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CULTURAL AND GENDER DIFFERENCES IN CHILD ABUSE RISK IN AFRICAN
AMERICAN AND WHITE EXPECTANT MOTHERS AND FATHERS

by

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A DISSERTATION

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CULTURAL AND GENDER DIFFERENCES IN CHILD ABUSE RISK IN AFRICAN AMERICAN AND WHITE EXPECTANT MOTHERS AND FATHERS

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MEDICAL CLINICAL PSYCHOLOGY

ABSTRACT

Previous maltreatment literature examining child physical abuse risk has not effectively examined cultural nuances in risk and protective factors. Further, research has relied heavily upon maternal only samples, limiting our understanding of paternal risk factors. The current study examined macro-level variables (i.e., racial identification and gender role ideologies) in conjunction with individual-level factors (i.e., attribution of child intent and acceptability of abuse) as they relate to parental abuse risk. The study employed explicit and implicit measures administered to 142 African American and White first-time expectant mother and father dyads. Study hypotheses were partially supported, identifying both consistencies and inconsistencies across race. With regard to gender, findings differed for mothers and fathers as they relate to individual-level risk factors. Gender role ideologies demonstrated a significant relation for both mothers and fathers and partner effects were also observed. Findings inform both universal and culturally sensitive parenting interventions and research. Additionally, results demonstrate a continued need to disentangle and identify individual-level risk factors that may be unique to fathers.

Keywords: Child Abuse Risk, Gender, Culture

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CHAPTER 1

INTRODUCTION

In 2014, the Department of Health and Human Services (DHHS) estimated 3.6 million reports of abuse and neglect in the United States ([DHHS], 2016). This finding was a reported 8.3 percent increase in referrals since 2010 ([DHHS], 2016). Of these cases, only 702,000 were substantiated or confirmed, suggesting a majority of cases do not meet the high standards for legal confirmation and action (Department of Health and Human Services [DHHS], 2016). This disparity between referral and substantiation rates raises questions regarding the nature of this select substantiated group.

Physical abuse comprised 17 percent of the substantiated cases, the second most prevalent form of maltreatment (DHHS, 2013). Child physical maltreatment is defined as “a physical act that caused or could cause physical injury to a child” (DHHS, 2016, p. 103). Physical abuse in childhood is universally considered a public health concern with enduring effects associated with maladaptive behavioral and social-emotional outcomes in children that disrupt development with problems that persist into adulthood (Runyon, Deblinger, Ryan, & Thakkar-Kolar, 2004; Lau et al., 2006).

Biases in reporting to protective services suggest substantiated cases significantly underestimate the national prevalence rates (Sedlak et al., 2010), as only severe cases of abuse meet the high standards of legal confirmation. High caseloads and limited resources prevent agencies from efficiently responding to referrals. Research examining

the rate of child physical abuse suggests a prevalence rate 5-11 times greater than officially reported (Sedlak, 2010; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). Further, overrepresentation of severe physical abuse in agencies often translates to overrepresentation of these groups within the maltreatment research literature (Sedlak et al., 2010), largely ignoring undetected samples. Although studying substantiated groups has informed understanding of outcomes and factors associated with confirmed abuse, identifying risk factors predictive of engaging in abuse prospectively is therefore limited (Stith et al., 2009). In addition, outcome research examining future abuse perpetration shows substantiated samples are not meaningfully different than unsubstantiated samples (English et al., 2002). Therefore, a focus on substantiation alone may not be sufficient to clarify predictors of recurrence or initial incidents of child abuse, suggesting substantiation is not an adequate indicator of need for services or focus of research. Therefore, in order to effectively predict child physical maltreatment and identify risk factors, researchers must begin to adopt a preventative approach to examining abuse by targeting the high numbers of unsubstantiated and undetected cases. This approach allows for the assessment of risk factors associated with abuse prior to the abuse occurring. An understanding of underlying mechanisms that place an individual at a heightened risk to abuse will inform intervention strategies and potentially offset the abuse trajectory.

Continuum of Parent-Child Physical Aggression

A continuum of physical aggression is often used to characterize the varying degrees of parent-child physical aggression with mild physical discipline at one end and extreme physical abuse on the other end. Physical discipline or corporal punishment is defined as “the use of physical force with the intention of causing a child to experience

pain but not injury, for the purpose of correction or control of the child's behavior" (Straus, 2000, p. 1110). Physical abuse is considered to occur when a parent unintentionally increases their application of physical discipline (Herrenkohl, Herrenkohl, & Egolf, 1983; Whipple & Richey, 1997). Individuals evidencing socially accepted physical discipline strategies in the U.S. are considered sub-abusive and fall along the continuum prior to the abusive range (Graziano, 1994). However, physically abusive parents often begin in the sub-abusive area of the continuum and later move to the abusive end (Whipple & Richey, 1997). Determining where physical discipline becomes physically abusive along the continuum is often a difficult task, with no clear differentiation (Gershoff, 2002; Graziano, 1994). Parents who are physically abusive also often engage in harsh physical discipline strategies (Velkamp & Miller, 1994). Both child abuse (Runyon, Deblinger, Ryan, & Thakkar-Kolar, 2004) and corporal punishment (Gershoff, 2002) have demonstrated maladaptive outcomes in children. Thus, the continuum provides a framework for conceptualizing physical discipline strategies, with mild physical discipline at one endpoint and harsh physical discipline closer to the abusive end (Rodriguez, 2010). However, in order to better understand transitions between mild and harsh parental disciplinary strategies, we must also consider contextual factors such as the general parenting style that may inform the physical discipline methods parents choose to implement.

Parenting style has historically been defined along two dimensions of warmth and demandingness that parents employ in their interactions with their children (Baumrind, 1971). These two dimensions yield four distinct styles, three of which (Authoritative, Authoritarian and Permissive) are the focus of most research (Fletcher, Walls, Cook,

Madison, & Bridges, 2008; Park & Bauer, 2002; Simons & Conger, 2007). This project contrasts research on the two styles referred to as the primarily “positive” and “negative” parenting styles, Authoritative and Authoritarian, respectively (Grolnick & Ryan, 1989). Authoritative parenting is characterized as a “positive” parenting style in which parents exercise a high level of control, yet are also high on the warmth dimension (Baumrind, 1971; Grolnick, 2013). These parents are described as firm when necessary, yet warm and encouraging of autonomous behavior in children (Grolnick, 2013; Grolnick & Ryan, 1989). Authoritarian parenting style, however, is often considered a maladaptive or “negative” parenting style, characterized as parenting practices high in control and low in warmth (Baumrind, 1971; Grolnick, 2013). These parents are often found to have very strict standards and punitive measures of control (Grolnick, 2013; Grolnick & Ryan, 1989).

