Parenting Practices and Young Adults’ Emotional Distress: The Moderating Roles of Family Structure and Race

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PARENTING PRACTICES AND YOUNG ADULTS’ EMOTIONAL DISTRESS: THE MODERATING ROLES OF FAMILY STRUCTURE AND RACE

by

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A Thesis
Submitted to the Graduate School and the Department of Psychology at The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Master of Arts

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ABSTRACT

PARENTING PRACTICES AND YOUNG ADULTS’ EMOTIONAL DISTRESS: THE MODERATING ROLES OF FAMILY STRUCTURE AND RACE

by Nathan Alexander Winner

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Authoritarian parenting practices are more common among African American families, and appear to include fewer disadvantages in regards to child outcomes compared to White/non-Hispanic families who use these same practices. Little is known about why these racial differences occur, although family structure may play a role. The present study sought to understand the role of family structure and race in moderating the effects of parenting practices on college student mental health outcomes. College students reported on the parenting practices of their caregivers, as well as their race, family structure, characteristics of their familial environment, and socioeconomic status. Levels of depression, anxiety, and stress as measured by the DASS-21 served as outcome variables. As predicted, race did not moderate the relationship between parental warmth and emotional distress among young adults. However, contrary to hypotheses, race and family structure also did not moderate the relationship between parental intrusive control and emotional distress. Implications and directions for future research are briefly discussed.
ACKNOWLEDGMENTS

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CHAPTER I
INTRODUCTION

Diane Baumrind’s (1966) conceptualization of parenting styles has been widely studied in the field of parenting research, with authoritative parenting being perceived as more advantageous than either authoritarian or permissive parenting (Baumrind, 1971). While authoritative parenting has traditionally been associated with positive outcomes, African Americans have been found to be more likely to use an authoritarian style. Interestingly, this style has been associated with certain benefits among African Americans, such as more effective parent-child communication (Reitman, Rhode, Hupp, & Altobello, 2002), a decreased risk of suicide for at-risk youth (Greening, Stoppelbein, & Luebbe, 2010), and enhanced academic achievement among adolescents (Gonzales, Cauce, Friedman, & Mason, 1996). This has led many researchers to argue that Baumrind’s parenting typology is not fully applicable to African American families (Smith-Bynum, 2013), and that research should focus on particular parenting practices themselves, such as levels of warmth and control (Tamis-LeMonda, Briggs, McClowry, & Snow, 2008). Family structure has also been found to be an important variable with respect to child, adolescent, and young adult outcomes, with two-parent families being generally more predictive of well-being compared to single parent families (Manning & Lamb, 2003; Moore, Jekielek, & Emig, 2002). Family structure varies widely by race, with African Americans being nearly three times more likely than White/non-Hispanics to live in single-parent households (U.S. Census Bureau, 2010). This has led some to argue that some of the benefits thought to be associated with being White may in fact be due to a combination of both race and family structure, rather than race alone.
However, no study has examined this interaction in the context of parenting practices and subsequent outcomes in a young adult population. A young adult population is crucial to consider given the unique challenges these individuals may face, including growing maturity and shifting social roles during a major life transition, which may put these individuals at risk for a range of adverse mental health outcomes (Schulenberg, Sameroff, & Cicchetti, 2004). Additionally, several studies have already noted the effects that family structure and parenting may have on a young adult population (Barrett & Turner, 2005; Hayatbakhsh et al., 2013; McMurtry, 2014; Smith, 2006; Wintre & Yaffe, 2000). Therefore, the present study sought to examine race and family structure as moderators of the relationship between parenting practices and young adults’ emotional distress. Rather than focus on single aspects of individuals’ identities, a greater emphasis on intersectionality provides a deeper understanding of the parenting situations that different individuals may face. By examining parenting practices in the context of an interaction between race and family structure, it was hoped that the literature on racial differences in parenting would be clarified in regards to the unique role of race in predicting various outcomes, and that the ways various family structures function across races would be better understood.

Parenting Practices

Diane Baumrind first garnered empirical support for her multidimensional parenting model in 1967 after observing specific patterns of behavior in both preschoolers and their parents. She broadly characterized these patterns of behavior based on the levels of warmth (e.g., affection, nurturance) and control (e.g., patterns of discipline and authority) exhibited by the parents. Baumrind identified one category of
parents who displayed firm control, as well as a high degree of warmth and affection. These parents communicated demands and expectations clearly to their children, while also offering verbal approval and sensitivity to their child’s feelings (Baumrind, 1967). Baumrind described this type of parenting as authoritative (Baumrind, 1966), and later characterized it more generally as a combination of both high parental warmth and high parental control (Baumrind, 1971).

Recent research has found that authoritative parenting consists of a high degree of parental monitoring (Lamborn, Mounts, Steinberg, & Dornbusch, 1991), as well as encouraging child autonomy without sacrificing parental demands (Strage & Brandt, 1999). Baumrind (1967) found that children who were parented authoritatively were the most self-reliant, had a higher degree of self-regulation, and were more explorative. Studies have also found that authoritative parenting leads to healthy socialization in predominantly White preschoolers (Hastings, McShane, Parker, & Ladha, 2007), and is negatively correlated with delinquency among African American school-aged children (Simons, Simons, Burt, Brody, & Cutrona, 2005). The effects of authoritative parenting can also be seen in young adulthood, with a sample of predominately White/non-Hispanic, authoritatively-raised college students showing higher levels of optimism (Baldwin, McIntyre, & Hardaway, 2007) and greater psychological health in a racially diverse sample of college students from predominately two-parent families (Wintre & Yaffe, 2000). However, neither of these studies accounted for students’ race in their statistical analyses, and it is therefore difficult to know the extent to which race may impact these relationships.
The second category of parenting styles classified by Baumrind (1967) was termed authoritarian, and is characterized by firm control and lower levels of nurturance. These parents were less likely to use positive reinforcement, as well as less likely to be emotionally supportive of their children, and give in to their child’s demands (Baumrind, 1967). Baumrind also noted a significantly different level of communication in authoritarian parents. As opposed to authoritative parents who were open to child’s reasoning and discussion, authoritarian parents used more commands which were highlighted by a lack of affection or sympathy for their child’s feelings and perspective (Baumrind, 1967). It is also worth noting that, while authoritarian and authoritative styles differed on the basis of warmth and communication, the level of control exhibited by the parents was purportedly not significantly different (Baumrind, 1967).

Suboptimal outcomes tend to be associated with authoritarian parenting. Children reared under these parenting practices tend to be more insecure, less socialized with peers, more prone to aggression (Baumrind, 1967), and more likely to be oppositional and insubordinate (Simons et al., 2005). In addition, White/non-Hispanic children of authoritarian parents have generally been found to be more mistrusting, withdrawn, and unhappy (Baumrind, 1971). Children raised by authoritarian parents are also at-risk of suffering from low self-esteem (Lee, Daniels, & Kissinger, 2006) and depression, as well as a lower level of academic achievement (Dallaire, Pineda, & Cole, 2006; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987), although only the latter study included a sample that was predominantly African American. Outcomes associated with authoritarian parenting extend to young adulthood as well, with students raised by authoritarian parents more likely to report poor emotional adjustment while transitioning
to college (Smith, 2006). It should be noted that the participants of this study were homogenous in regards to family structure, and any racial variability was left unreported. This variability is pertinent given that research has suggested some outcomes of parenting may vary by both race (Reis, 1993; Reitman et al., 2002) and family structure (Karre & Mounts, 2012).

The third and final parenting style identified by Baumrind (1966) was permissive parenting, which she primarily characterized by low levels of parental control and moderate levels of parental warmth (Baumrind, 1966; 1971). Permissive parents have lower levels of overall involvement with their children, and are more likely to withhold love as a form of control (Baumrind, 1967). These parents are also less likely to both impose and enforce demands for their children (Baumrind, 1971), and more likely to direct their children in ways that discourage child independence (Baumrind, 1967).

