covariate. The effect of a participant's spouse current deployment status on harsh parenting was examined through an independent samples t-test where equal variances were not assumed which revealed no significant differences on harsh parenting between a spouse currently being deployed (M = 7.67, SD = 7.80) and a spouse not currently deployed (M = 2.46, SD = 4.41), $t(5.22) = 1.62$, $p = .164$. As such, this variable was not included as a covariate in the final model.

Model estimation. The first model results revealed less than adequate fit, $\chi^2 (28) = 111.23$, $p < .001$, RMSEA = 0.08, CFI = 0.85, SRMR =0.09, so modification indices were

examined to determine if any paths should be added to improve overall fit (see Table 7). Modification indices suggested that the model may include a direct path from psychological distress to marital conflict and three indirect paths from psychological distress to harsh parenting: 1) psychological distress to marital conflict to harsh parenting, 2) psychological distress to parenting stress to harsh parenting, 3) psychological distress to marital conflict to parenting stress to harsh parenting. According the process model of parenting (Belsky, 1984), spillover theories Baron & Straus, 1987;1989; Baron, Straus, & Jaffee, 1988; Erel & Burman, 1995, and parenting literature, stress has a considerable influence on parenting behaviors. Research has demonstrated that increased levels of stress have been correlated with higher rates of harsh parenting and less adaptive parenting (Deater-Deckard, 2005; Haskett et al., 2006; Peterson & Hawley, 1998; Rodriguez, 2009; Tucker & Rodríguez, 2014), and stress has been identified as a mediator of harsh parenting behaviors (Huth-Bock & Hughes, 2008; Pinderhughes et al., 2000). As such, the full model was estimated again after the four paths described above were added.

The second model demonstrated improved model fit with the CFI, RMSEA, SRMR falling above or below recommendation cutoffs, χ^2 (27) = 585.13, $p < .001$, RMSEA = 0.44, CFI = 0.96, SRMR =0.04. Given the adequate model fit and no additional modification indices were recommended, no further paths were specified. The final model accounted for 23.5% of the variance in parenting stress, 17.2% of variance in marital conflict, 12% of variance in harsh parenting, and 0.8% of variance in parenting beliefs (see Figure 6). The results of each proposed hypothesis are discussed below. See Tables 8-13.

Table 7

Model 1 Modification Indices.

Parameter	M.I.	E.P.C.
Marital Conflict on PSS	57.03	0.86
Marital Conflict on MHI	57.03	-0.41
MHI on PSS	56.94	-14.41
MHI on CTS	36.51	-1.10
MHI with Marital Conflict	57.03	-0.41

N = 424, FIML estimation.

Note. PSS = Parenting Stress Scale; MHI = Mental Health Inventory-18; CTS = Conflict Tactics Scale.

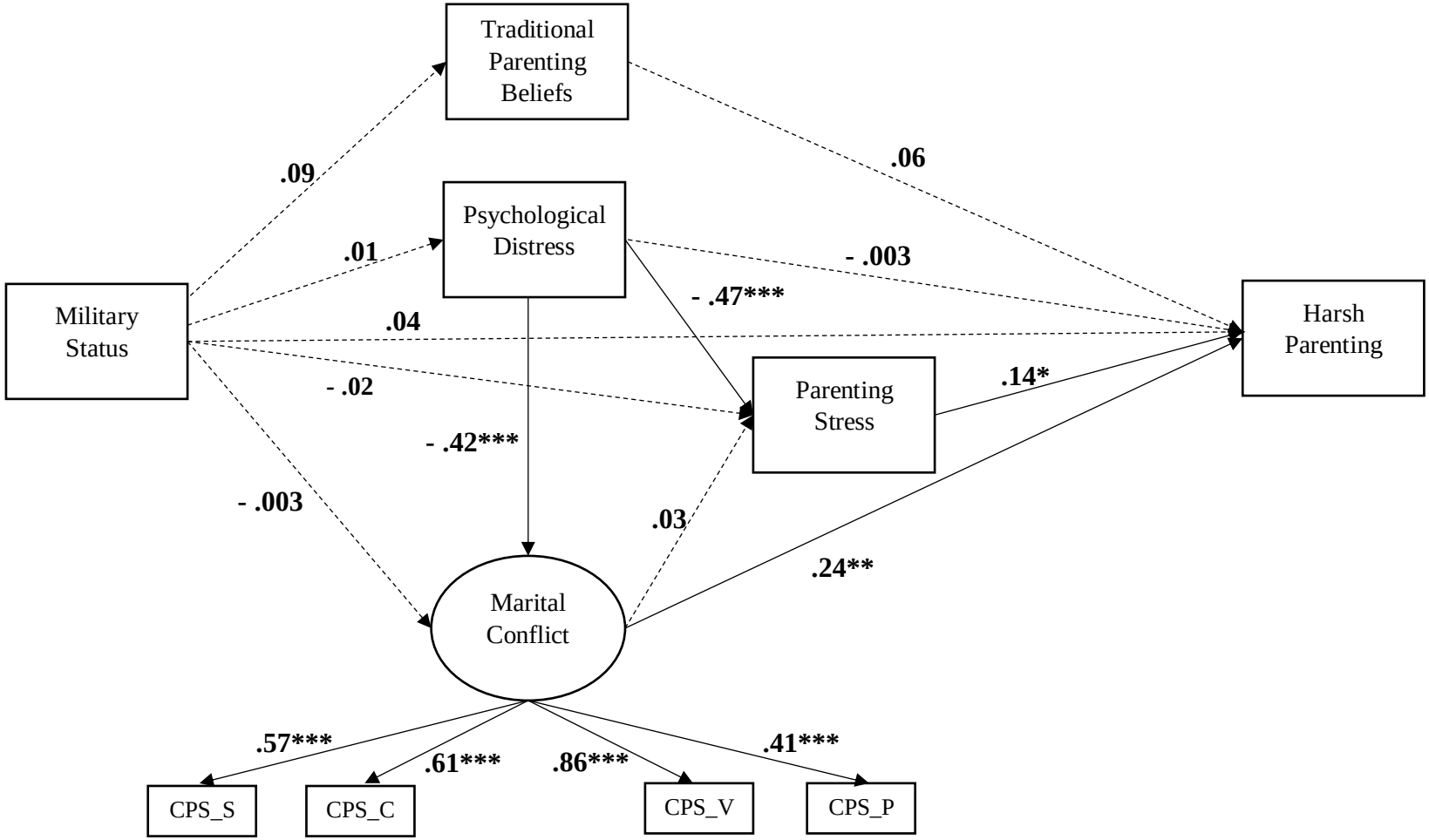

Figure 6. Results of the Final Hypothesized Structural Equation Model.
Note. Covariate not pictured for simplicity. Non-significant paths are represented by dashed lines.
*$p < .05$, **$p < .01$, ***$p < .001$

Aim 1

The first aim examined the relationship between socioeconomic status, race, and harsh parenting.

Hypothesis 1. It was hypothesized that the socioeconomic status (SES), as represented by the variables of maternal education, family income, and family structure would be negatively associated with harsh parenting. This hypothesis was not supported as harsh parenting was not significantly related to maternal education (r = -.05), family income (r = -.05), and family structure (r = -.007).

Hypothesis 2. It was hypothesized that race would be associated with harsh parenting and African American parents would report the higher rates of harsh parenting compared to Caucasian parents. However, the results did not support this hypothesis. There was not a significant correlation between race and harsh parenting (r = -.087). Due to the differences in the sample size between groups (African American, n = 78; Caucasian, n = 423), equal variances were not assumed and the results of the independent samples t-test was not significant, $t(93) = 1.95$, $p = .113$.

Bivariate correlations for SES variables, race, and harsh parenting by group (military only, civilian only, combined sample) can be found in Table 8-10.

Table 8

Intercorrelations for SES, Race, and Harsh Parenting for Military Sample Only.

Variable	1	2	3	4	5	6	7
1. Race	--						
2. Maternal Edu	.108	--					
3. Family Income	.192	.520**	--				
4. FamStr	-.202*	.051	-.020	--			
5. CTS	.033	-.068	-.011	-.034	--		
6. CTS_Psy	-.047	-.055	.003	-.041	.989**	--	
7. CTS_CP	.069	-.101	-.083	.028	.521**	.389**	--
N	166	166	166	158	166	166	166

Note. Maternal Edu = Maternal Education; FamStr = Family Structure; CTS = Conflicts Tactics Scale; CTS_Psy = Conflict Tactics Scale- Psychological Aggression; CTS_Cp = Conflict Tactics Scale- Corporal Punishment.

Table 9

Intercorrelations for SES, Race, and Harsh Parenting for Civilian Sample Only.

Variable	1	2	3	4	5	6	7
1. Race	--						
2. Maternal Edu	.089	--					
3. Family Income	.064	.555**	--				
4. FamStr	.026	.025	-.001	--			
5. CTS	-.115*	-.034	-.069	.000	--		
6. CTS_Psy	-.119	-.033	-.065	-.004	.997**	--	
7. CTS_Cp	-.031	-.033	-.086	.040	.656**	.595**	--
N	335	329	329	314	335	335	335

Note. Maternal Edu = Maternal Education; FamStr = Family Structure; CTS = Conflicts Tactics Scale; CTS_Psy = Conflict Tactics Scale- Psychological Aggression subscale; CTS_CP = Conflict Tactics Scale- Corporal Punishment Subscale.

Table 10

Intercorrelations for SES, Race, and Harsh Parenting for Combined Sample.

Variable	1	2	3	4	5	6	7
1. Race	--						
2. Maternal Edu	.097*	--					
3. Family Income	.075	.541**	--				
4. FamStr	-.068	-.019	-.006	--			
5. CTS	-.087	-.052	-.051	-.007	--		
6. CTS_Psy	-.095*	-.047	-.045	-.012	.994**	--	
7. CTS_Cp	.014	-.070	-.078	.042	.576**	.484**	--
N	501	495	495	472	501	501	501

Note. Maternal Edu = Maternal Education; FamStr = Family Structure; CTS = Conflicts Tactics Scale; CTS_Psy = Conflict Tactics Scale- Psychological Aggression subscale; CTS_CP = Conflict Tactics Scale- Corporal Punishment Subscale.

Aim 2

The second aim examined the moderating effects of military status on the relationships between SES, race, and harsh parenting.