Literature suggests a relation between parental discipline preferences and parenting styles. Parents reporting an authoritarian parenting style endorse greater use of corporal punishment as a discipline strategy (Paquette, Bolte, Turcotte, Dubeau, & Bouchard, 2000). Therefore, some researchers have incorporated corporal punishment approval attitudes and corporal punishment use as a factor contributing to a profile of authoritarian parenting (Robinson, Mandelco, Olsen, & Hart, 2001). Authoritarian parents’ rigidity in enforcing strict standards and demanding compliance (Larzelere & Kuhn, 2005) may prompt physical discipline tactics that lead them closer to the abusive end of the continuum, thereby increasing the likelihood they will ultimately engage in physical abuse. A study examining substantiated abusive and non-abusive parents found significant group differences in reported parenting style (Wilson, Rack, Shi, & Norris,

2008). Parents substantiated for physical abuse reported greater authoritarian parenting styles than non-abusive parents (Wilson et al., 2008). In addition, parents reporting greater authoritarian parenting styles endorsed greater child abuse risk and greater use of physically abusive discipline strategies (Rodriguez, 2010). Therefore, in order to effectively understand when physical discipline moves along the continuum to become physical abuse, we must take into consideration authoritarian parenting styles and their influence on discipline attitudes and practices that could culminate in physical abuse.

Past research has primarily focused on identification of risk and protective factors in a substantiated sample, which again represents a small and severe proportion of cases and limits understanding of the transition from the sub-abusive to the abusive end of the continuum. Therefore, contemporary literature has focused on identifying processes in sub-abusive samples affording a preventative approach in examining abuse by identifying risk for parent-child aggression before parents engage in abuse. In order to facilitate this process, the term *child abuse potential* was coined to measure an individual's likelihood of engaging in physically aggressive discipline strategies that move toward the abusive end of the continuum (Milner, 1994). This approach allows for the assessment of sub-abusive samples from a preventative framework, affording an estimate of parental child abuse risk (Milner, 1994). Child abuse potential assess a parent's intrapersonal and interpersonal difficulties characteristic of an individual's beliefs and behaviors contributing to a parent's individual risk for employing physically abusive discipline strategies (Milner, 1994). Therefore, in order to effectively address child maltreatment, we must start by examining factors predictive of a parent's potential to engage in

physically aggressive discipline strategies that may later become abusive, namely child abuse potential.

One avenue toward this prevention effort is to identify at-risk processes prenatally in expectant parents. Understanding parenting attitudes and beliefs that predict abuse-risk in pregnant mothers and their partners before the child is born can inform intensive preventative programs that address these factors and potentially offset child abuse from occurring (Berlin, Dodge & Reznick, 2013; Bugental & Happaney, 2004). Specifically, assessing a combination of environmental factors (socio-economic status, maternal age, education level; Sedlak et al., 2010), contributors to parental individual and interpersonal distress (child abuse potential; Milner, 1994), negative attitudes and beliefs about parenting (Bavolek & Keene, 2001), as well as parenting practices and behaviors (Haskett, Scott & Fann, 1995) within pregnant first-time parents will afford a multifaceted and comprehensive preventative conceptualization of abuse-risk. Overall, in order to adopt a preventative approach in examining child physical abuse, researchers must examine early risk factors for various dimensions of the parent-child aggression continuum. In doing so, preventative interventions can target modification of maladaptive parenting attitudes and behaviors to potentially offset the occurrence of child physical abuse.

Theoretical Models of Abuse Risk

In an effort to understand the abusive end of the parent-child aggression continuum, one theory employing a multifaceted approach is the ecological theory proposed by Belsky (1980). Adopted from Bronfenbrenner's bio-ecological model (Bronfenbrenner, 1997), Belsky's theory suggests child physical abuse is determined by

transactional processes between proximal and distal factors influencing the parent at various levels of interaction (Belsky, 1980, 1993). These transactions may either be positive or negative factors that ultimately contribute to or offset an individual's developmental outcomes. An individual's developmental outcome is frequently assessed through the degree of risk factors that promote maladaptive outcomes and the number of protective factors that buffer or offset a maladaptive trajectory (Shonkoff & Phillips, 2000). These factors are often a complex combination of cultural, environmental, family and individual-level psychosocial forces that predict physical maltreatment (National Research Council, 1993).

Ecological models of child development identify the parent as a proximal factor contributing to a child's developmental outcomes; therefore, the parent's personal development becomes of interest (Sidebotham, 2001). The closest, most proximal, level of the model (ontological) includes a parent's individual-level qualities such as life experiences (i.e., past childhood abuse), intra- and interpersonal functioning related to parental cognitions, attitudes, and behavior.

One risk theory emphasizing cognitive mechanisms within the ontological level is Milner's (1993) Social Informational Processing (SIP) theory. The SIP theory suggests four stages of cognitions at the ontological level may influence parental decision-making processes in the application and implementation of discipline strategies that become abusive (Milner, 2000). Specifically, maladaptive cognitions may underlie a parent's justification for the use of harsh discipline strategies that approach the abusive end of the continuum (Milner, 1993).

According to SIP theory, pre-existing cognitive schemas regarding discipline exist within every individual, and these schemas are later activated through parent-child interactions and during disciplinary encounters (Milner, 1993). High-risk parents are predicted to then make processing errors in assessing their child's behavior due to maladaptive preexisting schema, often viewing their child's behavior negatively (Milner, 2000). Therefore, during the first stage of the SIP model (Perception), high-risk parents perceive greater noncompliance in child behavior (Milner, 2000). The second stage involves the interpretation of the parent-child interaction. During this stage, high-risk parents make faulty judgments of their child's intent, often blaming the child for their behavior (Milner, 2000). The third stage of the SIP model involves a process of information integration in which the parent selects a disciplinary response. High-risk parents often fail to consider contextual factors that may explain children's misbehavior, resulting in selection of punitive approaches (Milner, 2000). Therefore, during the final implementation stage, errors in processing made in the previous stages inform parental discipline behavior utilizing harsh physical punishment methods that are not adequately monitored (Milner, 2000). However, these ontological cognitive factors alone are not sole predictors of maltreatment. Rather, these factors are exacerbated through transactions with additional ecologically distal variables.

Therefore, the next level of the ecological model (microsystem) examines contributing factors within the family system that may impact the parent-child relationship. At the microsystem level, research has examined the role of social support for parents and factors related to the parent dyad quality as contributing to individual abuse risk (Shaw & Kilburn, 2009). The exosystem is the third level encompassing

community-level factors that contribute to the likelihood of abuse. This level includes factors such as school, neighborhood and socioeconomic status (SES) as impacting the family unit as a whole. For example, studies have found a significant relation between SES and use of corporal punishment, wherein parents from lower socioeconomic status often endorse greater use of physical discipline strategies than parents from other SES groups (Lansford et al., 2004; Pinderhughes et al., 2000; Straus & Stewart, 1999). In addition, studies have demonstrated physical abuse is often more prevalent in low SES families (Lee et al., 2008; Mulvaney & Mebert, 2007), suggesting greater economic adversity may contribute to cumulative parenting stress and ultimately compromise discipline decision-making, increasing an individual's likelihood of engaging in physically abusive discipline strategies. The final level of the ecological model (macrosystem) includes cultural beliefs and societal-level values that more broadly and indirectly influence parenting practices and beliefs. This level includes societal conceptualizations of parenting roles and responsibilities (e.g., the culture's gender-role attitudes as they relate to parenting and beliefs about parenting practices), and cultural socialization practices (e.g., racial identity development). This level of the ecological model is of particular interest in this study and will be discussed further below.