Of the three primary parenting styles, child outcomes for permissive parents tend to be the worst, with children lacking in both self-regulation and maturity (Baumrind, 1967), as well as having lower levels of academic success (Dornbusch et al., 1987). These children also have lower thresholds for frustration and are less likely to persevere when encountered with challenging situations (Baumrind, 1971; Baumrind & Black, 1967; Maccoby & Martin, 1983), although these studies consisted of predominantly White families. Permissive parenting outcomes also extend to early adulthood, with young adults raised by permissive parents potentially facing more problematic drinking behaviors (Patock-Peckham & Morgan-Lopez, 2006) and a greater number of emotional difficulties while in college (Smith, 2006), although neither of these studies reported the racial breakdown of the sample, and only the latter reported differences in family
structure. While many studies do not address or report these key differences among participants, it is still nevertheless important to examine how these demographic dissimilarities can affect socialization in children and eventual outcomes in young adults.

While Baumrind’s typology has been widely studied in the field of parenting research, many have questioned the applicability of this typology to diverse populations (Tamis-LeMonda et al., 2008). Relatedly, others have noted that Baumrind’s parenting styles refer more to a broad “emotional climate” which provides a context for specific parenting practices, rather than the styles being actual types of practices themselves (Darling & Steinberg, 1993, p. 488). Focusing solely on parenting styles, therefore, may overlook the actual processes through which children are socialized by their parents, and potentially result in a lack of accurate prediction, particularly across ethnic groups (Darling & Steinberg, 1993). Given these concerns, which have been similarly addressed in past research (Williams, 2000), the present study focused on specific parenting practices associated with levels of parental warmth and control (which broadly characterize Baumrind’s parenting styles), rather than focus on Baumrind’s typology itself. In this way, Baumrind’s typology may be seen as a backdrop on which to understand specific parenting practices, and the impact that they may have on young adult children.

**Parenting Practices and Race**

Racial differences in parenting styles have long been noted, with Baumrind (1972) indicating that African American parents were more likely than White/non-Hispanic parents to adopt authoritarian practices. Recent studies have corroborated this finding (Reis, 1993; Reitman et al., 2002). More specifically, African American mothers
report a lower degree of warmth and a greater degree of intrusive control with their children (Weis & Toolis, 2010) and less affection and reinforcement of prosocial behavior with their adolescents (Skinner, MacKenzie, Haggerty, Hill, & Roberson, 2011). Jackson-Newsom, Buchanan, and McDonald (2008) found that authoritative control (e.g., collaborative decision making) was positively related to parental warmth, while authoritarian control (e.g., harsh discipline) was negatively related to parental warmth among White/non-Hispanic youth, but that these same relationships between types of control and warmth were not seen among African Americans. This is consistent with research which has suggested the utility of “authoritarian” control among certain African American families (Brody & Flor, 1998). Additional findings have also revealed African American parents have a greater inclination to use spanking as a form of punishment (Christie-Mizell, Pryor, & Grossman, 2008), and harbor a more hostile control style (Hill & Tyson, 2008; Weis & Toolis, 2010), both of which are thought to be associated with authoritarian control (Baumrind, 1971).

Various other studies have noted additional differences in parenting between races. African American adolescent mothers’ authoritarian parenting excludes verbal hostility (Reis, 1993), and African American parents displayed less negative affect when disciplining their children (Jackson-Newsom, Buchanan, & McDonald, 2008). Reitman et al. (2002) also found authoritarian parenting to be linked to more efficacious communication in lower-income, single African American parents compared to higher-income, married White/non-Hispanic parents, suggesting potential benefits of authoritarian practices for African Americans, particularly for low income, single-parent families. In fact, multiple studies have examined the potential benefits of authoritarian
parenting for African Americans. Working from the framework of Baumrind’s typology, Greening et al. (2010) found an authoritarian style to serve as a protective factor for African American children at risk for suicide, suggesting benefits of stricter control patterns among African American families. Taylor, Phillip, Hinton, and Wilson (1992) found a high degree of both nurturance and punishment to be especially advantageous for academic achievement in low-income African American children and adolescents. Gonzales et al. (1996) yielded similar findings when examining the effect of strict control on the grades of African American adolescents in at-risk neighborhoods. A study by Deater-Deckard, Dodge, Bates, and Pettit (1996) found that, while physical discipline put White/non-Hispanic youth at risk for behavior problems in school settings, the same did not hold true for their African American counterparts. Pittman and Chase-Lansdale (2001) found that, while levels of parental warmth and control associated with authoritative parenting tended to be beneficial for African American adolescent girls, it was not always as beneficial as has traditionally been found for White/non-Hispanic adolescents.

Studies which have examined racial differences in parenting among young adults have displayed similar discrepancies between authoritative and authoritarian practices (McMurtry, 2014), although this is still a population which has remained largely unexplored. The present study therefore aimed to examine these parenting differences in young adults, in order to further clarify the various ways that parenting impacts different individuals during a crucial transitional period. Young adults in particular face unique developmental challenges, such as changing social settings and increased responsibility and independence, which may put these individuals at risk for a variety of negative
mental health outcomes (Schulenberg et al., 2004). It is therefore important to better understand the extent to which parenting may affect these individuals’ well-being at this stage of life.

The aforementioned racial differences in parenting have led many to believe that Baumrind’s parenting typology may not be entirely applicable to African American families (McLoyd, Cauce, Takeuchi, & Wilson, 2000; Tamis-LeMonda et al., 2008). Similarly, Smith-Bynum (2013) questions whether African American parenting is truly “authoritarian,” or simply a different type of authoritative style. Others have postulated “no-nonsense parenting” as a distinctly African American style of parenting in rural, single parent families, which also combines a high degree of parental warmth with a high degree of parental control (Brody & Flor, 1998). This research suggests that studies which measure parenting through broad “parenting styles” (e.g., Reitman et al., 2002; Greening et al., 2010) may be unsuitable in explaining parenting as it exists outside of a White/non-Hispanic population. Others have further noted that Baumrind’s typology may be failing to account for experiences that are unique to African American parents, such as the challenges associated with socializing their children into a predominantly White country (Tamis-LeMonda et al., 2008). This has caused many researchers to focus research on specific practices associated with Baumrind’s parenting styles, particularly levels of warmth and control, rather than simply the styles themselves (Tamis-LeMonda et al., 2008). Therefore, in order to build greater cultural sensitivity in parenting research, the current study examined the constructs of warmth and control instead of parenting styles in an attempt to better understand the ways in which parenting and race intersect, rather than examine parenting from a White/non-Hispanic-centered, etic perspective.
Other limitations also exist in this body of research. For example, Reis’ (1993) study of African American and White/non-Hispanic mothers did not find African American mothers to be more focused on punishment as might be predicted by past research; this could potentially be explained by the fact that all mothers in the study were single mothers, and many studies have not traditionally controlled for family structure differences among races. Relatedly, findings by both Reitman et al. (2002) and Jackson-Newsom et al. (2008) did not account for the greater prevalence of single-parent homes among the African American sample as compared to the White sample, which is pertinent given differences associated with family structure (Moore et al., 2002). Given that African American families are nearly three times more likely than White/non-Hispanic families to be single-parent households (U.S. Census Bureau, 2010), it is important for research to also account for the potential influence of differing family structures when addressing racial differences in parenting practices.

Family Structure and Related Outcomes

In addition to both parenting practices and race, the structure of the household in which children grow up also has important implications for the well-being of children, adolescents, and young adults. Research on family structure has often understood this construct in terms of formal marital status; however, given growing trends of both single parenthood and cohabitation, this operationalization is likely inadequate (Manning & Lamb, 2003). The present study defined family structure as the domestic relationship between the child and their parents and/or caregivers, as well as the domestic relationship between the parents and/or caregivers themselves. Assessing family structure can be a
difficult task given the large amount of variability between and within family structures, and any analysis of family structure must account for this diversity.