Hypothesis 3. It was hypothesized that military status would moderate the relationship between the latent variable of SES and harsh parenting. The results of the CFA revealed that the latent variable of SES comprised of maternal education, family income, and family structure was not supported (see Table 4). Given that the overall model was not supported, combined with the non-significant findings on Hypothesis 1, the moderation analysis was not performed.

Hypothesis 4. It was hypothesized that military status would moderate the relationship between race and harsh parenting. Specifically, it was expected that the relationship between race and harsh parenting would be weakened by military status. The non-significant moderating effects, $\beta = 0.10$, $SE = 0.11$, $p = .377$, 95% CI [-0.12, 0.33], show that this hypothesis was not supported (see Figure 7).

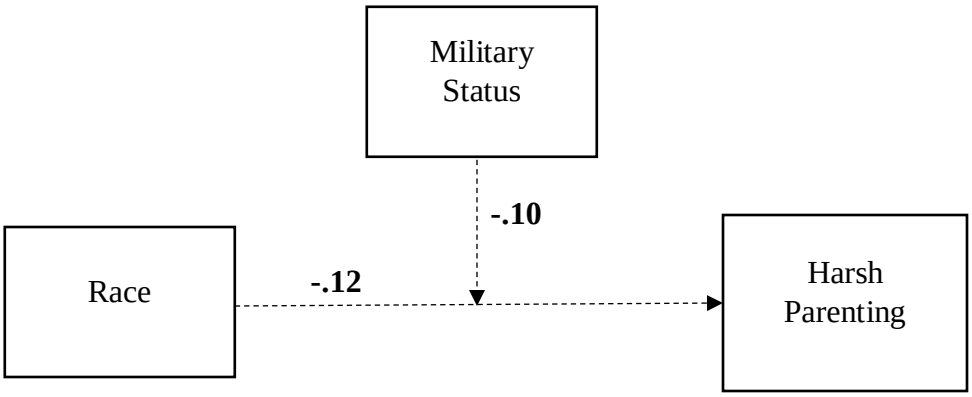

Figure 7. Hypothesized Model of the Moderating Effects of Military Status on the Relationship between Race and Harsh Parenting.
Non-significant paths are represented by dashed lines.

Aim 3

Examined the direct and indirect relationships among military status, parenting beliefs, marital distress, psychological distress, parenting stress, and harsh parenting.

Hypothesis 5. It was hypothesized that military status would have a direct effect on harsh parenting. The results indicated that the direct effect was not significant, β = 0.04, *SE* = 0.04, *p* = .407, 95% CI [-0.05, 0.13], therefore this hypothesis was not supported.

Hypothesis 6. It was hypothesized that parenting beliefs would mediate the relationship between military status and harsh parenting. This hypothesis was not supported as the examined indirect effect was not significant, β = 0.05, *SE* = 0.05, *p* = .351, 95% CI [-0.01, 0.02].

Hypothesis 7. It was hypothesized that marital distress would mediate the relationship between military status and harsh parenting. Results did not support this hypothesis, as the examined indirect effect was not significant, β = 0.001, *SE* = 0.13, *p* = .959, 95% CI [-0.03, 0.03].

Hypothesis 8. It was hypothesized that psychological distress would mediate the relationship between military status and harsh parenting. Given that the indirect effect was not significant, β = 0.00, *SE* = 0.83, *p* = .993, 95% CI [-0.01, 0.01], this hypothesis was not supported.

Hypothesis 9. It was hypothesized that parenting stress would mediate the relationship between military status and harsh parenting. The results did not support this hypothesis as the indirect effect was not significant, β = 0.003, *SE* = 0.007, *p* = .664, 95% CI [-0.02, 0.01]. Additionally, two additional hypotheses were discussed within this hypothesis. First, it was hypothesized that the relationship between military status and harsh parenting would be mediated through marital conflict and parenting stress. However, the results did not support this hypothesis, β = 0.00, *SE* = 0.00, *p* = .982, 95% CI [-0.001, 0.001]. Then, it was hypothesized that the relationship between military status and harsh parenting would be mediated through psychological distress and parenting stress. This hypothesis was not supported as the indirect effect was not significant, β = -0.001, *SE* = 0.004, *p* = .840, 95% CI [-0.01, 0.01].

Direct Effects

Based on the proposed full model, there were ten direct effects that were inferred and not specifically stated in the hypotheses and will be labeled as secondary hypotheses (See Figure 6).

Secondary hypothesis 1. It was hypothesized that military status would have a direct effect on traditional parenting beliefs. Results did not support this hypothesis, β = 0.09, *SE* = 0.05, *p* = .079, 95% CI [-0.01, 0.19].

Secondary hypothesis 2. It was hypothesized that military status would have a direct effect on marital conflict. The results indicated that the direct effect was not significant, β = 0.003, *SE* = 0.05, *p* = .958, 95% CI [-0.11, 0.10], therefore this hypothesis was not supported.

Secondary hypothesis 3. It was hypothesized that military status would have a direct effect on parenting stress. The examined direct effect was not significant, β = -0.02, *SE* = 0.04, *p* = .627, 95% CI [-0.11, 0.06], therefore this hypothesis was not supported.

Secondary hypothesis 4. It was hypothesized that military status would have a direct effect on psychological distress. This hypothesis was not supported as the examined direct effect was not significant, β = 0.09, *SE* = 0.05, *p* = .079, 95% CI [-0.09, 0.11].

Secondary hypothesis 5. It was hypothesized that traditional parenting beliefs would be positively related to harsh parenting. Given that the examined direct effect was not significant, β = 0.06, *SE* = 0.05, *p* = .198, 95% CI [-0.03, 0.15], this hypothesis was not supported.

Secondary hypothesis 6. It was hypothesized that marital conflict would be positively related to harsh parenting. Indeed, higher levels of marital conflict were related to higher rates of harsh parenting reported by participants, β = 0.24, *SE* = 0.09, *p* = .006, 95% CI [-0.07, 0.41].

Secondary hypothesis 7. It was hypothesized that marital conflict would have a direct effect on parenting stress. However, the results did not support this hypothesis, β = 0.03, *SE* = 0.06, *p* = .609, 95% CI [-0.08, 0.14].

Secondary hypothesis 8. It was hypothesized that parenting stress would be positively related to harsh parenting. The results supported this hypothesis such that higher levels of parenting stress were related to higher reports of harsh parenting, β = 0.14, *SE* = 0.06, *p* = .018, 95% CI [-0.02, 0.25].

Secondary hypothesis 9. It was hypothesized that psychological distress would be positively related to harsh parenting. Results did not support this hypothesis, β = 0.003, *SE* = 0.06, *p* = .966, 95% CI [0.13, 0.12].

Secondary hypothesis 10. It was suggested that psychological distress would be positively related to parenting stress. The results supported this pathway as evidences by a significant direct effect of psychological distress on parenting stress, β = 0.47, *SE* = 0.05, *p* < .001, 95% CI [0.56, 0.38]. As expected, higher levels of psychological distress were associated with higher levels of parenting stress.

Exploratory Direct and Indirect Effects

The modification indices from the first model suggested that the model may include a direct path from psychological distress to parenting stress and three indirect paths from psychological distress to harsh parenting.

Exploratory direct path. It was suggested that there may be a direct effect of psychological distress on marital conflict. This path was supported as evidenced by a significant direct effect of psychological distress on marital conflict, β = 0.42, *SE* = 0.06, *p* < .001, 95% CI [0.54, 0.29]. Higher levels of psychological distress higher levels of parenting stress reported by participants.

Exploratory indirect path 1. It was suggested that there may be an indirect path from psychological distress and harsh parenting through marital conflict. The results revealed that the relationship between psychological distress and harsh parenting was mediated through marital conflict, β = 0.10, *SE* = 0.04, *p* = .014, 95% CI [0.18, 0.02]. Specifically, higher levels of

psychological distress were related to higher levels of marital conflict which in turn were related to higher levels of harsh parenting reported by participants.

Exploratory indirect path 2. It was recommended that there was a potential indirect effect of parenting stress on the relationship between psychological distress and harsh parenting. Results supported this pathway such that parenting stress had a mediating effect on the relationship between psychological distress and harsh parenting, $\beta = 0.07$, $SE = 0.03$, $p = .024$, 95% CI [0.12, 0.01]. Higher levels of psychological distress were related to higher levels of parenting stress which in turn was related to higher levels of reported harsh parenting.

Exploratory indirect path 3. It was suggested that the relationship between psychological distress and harsh parenting may be mediated through marital conflict and parenting stress. However, this exploratory pathway was not supported as the indirect effect was not significant, $\beta = 0.002$, $SE = 0.003$, $p = .636$, 95% CI [0.01, 0.01].

Table 11

Factor Loading for Latent Variables within the Final Model.

Item	Estimate	*SE*	*P*
CPS Severity	0.57	0.07	< .001
CPS Child Involvement	0.61	0.06	< .001
CPS Verbal Aggression	0.86	0.05	< .001
CPS Physical Aggression	0.41	0.06	< .001

N = 424, FIML Estimation.
Note. CPS = Conflicts and Problem-Solving Scales.

Table 12

Direct Path Estimates for the Final Model.

	β	*B*	*SE*	*p*	95% CI
CTS					
Marital Conflict	0.24	0.83	0.09	.006	[0.07, 0.41]
Child Age	0.02	0.03	0.04	< .001	[0.07, 0.23]
PMI	0.06	0.02	0.05	0.20	[-0.03, 0.15]
PSS	0.14	0.07	0.06	.018	[0.02, 0.25]
MHI	0.003	0.001	0.06	.966	[0.13, 0.12]
Military Status	0.04	0.36	0.05	.407	[-0.05, 0.13]
Marital Conflict					
Military Status	-0.003	-0.007	0.05	.958	[-0.11, 0.10]
MHI	0.42	-0.03	0.06	< .001	[0.54, 0.29]
PSS					
Marital Conflict	0.03	0.19	0.06	.609	[-0.08, 0.14]
Military Status	-0.02	-0.38	0.04	.627	[-0.11, 0.06]
MHI	0.47	0.24	0.05	< .001	[-0.56, -0.35]
PMI					
Military Status	0.09	2.71	0.05	.079	[-0.01, 0.19]
MHI					
Military Status	0.01	0.39	0.05	.825	[-0.09, 0.11]

N = 424, FIML Estimation.

Note. CTS = Conflict Tactic Scale; PMI = Parental Modernity Inventory; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; MHI = Mental Health Inventory-18.

Table 13

Indirect Path Estimates for the Final Model.