Overall, Belsky's model emphasizes the importance of a multidimensional approach, wherein no one factor can be considered the sole casual explanation of child abuse. Rather, child maltreatment is likely an interaction of risk and protective factors that may change over time (Belsky, 1993). Traditionally, risk factors have been the sole focus of maltreatment literature in an attempt to identify predictors of perpetration. However, contemporary research has stressed the importance of examining protective

factors more extensively within the context of child maltreatment (Shonkoff & Phillips, 2000). Protective factors are those considered to buffer or offset risk, often described as resilience (Shonkoff & Phillips, 2000). To date, social support, parent resilience, parenting knowledge, social-emotional competence, and supportive family environment have been studied as protective factors mitigating child maltreatment (Kotch et al., 1999; Shaw & Kilburn, 2009). Although child maltreatment is often considered a complex phenomenon influenced by individual, family, community and cultural factors (National Research Council, 1993), few studies comprehensively examine the impact of both risk and protective factors across these levels and their relation to abuse risk in unsubstantiated samples. Research has suggested greater cumulative psychosocial stressors that outweigh protective supports relate to greater physical abuse risk (Wekerle, Wall, Leung, & Trocme, 2007; World Health Organization, 2006). However, the literature is generally limited to substantiated samples of parents, thereby constraining our understanding of the potential protective and risk factors within an unsubstantiated context suitable for prevention approaches. Informed by Belsky's ecological model, the current study examines individual abuse risk by assessing cultural and gender-specific protective factors. Specifically, an assessment of these mechanisms in a culturally diverse sample is needed in order to assist with the promotion of culturally competent and sound practice and preventative interventions.

Culture and Parenting

Culture is defined as a "set of beliefs, attitudes, values and standards of behavior that are passed on from one generation to the next" (Abney, 2002, p.477). Culture is

often considered a dynamic process which cannot be viewed as having a uniform impact on all members. Culture is not a homogenous phenomenon as within-group variability is frequently greater than differences observed between groups (Korbin, 2002). All aspects of development are influenced by culture including parenting beliefs and practices (Caughy & Franzini, 2005; Coard et al., 2004; Shonkoff & Phillips, 2000). However, culture is often defined along broad categories based on skin color or geographic area for grouping purposes (Korbin, 1994). These broad categorizations, although perhaps useful for some reasons, fail to accurately capture nuances within a culture. Further examination of the aspects of culture that may contribute to both within- and between-group differences in parenting and child maltreatment is needed.

Rates of child abuse reported in community samples show similarities across racial minority groups (Charlow, 2002); however, African American children are overrepresented in welfare agencies and foster care when compared to the population at large (DHHS, 2016). National reporting statistics estimate African American children comprise 21 percent of reported cases (DHHS, 2016). Conversely, White Americans are often underrepresented in the child welfare and foster care systems (Fontes, 2005). Incidence of child abuse in African American children between 2005-2006 was two times the rate of White children (Sedlak et. al, 2010). Specifically, African American children experienced significantly higher rates of physical abuse than children from other groups (Sedlak et. al, 2010). The reason for these differences is debated and possible explanations include biases in reporting (Ards, Chung, & Myers, 1998), differences in socioeconomic and neighborhood factors (Coulton, Korbin, & Su, 1999), and a lack of services and resources in certain communities (Ards, et. al, 1998). Research has identified

greater severity of consequences and outcomes for maltreated ethnic minority children (Cohen, Delinger, Mannaino, & Arellano, 2001). African American children were three times as likely as White children to die from child abuse (Connelly & Straus, 1992). In addition, when ethnic minority parents enter the welfare system, they are often met with adversarial procedures evidenced by the greater number of court proceedings (Roberts, 2002). These studies examining differences in outcome do not adequately consider biases in reporting and contextual factors that may influence these relations. Many of these earlier studies do not account for the role of attitudes, beliefs and parenting styles that may explain differences in abuse rates between African American and White families (Drake, & Jonson-Reid, 2011; Valentino et al., 2012). Rather, early studies focus on race itself as an explanatory variable for abuse. This gap in the research underscores the need for greater understanding of risk and protective factors that inform culturally competent intervention and research strategies in examining child abuse.

Currently, little research exists in comprehensively examining cultural processes in relation to abuse risk. The majority of early research on child abuse simply ignored cultural factors, assuming all families were comparable to White American families (Fontes, 2005). These studies relied solely on samples of White American families or often failed to report racial demographics of the sample (Fontes, 2005). Existing studies including samples of multiple racial groups have focused on factors that cannot be modified such as demographic and background variables (e.g., race, ethnicity and sex) when considering “cultural” factors believed to contribute to abuse (Black et al., 2001; Lee & George, 1999; Stith et al., 2009). Although these demographic factors are useful in initial categorizations, research has increasingly noted that grouping individuals based on

census categories may conceal cultural differences (Abney, 1996; Fontes, 2001). Further, this approach to examining abuse has frequently resulted in misrepresentation of information by lay media, often implicating and stigmatizing certain groups or neighborhoods and failing to convey the pervasiveness of child abuse. For example, although reports indicate a pervasive disparity between African American and White children's rates of abuse, these studies do not effectively examine the potential role of income and poverty (Drake & Jonson-Reid, 2011).

With regard to parenting in general, research examining parenting styles suggests African American parents endorse greater use of authoritarian parenting styles than White Americans (Fite, Stoppelbein, & Greening, 2009; Jackson-Newsom, Buchanan, & McDonald, 2008). However, in other studies, ethnic minority parents report a preference for authoritative parenting practices (Bluestone, Tamis-LeMonda, 1999; Bradley, 1998) and some studies have reported no group differences between endorsements of ethnic minority parents and White parents' use of authoritative parenting styles (Steinberg, Blatt-Eisengart, & Cauffman, 2006). With regard to child outcomes and endorsement of authoritarian parenting, research suggests mixed findings by race. Some studies have not identified negative outcomes in children from African American families adopting authoritarian parenting practices (Deater-Deckard et al., 1996; Taylor & Roberts, 1995; Lansford et al., 2004; Valentino, 2012). Specifically, literature has suggested authoritarian parenting in African American mothers is not associated with externalizing behaviors (Deater-Deckard et al., 1996), and can lead to less aggressive behavior and positive developmental outcomes in children (Gunnore & Mariner, 1997; Lansford et al., 2004). Yet additional studies note sensitive, responsive parenting not characteristic of

authoritarian parenting is optimal and associated with prosocial outcomes across African American and White mother-child dyads (Landry, Smith, & Swank, 2006). Additional research is necessary to clarify these racial differences in order to elucidate attitudes and beliefs explaining the endorsement of these parenting styles.

In addition, research has noted cultural differences with regard to discipline practices and attitudes. Specifically, African American mothers hold positive attitudes towards the use of corporal punishment, wherein corporal punishment is not considered detrimental to the child (Lansford et al., 2004; Polaha, Larzelere, Shapiro, & Pettit, 2004). However, White and Hispanic Americans when compared to African American mothers and fathers view the use of all forms of physical discipline as negatively impacting child outcomes (Gershoff, 2002; Whiteside-Mansell et al., 2009). Similar to the parenting styles literature, findings regarding racial group membership and physical discipline practices are mixed. Some studies have found White American mothers are more likely than African American mothers to endorse corporal punishment practices when they believe their child's misbehavior is intentional (Burchinal, Skinner, & Reznick, 2010). However, previous studies suggest African American mothers more positively endorse corporal punishment than White Americans (Jambunathan, Burts, & Pierce, 2000) and have been found to view spanking as an effective discipline strategy (Caughy & Franzini, 2005). Furthermore, African American men have been found to endorse the greatest level of acceptance of corporal punishment as a discipline technique when compared to African American women and White men and women (Flynn, 1998).