Some have suggested that intact, two-biological parent households in a low-conflict marriage generally have the greatest benefits for children and adolescents (Manning & Lamb, 2003; Moore et al., 2002). Williams, Sassler, Frech, Addo, and Cooksey (2013) even suggested that children who are born to single mothers end up healthier as adolescents when their mothers marry and stay married to their biological fathers, although the effect sizes from this study tended to be modest. While the nature of these temporal relationships remains unclear, a review by Wagner, Silverman, and Martin (2003) concluded that children living without both biological parents are at an increased risk of suicidal behavior as adolescents. Thomas and Sawhill (2005) have also shown married families, regardless of race, to be more financially secure than both single parent and cohabiting parent households, which is especially pertinent given the risk poverty poses for a variety of child psychological outcomes (Wadsworth & Achenbach, 2005). In addition, the benefits of two-parent households carry over into young adulthood, with these individuals less likely to experience problems related to emotional health (Barrett & Turner, 2005; Hayatbakhsh et al., 2013).

While children typically still thrive in other variations of family structures, these structures may still pose differing degrees of risk for children. For example, divorce is linked to several deleterious effects among children, including behavior problems in school and increased incidence of depression (Amato, 2000; Peterson & Zill, 1986). These effects may continue into young adulthood; young adults of divorced parents are at greater risk for developing mental health problems (Cherlin, Chase-Lansdale & McRae,
1998). Step-parenting may also be associated with problematic outcomes. A review by Coleman, Ganong, and Fine (2000) noted that, compared to living with their biological parents, adolescents living with stepparents may be at a greater risk for behavioral problems, including the use of drugs and alcohol, risky sexual behaviors, and delinquency. Ram and Hou (2003) found both step-parenting and single parenting to pose risks for a range of behavioral and emotional problems, as well as lower scores on math and reading comprehension for children. However, it is unclear the effect of step-parenting on young adults.

Single parenting may offer a unique set of challenges for both children and parents. Astone and McLanahan (1991) found that single parents may have less time to provide supervision and assist their children with schoolwork. In addition, a meta-analysis by Amato and Gilbreth (1999) concerning non-resident fathers found that children who felt closer to their fathers had higher levels of academic achievement and fewer emotional and behavioral problems, which suggests the important role that multiple parental figures may play above and beyond simple financial assistance. A review by Weinraub, Horvath, and Gringlas (2000) also concluded that, when observed separately, challenges related to parenting may have a greater impact than socioeconomic status when examining the risks associated with single parenting. Similarly, Turunen (2013) found adolescents to be especially at risk for emotional problems in single parent families, which was better explained by parental socialization rather than economic hardship. These challenges may persist into young adulthood, regardless of race, with those from single parent families generally facing greater obstacles related to education and employment (Hill, Holzer, & Chen, 2008), and elevated risks related to psychological
health, including depression, anxiety, and both internalizing and externalizing problems (Barrett & Turner, 2005; Hayatbakhsh et al., 2013). It should also be mentioned that, while the exact reason children from single parent families face more difficulties is unclear, it may likely be due to a decrease in social capital, rather than any sort of deficiency in the parenting itself (Coleman, 1988).

Additional factors regarding family structure also play a role when predicting child outcomes. The stability of the family structure is one important variable. In this context, stability may refer to the degree to which a certain type of family structure remains consistent or inconsistent over a period of time, particularly in regards to the relationships involving the parents and/or caregivers (Manning & Lamb, 2003). Instability of the child’s household has been consistently identified as a risk factor for externalizing behavior in children and adolescents for both White/non-Hispanics and African Americans (Hao & Xie, 2002; Hill, Yeung, & Duncan, 2001; Manning & Lamb, 2003). Sun and Li (2011) also found children of stable two-parent families to perform better academically than disrupted two-parent families, although stability did not appear to be similarly beneficial among the single-parent families. Stability has not been well-examined in terms of its relevance to outcomes extending to young adulthood, although some research indicates that it is similarly beneficial, at least among White/non-Hispanics (Bandy & Ottoni-Wilhelm, 2012). Given the large intra-variability that certain family structures have in terms of their duration and stability, any measure of family structure should take these differences into account (Heard, 2007; Manning & Lamb, 2003). Socioeconomic considerations are another important factor, particularly when examining parenting between races, given how much more likely low-income families are to adopt
practices related to intrusive control compared to middle- and high-income families, especially among African American families (Smith-Bynum, 2013; Tamis-LeMonda et al., 2008).

Broadly speaking, stable two-parent households appear most beneficial for children, adolescents (Moore et al., 2002; Wagner et al., 2003), and young adults (Cherlin et al., 1998), although many have highlighted the variability involved in these findings (Amato, 2000), as well as the somewhat modest effect sizes found (Astone & McLanahan, 1991; Williams et al., 2013). Additionally, others have argued that a broad conception of family structure as a variable cannot be accurately attained without accounting for the unique differences between races (Cain & Combs-Orme, 2005).

**Family Structure and Parenting Styles**

There is a relatively limited body of research which examines the relationship between family structure and parenting styles. Smetana, Abernethy, and Harris (2000) noted that African American mothers in two-parent families display more affection to their adolescents than mothers in single parent families. Various other studies have examined these differences among racially diverse populations. Karre and Mounts (2012) suggest that, when examining families with non-resident fathers, young adult men report less antisocial behavior when their mothers use less authoritative parenting, although the same was not true for the non-resident fathers. This would seem to suggest that authoritative parenting practices may not be as beneficial for single mothers. However, research by Campana, Henderson, Stolberg, and Schum (2008) suggests that post-divorce children may benefit when both the mother and father adopt an authoritative approach, although it appeared children still had positive outcomes when only one parent was
authoritative. Bronte-Tinkew, Scott, and Lilja (2010) also note single fathers tend to be more permissive and uninvolved compared to single mothers, which suggests the importance of examining gender differences between parents. Coleman et al. (2000) have also noted that detrimental outcomes associated with intrusive control patterns are consistent between first-marriage families and stepfamilies in regards to the well-being of adolescents, which lends further credence to authoritarian parenting practices being generally unfavorable for two-parent families.

While a great deal of research exists regarding the effects of parenting practices and family structures separately, relatively few studies have examined them in conjunction. Differences are likely to be present given the different challenges parents face in various household environments. While literature is sparse in this respect, the variability in family structures across races has been well-documented.

*Family Structure and Race*

The prevalence of certain family structures varies widely by race. Single parenthood is far more common in the African American community, with 53% of African American households having only one parent, compared to 19% for Whites/non-Hispanics (U.S. Census Bureau, 2010). While the prevalence of single parenthood has increased over the last several decades for all races (Andersen, 2013), this increase has been especially dramatic for African American families (Murry, Bynum, Brody, Willert, & Stephens, 2001). This has led to speculation that some of the perceived advantages White/non-Hispanic children seem to have over African American children may, in fact, be attributed to a combination of race and differences in family structure, rather than simply race alone (Hill et al., 2008; McLanahan & Sandefur, 1994).
Family structures differ across races in various other ways. Many researchers have noted the long history that extended kinship networks have played in African American families (Jones & Lindahl, 2011; Jones, Zalot, Foster, Sterrett, & Chester, 2007; McAdoo, 1997), with grandmothers, aunts, and family friends often taking active roles in raising children (Parent, Jones, Forehand, Cuellar, & Shoulberg, 2013; Smith-Bynum, 2013). Manning (2001) has also noted that African American mothers are more likely than White/non-Hispanic mothers to conceive and raise children in non-marital cohabiting unions. Because of these differences, many argue that the traditional conception of the nuclear family is not sensitive to the unique culture of African Americans in this country, and it is therefore inappropriate to compare African American families with the “norm” set by White/non-Hispanic families (Cain & Combs-Orme, 2005). While family structure differences exist across races, it nevertheless appears clear that parenting is best done with more than one person, even if it does not involve a traditional nuclear family (Cain & Combs-Orme, 2005). This is important for research to account for, given the high level of instrumental support that grandmothers, aunts, and family friends often provide in African American families (Parent et al., 2013). Unfortunately, the majority of studies on parenting tend to examine either race or family structure, rather than the interaction of the two. Additionally, little research exists regarding more traditional two-parent families among African Americans, although this family structure still exists in this population (Tamis-LeMonda et al., 2008).