Path	*β*	*B*	*SE*	*p*	95% CI
MilSt → PMI → CTS	0.005	0.05	0.005	.351	[-0.01, 0.02]
MilSt → Marital Conflict → CTS	-0.001	-0.006	0.01	.959	[-0.03, 0.02]
MilSt → MHI → CTS	0.00	0.00	0.003	.993	[-0.01, 0.01]
MilSt → PSS → CTS	-0.003	-0.03	0.007	.664	[-0.02, 0.01]
MilSt → Marital Conflict → PSS → CTS	0.00	0.00	0.00	.982	[-0.00, 0.00]
MilSt → PMI → PSS→CTS	-0.001	-0.007	0.004	.840	[-0.01, 0.01]
MHI → Marital Conflict → CTS	0.10	0.03	0.04	.014	[0.18, 0.02]
MHI → PSS → CTS	0.07	0.02	0.03	.024	[0.12, 0.01]
MHI → Marital Conflict → PSS → CTS	0.002	0.00	0.003	.636	[0.01, 0.01]

N = 424, FIML.
Note. MilSt = Military Status; PMI = Parental Modernity Inventory; CTS = Conflict Tactics Scale; PSS = Parenting Stress Scale.

Research Question

A research question was proposed to determine if harsh parenting and predictor variables varied as a function of branch of service. The entire military-affiliated sample was comprised of 166 participants to include military spouses (*n* = 100; 60%), dual military (*n* = 48; 29%), and military service members/veterans (*n* = 18; 11%). Military branches represented in the sample were Air Force (*n* = 18; 11%), Army (*n* = 59; 36%), Coast Guard (*n* = 6; 4%), Marines (*n* = 9; 5%), and Navy (*n* = 74; 45%). The mean age of participants in the entire sample was 31.36 (*SD* = 6.49). Participants were largely Caucasian (*n* = 138; 83%), female (*n* = 148; 89%), and enlisted (*n* = 121; 80%). Based on the sample sizes, the final sample included only three branches of service: Air Force, Army, and Navy (N = 151). Demographics characteristics and descriptive statistics of study measures for the military affiliated sample are reported in Table 14-15.

A series of ANOVAs were conducted to examine the effect of branch of services on the use of harsh parenting and other predictor variables (to include subscales on measures of harsh parenting and parenting beliefs). Although no specific hypotheses were proposed, differences among branches were expected on participant's reported use of harsh parenting. The results revealed that this expectation was partially supported. No significant differences were found among military branches on the use of harsh parenting overall (the composite score of psychological aggression and corporal punishment), $F(2) = .802$, $p = .450$, however, there was a significant effect of military branch on the reported use of corporal punishment, $F(2) = 3.93$, $p = .022$. Additionally, there was a significant effect of branch of service on participant's reported parenting stress, $F(2) = 3.80$, $p = .025$. All other ANOVA tests were non-significant (see Table 16).

Post-hoc analyses (Tukey's HSD) were completed to further understand the relationship between branch of service and the use of corporal punishment and branch of service and parenting stress. The post-hoc analyses for that relationship between military branch and corporal punishment suggested that participants affiliated with the Air Force ($M = .94$, $SD = 2.53$) reported higher levels of corporal punishment compared to their Navy ($M = .15$, $SD = 0.61$) counterparts (see Table 17). Furthermore, the post-hoc analyses for the relationship of military branch and parenting stress suggested that Air Force participants ($M = 32.17$, $SD = 7.40$) reported lower levels of parenting stress compared to their Army ($M = 37.75$, $SD = 7.50$) and Navy counterparts ($M = 37.59$, $SD = 59$). See Table 18.

Table 14

Demographic Characteristics by Military Branch.

	Air Force N = 18		Army N = 59		Navy N =	
Characteristic	*M*	*SD*	*M*	*SD*	*M*	*SD*
Age	29.33	8.51	31.76	6.55	31.77	5.89
	n	%	*n*	%	*n*	%
Race						
African American	2	11%	12	20%	14	19%
Caucasian	16	89%	47	80%	60	81%
Gender						
Male	0	0%	2	3%	15	20%
Female	18	100%	57	97%	59	80%
Transgender	0	0%	0	0%	0	0%
Relationship Status						
Married/Civil Union	15	83%	57	97%	67	91%
Separated, Legally Married	0	0%	1	2%	1	1%
Divorced	1	6%	0	0%	0	0%
Living with Partner	2	11%	1	2%	1	1%
In a Committed Relationship	0	0%	0	0%	1	1%
Other	0	0%	0	0%	2	3%
Maternal Education						
Less than High School	0	0%	1	2%	0	0%
High School/GED	2	11%	2	3%	2	3%
Some College	8	44%	17	29%	27	37%
Associates Degree	5	28%	13	22%	21	28%
Bachelor's Degree	2	11%	14	24%	12	16%
Master's Degree	0	0%	11	19%	10	14%
Doctorate/Professional Degree	1	6%	1	2%	2	3%
Family Income						
Less than $10,000	0	0%	1	2%	0	0%
$10,000-$19,999	0	0%	1	2%	2	3%
$20,000-$29,999	2	11%	2	5%	3	4%
$30,000-$39,999	4	22%	11	19%	8	11%
$40,000-$49,999	4	22%	7	12%	7	10%
$50,000-$59,999	2	11%	2	3%	12	16%
$60,000-$69,999	1	6%	9	15%	14	19%
$70,000-$79,999	2	11%	5	9%	6	8%

Table 14 Continued

	Air Force N = 18		Army N = 59		Navy N = 74	
	n	%	*n*	%	*n*	%
Family Income continued						
$80,000-$89,999	1	6%	7	12%	8	11%
$90,000-$99,999	0	0%	3	5%	3	4%
$100,000-$149,999	2	11%	8	14%	9	12%
More than $150,000	0	0%	2	3%	2	3%
	M	*SD*	*M*	*SD*	*M*	*SD*
Family Structure	3.76	1.03	4.46	1.45	4.24	1.21
	n	%	*n*	%	*n*	%
Employment Status						
Unemployed	0	0%	1	2%	0	0%
Stay at home parent	4	22%	25	42%	13	18%
Part-time student	0	0%	3	5%	2	3%
Full-time student	2	11%	7	12%	24	32%
Employed Part-time	3	17%	10	17%	7	10%
Employed Full-time	9	50%	13	22%	28	38%
Number of Children						
1	9	50%	20	34%	31	42%
2	7	39%	18	31%	23	31%
3	0	0%	8	14%	12	16%
4	1	6%	10	17%	3	4%
5	1	6%	1	2%	3	4%
6	0	0%	1	2%	1	1%
7	0	0%	1	2%	1	1%
8 or more	0	0%	0	0%	0	0%
	M	*SD*	*M*	*SD*	*M*	*SD*
Child Age (in months)	28.35	19.39	26.47	22.36	33.01	23.61
	n	%	*n*	%	*n*	%
Mental Health Diagnosis						
Yes	5	28%	16	27%	29	39%
No	13	72%	42	71%	45	61%
Military Classification						
Enlisted	14	78%	42	71%	65	88%
Officer	2	11%	16	27%	9	12%

Table 14 Continued

	Air Force N = 18		Army N = 59		Navy N =	
	n	%	*n*	%	*n*	%
Deployment Status						
Currently Deployed	---	---	2	3%	4	5%
Not Currently Deployed	5	28%	27	46%	46	62%

Table 15

Descriptive Statistics of Study Measures for Military Sample.

Measure	M (*SD*)	Range [Min, Max]	Skewness (*SE*)	Kurtosis (*SE*)
CTS	2.45 (4.32)	20 [0, 20]	2.21 (.197)	4.72 (.392)
PMI	70.32 (15.71)	86 [40, 126]	.427 (.197)	.175 (.392)
PSS	37.01 (8.09)	40 [18, 58]	.283 (.197)	-.101(.392)
CPS_S	12.13 (2.31)	16 [2, 18]	.341 (.197)	2.41 (.392)
CPS_C	2.53 (3.17)	15 [0, 15]	1.67(.197)	3.04 (.392)
CPS_V	7.02 (5.83)	27 [0, 27]	.981 (.197)	.454 (.392)
CPS_P	.17 (.63)	6 [0, 6]	6.18 (.197)	49.99 (.392)
MHI	70.88 (17.01)	86 [13, 99]	-.874 (.197)	.076 (.392)
MCSD	7.18 (2.72)	12 [0, 12]	-.175 (.197)	-.726 (.392)

N = 151

Note. CTS = Conflict Tactic Scale; PMI = Parental Modernity Inventory; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; CPS_C = Conflicts and Problem-Solving Scales- Child Involvement; CPS_V = Conflicts and Problem-Solving Scales- Verbal Aggression; CPS_P = Conflicts and Problem-Solving Scales- Physical Aggression; MHI = Mental Health Inventory-18; MCSD = Marlowe-Crowne Social Desirability Scale- Form C.

Table 16

Analysis of Variance for Study Measures in Military Sample.

Source	*df*	*F*	*partial* η^2	*P*
CTS	2	0.80	.011	.450
CTS_Psy	2	1.23	.016	.295
CTS_Cp	2	3.93	.050	.022
PMI	2	0.59	.008	.553
PMI_Trad	2	0.59	.008	.558
PMI_Prog	2	0.67	.009	.514
PSS	2	3.80	.049	.025
Marital Conflict				
CPS_S	2	0.61	.008	.543
CPS_C	2	2.46	.032	.089
CPS_V	2	0.76	.010	.458
CPS_P	2	0.85	.011	.429
MHI	2	0.63	.008	.532

N = 151

Note. CTS = Conflict Tactic Scale; . CTS_Psy = Conflict Tactic Scale- Psychological Aggression subscale; CTS_Cp = Conflict Tactic Scale- Corporal Punishment subscale; PMI = Parental Modernity Inventory; PMI_Trad = Parental Modernity Inventory- Traditional Beliefs subscale; PMI_Prog = Parental Modernity Inventory- Progressive Beliefs subscale; PSS = Parenting Stress Scale; CPS_S= Conflicts and Problem-Solving Scales- Severity; CPS_C = Conflicts and Problem-Solving Scales- Child Involvement; CPS_V = Conflicts and Problem-Solving Scales- Verbal Aggression; CPS_P = Conflicts and Problem-Solving Scales- Physical Aggression; MHI = Mental Health Inventory-18.

Table 17

Post-Hoc Analysis for Corporal Punishment.