With regard to actual use of physically aggressive discipline techniques, behaviors also vary based on racial groups. African American children are more often hit

with an object, slapped and pinched than White American children (Caughy & Franzini, 2005). In addition, African American mothers and fathers reportedly engage in spanking as a discipline method more than White parents (Wissow, 2001). These disparities in endorsement and use of physical discipline strategies could contribute to the disproportionate representation of African Americans in welfare agencies (Sedlak et al., 2010). However, minimal research effectively examines these aforementioned relations of racial group membership and abuse risk in unsubstantiated and undetected cases. Further, current research fails to examine the mechanisms by which cultural influences relate to differences in parenting and discipline attitudes (Ferrari, 2002). Rather than focusing on fixed variables of race that cannot be modified, the literature should examine factors and cultural mechanisms such as parenting style, attitudes and beliefs that may explain cultural differences in abuse risk.

Further, culture can offer both risk and protective factors, strengths and weaknesses that ultimately impact an individual's developmental trajectory, therefore underscoring the importance of simultaneously examining cultural resiliency within the context of child maltreatment risk (Fontes, 2005). For example, when explaining significant group differences between African American and White parents on self-reported child abuse risk, researchers identify African American families as having greater economic disadvantages (Fontes, 2005). However, African American parents are more likely to participate in community and family activities that may help with child rearing (Gelles & Straus, 1988). These activities include increased contact with relatives and the community, which can serve as support for child care and thereby reduce risk for abuse (Cazenave & Straus, 1979). The presence of these social networks of support can

mitigate the strains associated with parenting and promote positive child outcomes and prevent the occurrence of child maltreatment (Garbarino & Kostelny, 1992). The literature must move to examine more specific constructs related to race in order to better understand these potential culture-specific protective factors within the context of child maltreatment.

Racial Socialization and Racial Identity

Culture norms influence how parents socialize their children and teach their children skills (Leary, 2013; Ogbu, 1981, 2013). These skills later become important in adult socio-cultural competence and interactions with various individuals and groups (Ogbu, 1981, 2013). African Americans must actively learn to cope with hostility and discrimination from the majority group and its disparaging views of African American culture (Brown & Krishnakumar, 2007). Therefore, African American parents become essentially responsible for protecting their children from these negative experiences by teaching them to understand the realities of being African American (Brown, 2008; Ward, 2000). The strategies African American parents employ to teach their children to cope vary and are collectively termed “racial socialization” strategies (Abell, Clawson, Washington, Bost, & Vaughn, 1996; Coard et al., 2004; Franklin, Boyd-Franklin, & Draper, 2002; Hughes & Chen, 1997; McGroder, 2000; Peters, 1988; Stevenson, Davis & Abdul-Kabir, 2001; Wilson, 1990).

Racial socialization is defined as “the developmental processes by which children acquire the behaviors, perceptions, values, and attitudes of an ethnic group, and come to see themselves and others as members of the group” (Rotheram & Phinney, 1987, p. 11). This developmental process is considered to occur in a society where dark skin may lead

to greater experiences of discrimination and therefore negative outcomes for African Americans (Brown, 2008; Coard et al., 2004; Peters, 1985). Hence, parents within this group often engage in child-rearing practices that promote psychological and physical health to counter this existing cultural obstacle. Racial socialization is often conceptualized as including three components: (1) personal and group identity, (2) inter-group and inter-individual relationships and (3) social hierarchy (Brown, 2008; Coard et al., 2004; Thornton et al., 1990). Teaching modalities include verbal or nonverbal deliberate or unintended messages promoting cultural heritage and pride, preparation for future bias, racial mistrust and egalitarianism (Brown, 2008; Hughes & Chen, 1999). African American parents have been the most widely researched group in using racial socialization practices. Research has demonstrated greater promotion of racial socialization practices are related to positive socio-emotional and behavioral outcomes in children (Caughy, O-Campo, Randolph, & Nickerson, 2002). These outcomes include positive mother-child interactions (Frabutt, Walker, & MacKinnon-Lewis, 2002) and positive ethnic identity formation (Demo & Hughes, 1990; Stevenson, 1995). A study examining African American mother-child dyads found that those who engaged in moderate racial socialization evidenced the most positivity, communication and warmth toward their children compared to mothers who did not endorse high levels of racial socialization strategies; further, mothers in the moderate socialization group evidenced the lowest levels of mother-child negativity (Frabutt, Walker, & MacKinnon-Lewis, 2002).

Data from the National Survey of African Americans revealed socialization practices are related to an individual's gender, marital status and racial identity

(Thornton, 1997). Mothers are more likely than fathers to convey racial messages in their parenting (Thornton et al., 1990). Specifically, older women who were highly educated were the most likely to engage in socialization practices (Thornton et al., 1990). In addition, an individual's racial identity informs the frequency and content of racial socialization practices. For example, parents with a greater sense of racial identity are likely to hold stronger convictions regarding cultural knowledge they wish to disseminate to their children (Thomas, 2000). Racial identity is considered a component of racial socialization often conceptualized on a continuum (Phinney, 1996) and is defined as a measure of attitudes and beliefs one holds about their ethnic group and attitudes toward other racial groups (Thomas, 2000). Rather than focusing on race alone as a construct, an examination of racial identity affords understanding of how ethnic minority group members interpret and view their own race and how this influences their judgments (Terao et al., 2001).

Previous studies examining racial identity in minority populations have demonstrated positive mental health outcomes (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Goodstien & Ponterotto, 1997). For example, African Americans evidencing greater internalized positive racial identity reported healthier psychological functioning (Belgrave & Allison, 2010; Helms, 1993; Sellers, Copeland-Linder, Martin & Lewis, 2006), and greater self-esteem (Bracy et al., 2004; Goodstien & Ponterotto, 1997; Sellers, Copeland-Linder, Martin & Lewis, 2006). In addition, mothers and fathers with higher levels of racial identity have demonstrated a greater likelihood to emphasize racial socialization as an important parenting practice (Thomas, 2000).

African Americans must develop competence and coping skills to combat environmental stressors they are more likely to experience on a daily basis based solely on their minority status (Clark, 1991; Miller, 1999). A strong racial identity is associated with greater success and prosocial outcomes when dealing with stressors (Miller, 1999). Therefore racial socialization and racial identity are often considered protective factors for African Americans. As noted before, cumulative environmental stress and individual-level stress is a strong predictor of physical abuse risk in parents, as feelings of being overwhelmed when dealing with stressors can impact discipline appraisals and ultimately result in use of more physically aggressive discipline strategies (Miller-Perrin, 2012; Whipple & Webster-Stratton, 1991). The resources provided by racial identity and racial socialization may mitigate or facilitate African Americans' coping with stress (Hood, Brevard, Nguyen, & Belgrave, 2012). Studies are limited examining this relation to parenting constructs; however, previous research has demonstrated positive racial identity is a protective factor against the presence of stress for African Americans (Sellers et al., 2006).