Statement of Purpose

Previous research has revealed the benefits of authoritative parenting (Baumrind, 1967; Wintre & Yaffe, 2000), and has identified that race may moderate the relationship
between parenting style and outcomes such that optimal outcomes have been associated with authoritarian parenting in African American families (Reis, 1993; Reitman et al., 2002). However, researchers have cautioned the applicability of Baumrind’s parenting typology to diverse populations, and instead have encouraged research which examines specific parenting practices themselves (Darling & Steinberg, 1993; Smith-Bynum, 2013). Additionally, family structure has also been identified as an important variable, with suboptimal outcomes generally associated with single-parent homes (Turunen, 2013; Wagner et al., 2003), although the nature of “single-parent homes” may vary across races, given the large extent to which African American families have traditionally relied on extended family networks (Parent et al., 2013; Smith-Bynum, 2013). The research on race and parenting practices has failed to account for the possible effects of family structure, and the research on family structure has not explored race as a potential moderator. With the structure of households for young adults varying so widely between African Americans and White/non-Hispanics, it is important to understand the ways in which race and family structure together may impact outcomes for this population. Therefore, the purpose of the present study was to examine the ways in which family structure and race moderate the relationship between parenting practices and measures of depression, anxiety, and stress in college students. In order to attempt to account for the variability within certain family structures, variables signifying the stability and duration of the household were originally included in the model. Socioeconomic status was also accounted for, which is appropriate given the current sample is expected to be relatively homogenous in this respect (i.e., college students in the South; Smith-Bynum, 2013). Outcomes measuring mental health (Amato, 2000; Campana et al., 2008; Lee et al., 2006;
Turunen, 2013), and depression and anxiety in particular (Barrett & Turner, 2005; Cherlin et al., 1998; Hayatbakhsh et al., 2013), have been recurrent themes in past literature, and were thus utilized in the present study. Building on past research which has examined outcomes among children (Greening et al., 2010; Ram & Hou, 2003; Simons et al., 2005; Wagner et al., 2003) and adolescents (Astone & McLanahan, 1991; Coleman et al., 2000; Peterson & Zill, 1986; Williams et al., 2013), the present study adds to the literature which examines outcomes in young adulthood (Baldwin et al., 2007; Smith, 2006; Wintre & Yaffe, 2000), a population which faces a unique set of challenges related to growing independence and maturity (Schulenberg et al., 2004). It was expected that certain parenting practices, namely high levels of warmth and high levels of intrusive control (synonymous with authoritarian control), would be associated with lower levels of emotional distress for African American students from single parent families. Given the unique challenges that single parenting offers (Astone & McLanahan, 1991), authoritarian parenting practices may be seen as more adaptive for single parent families, particularly for those African American families which have traditionally endorsed authoritarian parenting (Baumrind, 1972; Reis, 1993), and have not relied on additional support from non-parent family members. It was also predicted that authoritative parenting practices, namely high levels of warmth and low levels of intrusive control, would be associated with lower levels of emotional distress for White/non-Hispanic students from two-parent families, which has traditionally been the population examined when concluding the effectiveness of an authoritative style over an authoritarian one (Baumrind, 1971).
Research Questions and Hypotheses

Question 1: Will race moderate the relationship between parental warmth and emotional distress among college students?

   Hypothesis 1: Race will not moderate the relationship between parental warmth and emotional distress among college students.

Question 2: Will race moderate the relationship between parental intrusive control and emotional distress among college students?

   Hypothesis 2: Race will moderate the relationship between parental intrusive control and emotional distress among college students such that greater levels of intrusive control will be associated with lower levels of emotional distress among African Americans.

Question 3: Does the interaction between race and parental intrusive control in predicting emotional distress among college students vary across levels of family structure?

   Hypothesis 3: The interaction between race and parental intrusive control in predicting emotional distress among college students will vary across levels of family structure, such that the greater levels of intrusive control associated with lower levels of emotional distress among African Americans will be more profound among single-parent families.
CHAPTER II

METHODOLOGY

Participants

A total of 717 participants initially responded to the online survey. Of this total, 28 did not complete the survey, and were thus removed from further analyses. Of the remaining 689 participants, 123 failed validity checks and were removed from the study without receiving credit, including 33 who incorrectly answered a false item (e.g., Please answer, “Very Like” for this item), and 90 who completed either the PBI or the DASS-21 in less than thirty seconds. Of the remaining 566 participants, 56 were either outside the age range of 18-26, or did not enter their age. An additional 31 did not identify as either White/non-Hispanic or Black/African-American. Therefore, a total of 479 valid respondents were retained for the present study.

Participants were 479 male (17.5%) and female (82.5%) young adult college students, with an average age of 20.27 years (SD = 1.726). The sample included 301 White/non-Hispanic students (62.8%) and 178 Black/African-American students (37.2%). A total of 361 participants reported that their primary caregiver was in a committed relationship during the majority of their childhood (252 White/non-Hispanics and 109 Black/African-Americans), and 118 participants reported that their primary caregiver was single during the majority of their childhood (49 White/non-Hispanics and 69 Black/African-Americans). Additionally, 45 participants reported being in a “single parent only” household, 53 participants reported being in a “single parent [household] with significant support from other family members,” and 4 participants reported being in a “single parent [household] with significant support from non-family members.” Given
the relatively modest number of participants in these latter categories, only two levels of moderation (i.e., two-parent and single-parent) were examined for subsequent analyses.

All demographic characteristics are presented in Table 1.

Table 1

*Demographic Characteristics of the Sample*

<table>
<thead>
<tr>
<th>Characteristic (Range)</th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Participant age (18-26)</td>
<td>20.27</td>
<td>1.726</td>
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<table>
<thead>
<tr>
<th>Characteristic</th>
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<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>84</td>
<td>17.5</td>
</tr>
<tr>
<td>Female</td>
<td>395</td>
<td>82.5</td>
</tr>
<tr>
<td>Participant Race</td>
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<tr>
<td>White/non-Hispanic</td>
<td>301</td>
<td>62.8</td>
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<tr>
<td>Black/African-American</td>
<td>178</td>
<td>37.2</td>
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<tr>
<td>Year in School</td>
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<td>Freshman</td>
<td>164</td>
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<tr>
<td>Sophomore</td>
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<tr>
<td>Junior</td>
<td>107</td>
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<tr>
<td>Senior</td>
<td>102</td>
<td>21.3</td>
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<tr>
<td>Other</td>
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### Table 1 (continued).