(I) MilBr	(J) MilBr	Mean Difference (*SE*)	95% CI	
			Lower Bound	Upper Bound
Air Force	Army	0.64 (0.29)	-0.05	1.33
	Navy	0.80 (0.28)*	0.12	1.47
Army	Air Force	-0.64 (0.29)	-1.33	0.05
	Navy	0.16 (0.19)	-0.29	0.60
Navy	Air Force	-0.80 (0.28)*	-1.47	-0.12
	Army	0.16 (0.19)	-0.60	0.29

*$p < 0.05$

Table 18

Post-Hoc Analysis for Parenting Stress.

(I) MilBr	(J) MilBr	Mean Difference (*SE*)	95% CI	
			Lower Bound	Upper Bound
Air Force	Army	-5.58 (2.14)*	-10.64	-0.52
	Navy	-5.43 (2.09)*	-10.37	-0.49
Army	Air Force	5.58 (2.14)*	0.52	10.64
	Navy	0.15 (1.39)	-3.13	3.43
Navy	Air Force	5.43 (2.09)*	0.49	10.37
	Army	-0.15 (1.39)	-3.43	3.13

*$p < 0.05$

CHAPTER IV

DISCUSSION

The current study examined the relationships between socioeconomic status (SES), race, and harsh parenting in a sample of military and civilian parents through the process models of parenting and spillover theories. A structural equation model was proposed with three main aims detailing nine hypotheses regarding the relationships among SES, race, and harsh parenting and the mediating effects of parenting beliefs, marital conflict, and psychological distress on those relationships. The first aim examined the direct relationships between SES and harsh parenting and race and harsh parenting. First, SES variables were hypothesized to be negatively related to harsh parenting. It was also hypothesized that race would be associated with harsh parenting. Specifically, African American parents were expected to report higher rates of harsh parenting compared to their Caucasian counterparts. The hypotheses of Aim 1 were not supported by the results. The second aim explored the moderating effects of military status on the relationships between SES, race, and harsh parenting in two distinct hypotheses. Results did not find any significant moderating effects of military status. The third aim examined the direct and indirect effects of military status, parenting beliefs, marital conflict, psychological distress, parenting stress, and harsh parenting. The hypotheses in this proposed model were not supported, but the results included some significant secondary direct effects as well as exploratory analyses that revealed evidence for mediating effects of stress and harsh parenting. Additionally, a research question was proposed to examine differences in parenting behaviors, beliefs, and types of stress among the different branches of the military. No significant differences were found among the branches of service.

The study's sample was unique in terms of harsh parenting, as participants reported low overall rates of harsh parenting. This is consistent with research that shows that rates of harsh parenting in the United States are decreasing (Zolotor et al., 2011). In a recent study, Finkelhor and colleagues (2019) examined national data which indicated that rates of spanking are continuing to decrease, with 37% of their entire sample reporting using corporal punishment in 2014. Additionally, they found that rates of corporal punishment were lower for girls, Northeasterners, and Caucasians compared to boys, Southerners, and African Americans respectively. It appears that there may be a new wave of parents that are shifting away from using harsh parenting techniques.

Socioeconomic Status, Race, and Harsh Parenting

The first aim sought to examine the relationships among SES, race, and harsh parenting. Based on a review of the literature on parenting and sociodemographic factors, it was hypothesized that SES would be negatively related to harsh parenting (Hypothesis 1) and race would be related to harsh parenting (Hypothesis 2). Specifically, African American parents were expected to report higher rates of harsh parenting compared to their Caucasian counterparts. The results did not support these hypotheses. Socioeconomic status is multifaceted. In the current study, SES was represented by maternal education, family income, and family structure and proposed to form a latent variable, but these variables did not seem to adhere to one another. For the military sample, rank was also an indicator of SES as it directly related to income. None of the individual variables of SES were significantly related to harsh parenting. Similarly, the results demonstrated that there was not a significant correlation between race and harsh parenting for the entire sample, and there were no significant differences in reported rates of harsh parenting between African American and Caucasian parents.

These results of the current study were contrary to the parenting literature that indicates lower SES is associated with higher levels of harsh parenting (Berger, 2005; Eamon, 2001; Hoff, Laursen, Tardif, & Bornstein, 2002; Pinderhughes et al., 2000), and that maternal education is the most reliable predictor of parenting behaviors (Bornstein, Hahn, Suwalsky, & Haynes, 2003; Augustine & Crosnoe, 2010; Carr & Pike, 2012; Dubow, Boxer, & Huesmann, 2009; Magnuson, 2007). To better understand why these results, differ from the literature, the demographics of the current sample were examined. The majority of the participants (n = 342; 69%) in this study reported having a college degree and a family income of equal to or above $50,000 (64%) which may account for the lack of significant findings regarding SES and harsh parenting in the entire sample.

Race has been identified as another important sociodemographic factor that influences harsh parenting, with African American parents endorsing higher rates of harsh parenting than Caucasian parents in civilian populations (Berlin et al., 2009; Grogan-Kaylor & Otis, 2007; Pinderhughes et al., 2000; Slade & Wissow, 2004; Taillieu, Afifi, Mota, Keyes & Sareen, 2014). The current study did not support these findings. It appears that the lack of racial differences in harsh parenting in this study may be attributable to the study being underpowered due to large differences in group sizes (African American parents accounted for only 16% of the sample). Additionally, there was a small to medium effect size (g = 0.24) for the independent samples t-test, but the effect was ultimately non-significant. It is suspected that significant findings may have been present if the group sizes of African American and Caucasians parents were similar. Another consideration is that the African American parents in this sample are a subgroup that has lower rates of harsh parenting based on the demographics, as most of these participants were married, had family incomes of above $50,000, and resided in a household with two parents.

Support for this consideration is provided by the results of a study by Scott, Pinderhughes, and Johnson (2018) that posits that African American families vary in their use of physical discipline (e.g., that subgroups exist) and that these differences may be related to demographic characteristics and contextual factors such as marital status, income, and neighborhood safety.

Influence of Military Status on Socioeconomic Status, Race, and Harsh Parenting

The second aim sought to examine the moderating effects of military status (e.g., military-affiliated vs. civilians) on the relationships among SES and harsh parenting (Hypothesis 3) and race and harsh parenting (Hypothesis 4). In moderation analyses, there is an assumption that there is direct relationship between two variables that is then changed by a third variable (Hayes, 2017). Based on this assumption and the non-significant findings in Hypothesis 1 and 2, it was expected that Hypothesis 3 and 4 would also be non-significant which was confirmed by the results.

In terms of SES, military status was expected to weaken the relationship between SES and harsh parenting and parents in military families were expected to report similar rates of harsh parenting across all levels of SES. The moderation analysis proposed in Hypothesis 3 was not conducted because none of the three separate indicators of SES were significantly correlated to harsh parenting. Additionally, the proposed model was predicated on the assumptions that SES would be a latent variable. Based on the practical guidelines for measuring SES provided by Entwisle and Astone (1994), the variables of maternal education, family income, and family size were anticipated to create a latent variable of SES, but this was not supported by the results of the Confirmatory Factory Analysis (CFA).

As for race, military status was expected to moderate the relationship between race and harsh parenting, but the results did not support this hypothesis. This finding was not surprising as

the relationship between race and harsh parenting was found to be non-significant in bivariate correlations for the entire sample. As previously discussed, it seems that the discrepancies in group sizes between African American and Caucasian participants are contributing to the lack of significant findings which in turn may be obscuring potential moderating effects on military status. The hypothesized effect was non-significant, however, the effect size was $g = .24$, and falls within the small-to-medium range. In many of the comparisons, the *p*-values seems to drop below the a-priori alpha level only after accounting for unequal samples sizes. These together point to a limitation in terms of power. Significant findings were found when examining the civilian sample that were consistent with the literature regarding the relationships among SES, race, and harsh parenting which is also consistent with the power limitations described above. Specifically, bivariate correlations revealed significant negative relationships between family income and harsh parenting and race and harsh parenting.

In the current study, the military sample looked differently than expected based on available demographic information. As such, it was expected that most of the military participants would be young (under the age of 25) and enlisted which is typically associated with less education and lower SES. However, the mean age of military affiliated participants was 31.36. The majority had a college education and were officers, resulting in higher SES. Additionally, the racial composition was not as diverse as we anticipated and was predominately Caucasian which could have possibly obscured the moderating effects of military status on the relationship between race and harsh parenting.

Relationships Among Military Status, Parenting Beliefs, Stress, and Harsh Parenting

The third aim examined a model of the direct and indirect relationships among military status, parenting beliefs and stress (parenting stress, marital conflict, and psychological distress)

based on the process model of parenting and spillover theory. The culture and unique stressors associated with the military in the United States make military families at increased risk for utilizing harsh parenting strategies such as yelling and spanking to discipline their children (Gibbs et al., 2007; Taft, Vogt, Marshall, Panuzio, & Niles, 2007; Vaughn-Coaxum, Smith, Iverson, & Vogt, 2015). Additionally, approximately half of the U.S. military's population is are under the age of 25 (Kelty et al., 2010) and have children young child (42% under five years old; Defense Manpower Research Center, 2014) which are known to be related with higher rates of harsh parenting (Berlin et al., 2009; Jansen et al., 2012; Lee & Guterman, 2010; Speck & Riggs, 2015; Straus & Stewart, 1999).

The proposed model had five primary hypotheses (Hypothesis 5-9) along with ten secondary hypotheses implicit in the model. Some support was found for the overall model, though none of the primary hypotheses were significant. In the full model, child age had a significant direct effect on harsh parenting. Specifically, older child age (based on the age of their youngest child at least 5 years old or younger) was related to higher rates of harsh parenting reported by participants. This finding is consistent with the literature that a significant portion of harsh parenting occurs in toddlers and preschool age children (Dietz, 2000; Straus & Stewart, 1999). The findings of the full model (primary and secondary hypotheses) including exploratory pathways for the relationships among military status, parenting beliefs, marital conflict, psychological distress and harsh parenting are discussed.

Primary Hypotheses

First, it was hypothesized that military status would have a direct effect on harsh parenting, and it was expected that parents in military families would report higher rates of harsh parenting compared to their civilian counterparts (Hypothesis 5). The results revealed that there

was not a significant relationship between military status and harsh parenting, therefore this hypothesis was not supported. It is possible that this finding is related to the demographics of the participants in the current study, as the mean age of participants in the military sample was 31.36 and were largely college educated. This would be consistent with the research that older parents and parents with higher levels of education tend to report lower rates of harsh parenting (Berlin et al., 2009; Fox et al., 1995; Jansen et al., 2012; Lee & Guterman, 2010; Speck & Riggs, 2015). Furthermore, the current sample may be a unique subgroup of military families that are not typically represented in the research. It is also possible that distinct groups exist within the military that vary in their parenting beliefs, levels of stress, and parenting behaviors as it relates to discipline.