Currently, examination of racial socialization and racial identity within the child maltreatment and abuse risk research is scarce. Many studies often focus on racial identity as a protective outcome in adolescence (Belgrave & Allison, 2010; Helms, 1993; Sellers, Copeland-Linder, Martin & Lewis, 2006); however, researchers fail to examine the potential protective role of racial identity within the context of parenting and how it may buffer an individual's abuse risk. In examining these specific cultural factors within a parenting sample, we can begin to unpack the aforementioned racial/cultural differences

in child maltreatment risk and begin to identify modifiable culture-specific variables that may offset an abusive parenting trajectory.

Gender and Parenting

Similar to a need for increased culturally competent research, child maltreatment studies are in desperate need for examination of models across genders, yet another macrosystem level variable that may relate to abuse risk. The vast majority of the existing literature has focused on maternal samples thereby limiting understanding of paternal parenting practices and beliefs contributing to child maltreatment (Behl, Conyngham, & May, 2003). Mothers are often regarded as the primary caregiver, becoming the focus of parenting research. However, fathers comprise a substantial proportion of physical abuse perpetrators. In 2014, DHHS reports reveal fathers account for 44 percent of child physical abuse perpetrators (DHHS, 2016), and are likely to engage in the most serious forms of child maltreatment (Brewster et al., 1998; Stiffman, Schnitzer, Adam, Kruse, & Ewigman, 2002). Despite these alarming statistics, models examining paternal abuse risk and parenting practices are relatively scarce (Guterman & Lee, 2005).

The focus on maternal samples posits mothers, as primary caregivers, are at greatest risk for employing physically aggressive discipline strategies further along the abuse end of the continuum (Ferrari, 2002, Stith et al., 2009). However, recent shifts in societal trends have demonstrated greater paternal involvement in parenting (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Dette-Hagenmeyer, Erzinger, & Reichle, 2014). Specifically, mothers engage in more daily care of children and household responsibilities, whereas fathers may occupy the role of disciplinarian (Straus

& Stewart, 1999). The largest increase in parental involvement was observed in African American and Latino fathers (Hofferth, 2003), a macro-level influence. Such cultural changes underscore the increased need for an examination of fathers in child maltreatment research. Fathers may both directly engage in physically abusive behaviors themselves, or influence maternal abuse risk indirectly (Dubowitz, 2006). Greater paternal involvement in child rearing practices suggests a need to study risk and protective factors both unique to fathers as well as qualities shared by both parents and as they relate to abuse risk.

Limited existing literature examining paternal individual risk for perpetration of abuse has demonstrated that younger fathers (Lee, Guterman, & Lee, 2008) and those with substance abuse (Ammerman, Kolko, Kirisci, Blackson, & Dawes, 1999; Lee, Perron, Taylor, & Guterman, 2011) evidence greater use of corporal punishment and child abuse risk. In addition, financial factors such as unemployment status and income demonstrated a relation between paternal abuse risk in some studies (Wolnfer & Gelles, 1993) but not in others (Lee et al., 2008). However, mechanisms explaining these findings are less clear. With regard to discipline strategies specifically, mothers and fathers have been shown to endorse similar discipline methods. For example, both mothers and fathers share an acceptance of severe physical discipline approaches (Nobes & Smith, 1997) and often utilize comparable rates of corporal punishment, although fathers engage in more severe force (Nobes et al., 1999). These findings are consistent with previous literature demonstrating greater similarities than disagreement between maternal and paternal physical discipline practices (Margolin, 1992).

However, findings comparing paternal and maternal abuse risk are mixed. Earlier studies examining young parents (age 14-24) reveal unique factors contributing to paternal abuse risk (Florsheim et al., 2003). Yet research has also demonstrated paternal characteristics (e.g., level of involvement with the child) as reported by mothers, are related to maternal abuse risk, suggesting parental abuse risk is an interactive process within the parenting dyad (Guterman et al., 2009). Research has revealed fathers demonstrate similar risk profiles as mothers (Schaeffer et al., 2005; Smith Slep & O’Leary, 2007); however, specific risk and protective factors related to the parenting dyad and their use of harsh physical discipline is less clear. Findings suggesting an interconnectedness and synchronicity between maternal and paternal discipline behaviors afford an opportunity for examination of potential shared variables that may act as risk and protective aspects for both parents. Although mothers and fathers’ use of physical discipline strategies and risk profiles may be similar (Schaeffer et al., 2005), parenting styles often do not correspond between parents (Martin, Ryan & Brooks-Gunn, 2007). As mentioned above, one parent may act as the disciplinarian and more frequently engage in discipline encounters compared to the other parent (Straus & Stewart, 1999). Therefore, understanding how these shared factors may relate to individual abuse risk is also important and not well documented in the literature.

In sum, inclusion of fathers in maltreatment research is evolving, yet limited. Although fathers represent a significant proportion of child physical abuse perpetrators, often engaging in more severe forms of physical abuse, there is an overreliance on maternal reports of parenting. Previous studies including fathers have relied heavily on retrospective reporting from children, adolescents, and other adults regarding parenting

behaviors within the family system (Pears & Capaldi, 2001). The inclusion of fathers within these studies is an important initial step; however, the reliance on others' reports of paternal parenting behavior is subject to biases and possible underestimation (Nobes & Smith, 1997). The overrepresentation of maternal samples in the literature significantly limits understanding of risk and resiliency related to paternal parenting practices. Therefore, in order to comprehensively understand abuse risk and advance prevention efforts, an examination of paternal factors to complement existing research on maternal abuse risk models is needed. Furthermore, advancement of informed intervention efforts for both mothers and fathers cannot rely on research that solely focuses on an examination of relations in substantiated and identified samples of parents. This study seeks to address this gap in the literature by examining both maternal and paternal models of abuse risk and protective factors in an unsubstantiated sample.

Attitudes about Gender Roles

Within the broader cultural framework, gender roles are attitudes and behaviors defined by society and assigned to men and women (Eagly & Wood, 1999). Theories informed by social structural models purport men and women occupy certain gendered roles based on individual choice and sociocultural scripts (Gershuny, Bittman, & Brice, 2005). Similar to other psychosocial constructs, gender-role attitudes can be examined on a continuum ranging from traditional to nontraditional (Katz-Wise, Priess, & Hyde, 2010). Traditional gender roles refer to the interdependence of men and women in relationships and the clear distinction of power, wherein, men are regarded as the breadwinners of the family and women are maternal homemakers (Gershuny, Bittman, & Brice, 2005; Rogers & Amato, 2000; Zuo, 2004). Traditional fathers provide instrumental

support, including financial support and discipline, but less emotional support (Rogers & Amato, 2000). Nontraditional gender roles are often described as an egalitarian perspective in which power distinctions are less pronounced and both parents are viewed as contributing equally to child-rearing and family economics (Rogers & Amato, 2000).