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<thead>
<tr>
<th>Characteristic</th>
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</thead>
<tbody>
<tr>
<td><strong>Socioeconomic Status (higher numbers indicate higher SES)</strong></td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>3.3</td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
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<td>6</td>
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<td>7</td>
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<td>8</td>
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<td>1.5</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>0.8</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%</th>
<th>White/non-Hispanic</th>
<th>African American</th>
</tr>
</thead>
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<tr>
<td><strong>Participants’ Primary Caregiver</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mother</td>
<td>387</td>
<td>80.8</td>
<td>235</td>
<td>152</td>
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<tr>
<td>Father</td>
<td>63</td>
<td>13.2</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>Grandmother</td>
<td>13</td>
<td>2.7</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Grandfather</td>
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<td>0.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aunt</td>
<td>3</td>
<td>0.6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Uncle</td>
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<td>0.2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>2.5</td>
<td>9</td>
<td>3</td>
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</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%</th>
<th>White/non-Hispanic</th>
<th>African American</th>
</tr>
</thead>
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<tr>
<td>Relationship of Participants’ Primary Caregiver</td>
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<td></td>
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<tr>
<td>Single</td>
<td>118</td>
<td>24.6</td>
<td>49</td>
<td>69</td>
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<tr>
<td>Committed Relationship</td>
<td>361</td>
<td>75.4</td>
<td>252</td>
<td>109</td>
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<tr>
<td>Participants’ Family Structure</td>
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<td></td>
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<tr>
<td>Married, biological parents</td>
<td>291</td>
<td>60.8</td>
<td>216</td>
<td>75</td>
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<tr>
<td>Biological parent and step parent</td>
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<td>35</td>
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<tr>
<td>Foster parents</td>
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<td>0.2</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Adoptive parents</td>
<td>3</td>
<td>0.6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other unmarried two-parent household</td>
<td>2</td>
<td>0.4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Single parent only</td>
<td>45</td>
<td>9.4</td>
<td>19</td>
<td>26</td>
</tr>
<tr>
<td>Single parent with <em>significant</em> support from other family members</td>
<td>53</td>
<td>11.1</td>
<td>19</td>
<td>34</td>
</tr>
<tr>
<td>Single parent with <em>significant</em> support from non-family members</td>
<td>4</td>
<td>0.8</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Other caregiver</td>
<td>8</td>
<td>1.7</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Measures

*Demographic Questionnaire*

A demographic questionnaire was used to collect participant information such as SES (Adler et al., 1994), gender, race, who participants identify as their “primary caregiver”, and family structure (e.g., “Which description best describes your primary
family structure during your first 16 years growing up at home?”). Following the methodology of Adler et al. (1994), SES was assessed by asking participants to rank themselves based on “where [they] think [they] stand… relative to other people in the United States” (see Appendix A). The stability and duration of participants’ family structure were also assessed. Similar to research by Manning and Lamb (2003), stability was assessed by the question, “During your first 16 years growing up at home, how many times did this family structure change?” and duration was assessed by the question, “During your first 16 years growing up at home, how many years did this family structure remain intact (i.e., did not change)?” The questions, “Who were the other family members significantly involved in your upbringing during your first 16 years growing up at home [if any]?” and, “Who were the non-family members significantly involved in your upbringing during your first 16 years growing up at home [if any]?” were used to assess support from non-parent family members.

**Parental Bonding Instrument (PBI)**

The Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979) is a 25-item measure used to assess participants’ retrospective reports of parenting practices. Each item is rated on a 4-point Likert scale, with a score of 0 indicating “very like” and a score of 3 indicating “very unlike.” The PBI was developed to assess participants’ recollections of their parents’ behaviors and practices for the first 16 years of their life, and has a range of 0 to 75. The PBI includes two subscales of overprotection and care, which are equivalent to Baumrind’s concepts of control and warmth (Parker et al., 1979). High scores on overprotection indicate parenting that is intrusive, while low scores indicate a greater degree of autonomy granting. High scores on care indicate parenting
that is warm and affectionate, while low scores indicate parenting that is cold and detached.

The PBI has demonstrated evidence of reliability among college students, with internal consistency coefficients ranging from .87 to .94 (Safford, Alloy, & Pieracci, 2007). The PBI has also shown evidence of concurrent validity among college students when compared to scores on the Children’s Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965), with coefficients ranging from .56 to .86 (Safford et al., 2007). For the present study, there were no significant differences between participants’ reports of male and female primary caregivers’ parenting for either overprotection \( F(1, 478) = 2.53, p > .05 \) or care \( F(1, 478) = .23, p > .05 \); therefore, reports of both male and female primary caregivers’ parenting were included in subsequent analyses. Reliability coefficients for the present study were .842 and .928 for the Protection and Care subscales, respectively.

*Depression Anxiety Stress Scales (DASS-21)*

The Depression Anxiety Stress Scales-21 (DASS-21; Antony, Bieling, Cox, Enns, & Swinson, 1998) is a 21-item measure used to assess participants’ levels of depression, stress, and anxiety. Participants self-report their severity of symptoms as experienced over the past week. Each item is rated on a 4-point Likert scale, with a score of 0 indicating “Did not apply to me at all,” and a score of 3 indicating “Applied to me very much, or most of the time.” Subscales are generated by totaling 7 individual items, with these scores ranging from 0 to 21. Higher scores indicate a greater endorsement of that set of symptoms. Items include, “I was unable to become enthusiastic about anything” to
measure depression, “I felt I was close to panic” to measure anxiety, and “I found it difficult to relax” to measure stress.

When normed on a group of undergraduate college students (Osman et al., 2012), the DASS-21 displayed adequate internal consistency, with subscales ranging from .83 to .88, as well as evidence of concurrent validity. Evidence of concurrent validity included subscale scores related to scores on the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), the Beck Anxiety Inventory (BAI; Beck & Steer, 1990), and the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). Coefficients were .80, .69, and .73, respectively. For the present study, internal consistency coefficients for the Depression, Anxiety, and Stress subscales were .904, .834, and .850, respectively.

Procedures

This study was approved by The University of Southern Mississippi’s Institutional Review Board Human Subjects Protection Review Committee (Appendix B).

Participants were recruited through the Department of Psychology’s research participation program (http://usm.sona-systems.com/). Participants completed an informed consent form (Appendix C) and the remaining questionnaires through Qualtrics, a secure online survey system. Following completion of the informed consent, participants were directed to a demographic questionnaire (Appendix A), followed by randomly ordered measures of parenting practices and emotional health. Completion of the study took approximately 10-20 minutes.

Validity checks included two false items, which asked the participant to answer in a specific way (e.g., Answer “agree” to this question). Participants who incorrectly
answered either item were removed from further analyses. The time taken to complete study measures also served as a validity check (Huang, Curran, Keeney, Poposki, & DeShon, 2012), and those participants who completed either the PBI or the DASS-21 in less than thirty seconds were removed from further analyses.

Research Questions and Hypotheses

1. Will race moderate the relationship between parental warmth and emotional distress among college students?
   a. Race will not moderate the relationship between parental warmth and emotional distress among college students.

2. Will race moderate the relationship between parental intrusive control and emotional distress among college students?
   a. Race will moderate the relationship between parental intrusive control and emotional distress among college students such that greater levels of intrusive control will be associated with lower levels of emotional distress among African Americans.

3. Does the interaction between race and parental intrusive control in predicting emotional distress among college students vary across levels of family structure?
   a. The interaction between race and parental intrusive control in predicting emotional distress among college students will vary across levels of family structure, such that the greater levels of intrusive control associated with lower levels of emotional distress among African Americans will be more profound among single-parent families.
CHAPTER III
RESULTS

Means and standard deviations for all measures are provided in Table 2. For this sample, means for the PBI subscales and the DASS-21 subscales are within one standard deviation of scores reported in comparable populations (Osman et al., 2012; Safford et al., 2007). This suggests that participants in the present study are reporting similar parenting practices and emotional distress symptoms as other young adult college students in the research literature.