Based on the premise that there would be a direct relationship between military status and harsh parenting, four mediation analyses were examined for the predictor variables of parenting beliefs, marital conflict, parenting stress, and psychological distress (Hypothesis 6-9). None of the mediation analyses were significant, therefore, these hypotheses were not supported. These findings were not surprising given the lack of relationship between military status and harsh parenting. Again, the power and sample in the current study may account for the non-significant findings. Additionally, the sample reported relatively low levels of marital conflict, parenting stress, and harsh parenting which could be impacting the results.

Secondary Hypotheses

Direct effects of military status. Military Status was expected to have direct effects on all the proposed predictor variables in the model. Based on the military culture and parenting literature on military families, military status was expected to have a direct effect on parenting beliefs (Secondary Hypothesis 1). Specifically, it was believed that military-affiliated parents

would report having more traditional parenting beliefs than civilian parents and civilian parents would report more progressive parenting beliefs than their military counterparts. The results of the model did not support this direct effect military status on overall parenting beliefs and no significant differences were found specifically for traditional parenting beliefs (on means comparison for the Traditional Beliefs subscale of the PMI). However, significant differences were revealed between military and civilian parents on the Progressive Beliefs subscale with civilian parents reporting more progressive parenting beliefs compared to military-affiliated parents. This finding aligns with expectations and is consistent with the literature that suggests that the traditional, authoritarian culture and demands for conformity and fidgety in the military spillovers into family life thus impacting parenting beliefs (Drummet, et al., 2003; Hall, 2011a; Kelty, Kleykamp, & Segal, 2010).

Based on cultural spillover theory (Baron & Straus, 1987,1989; Baron et al., 1988), the stressors of military life, such as work demands (e.g., long hours, deployments, frequent relocations) were expected to have a negative impact in other areas of life, including increased marital conflict, parenting stress, and psychological distress. First, military status was expected to have a direct effect on marital conflict (Secondary Hypothesis 2) with military parents reporting more marital conflict than civilian parents. The secondary hypothesis was not supported as there was not a direct effect of military status on marital conflict and no differences were found between the groups across the subscales of marital conflict (frequency, child involvement, verbal aggression, and physical aggression). Overall, the sample did not report high levels of marital conflict and reported particularly low levels of verbal and physical aggression; which may contribute to the lack of findings in this study. Military status was also expected to be related to parenting stress (Secondary Hypothesis 3), but this direct effect was not supported

by the results. Finally, the model implied that there would a direct effect of military status on psychological distress (Secondary Hypothesis 4). Like the other aspects of stress, results revealed no significant direct effect and no significant differences were found on levels of reported parenting stress between parents in military and civilian families. Given the strong evidence in the literature that overwhelmingly supports the relationships between stress and harsh parenting behavior (Burrell, Thompson, & Sexton, 1994; Deater-Deckard, 2005; Haskett et al., 2006; Peterson & Hawley, 1998; Rodriguez, 2009; Tucker & Rodríguez, 2014; Whipple &Webster-Stratton, 1991), it is possible that the lack of significant direct effects are related to power and sampling issues in the current study.

Direct effects of parenting beliefs. The influence of parenting beliefs on parenting behaviors has been extensively studied, and parenting beliefs have been identified as a significant predictor of harsh parenting (Ateah & Durrant, 2005; Bower-Russa, 2005; Clément & Chamberland, 2009; Crouch & Behl, 2001; Kawabata, Alink, Tseng, Van Ijzendoorn, & Crick, 2011; O'Brien & Peyton, 2002; Taylor et al., 2011; Vittrup et al., 2006). More specifically, traditional parentings beliefs are associated with using harsher parenting strategies such as corporal punishment, whereas progressive parenting beliefs are linked to less harsh parenting techniques. In the current study, there was an expectation that parenting beliefs would be directly related to harsh parenting (Secondary Hypothesis 5). Contrary to the literature, there was not a significant direct effect of parenting beliefs on harsh parenting in the full model that utilized composite scores for the variables. However, when reviewing the relationships among specific subscales of parenting beliefs (traditional and progressive) and parenting behaviors (non-violent, psychological aggression, and corporal punishment), several significant findings emerged. Bivariate correlations revealed the parenting beliefs (using the composite score, where

higher scores reflect more traditional parenting beliefs) and the traditional belief parenting subscales had a significant, negative relationship with non-violent parenting practices such as redirection. Traditional parenting beliefs (subscale only) also demonstrated a modest, but significant positive relationship with reported use of corporal punishment. This modest relationship is likely a result of the current sample reported low rates corporal punishment overall. Progressive parenting beliefs were positively related to adaptive parenting strategies, while being negatively related to the use of corporal punishment which supports the parenting literature. These findings suggest that it may be useful to explore the individual components of harsh parenting separately to ascertain a better understanding of the relationships between parenting beliefs and harsh parenting.

Direct effects of marital conflict. The impact and direct effect of discord within the marital relationship on parenting behaviors, including harsh parenting, has been consistently found in the literature (Cox et al., 2001; Krishnakumar & Buehler, 2000; Yu & Gamble, 2008). As such, marital conflict was expected to have a direct effect on harsh parenting (Secondary Hypothesis 6), with increased marital conflict being related to higher rates of harsh parenting. As expected, there was a significant direct effect of global marital conflict on harsh parenting. This finding provides support for the spillover theory (Erel & Burman, 1995) as well as the process model of parenting (Belsky, 1984) and is consistent with the parenting literature that asserts that there is a positive relationship between marital conflict and harsh parenting.

Based on the same theories cited above, the proposed model also expected there to be a direct effect of marital conflict on parenting stress (Secondary Hypothesis 7). The results showed that this direct path was not significant. It is likely that the demographics of the sample, the

selection of measures, and lower rates reported verbal and physical aggression in the marriage, are responsible for the non-significant findings in the current study.

Direct effects of parenting stress. Parenting stress was inferred to have a direct effect on harsh parenting (Secondary Hypothesis 8), and higher levels of parenting stress were expected to be related to participant's report of higher rates of harsh parenting. Results revealed support for this hypothesis and increased parenting stress is linked to higher rates of reported harsh parenting. These findings are consistent with the parenting literature that supports the relationship between the direct and mediating effects of parenting stress on harsh parenting and other parenting behaviors (Anthony et al., 2005; Berry & Jones, 1995; Clément & Chamberland, 2009; Schaeffer, Alexander, Bethe, & Kretz, 2005; Simons et al., 1993). Furthermore, these findings highlight the importance for gaining a better understanding of the mechanisms that increase parenting stress and the impact that parenting stress has on aspects of parenting that increase harsh parenting. For example, a study found that increased parenting stress is related to more negative parental attributes (interpretations and evaluation of child's behavior) which is associated with increased harsh parenting (Beckerman, van Berkel, Mesman, & Alink, 2017)

Direct effects of psychological distress. Psychological distress was expected to have a direct effect on harsh parenting (Secondary Hypothesis 9) with increased distress leading to higher reports of harsh parenting. This hypothesis was not supported as the direct effect of psychological distress on harsh parenting was not significant. Although at first glance the results conflict with the findings in the literature, there seems to be some relationship between psychological distress and the two individual factors of harsh parenting on bivariate correlations. Global psychological distress was positively related to all aspects of harsh parenting examined in study to include psychological aggression, corporal punishment, and overall harsh parenting.

Psychological distress was also believed to have a direct path to parenting stress (Secondary Hypothesis 10), and the results supported that belief, which is consistent with research on mental health and parenting behaviors. The relationship between psychological distress (e.g., depression and anxiety) in parents and harsh parenting is also well documented in the literature (Eamon, 2001; Jansen et al., 2012; Lee, 2009; McLearn et al., 2006), and psychological distress plays an influential role in parenting behaviors through multiple pathways such as expectations of children. This is supported by the results found in Secondary Hypotheses 9 and 10 and the significant mediating effects of psychological distress revealed in the exploratory indirect effects in the full hypothesized model.

Exploratory Direct and Indirect Effects

Psychological distress and marital conflict. The modification indices from the first model suggested a direct path from psychological distress and marital conflict, which was significant when added to the model. This finding is consistent with the literature and provides evidence that various types of stress are interrelated and impacts parenting behavior (Eamon, 2001; Jansen et al., 2012; Lee, 2009; McLearn et al., 2006; Smith, Cross, Winkler, Jovanovic, & Bradley, 2014). For example, a study examining links between spouse's psychological distress and marital conflict in the home found that high levels of psychological distress uniquely predicted certain types of marital conflict tactics such as withdrawal (Papp, Goeke-Morey, & Cummings, 2007). The results from a study conducted by Kim and colleagues (2009) identified emotional dysregulation as an important underlying mechanism in shaping marital relationships. Further, they suggest poor emotional regulation skills are associated with the increased likelihood of utilizing inappropriate strategies when interacting with their romantic partners which may also lead conflict in the relationship.

Indirect effects of psychological distress. An exploratory indirect path from psychological distress to harsh parenting through marital conflict (Exploratory Indirect Path 1) was suggested in the full hypothesized model. As the model's modification indices suggested, there was a significant mediating effect of marital conflict on the relationship between psychological distress and harsh parenting. Although there was not a direct effect of psychological distress and harsh parenting, the results revealed a mediated relationship through marital conflict. Higher levels of psychological distress were related to higher levels of marital conflict which in turn was associated with higher reports of harsh parenting. These results give additional support to the strength of the spillover theories and the importance of addressing marital conflict as it has implications for harsh parenting. Furthermore, these findings are consistent with the literature establishing a direct link between psychological distress and marital conflict (Conger et al., 2002; Lander-Potts et al., 2005). Research has found links from marital conflict and harsh parenting as well. A study by Erath and Bierman (2006) found that aggressive martial conflict was directly related to maternal harsh punishment and aggressive-disruptive behavior in children both at home and school. Further, they reported that maternal harsh punishment mediated that relationship between aggressive marital conflict and aggressive-disruptive child behavior. There is also support in the literature regarding the mediating effects of marital conflict on the relationship between psychological and harsh parenting. For example, In a study of African American couples, researchers found that psychological distress had a significant negative effect on behaviors in the marital relationship which significantly influenced their parenting practices (problems within the marital relationship were related to an increase in ineffective parenting practices; Sutton, T. E., Simons, L. G., Simons, R. L., & Cutrona, 2017).