Men and women have become less traditional in their gender role ideologies (Amato, Johnson, Booth, & Rogers, 2003; Brewster & Padavic, 2000; Thornton, 1989). This shift in role attitudes has resulted in men increasing their involvement in parenting and women increasing their involvement in the workforce (Amato, Johnson, Booth, & Rogers, 2003; Bianchi, Milkie, Sayer & Robinson, 2000). The gender attitudes individuals hold significantly influence family functioning and parenting (Katz-Wise, Priess, & Hyde, 2010). One of the greatest sources of conflict and distress in parenthood is division of household labor and child-rearing responsibilities (Belsky & Pensky, 1988; Crohan, 1996). The division of labor reflects fairness and equality in a couple relationship; the presence of children can exacerbate potential inequalities between mothers and fathers (Twenge, Campbell, & Foster, 2003). Although men have become more involved in child-rearing, women still spend twice as much time as men on childcare responsibilities (Pleck & Masciadrelli, 2004).

Traditionally, when men are valued for their financial support and their career is considered of greater importance than their partner's career, they are afforded exemption from many caregiving responsibilities (Steil, 1997). Families in which men and women hold traditional values with regards to marriage and parenthood are likely to have fathers who are less involved in child-rearing practices (Bianchi, Milkie, Sayer, & Robinson, 2000). Further, research examining parenting styles has demonstrated adolescents from

traditional households endorsed greater use of authoritarian parenting styles by their mothers and fathers than individuals from egalitarian households (Sabattini & Leaper, 2004). Therefore, when mothers and fathers endorse more egalitarian gender roles, fathers are likely to be more involved with their children and potentially warmer in their interactions (Sabattini & Leaper, 2004). Consequently, traditional fathers are likely to exhibit less warmth with children than non-traditional fathers.

Families in which mothers and fathers endorse equity in child-rearing practices often engage in similar parenting strategies (Deutsch, 1999). Men and women with egalitarian parenting attitudes have demonstrated greater couple satisfaction (Risman & Johnson-Sumerford, 1998). Equity in child-rearing becomes an important focus of child maltreatment literature because fathers' involvement in parenting is important for reducing maternal stress (Kalil, Ziol-Guest, & Coley, 2005). As noted above, stress is one of the strongest predictors of child maltreatment risk in parents (Miller-Perrin, 2012; Whipple & Webster-Stratton, 1991). Therefore, families in which both mothers and fathers endorse egalitarian attitudes and gender equality may protect individuals from parenting stress by providing a context of shared responsibility. Within the context of child maltreatment, egalitarian non-traditional gender role attitudes may serve as a protective factor associated with maltreatment risk.

The current study examined the protective role of egalitarian gender role ideologies from a macro-level, ethnocultural framework in both mothers and fathers and how it relates to individual child physical abuse risk. Gender role ideologies have evolved over the years and are related to family functioning and stress. Egalitarian gender role attitudes in both mothers and fathers may mitigate stress experienced in childcare by

distributing parenting responsibilities across caregivers. However, research must examine the role of gender role attitudes within a broader risk context. Mothers and fathers may vary in both their endorsements of egalitarian roles as well in the potential impact of these ideologies on their individual abuse risk.

Individual-level Risk Factors

In addition to protective factors, a multidimensional approach necessitates the examination of parental risk factors predictive of abuse risk and harsh parenting (Shonkoff & Phillips, 2000). The examination of protective factors is relatively limited in the child maltreatment literature and an important focus of this study. However, in order to effectively understand the role of protective variables, we must also consider the role of risk factors acting as underlying mechanisms explaining observed group differences in harsh parenting (Shonkoff & Phillips, 2000). For example, aforementioned findings demonstrate African American men and women often endorse greater use and acceptance of harsh physical discipline strategies (Caughy & Franzini, 2005; Jambunathan, Burts & Pierce, 2000); however, understanding of the mechanisms by which an individual is placed at a heightened risk for abuse within this group is less clear. Similarly with regard to gender, previous studies have noted both correspondence in risk profiles, acceptance and use of physically aggressive discipline strategies between mothers and fathers (Schaeffer et al., 2005), as well as differences in risk. Yet there is little research examining potential gendered differences related to socio-cognitive factors. Therefore, in order to comprehensively examine how or why gender and culture-specific factors such as greater racial identification and egalitarian gender role attitudes may relate to lower

risk for abuse, researchers must also examine underlying paths of risk that explain differences in abuse risk across cultures and genders.

Cognitive factors such as definitions of abuse and attributions of child intent may explain observed abuse risk differences between groups. For example, cultural values, norms and beliefs may inform an individual's acceptability in defining abuse as well as deriving attributions of child behavior. In addition, definitions of abuse and attributions of child behavior may explain gender differences in abuse risk due to their level of involvement and type of caregiving responsibilities, which are considered to vary between mothers and fathers. Although definitions of abuse risk and attributions of child behaviors are noted to relate to abuse risk, the role these cognitive factors may play both between racial groups as well as between mothers and fathers is less clear. Findings regarding these cognitive factors will be further discussed below.

Definitions of Physical Abuse

Child maltreatment is indisputably a serious problem warranting attention; however, there is little agreement on what constitutes abuse (Mash & Wolfe, 1991; Rubin, 1992). Even in the United States, variability in definitions exists across subcultures, states, and regions of the country. Understanding what influences one's definition is imperative, as one's acceptability and definition of abuse are preexisting cognitive schemas within the SIP model at the ontological level often informing their decision of what parent-child aggression is appropriate (Mash & Wolfe, 1991). Currently, the legal definition of child abuse mentioned earlier provides a guideline for societal action; however an individual's acceptability of varying degrees of parent-child aggression may inform their disciplinary behaviors (Milner, 2000). Within the continuum

framework, abuse incidents occur through unintentional escalation of physical discipline (Whipple & Richey, 1997). Therefore, when physical discipline is considered acceptable (Milner, 2000), these strategies may be used more often as a discipline method and can easily and more progressively move along the continuum to become physically abusive (Whipple & Richey, 1997). According to the SIP model, preexisting maladaptive cognitions of at-risk parents may negatively influence their ability to monitor a physical discipline encounter (Milner, 2000). Thus, parents who endorse or approve of more severe forms of discipline and hold more restrictive definitions of abuse are theoretically at a greater risk for becoming physically aggressive during a physical discipline encounter (Milner, 2000).

Findings regarding acceptance of the range of physical discipline across cultures varies widely. As previously noted, some studies have suggested African Americans have a high tolerance and acceptance of corporal punishment (Pinderhughes, Dodge, Bates Pettit & Zelli, 2000; Wissow, 2001). Past literature has noted African American families hold more positive views than White Americans about the use of corporal punishment as a discipline strategy (Jambunathan, Burts & Pierce, 2000). Another study found African American mothers viewed spanking as more effective than White mothers (Caughy & Franzini, 2005). However, other studies have found no difference across low income White, Hispanic and African Americans and their acceptance of physical discipline strategies (Medora, Wilson, & Larson, 2001). These studies did not examine the relation between acceptability of parent-child aggression and individual abuse risk. The acceptance of the utilization of harsh physical discipline strategies by racial minority

parents may be part of what places them at higher risk for engaging in practices that thereby move them toward the abusive end of the continuum.

Of studies examining this construct with regard to abuse risk specifically, findings vary based on assessment. For example, some studies have noted differences between high and low-risk individuals in their acceptance of physical discipline strategies (Bower-Russa, 2005); however, other studies have found no difference between risk groups (Kelley et al., 1992; Trickett & Susman, 1988). A majority of early studies have relied on the use of self-report measures; however, these self-report measures primarily focus on attitudes about harsh parenting and do not directly assess an individual's definition of abuse. Some studies have examined this construct through use of analog assessment measures and have identified a significant relation between acceptability of parent-child aggression and abuse risk (Rodriguez et al., 2011). This variability in assessment is of primary concern in understanding parent's acceptability of parent-child aggression and definitions of child maltreatment. Assessment approaches will be discussed in detail later in this document.