Table 2
Means and Standard Deviations of Study Measures (N = 479)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBI: Warmth</td>
<td>29.11</td>
<td>7.28</td>
</tr>
<tr>
<td>PBI: Control (Overprotection)</td>
<td>15.63</td>
<td>7.09</td>
</tr>
<tr>
<td>DASS-21: Depression</td>
<td>4.29</td>
<td>4.56</td>
</tr>
<tr>
<td>DASS-21: Anxiety</td>
<td>4.00</td>
<td>4.11</td>
</tr>
<tr>
<td>DASS-21: Stress</td>
<td>6.71</td>
<td>4.53</td>
</tr>
</tbody>
</table>

Note. PBI = Parental Bonding Inventory; DASS-21 = Depression Anxiety Stress Scales-21-item version

In order to determine whether the assumption of normality was met, pseudo z-scores for all dependent variables were calculated, and no scores appeared problematic, given the large sample size (Field, 2013). Upon examining the standardized values of all dependent variables, no truncation of outliers was determined to be necessary.
Bivariate correlations were calculated between demographic variables (socioeconomic status, age, gender, year in school, and participant’s primary caregiver) and the emotional distress dependent variables (i.e., depression, anxiety, and stress). Only correlations between socioeconomic status and depression ($r = -0.148, p < .001$) and stress ($r = -0.102, p < .01$) were found to be significant, which reinforces the importance of accounting for socioeconomic status in subsequent analyses. While original planned analyses called for accounting for the stability and duration of the participants’ family structure, 83 participants did not provide a valid response to either item, and removal of these participants would have resulted in an insufficient sample size to detect the moderating effect of family structure (i.e., 88 participants reporting a single-parent family structure). Given these concerns related to power, stability and duration were subsequently not accounted for in the analyses, and thus not included within the present set of bivariate correlations.

Additional bivariate correlations were calculated to determine the relationships among independent and dependent variables (see Table 3). All correlations between the DASS-21 and PBI subscales were found to be significant at the $p < 0.01$ level. Specifically, Parental Warmth was negatively correlated with Depression, Anxiety, and Stress, while Control, Depression, Anxiety, and Stress were positively correlated with one other. Furthermore, Control was positively correlated with Race (1 = White/non-Hispanic; 2 = African American) at the $p < .01$ level, and Family Structure (1 = single parent; 2 = two-parent) was negatively correlated with Anxiety at the $p < .05$ level, and with Race at the $p < .01$ level.
### Table 3

**Bivariate Correlations for Study Measures**

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<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PBI: Warmth</td>
<td>-</td>
<td>-.403**</td>
<td>-.380**</td>
<td>-.336**</td>
<td>-.318**</td>
<td>-.072</td>
<td>.053</td>
</tr>
<tr>
<td>2. PBI: Control (Overprotection)</td>
<td>-</td>
<td>-.161**</td>
<td>.172**</td>
<td>.182**</td>
<td>.264**</td>
<td>-.069</td>
<td></td>
</tr>
<tr>
<td>3. DASS-21: Depression</td>
<td>-</td>
<td>.733**</td>
<td>.747**</td>
<td>-.037</td>
<td>-.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. DASS-21: Anxiety</td>
<td>-</td>
<td>.742**</td>
<td>-.004</td>
<td>-.104*</td>
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<td></td>
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<tr>
<td>5. DASS-21: Stress</td>
<td>-</td>
<td>-.059</td>
<td>-.032</td>
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<td></td>
</tr>
<tr>
<td>6. Race</td>
<td>-</td>
<td></td>
<td>.252**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. Family Structure</td>
<td>-</td>
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</tr>
</tbody>
</table>

*Note.* PBI = Parental Bonding Inventory; DASS-21 = Depression Anxiety Stress Scales-21 item version; *p < .05, **p < .01

### Initial Second-Order Confirmatory Factor Analysis

Prior to assessing moderation through structural equation modeling, a second-order confirmatory factor analysis was conducted for the latent variable of “emotional distress,” in order to verify the second-order factor structure with the current sample. The measurement model consisted of three latent variables (the depression, anxiety, and stress subscales of the DASS-21), with seven indicator variables on each latent variable.

Model fit was examined using a chi-square difference test, the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square of error approximation (RMSEA). Adequate CFI and TLI include values >.90, and adequate RMSEA includes values <.05. Testing of the model resulted in a significant chi-square value ($\chi^2 (1, 186) = 558.019, p < .001$), and marginally acceptable fit indices (CFI = .902;
Figure 1. Second-Order CFA for the Latent Variable of Emotional Distress; $f_4$ = Emotional Distress; $f_1$ = Depression; $f_2$ = Anxiety; $f_3$ = Stress
TLI = .889; RMSEA = .065). As can be seen in Figure 1, all first-order factors loadings were significant ($p < .001$), and ranged from .337 to .830 (.577 - .830 excluding the second DASS-21 item). Given that the DASS-21 has shown evidence of validity with a similar population (Osman et al., 2012), and there appeared to be no reason for the second DASS-21 item (i.e., “I was aware of dryness of my mouth”) to load differently with the present population, this item was retained in the analysis. Loadings between the second-order factor of “emotional distress” and the first-order factors of depression, anxiety, and stress were .890, .941, and .932, respectively.

Hypotheses 1 and 2

The first and second research questions examined whether race moderated the relationship between the latent variable of emotional distress and levels of parental warmth and intrusive control, respectively. Structural Equation Modeling was utilized to assess the main effects of the independent variables (i.e., race, parental intrusive control, parental warmth), the control variable (i.e., socioeconomic status), and the interaction terms (i.e., raceXcontrol, raceXwarmth) on the latent variable of emotional distress. Race was formally coded as 1 = African American and 0 = White/non-Hispanic within the model. The first hypothesis predicted that race would not moderate the relationship between parental warmth and emotional distress, such that higher levels of parental warmth would be predictive of lower levels of emotional distress for both Whites/non-Hispanics and African Americans. The second hypothesis predicted that race would moderate the relationship between parental intrusive control and emotional distress, such that higher levels of parental intrusive control would be associated with lower levels of emotional distress for African Americans.
Testing of the model revealed a non-significant chi-square value ($\chi^2 (1, 12) = 18.251, p = 0.11$), and acceptable fit indices (CFI = .99, TLI = .99, RMSEA = .03). As can be seen in Figure 2, standardized estimates using maximum likelihood estimation revealed parental warmth as the only significant predictor of the latent variable of emotional distress ($\beta = -.396, p < .001$). The main effect of parental intrusive control was found to be non-significant. Consistent with the first hypothesis, the interaction term for race and parental warmth was not statistically significant in predicting emotional distress, suggesting that parental warmth appears beneficial for both White/non-Hispanic and African American young adults. Contrary to the second hypothesis, the interaction term for race and parental intrusive control was not statistically significant in predicting emotional distress, suggesting that levels of parental intrusive control do not differ

Figure 2. Predictive Ability of Relevant Main Effects and Interaction on Latent Variable of Emotional Distress; race = Race; ses = Socioeconomic Status; warmth = Parental Warmth; control = Parental Intrusive Control; raxcont = Race and Control Interaction; raxwarm = Race and Warmth Interaction; emodis = Emotional Distress; depr = DASS-21: Depression subscale; anx = DASS-21: Anxiety subscale; str = DASS-21: Stress subscale
between White/non-Hispanic and African American young adults in predicting emotional distress.

Hypothesis 3

The third research question examined whether the interaction between race and parental intrusive control differed across levels of family structure. It was hypothesized that this interaction would vary across levels of family structure, such that the greater levels of parental intrusive control predictive of lower levels of emotional distress among African Americans would be more profound among single-parent families. Given that the original interaction between race and intrusive control was not statistically significant, this hypothesis was not supported.

Despite these initial findings, invariance testing was conducted to assess whether relevant individual predictors (e.g., race, parental intrusive control) were consistent across levels of family structure. Prior to assessing individual predictors, a chi-square difference test was conducted between constrained and unconstrained versions of the original model, in order to determine whether any individual predictors differed across levels of family structure. The chi-square value of the constrained model ($\chi^2 (1, 35) = 42.27, p = .19$) was not significantly greater ($\Delta\chi^2 = 4.15, p > .05$) than the value of the unconstrained model ($\chi^2 (1, 29) = 38.12, p = .12$), indicating that there were no predictors within the model that differed across levels of family structure.

Post Hoc Analyses

Post hoc analyses were run to test the moderating effect of parental intrusive control while not accounting for the effect of parental warmth. Structural Equation Modeling was utilized to assess the main effects of race and parental intrusive control, as
well as the control variable of socioeconomic status and the interaction of race and intrusive control on the latent variable of emotional distress.