Next, an exploratory indirect pathway hypothesized a mediated relationship from psychological distress and harsh parenting via parenting stress (Exploratory Indirect Path 2). Results revealed a significant mediation, and higher levels of psychological distress were positively related to higher levels of parenting stress which in turn were related to higher rates of harsh parenting. These findings are consistent with the literature. For example, the results in a study conducted by Le and colleagues (2017) showed that parent stress mediated the relationship between harsh parenting through negative affect (described as personal distress) and parenting stress for both mothers and fathers. Furthermore, parenting stress has been linked to increased externalizing behaviors in children (Erath, El-Sheikh, & Mark Cummings, 2009; Mackler et al., 2015; McKee et al., 2007) which is suspected to have a reciprocal relationship with harsh parenting (Bender et al., 2007).

The third exploratory indirect path suggested that the relationship between psychological distress and harsh parenting would be mediated through marital conflict and parenting stress. This exploratory hypothesis was not supported by the results (Exploratory Indirect Path 2). The null findings were likely due to the non-significant direct effects seen in the secondary hypotheses. As discussed above, psychological distress was not related to harsh parenting and marital conflict was not related to parenting stress in this study. Therefore, significant indirect pathways from psychological distress from harsh parenting via marital conflict and parenting stress was unlikely to occur.

Differences in Harsh Parenting among Military Branches

The research question sought to examine if any differences existed in the reported rates of harsh parenting among the different branches of the military. Additionally, the different branches of services were compared for any differences across the study's predictor variables (parenting

beliefs, parenting stress, martial conflict, and psychological distress). Based on the demographics of the sample, the differences among three branches of the military (Air Force, Army, and Navy) were examined. Given the paucity of literature that has examined differences among military branches in harsh parenting practices, no specific hypotheses were proposed. However, differences were expected on reported rates of harsh parenting based on available information regarding unique characteristics and cultures of each military branch (Everson & Herzog, 2010; Everson, Herzog, & Haigler, 2011; Hall, 2011a). Results did not support this expectation as there were no significant differences between the military branches and the outcome measure of harsh parenting used in this study. Further investigation was conducted on the individual components of harsh parenting (psychological aggression and corporal punishment) and adaptive parenting techniques. At first glance, it appeared to be significant differences among the military branches in reported rates of corporal punishment as the omnibus ANOVA was significant. Post-hoc analysis indicated that significant differences existed between the Air Force and Navy, with Air Force parents reporting higher rates of corporal punishment compared to their Navy counterparts. Despite these significant findings, the results should be interpreted with caution because the assumption of homogeneity of variance was violated. Interestingly, these results run contrary to expectations as the Air Force members tend to be older than their counterparts in other branches, more educated (a higher percentage of enlisted members hold bachelor and master's degrees), and likely to have fewer, shorter deployments than other branches (Herzog, Boydston, & Whitworth, 2010). It seems that there may be differences between military branch of service and harsh parenting worth investigating, and future studies should examine this in a larger, more diverse sample of military participants.

A series of ANOVAs were conducted on the predictor variables in the current study and the military branches. All the results were non-significant for all the variables except for parenting stress. The ANOVA was significant and suggested significant differences in the levels of parenting stress between military branches, and post-hoc analyses were also significant. Results revealed that parents in Air Force families reported lower levels of parenting stress compared to parents in Army and Navy families. These results are promising but should be interpreted with caution given that this was an exploratory analysis. These findings may provide preliminary support that differences may exist among military branches. As such, future studies should make planned comparison about potential differences that may exist between the military branches as this could allow significant differences to be detected with reduced error. Gaining a better understanding of the unique challenges and stressors of each military branch, could help develop specific interventions to reduce harsh parenting and child maltreatment.

Military Deployments and Harsh Parenting

Military families have been experiencing increasing rates of child maltreatment in recent years (Jowers, 2015) and are at evaluated risk for harsh parenting and child abuse as a result of the unique experiences and stress associated with military service (Cozza, et al., 2010; Gibbs et al., 2007; McCarthy et al., 2015; Schaeffer et al., 2005; Sogomonyan & Cooper, 2010). Deployment is the biggest stressor facing military families that has been directly linked to child maltreatment and harsher parenting techniques. Studies with military families have found the rates of child maltreatment perpetrated by civilian spouses increased significantly during their spouses' deployment. Specifically, one study found maltreatment treatment rates were three times higher during deployments compared to rates during non-deployments (Gibbs et al., 2007), while another study by McCarthy and colleagues (2015) found a 52% increase in child

maltreatment perpetrated by civilian spouses during deployment compared to pre- and post-deployment. Consistent with the findings in the literature, a modest, a significant correlation was found in the current study between spouse's current deployment status and reported use of harsh parenting which is a known risk factor of child treatment. Upon further investigation, the results of an independent samples t-test assuming unequal sample sizes was not significant indicating that there were no significant differences between the two groups on their reported levels of harsh parenting. It is important to note that were large differences in the sample sizes and if the Levene's test was not violated (equal variances assumed) then the results suggested that significant differences do indeed exist. Specifically, participants who had a spouse that was currently deployed reported higher rates of harsh parenting than their counterparts that did not have a spouse currently deployed. These results along with the existing literature highlight the importance of developing interventions and supports for military spouses during deployment that are specifically aimed at reducing stress, increasing coping skills, and teaching adaptive parenting behaviors. Additionally, future studies should seek to identify the specific factors associated with deployments that are influencing the significant increases seen in child maltreatment perpetrated by the civilian military spouse.

Strengths, Limitations, and Future Directions

A number of limitations must be acknowledged regarding the findings of this study. The first limitation is power. Due to the large discrepancies in group sizes, it appears that the current study did not have enough power to detect differences that may have existed. Correlations with the civilian sample revealed significant correlations between race and harsh parenting and family income and harsh parenting that disappeared when introducing the military sample. Similarly, the sampling which is comprised of volunteers is a limitation so the results of the study may not

be generalizable to a larger population based on the demographic composition of the sample. Notably, parents in the current study were asked to report their parenting behaviors on their youngest child, who was five years old or younger, which resulted in infants being included. Future research should consider replicating this study and testing the hypothesized model in a sample that is more evenly distributed across demographic variables of interest such as SES, race, and military status and with parents that have toddlers and preschool age children.

Overall, the composition of the sample was problematic, as the participants' characteristics placed them at lower risk for harsh parenting, which may account for the non-significant findings among SES, race, and harsh parenting. Specifically, the entire sample was mostly comprised of older, educated, Caucasian women. Parenting literature has consistently shown that these demographic characteristics are associated with lower rates of harsh parenting (Augustine & Crosnoe, 2010; Belsky & Jaffee, 2006; Carr & Pike, 2012; Davis-Kean, 2005; Dubow, Boxer, & Huesmann, 2009; Magnuson, 2007).

Another limitation was the use of cross-sectional data so causality cannot not be inferred. Longitudinal studies examining parenting behaviors and stress over time may provide evidence of causality regarding the effects of parenting and psychological distress on harsh parenting. For military families, future studies should aim to use this methodology to examine parenting stress and marital conflict before and after deployment since this seems to be a critical period for harsh parenting and child maltreatment. Additionally, future research should consider additional ways to measure SES and identify variables that will create an empirically supported latent variable that accurately captures the important elements of this construct.

Finally, all the significant mediation results were found in exploratory hypotheses. As such, these hypotheses were not considered when conducting the power analysis which would

have likely required a larger sample size to detect significant effects. Findings in exploratory analyses should be interpreted with caution as there is an increase for spurious effects. However, the literature does support the mediating effects on stress on parenting behaviors. Future studies should include these mediational pathways in the hypothesized model to ensure these findings are indeed based a significant relationship among the relationships among psychological distress, marital conflict, parenting stress, and harsh parenting.

The limitations described above are balanced by the strengths of the study. This study was the first to examine the relationships among SES, race, and harsh parenting in a military sample. The military has its own culture that impacts service members and their family in a number of ways and makes them different from civilian families. Therefore, it is essential to gain insight into how military culture influences certain relationships seen in civilian populations, like the association between SES, race, and harsh parenting. Having a better understanding of these relationships may help to develop psychoeducational and parenting programs specifically for military families that will help decrease rates of harsh parenting, and ultimately reduce the rates of child abuse in this population.

Military families face unique stressors and challenges such as deployments that impact the entire family. In the current study, a relationship was found between harsh parenting and the current deployment status of participants' spouse. This is consistent with the research that has demonstrated significant increases in child maltreatment rates in military spouses during deployment and highlights the potential link between harsh parenting and child maltreatment. Given that harsh parenting and child maltreatment are associated with negative child outcomes, this underscores that the importance of developing early interventions related to harsh parenting. Future research studies should seek to develop a model to identify the most salient factors related

to the increases in child maltreatment during deployment. Furthermore, the current study is the first study to examine harsh parenting behaviors among the different military branches. The results of this study provide preliminary evidence that there are differences in harsh parenting and parenting stress which can be explored further in future research with a larger, more diverse military sample.

Results of this study provide additional support of the process model of parenting and spillover theories. The contextual factors of stress, particularly psychological distress, were found to have an influential role in the use harsh parenting techniques in direct and indirect ways. This underscores the importance of seeking mental health treatment to address psychological distress and other stressors. In line with Erel and Burman's (1995) spillover theory, increased marital conflict was related to increased reports of harsh parenting in the current study which also can be addressed in therapy. Similarly, the preliminary findings from the research question examining the different branches of the military provide support for cultural spillover theory as differences emerged between branches on the use of corporal punishment and levels of parenting stress. It is possible that the specific culture and stressors associated with each branch are impacting stress levels and parenting behaviors.

CHAPTER V

CONCLUSION

This study was the first to examine the relationships among socioeconomic status (SES), race, and harsh parenting in a mixed military and civilian sample. In addition, the full proposed modeled examined the direct and indirect effects of military status on the relationships among parenting beliefs, marital conflict, parenting stress, psychological distress, and harsh parenting. The hypothesized full model was not supported as there was likely not enough power to detect differences between groups. In terms of harsh parenting, the composition and demographics of the sample placed them at lower risk for utilizing harsh discipline strategies. Despite this, exploratory analyses found significant mediating effects of marital conflict and parenting stress on the relationship between psychological distress and harsh parenting. Higher levels of psychological distress were associated with higher levels of martial conflict and parenting stress which were related to reporting higher rates of harsh parenting. Overall, the findings provide support for the process model of parenting and spillover theories. Due to non-significant results related to the individual components SES and latent variable of SES, I could not examine the hypothesized moderation of military status on the relationship between SES and harsh parenting. Promising results emerged from the research question examining differences in harsh parenting and stress across the military branches. Participants in Air Force families reported higher rates corporal punishment compared to their Navy counterparts. Air Force participants also reported lower levels of parenting stress compared to Army and Navy participants. In the military sample there was a significant, positive correlation between the current deployment status of spouse and harsh parenting. Higher rates of harsh parenting were reported by participants with a spouse that

was currently deployed. Future research may benefit from a replication of this study in a sample that is more diverse across SES, race, and military personnel.