In sum, one's acceptability and definitions of abuse often inform their decision to engage in parent-child aggression. When physical discipline is considered acceptable, the likelihood of utilizing these discipline strategies increases. However, how one conceptualizes and defines physical abuse across cultures, subcultures and regions varies considerably. Furthermore, research examining cultural differences is mixed, with some studies demonstrating African Americans endorse greater acceptance of physical discipline strategies, whereas other studies show no significant differences between White and African Americans. Operating from a comprehensive perspective, this study

seeks to address these aforementioned gaps and further examine cultural differences in acceptability of discipline and African American and White parents' abuse risk through use of both varied measures of assessment of the definition of abuse.

Attributions of Child Behavior

Another ontological, potentially modifiable, cognitive factor of interest to this particular study is parental attribution of child behavior. Attributions are considered a Stage two process of interpretations in the SIP model, wherein attributions a parent makes regarding the intentionality of a child's behavior affect the discipline strategies selected, potentially including physically aggressive strategies that move toward the abusive end of the continuum (Milner, 2000). At-risk parents are inclined to attribute their child's negative behaviors to internal/stable reasons and attribute positive behaviors to external and unstable causes (Dadds, Mullins, McAllister, & Atkinson, 2003; Milner, 2003). In addition, research suggests an association between attributions and negative parenting behaviors. Specifically, individuals who endorse hostile attributions about others and negatively view others' intentions are more likely to elect to use an aggressive response even for minor infractions (Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). Therefore, inaccurate or negative attributions of a child's behavior can result in biases that do not allow a parent to effectively consider alternative interpretations for a child's transgressions before electing a discipline strategy (Milner, 2003). High-risk parents who attribute their child's misbehavior as intentional are three times more likely to implement harsh physical discipline strategies than low-risk mothers (Ateah & Durrant, 2005). In addition, research comparing physically abusive mothers to a matched group of non-abusive mothers demonstrates physically abusive mothers have a

greater tendency than non-abuse mothers to interpret their child's transgressions as intentional annoyance (Haskett, Scott, Willoughby, Ahern, & Nears, 2006).

Research has examined parental attributions about children's behavior in expectant mothers, (e.g., Berlin, Dodge, & Reznick, 2013). To date, only preliminary data exists and focus solely on expectant mothers, not fathers. One such study examined the association between attributions of intent of child's behavior and harsh parenting strategies. Mother-reported negative attributions of infant intent assessed prenatally were associated with maternal self-reported abuse risk and harsh parenting a year later (Bugental & Happaney, 2004). Similar findings were observed in a second study examining maternal prenatal negative attributions of children's behavior as a predictor of later official maltreatment reports. Maternal prenatal hostile attributions of children's behaviors increased harsh parenting as well as the likelihood that their child would be maltreated within the first three years of their life (Berlin, Dodge, & Reznick, 2013). These studies are the first steps in assessing this relation from a preventative approach and underscore the importance of examining hostile attributions in expectant parents as a risk factor for later maltreatment. By examining negative attributions prenatally, one can target interventions pertaining to cognitions and provide parenting resources prior to the birth of the child, potentially offsetting maladaptive child outcomes and harsh parenting. However, the existing literature only examines these constructs with expectant mothers. An examination of this relation with fathers and various racial-cultural groups will address a major gap in the literature and further inform preventative intervention strategies for families.

Findings regarding cultural differences in attributions of child intent and harsh parenting are mixed and limited. Recent studies found White mothers are slightly more likely than African American mothers to endorse the use of corporal punishment when they hold negative attributions about child intentionality (Burchinal, Skinner, Reznick, 2010). However, other research has observed ethnic minority mothers were more likely to endorse hostile attributions of child intent and later engage in child maltreatment (Berlin, Dodge, & Reznick, 2013). The existing research findings reveal mothers and fathers demonstrate similar associations. For example, a study examining parental psychological difficulties (i.e. depressive and anger symptoms) found greater attributions of intentionality in child misbehavior for both mothers and fathers and a greater tendency to endorse negative discipline practices (Leung & Slep, 2006). Aside from these studies, the child maltreatment literature fails to effectively examine both racial and gender differences in hostile attributions of child intent and their relation to individual abuse risk. The current literature largely relies on maternal sampling alone, small samples of fathers and dichotomization of racial groups in “White” and “Non-white” groups, with “Non-white” groups consisting of individuals from multiple and varied racial/ethnic backgrounds.

Research examining negative attributions of child behavior is relatively well examined and has begun to take a preventative approach by assessing the relation between child attributions and abuse risk in expectant mothers. However, findings are still limited with regard to fathers. Moreover, literature examining differences related to abuse risk across specific cultural groups is scarce. Therefore, a greater understanding is

needed in how child attributions operate between mothers and fathers that considers specific racial groups.

Methodological Concerns

One of the major limitations within the child maltreatment literature is the reliance on self-report assessment for collecting information. These methods, referred to as explicit, or overt, assessments, are limited in their absence of anonymity in responding. Therefore, with regard to sensitive constructs, individuals may be more likely to misrepresent in self-report and contribute to source bias (Fazio & Olsen, 2003). Dependence on self-reported measures is a limitation of the field as a whole and is particularly problematic for researchers assessing child abuse risk (DeGarmo, Reid, & Knutson, 2006). A parent's fear of negative consequences from honest reporting of parent-child aggression can lead to manipulation of information and inaccurate reporting (Bennet, Sullivan & Lewis, 2006) with a socially desirable presentation. Furthermore, self-report of constructs related to child maltreatment may be influenced by the respondent's fear of legal consequences, their internal disposition and mood (DeGarmo et al., 2006). Despite this concern, the maltreatment literature continues to rely heavily on self-reported assessments to study abuse risk.

In order to address this limitation, researchers have slowly begun to incorporate analog assessments of child maltreatment risk. Analog assessments provide measurement of sensitive topics through implicit or covert means (Fazio & Olsen, 2003), wherein, the respondent is not aware of what the task is intended to assess and/or how it is scored. The approach operates under the assumption that a lack of awareness of the construct will

lessen misrepresentation and manipulation of responses (Rodriguez, 2013). Analog assessments vary in their level of conscious awareness of the construct of interest (Fazio & Olson, 2003). Those tasks with greater respondent awareness, requiring more conscious processing, are most closely related to self-report measures and risk possible misrepresentation of responses (Rodriguez, 2013). Therefore, analog tasks which are more implicit in nature often correlate more modestly with self-reported measures of the same construct than analog tasks which are more explicit in nature (Rodriguez, Cook, & Jedrzewski, 2012). Utilization of self-reported measures as a means of assessment can be reinforced if an implicit analog task demonstrates an association with self-reported measures of the same construct (Rodriguez et al., 2012). Analog assessments are limited in the current literature as some can be costly and labor-intensive, although they can provide insight into whether the target construct is indeed relevant for investigation. Employment of such assessment approaches is imperative for progress in the child maltreatment literature (DeGarmo et al., 2006).