Testing of the model revealed a non-significant chi-square value ($\chi^2 (1, 8) = 12.994, p = 0.11$), and acceptable fit indices (CFI = .99, TLI = .99, RMSEA = .04). Standardized estimates using maximum likelihood estimation revealed parental intrusive control ($\beta = .221, p < .05$) and socioeconomic status ($\beta = -.109, p < .05$) to be significant predictors of emotional distress. The interaction between race and intrusive control was found to be non-significant, suggesting that race does not moderate the relationship between parental intrusive control and emotional distress even when not accounting for the effect of parental warmth.
CHAPTER IV
DISCUSSION

The current study sought to examine the moderating effects of race and family structure on the relationship between parenting practices and emotional distress in young adults. As predicted, warmth did not differ across race in predicting emotional distress. However, neither race nor family structure were found to be significant moderators in the relationship between parental intrusive control and emotional distress, suggesting that the impact of intrusive control patterns on mental health outcomes does not significantly differ across race and family structure.

Hypothesis 1

The first hypothesis related to the moderating impact of race on parental warmth in predicting emotional distress for young adults. As predicted, race did not moderate the relationship between warmth and emotional distress, suggesting that high levels of warmth are beneficial for both White/non-Hispanics and African Americans. In fact, parental warmth was the only significant predictor of emotional distress, with a strong negative relationship present for both White/non-Hispanics and African Americans. Warmth, therefore, appears to be a crucial characteristic for parents in predicting greater emotional health in their young adult children.

Support for this hypothesis builds on existing research, which has shown high levels of parental warmth to be beneficial for both children and adolescents (Baumrind, 1967; Hastings et al., 2007), as well as young adults, regardless of race (Wintre & Yaffe, 2000). These findings also support the practice of examining specific parenting practices, as opposed to general parenting styles (Darling & Steinberg, 1993). More specifically,
while Baumrind’s original research on parenting styles described an authoritarian style as consisting of lower levels of warmth (Baumrind, 1967), and African American parents to be more likely to utilize an authoritarian style (Baumrind, 1972), subsequent research has found parental warmth to be beneficial for both African Americans and White/non-Hispanics (Taylor et al., 1992; Gonzales et al., 1996; Brody & Flor, 1998). These discrepancies highlight the need for accurate measurement of parenting, particularly when examining parenting across race (Tamis-LeMonda et al., 2008). Therefore, the present findings lend credence to the conceptualization of parenting styles as an “emotional climate,” rather than the specific mechanisms by which parents interact with their children (Darling & Steinberg, 1993; p. 488). With cultural concerns accounted for, it appears that parental warmth is beneficial for both White/non-Hispanics and African Americans.

Hypothesis 2

The second hypothesis was related to the moderating impact of race on parental intrusive control in predicting emotional distress for young adults. It was expected that greater levels of intrusive control would be predictive of fewer symptoms of emotional distress for African Americans, but not for White/non-Hispanics. Contrary to this hypothesis, race did not moderate the relationship between parental intrusive control and emotional distress, suggesting that parental intrusive control does not vary across race in predicting emotional distress in young adults. In fact, there was no significant positive or negative relationship between intrusive control and emotional distress in the present study, for either White/non-Hispanics or African Americans.
Past research has shown African American parents to adopt stricter control patterns compared to White/non-Hispanics (Hill & Tyson, 2008; Weis & Toolis, 2010). Studies have also linked high levels of parental control with a variety of positive outcomes among African Americans (Gonzales et al., 1996; Taylor et al., 1992), including outcomes related to mental health (Greening et al., 2010). However, the positive benefits associated with increased control among African Americans have not always been consistent in the literature (Christie-Mizell et al., 2008). For the present study, while higher rates of parental control were found among African Americans, these intrusive control patterns did not appear to be linked to more beneficial mental health outcomes among African Americans. Again, however, it should also be noted that there was no significant relationship (positively or negatively) between parental intrusive control and emotional distress for either White/non-Hispanics or African Americans, indicating that parental intrusive control was not predictive of emotional distress in the present study, despite African Americans reporting higher levels of control.

One reason for this finding may be the inclusion of parental warmth within the model. Among African Americans, research has shown parental warmth to mitigate the risks associated with intrusive control patterns (Brody & Flor, 1998; Taylor et al., 1992). Once parental warmth was excluded from the model in the post hoc analyses, a significant positive relationship was found between intrusive control and emotional distress. Therefore, these findings may further speak to the importance of parental warmth in parenting, which appears to not only predict fewer symptoms of emotional distress, but also to serve as a protective factor for other high-risk parenting practices (i.e., intrusive control). This hypothesis is consistent with Baumrind’s (1967) research,
which highlighted parental warmth as the determining factor between authoritative parenting and higher-risk authoritarian parenting.

Another reason for the non-significant findings of the interaction between race and parental control may be the conceptualization and measurement of the construct of control. Past research has shown intrusive control (Weis & Toolis, 2010), psychological control (Weis & Toolis, 2010), and physical punishment (Christie-Mizell et al., 2008) to all be more prevalent among African Americans; however, these constructs vary widely, even if they may be considered one form or another of “control.” Therefore, the present study’s lack of significant moderation may highlight the importance of understanding the specific practices associated with “control” that may predict different outcomes across races. Future studies should aim to differentiate the predictive ability of these various forms of parental control as a construct, rather than focus on one form (i.e., intrusive control) in isolation.

Hypothesis 3

The current study also sought to examine family structure as a moderator between the hypothesized interaction between race and parental intrusive control; however, given that the interaction between race and parental intrusive control was non-significant, subsequent analyses sought to examine family structure as a moderator between parental intrusive control and race separately. These moderations were also found to be non-significant, suggesting that both race and parental intrusive control do not predict emotional distress in young adults differently across levels of family structure.

Given the results of the current study, it appears that higher levels of intrusive control are not necessarily more adaptive for single parent families. These lack of
significant findings may speak to the resiliency of single parents, who often face a unique set of stressors, including constraints on time and assistance with child-rearing (Astone & McLanahan, 1991; Coleman, 1988). While past research has found children of single parents to be disproportionately at risk for a number of problematic outcomes, including emotional and behavioral difficulties (Barrett & Turner, 2005; Hayatbakhsh et al., 2013; Turunen, 2013), the findings of the present research suggest that the parenting that single parents provide does not pose risks to children above and beyond risk already accounted for by challenges associated with being raised in a single parent household (e.g., decreased social capital; Coleman, 1988). Again, however, it should be noted that no significant relationship (positively or negatively) was found between parental intrusive control and emotional distress among young adults.

The non-significant findings of family structure as a moderator may also be due to not adequately accounting for the diversity of family structure across races, specifically as it pertains to the role of extended kinship within the African American community (Jones et al., 2007; Jones & Lindahl, 2011; McAdoo, 1997). While the present study attempted to account for this diversity by asking participants to report non-parent family members and even non-family individuals who played a significant role in the participants’ upbringing, an inadequate sample size was reached to justify creating a third level of family structure (in addition to single parent and two-parent) as a moderator. This practical limitation may help explain the failure to highlight family structure as a moderator between race and emotional distress, given the wide variability that exists within single parent families, particularly among African Americans (Parent et al., 2013; Smith-Bynum, 2013). Therefore, it would be premature to dismiss the role of family
structure in predicting parenting outcomes across races, despite the findings of the present study.

Limitations

The present research faces a number of limitations. While data analyses examined the predictive ability of parenting practices on the well-being of young adults, no definite conclusions regarding causality may be inferred, given the correlational nature of the data. Additionally, the validity of retrospective reports of parenting have been called into question (Alloy, Abramson, Smith, Gibb, & Neeren, 2006), which places an additional set of methodological limitations on the present study.