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APPENDIX A

STUDY NOTIFICATION (created for this study)

Project Title: Parenting Practices

Introduction: The purpose of this form is to give you information that may affect your decision whether to say YES or NO to participation in this research. If you decide to say YES, you will be able to continue with the survey after you read this document. By continuing to complete this survey, you are providing your consent. If you do not wish to participate, you may close your browser window now and not continue further with the survey.

Researchers: Responsible Project Investigator(RPI): James F. Paulson, Ph.D., Professor, Old Dominion University, College of Sciences, Psychology Department
Investigator: Tiren A. Parker, M.A., Doctoral Student, Virginia Consortium Program in Clinical Psychology.

Description of Research Study: The purpose of this study is to examine the parenting practices in both military and civilian families. If you choose to complete the survey, you will be asked questions about your personal characteristics, parenting experiences and beliefs, and relationship experiences. This computerized survey should take approximately 25-30 minutes to complete.

Exclusionary Criteria: To be eligible for the present study, you must be at least 18 years or older, a parent with at least one child 5-years-old or younger, and currently reside in a two-parent household.

Risks and Benefits: If you decide to participate in this study, then you may face a risk of feeling distress associated with items on some of the questionnaires. If you experience distress, you may stop the study at any time. A list of resources will be provided once the survey is completed. If you have questions about the study or if you have concerns raised from your participation, you can contact the project investigators. As with any research, there is some possibility that you may be subject to risks that have not yet been identified.

There are no direct benefits for participation in this study. However, you may acquire insight about yourself from answering the questionnaires. This study may also benefit others, as knowledge gained will help broaden understanding of parenting experiences and practices.

New Information: If the researchers find new information during this study that would reasonably change your decision about participating then that information will be provided to you.

Costs and Payments: If you decide to participate in this study, you will be entered in a raffle, with the chance to win $25 gift card. Four winners will be chosen at a later date. At the end of the survey, if you wish to be entered in the raffle, you will be provided with a link to a separate website where you can fill out an entry form.

For SONA participants: If you decide to participate in this study, you will receive (1) Psychology

Department SONA research credit, which may be applied to course requirements or extra credit in certain Psychology courses. Equivalent credits may be obtained in other ways. You do not have to participate in this study, or any Psychology Department study, in order to obtain this credit.

Confidentiality: All information obtained about you in this study is completely anonymous and your name will never be associated with your responses. The results of the survey may be used in reports, presentations, and publications but no identifying information is associated with the results.

The information from this survey is not part of a Department of Defense or an official Department of the Air Force, Army, Navy, or Marine survey. Your individual responses will not be available to the Department of Defense or the Department of the Air Force, Army, Navy, or Marines. However, if you contact the investigators and we assess that you are in immediate danger, we must take reasonable steps to intervene to protect your welfare. This may necessitate breaking confidentiality.

Voluntary Consent and Withdrawal Privilege: Participation in this study is voluntary. **Even after starting, you may end your participation at any time**. If you wish you not to participate while in the middle of the survey, please EXIT the survey. If you have any questions about participating in this study, now, or in the future, please contact the investigators.

By clicking NEXT you agree to participate in the study you acknowledge that you understand what is involved, as described on this information screen.

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APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE (created for this study)

1. What is your age?
   [Dropdown menu]

2. What is your gender?
   - ☐ Male
   - ☐ Female
   - ☐ Transgender
   - ☐ Other (Please Specify): _____

3. What is your sexual orientation?
   - ☐ Heterosexual
   - ☐ Lesbian/Gay
   - ☐ Bisexual
   - ☐ Other (Please Specify): _____

4. What race do you identify with the most?
   - ☐ African American/Black (Non-Hispanic)
   - ☐ Alaskan Native
   - ☐ American Indian/Native American
     Please Specify: _____
   - ☐ Asian
     Please Specify: _____
   - ☐ Caucasian/White (Non-Hispanic)
   - ☐ Latino/a or Hispanic
     Please Specify: _____
   - ☐ Hawaiian Native or other Pacific Islander
     Please Specify: _____
   - ☐ Multiracial

5. What is your ethnicity?
   - ☐ Hispanic/Latino/Latina
   - ☐ Non-Hispanic/Latino/Latina

6. Are you a parent? (screener question)
   - ☐ Yes
   - ☐ No

7. Do you currently have any children age 5 or younger living in the home? (screener question)
   - ☐ Yes
   - ☐ No

8. How many children do you have?
   [Drop down menu]

9. Please provide the following information for your child(ren).

	Child's Gender	Child's Age	Relationship to Child [Dropdown menu]	Does this child currently live with you?
Child 1*	Male Female	[Open Ended]	Biological Parent Step-Parent Adoptive Parent Other (please specify):	Yes No
***Note: Survey software will display total number of rows for total number of children reported in item 6.*				

10. What is your current relationship status? (Pick the one)
    - ☐ Married/Civil Union
    - ☐ Separated, but legally married
    - ☐ Divorced
    - ☐ Living with Partner
    - ☐ Widowed
    - ☐ In a committed relationship
    - ☐ In an open relationship
    - ☐ Single
    - ☐ Other (Please Specify): _____

11. Do you live with your partner?
    - ☐ Yes
    - ☐ No

12. What is your spouse/partner's gender?

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Other (Please Specify): _____

13. Is your spouse/partner currently in the military or has ever been in the military?
    - ☐ Yes
    - ☐ No

14. Are you currently in the military or have ever served in the military?
    - ☐ Yes
    - ☐ No

15. Do you have any diagnosed mental health disorders?
    - ☐ Yes; Please Specify: _____
    - ☐ No

APPENDIX C

MILITARY DEMOGRAPHIC QUESTIONNAIRE- PARTNER (created for this study)

Please answer the following questions about your spouse/partner's military service.

1. What is your spouse/partner's current military status?
   - ☐ Active-duty
   - ☐ Reserve
   - ☐ National Guard
   - ☐ Retired
   - ☐ Veteran

2. What is your spouse/partner's branch of service?
   - ☐ Air Force
   - ☐ Army
   - ☐ Coast Guard
   - ☐ Marines
   - ☐ Navy
   - ☐ Other (Please Specify): _____

3. How long has your spouse/partner been in the military?
   ____ years ____months

4. Please indicate your spouse/partner's status.
   - ☐ Enlisted
   - ☐ Officer

5. What is your spouse/partner's rank? (specified by military branch and status)
   [Drop down menu]

6. Is your spouse currently deployed?
   - ☐ Yes
   - ☐ No

   6a. If yes, how long has your spouse/partner been deployed?
   _____ months

   6b. If no, what year was your spouse/partner's last deployment?
   [Dropdown menu]

   Length of deployment?
   _____ months

7. What is your spouse/partners' the total number of deployments (e.g., 90 days or more)?
   [Drop down menu]

APPENDIX D

SOCIOECONOMIC STATUS QUESTIONNAIRE (created for this study)

1. What is your highest level of education completed?
   - ☐ Less than High School
   - ☐ High School Diploma/GED
   - ☐ Some College (No degree obtained)
   - ☐ Associate's Degree/Trade School
   - ☐ Bachelor's Degree
   - ☐ Master's Degree
   - ☐ Doctoral/Professional Degree

2. Please indicate your current employment status (check all that apply):
   - ☐ Not employed
   - ☐ Staying at home with child(ren)
   - ☐ Full-time student
   - ☐ Part-time student
   - ☐ Employed part-time
   - ☐ Employed full-time

3. What is your spouse/partner's highest level of education completed?
   - ☐ Less than High School
   - ☐ High School Diploma/GED
   - ☐ Some College (No degree obtained)
   - ☐ Associate's Degree/Trade School
   - ☐ Bachelor's Degree
   - ☐ Master's Degree
   - ☐ Doctoral/Professional Degree

4. Please indicate your spouse/partner's employment status (check all that apply):
   - ☐ Not employed
   - ☐ Staying at home with child(ren)
   - ☐ Full-time student
   - ☐ Part-time student
   - ☐ Employed part-time
   - ☐ Employed full-time

5. What is the current total family income?
   □ $5,000 - $ 500,000 (slider scale)

6. How many adults are currently living in the home?
   [Drop down menu]

7. How many children are currently living in the home?
   [Drop down menu]

APPENDIX E

PARENT-CHILD CONFLICT TATICS SCALE (adapted for this study; Straus, Hamby, Finkelhor, & Runyan, 1995)

Children often do things that are wrong, disobey, or make their parents angry. We would like to know what you have done when your **youngest child**, did something wrong or made you upset or angry. Below is the list of things you might have done in the **past 4 weeks**. and I would like you to tell me whether you have:

	Never	Once	Twice	3-5 times	6-10 times	11-20 times	More than 20 times
1. Explained why something was wrong	0	1	2	3	4	5	6
2. Put child in "time out" (or sent them to their room)	0	1	2	3	4	5	6
3. Took away privileges or grounded child	0	1	2	3	4	5	6
4. Gave child something else to do instead what they were doing wrong	0	1	2	3	4	5	6
5. Threatened to spank or hit child but did **not** actually do it	0	1	2	3	4	5	6
6. Shouted, yelled, or screamed at child	0	1	2	3	4	5	6
7. Swore or cursed at child	0	1	2	3	4	5	6
8. Called child dumb/lazy or some other name like that	0	1	2	3	4	5	6
9. Said you would send child away or kick them out of the house	0	1	2	3	4	5	6
10. Spanked child on the bottom with your bare hand	0	1	2	3	4	5	6
11. Hit child on the bottom with something like a belt, hairbrush, a stick or some other hard object	0	1	2	3	4	5	6
12. Slapped child on the hand, arm, or leg	0	1	2	3	4	5	6
13. Pinched child	0	1	2	3	4	5	6
14. Shook child	0	1	2	3	4	5	6
16. Slapped child on the face or head or ears	0	1	2	3	4	5	6

APPENDIX F

PARENTAL MODERNITY INVENTORY (Schaefer & Edgerton, 1985)

Here are some statements other parents have made about rearing and educating children. For each one, please fill in the box that best indicates how you feel in general, not just about your own child.

1 = Strongly disagree 2 = Mildly disagree 3 = Not sure 4 = Mildly agree 5 = Strongly agree

1. Since parents lack special training in education, they should not question the teacher's teaching methods.
2. Children should be treated the same regardless of differences among then.
3. Children should always obey the teacher.
4. Preparing for the future is more important for a child than enjoying today.
5. Children will not do the right thing unless they must.
6. Children should be allowed to disagree with their parents if they feel their own ideas are better.
7. Children should be kept busy with work and study at home and at school.
8. The major goal of education is to put basic information into the minds of the children.
9. In order to be fair, a teacher must treat all children alike.
10. The most important thing to teach children is absolute obedience to whoever is in authority.
11. Children learn best by doing things themselves rather than listening to others.
12. Children must be carefully trained early in life or their natural impulses will make them unmanageable.
13. Children have a right to their own point of view and should be allowed to express it.
14. Children's learning results mainly from being presented basic information again and again.
15. Children like to teach other children.
16. The most important thing to teach children absolute obedience to parents.
17. The school has the main responsibility for a child's education.
18. Children generally do not do what they should unless someone sees to it.
19. Parents should teach their children that they should be doing something useful at all times.
20. It's all right for a child to disagree with his/her parents.
21. Children should always obey their parents.
22. Teachers need not be concerned with what goes on in a child's home.
23. Parents should go along with the game when their child is pretending something.
24. Parents should teach their children to have an unquestioning loyalty to them.
25. Teachers should discipline all the children the same.
26. Children should not question the authority of their parents.
27. What parents teach their child at home is very important to his/her school success.
28. Children will be bad unless they are taught what is right.
29. A child's ideas should be seriously considered in making family decisions.
30. A teacher has no right to seek information about a child's home background.

APPENDIX G

PARENTING STRESS SCALE (Berry & Jones, 1995)

The following statements describe feelings and perceptions about the experience of being a parent. Think of each of the items in terms of how your relationship with your children typically is. Please indicate the degree to which you agree or disagree with the following items.

1 = Strongly disagree 2 = Disagree 3 = Undecided 4 = Agree 5 = Strongly agree

1. I am happy in my role as a parent.
2. There is little or nothing I wouldn't do for my children if it was necessary.
3. Caring for my children sometimes takes more time and energy than I have to give.
4. I sometimes worry whether I am doing enough for my children.
5. I feel close to my children.
6. I enjoy spending time with my children.
7. My children are an important source of affection for me.
8. Having children is an important source of affection for me.
9. The major source of stress in my life are my children.
10. Having children leaves little time and flexibility in my life.
11. Having children has been a financial burden.
12. It is difficult to balance different responsibilities because of my children.
13. The behavior of my children is often embarrassing or stressful to me.
14. If I had it to do over again, I might decide not to have children.
15. I feel overwhelmed by the responsibility of being a parent.
16. Having children has meant having too few choices and too little control over my life.
17. I am satisfied as a parent.
18. I find my children enjoyable.

APPENDIX H

CONFLICTS AND PROBLEM-SOLVING SCALES (adapted for this study; Kerig, 1996)

All couples have conflicts from time to time, and there are many ways that partners can try to handle disagreements when they arise. Please tell us about yours **DURING THE PAST YEAR**.

1. How often do you or your partner have **minor** disagreements (e.g., "spats", "getting on each other's nerves")?
   - ☐ Once a year or less
   - ☐ Every 4-6 months
   - ☐ Every 2-3 months
   - ☐ Once or twice a month
   - ☐ Once or twice a week
   - ☐ Just about every day

2. How often do you or your partner have **major** disagreements (e.g., "spats", "getting on each other's nerves")?
   - ☐ Once a year or less
   - ☐ Every 4-6 months
   - ☐ Every 2-3 months
   - ☐ Once or twice a month
   - ☐ Once or twice a week
   - ☐ Just about every day

The following questions ask about what strategies you and your partner use when you have disagreements with each other in the **PAST YEAR**. Using the scale below, show how often **YOU** use each strategy on the left and how often your **PARTNER** uses each strategy on the right side.

YOU					**PARTNER**			
Never	Rarely	Some-times	Often		Never	Rarely	Some-times	Often
0	1	2	3	3. Argue about the child(ren)	0	1	2	3
0	1	2	3	4. Argue when child(ren) might be able overhear	0	1	2	3
0	1	2	3	5. Argue in front of child(ren)	0	1	2	3
0	1	2	3	6. Talk to child(ren) about conflicts with partner	0	1	2	3
0	1	2	3	7. Involve child(ren) in our argument	0	1	2	3
0	1	2	3	8. Become angry with child when angry with partner	0	1	2	3
0	1	2	3	9. Become sarcastic	0	1	2	3
0	1	2	3	10. Make accusations	0	1	2	3

0	1	2	3	11. Say or do something to hurt the other's feelings	0	1	2	3
0	1	2	3	12. Interrupt/don't listen to the other	0	1	2	3
0	1	2	3	13. Raise voice, yell, shout	0	1	2	3
0	1	2	3	14. Name-calling, cursing, insulting	0	1	2	3
0	1	2	3	15. Withdraw love/affection	0	1	2	3
0	1	2	3	16. Threaten to end relationship	0	1	2	3
0	1	2	3	17. Threaten physical harm to other	0	1	2	3
0	1	2	3	18. Throw objects, slam doors, break things	0	1	2	3
0	1	2	3	19. Throw something at partner	0	1	2	3
0	1	2	3	20. Push, pull, shove, grab partner	0	1	2	3
0	1	2	3	21. Slap partner	0	1	2	3
0	1	2	3	22. Strike, kick, bite partner	0	1	2	3
0	1	2	3	23. Beat up partner	0	1	2	3

APPENDIX I

MENTAL HEALTH INVENTORY-18 (Veit & Ware, 1983; Rivto et al., 1997)

These questions are about how you feel, and how things have been going for you during the past 4 weeks. During the **past 4 weeks**, how much of the time...

	All of the time	Most of the time	A good bit of time	Some of the time	A little bit of the time	None of the time
1. Has your daily life been full of things that were interesting to you?	1	2	3	4	5	6
2. Did you feel depressed?	1	2	3	4	5	6
3. Have you felt loved and wanted?	1	2	3	4	5	6
4. Have you been a very nervous person?	1	2	3	4	5	6
5. Have you been in firm control of your behavior, thoughts, emotions, feelings?	1	2	3	4	5	6
6. Have you felt tense or high-strung?	1	2	3	4	5	6
7. Have you felt calm and peaceful?	1	2	3	4	5	6
8. Have you felt emotionally stable?	1	2	3	4	5	6
9. Have you felt downhearted and blue?	1	2	3	4	5	6
10. Were you able to relax without difficulty?	1	2	3	4	5	6
11. Have you felt restless, fidgety, or impatient?	1	2	3	4	5	6
12. Have you been moody, or brooded about things?	1	2	3	4	5	6
13. Have you felt cheerful, light-hearted?	1	2	3	4	5	6
14. Have you been in low or very low spirits?	1	2	3	4	5	6
15. Were you a happy person?	1	2	3	4	5	6
16. Did you feel you had nothing to look forward to?	1	2	3	4	5	6
17. Have you felt so down in the dumps that nothing could cheer you up?	1	2	3	4	5	6
18. Have you been anxious or worried?	1	2	3	4	5	6

APPENDIX J

MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE- FORM C (Crowne & Marlowe, 1960; Reynolds, 1982)

Listed below are a number of statements concerning personal attitudes and traits. Please read each item and decide whether the statement is true or false as it applies to you. For each item, please choose **TRUE** or **FALSE**.

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don't get my way.
3. On a few occasions, I have given up doing something because I though too little of my ability.
4. There have been times when I felt like rebelling against people in authority, even though I know they were right.
5. No matter who I'm talking to, I'm always a good listener.
6. There have been occasions when I took advantage of someone.
7. I am always willing to admit when I made a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable.
10. I have never been irked when people expressed ideas very different from my own.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favors of me.
13. I have never deliberately said something that hurt someone's feelings.

APPENDIX K

RESOURCES (created for this study)

Child Help®

www.childhelp.org

Child Abuse Education and Prevention Resources

https://www.childhelp.org/story-resource-center/child-abuse-education-prevention-resources/

Resources for Parents (includes downloadable resources)
https://www.childhelp.org/hotline/resources-parents/

Center for Parent Information and Resources

http://www.parentcenterhub.org/repository/behavior-athome/

The National Coalition Against Domestic Violence

http://ncadv.org/learn-more/resources

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Education

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Selected Presentations

Parker, T.A. & Debb, S.M. (2017, June). *Information security awareness and HBCU students: A preliminary exploration of attitudes and behaviors*. Oral presentation given at the 2017 Cyber Analysis, Simulation, and Experimentation (CASE) Workshop on Cyberpsychology, Norfolk, VA.

Parker, T. A., Roberts, L. B., Taylor, J., & Paulson, J. F. (2017, May). *The mediating role of marital attitudes on the association between marital messages and relationship experiences.* Poster presented at the 2017 Association for Psychological Science 29th Annual Convention, Boston, MA.

Parker, T.A., Roberts, L.B., Jenkins, J.K., & Paulson, J.F. (2016, May). *Psychometric analysis of the marital messages scale.* Poster presented at 2016 Association for Psychological Science 28th Annual Convention, Chicago, IL.

Roberts, L.B., **Parker, T.A**., Martin, I.M., Parson, A. & Paulson, J.F. (2016, May). *Bisexual individuals' attitudes toward marriage: The role of marital messages received from family and friends***.** Poster presented at the 2016 Association for Psychological Science 28th Annual Convention, Chicago, IL.

Parker, T. A., Ellis**,** K.T. & Paulson, J.F. (2016, April). *Exploring racial and gender differences in the relationship between marital messages and marital attitudes in emerging adulthood*. Oral presentation given at that 2016 Virginia Psychological Association Spring Convention, Newport News, VA.

Block, J., **Parker, T. A.** & Paulson, J. (2014, May). *Postpartum relationship satisfaction of younger and older parents.* Poster presented at the 2014 Association for Psychological Science 26th Annual Convention, San Francisco, CA.