The generalizability of the current sample is also a concern. Participants included college students from a single university in the southeastern United States, which may not generalize to young adults in other areas of the country. In fact, greater levels of parental control may be more common among certain populations within the South (Brody & Flor, 1998). Additionally, college students may not be representative of young adults in general, both in regards to education and socioeconomic status. Given the link between authoritarian parenting practices and low socioeconomic status (Tamis-LeMonda et al., 2008), this limitation may be particularly relevant for the present study. Furthermore, college students may differ on their level of intrinsic motivation, which may have a reciprocal effect on their parents’ approach to parenting (Steinberg, Lamborn, Dornbusch, & Darling, 1992).

Finally, a large number of participants either did not complete the survey (i.e., 28 participants) or failed validity checks (i.e., 128 participants). While it is unclear if these
participants represented a distinct subset of the population, and no readily apparent reason exists for this being the case, this possibility should at the very least be noted.

Areas for Future Research

Future research should continue to examine the construct of parental control, while also taking into consideration the varied ways that this construct may be defined (e.g., intrusive control, psychological control, physical discipline). While the present study and others (Hill & Tyson, 2008; Weis & Toolis, 2010) demonstrated the higher rate to which African American families endorse levels of parental intrusive control compared to White/non-Hispanic families, additional research is needed to clarify how these varied rates of prevalence may predict outcomes differently across races. Additional measures (beyond the Parental Bonding Inventory) may be necessary to address these concerns.

Future studies should also continue to strive to account for the diversity of family structure, particularly within the African American community (Parent et al., 2013). Studies which neglect this diversity are at risk of perpetuating research that treats the dominant culture as a means of comparison for non-dominant, marginalized groups (Parent et al., 2013; Smith-Bynum, 2013). Relatedly, researchers may benefit from examining the impact of racial socialization in the parenting of African American children (Hughes et al., 2006), which may be particularly relevant for individuals who perceive a greater level of discrimination (Clark, Anderson, Clark, & Williams, 1999). Understanding racial socialization practices may also better inform researchers of the beliefs and motivations experienced by African American parents, which appears relevant to child-rearing within this population (Tamis-LeMonda et al., 2008).
Conclusions

In conclusion, the present study found parental warmth to be predictive of lower levels of emotional distress among young adults regardless of race, as predicted by the first hypothesis. These findings suggest the importance of parental warmth in effective parenting, the benefits of which do not appear to vary across race. However, contrary to the second hypothesis, while higher levels of parental intrusive control were seen among African Americans, parental intrusive control was not predictive of emotional health outcomes for either White/non-Hispanics or African Americans. Additionally, the predictive ability of parental intrusive control and race did not appear to vary across levels of family structure, suggesting that family structure does not moderate these variables in predicting emotional health outcomes among young adults.

The lack of significant findings in the present study may be attributed to limitations in assessing parental control and family structure as constructs. Post hoc analyses also suggest that the lack of significant effects of parental intrusive control may be attributed to the importance of parental warmth, which appears to buffer the risks associated with intrusive control. Future studies should strive to address the limitations of the present study, as well as explore the role of racial socialization in understanding family structure and parental control differences within the African American community.
APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

What is your age?

What is your gender?

- Male
- Female
- Other ____________________

What year are you at USM?

- Freshman
- Sophomore
- Junior
- Senior
- Other (please specify) ____________________

What is your race?

- White/Non-Hispanic
- Black/African-American
- Asian-American
- Native American
- Native Hawaiian/Pacific Islander
- Other ____________________

What is your ethnicity?

- Hispanic/Latino
- Non-Hispanic/Latino

Think of this scale as a ladder, representing where people stand in the United States. At the TOP of the ladder are the people who are the best off, those who have the most money, and whose families have the most respected jobs. At the BOTTOM of the ladder
are the people who have the least money, and whose families have the least respected jobs.

Please indicate where you think you stand on this ladder, relative to other people in the United States.

For the purposes of this study, you will be asked to identify a primary caregiver. This should be the person primarily involved with the majority of your upbringing during your first 16 years growing up at home. Please indicate which option below best describes this primary caregiver.

- Mother
- Father
- Grandmother
- Grandfather
- Aunt
- Uncle
- Other (please describe) ____________________

Was your primary caregiver single or in a committed relationship (e.g., marriage or other two-person relationship) during the majority of your first 16 years growing up at home?

- Single
- Committed relationship

Which description best describes your primary family structure during your first 16 years growing up at home?

- Married, biological parents
- Biological parent and step parent
- Foster parents
- Adoptive parents
- Other unmarried two-parent household
- Single parent only
- Single parent with significant support from other family members (e.g., aunts, uncles, grandparents)
- Single parent with significant support from non-family members (e.g., neighbors, family friends)
- Other caregiver (please describe) ____________________
Answer If Which description best describes your primary family structure during your first 16 years growing up at home? Single parent with significant support from other family members (e.g., aunts, uncles, grandparents) Is Selected

Who were the other family members significantly involved in your upbringing during your first 16 years growing up at home? (check all that apply)

- Aunt
- Uncle
- Grandmother
- Grandfather
- Other (please describe) ____________________

Answer If Which description best describes your primary family structure during your first 16 years growing up at home? Single parent with significant support from non-family members (e.g., neighbors, family friends) Is Selected

Who were the non-family members significantly involved in your upbringing during your first 16 years growing up at home? (check all that apply)

- Neighbor
- Family friend
- Other (please describe) ____________________

During your first 16 years growing up at home, how many times did the structure of your household change? A "change" includes each time the significant other (either husband/wife or boyfriend/girlfriend) of your primary caregiver moved in or out of the house (or passed away).

During your first 16 years growing up at home, how many years did this family structure remain intact (i.e., did not change)?
APPENDIX B
IRB APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #51471 Hattiesburg, MS 39406-0001
Phone: 601.266.5997 Fax: 601.266.4377 web: www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 21, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
   Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 15022701
PROJECT TITLE: Parenting Styles and Young Adults’ Emotional Health: The Moderating Roles of Family Structure and Race
PROJECT TYPE: New Project
RESEARCHER(S): Nathan Winne
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Psychology
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 03/02/2015 to 03/01/2016
Lawrence A. Hosman, Ph.D.
Institutional Review Board
APPENDIX C

ELECTRONIC INFORMED CONSENT

PURPOSE: The present study seeks to better understand the relationship between parenting, race, families, and emotional health among college students.

DESCRIPTION OF STUDY: The present study will consist of completing several brief questionnaires on the internet. Completion of the study should take approximately 10-20 minutes, and participants will receive .5 points of SONA credit. Questions will be asked regarding your thoughts, feelings, and experiences. Credit will only be assigned for completing the survey and answering honestly.

BENEFITS: Participants are not expected to directly benefit from this research. However, the researchers hope this study will lead to a greater understanding of families, race, and parenting.

RISKS: There are no foreseeable risks, beyond those already present in routine daily life, involved in the present study. If a participant at any time feels distressed while answering any of the study’s questions, they should contact the researcher immediately.

CONFIDENTIALITY: You will state your name on the informed consent form. All data collected from the study will be stored in aggregate form with no identifying information to ensure confidentiality. Data will be stored in a secure location for six (6) years, after which time it will be destroyed.

PARTICIPANT’S ASSURANCE: This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of
Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to the primary researcher Nathan Winner (nathan.a.winner@eagles.usm.edu) or the research supervisor, Dr. Bonnie Nicholson (bonnie.nicholson@usm.edu).

If you experience distress as a result of your participation in this study, please notify the primary researcher Nathan Winner (nathan.a.winner@eagles.usm.edu) or the research supervisor, Dr. Bonnie Nicholson (bonnie.nicholson@usm.edu). A list of available agencies that may able to provide services for you are provided below:

Community Counseling and Assessment Clinic (601) 266-4601

Student Counseling Services (601) 266-4829

Pine Belt Mental Healthcare (601) 544-4641

Forrest General Psychology Service Incorporated (601) 268-3159

Consent is hereby given to participate in this study.
REFERENCES