Few studies have incorporated use of analog assessments in the child maltreatment literature. Examples of early research utilizing implicit measures include assessment of mothers' punitive discipline responses under conditions of stress (Passman & Mullhern, 1977) and punitive responses after watching a video of child misbehavior (Fagot, 1992). More recent research has used subliminal priming to examine parental hostile attributions in at-risk and low-risk parents (Farc, Crouch, Skowronski & Milner, 2008). Studies have examined attributions of child intent through eye tracking when parents read vignettes of child transgressions (Rodriguez et al., 2012). In addition, recent

implicit tasks have included assessment of frustration tolerance paradigms as they relate to an individual's abuse risk (Rodriguez, Russa, & Kircher, 2015)

Research using implicit measures of acceptability of maltreatment remains limited. A majority of early studies employ use of explicit self-report assessment strategies alone. Explicit measures of definitions of maltreatment can unpack important differences between cultural groups and individuals. Although this approach is an important initial step, explicit measures may not directly target the assessment of cognitive mechanisms that ultimately inform action; therefore, implicit, analog assessments are needed. The Parent-Child Aggression Acceptability Movie Task (P-CAAM; Rodriguez, Bower Russa, & Harmon 2011) is an implicit measure of parental acceptability of parent-child aggression. Employing this measure, a significant relation between acceptability of parent-child aggression and abuse risk was identified. Mothers with greater self-reported abuse risk endorsed greater acceptability of parent-child aggression on this implicit measure (Rodriguez et al., 2011). Individuals with greater abuse risk were less likely to differentiate between physical discipline and abuse, suggesting these individuals may be less vigilant to monitor their application of physical discipline strategies in a discipline encounter (Rodriguez et al., 2011).

No data yet examines these processes with fathers or considers potential cultural differences. Further, little research compares explicit and implicit measures of the same construct (cf., Rodriguez et al., 2012). In addition to increased use of implicit, covert methods, further comparative studies examining the connections between implicit and explicit assessments in a diverse sample is needed. This study seeks to address this

measurement concern by adopting a comprehensive approach while employing implicit and explicit methods of assessment

Current Study

The purpose of this study was to adopt an ecological framework and examine both individual ontological risk factors and culture-specific macrosystem level factors in the assessment of child physical maltreatment risk with expectant mothers and fathers. This model, as discussed in the literature review, emphasizes the transactional processes of distal and proximal variables observed in African American and White parents. The literature has demonstrated factors associated with racial socialization processes such as greater racial identification may buffer psychosocial distress in ethnic minority individuals (Belgrave & Allison, 2010; Miller, 1999). Given the salience of stress in exacerbating abuse-risk (Miller-Perrin, 2012; Whipple & Webster-Stratton, 1991), greater racial identification may act as a protective factor within the larger macrosystem. In addition, although fathers are increasingly involved in child-rearing practices (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Dette-Hagenmeyer, Erzinger, & Reichle, 2014), little data effectively assesses the potential role of gender-specific factors such as gender-role egalitarian ideologies in decreased parental abuse risk for both mothers and fathers. Therefore, this study adopted a comprehensive approach by examining positive factors and ontological cognitive risk factors such as hostile attribution of child intent and definitions of child abuse as they relate to parental child abuse risk in a diverse sample of expectant parents. These risk factors were assessed

using both implicit and explicit methods in order to better capture concepts sensitive to misrepresentation.

Consequently, the goals of the proposed study were as follows:

1. A first goal of the study was to examine differences across racial groups while simultaneously examining the role of narrow definitions of abuse, attributions of intent and the culture-specific factor, racial identification, on child abuse risk. Specifically, parents with greater hostile attributions of child intent (cf., Berlin, Dodge, & Reznick, 2013) and restrictive definitions of physical abuse (wherein individuals who have a greater tolerance for parent-child aggression and who maintain a high standard for what is considered abuse; Rodriguez et al., 2011) were expected to demonstrate greater abuse risk and future harsh parenting. Greater racial identification was expected to relate to lower abuse risk in African American parents in particular. Given the literature emphasizing racial socialization as a strategy employed by African American parents to teach their children to cope with greater experiences of discrimination and negative outcomes (Brown, 2008), greater racial identification was predicted to be associated with lower child abuse risk for African American mothers and fathers but not predicted to be related to abuse risk for White parents (see Figure 1).
2. The second goal was to examine potential gender differences in abuse risk when examining definitions of abuse, attributions of child intent, and gender role ideologies as they relate to abuse risk. Maternal and paternal abuse risk was expected to be associated with egalitarian gender role attitudes, such that those with greater egalitarian gender role attitudes (i.e., less traditional gender views)

would be optimal (Shamir, Schudlich, & Cummings, 2001) and thus evidence lower abuse risk. The purpose of this goal is to examine gender differences alone, collapsing groups across race (i.e., the female group will include African American and White mothers). Literature suggests mothers and fathers' use of physical discipline strategies and risk profiles may be similar (e.g., Schaeffer et al., 2005), however, parenting styles often do not correspond between parents (e.g., Martin, Ryan & Brooks-Gunn, 2007). For example, one parent may act as the disciplinarian and more frequently engage in discipline encounters compared to the other parent (Straus & Stewart, 1999), thereby placing them at a greater risk for becoming physically abusive. Although mothers and fathers demonstrate synchrony with regard to parenting practices, mothers and fathers are predicted to differ with regard to individual-level cognitive risk factors (i.e. attributions of child intent and definitions of abuse) that impact their individual abuse risk (see Figure 2).

3. The third goal of the study was to extend recent literature incorporating implicit assessment of child maltreatment-related constructs by assessing the potential adjunct role of implicit measures when examining abuse risk with established explicit assessments. Implicit and explicit methods were used to assess hostile attributions of child intent and acceptability of parent-child aggression. Those who endorse negative attributions and more acceptance of parent-child aggression in both explicit and analog assessments, as opposed to explicit assessments alone, were hypothesized to significantly predict child abuse risk. This study's examination of gender differences in responses to the

methodological strategies (i.e., implicit vs. explicit) of both attributions about child behavior and definitions of parent-child aggression acceptance are exploratory.

CHAPTER 2

METHOD

Participants

Participants in this study consisted of 142 expectant mother-father dyads as part of a larger longitudinal study, the “Following First Families” (Triple-F) Study. Participants were recruited from socioeconomically diverse medical centers and hospitals in order to obtain a diverse sample representative of the Birmingham area. Table 1 presents demographic details for both mothers and fathers. Mothers’ mean age was 26.77 years ($SD = 5.44$) with 57.7% of mothers identifying as White and 42.3% identifying as African American. Paternal mean age was 28.84 year ($SD = 6.13$), with 52.8% of fathers identifying as White and 47.2% as African American. On average, both mothers and fathers reported completing some college/technical school and a mean annual household income between \$40,000-49,999. A majority of participants reported they were currently in a relationship with their partner (98.2%) and 88.3% live together. With regard to employment status, 72.9% of all participants were currently employed and 27.1% of participants were receiving public assistance.

Procedure

Participants were recruited as part of a larger prospective longitudinal parenting study of pregnant mothers and their partners, the Triple F study. The overall aims of the Triple F study includes examination of contextual taxes and resources in conjunction with cognitive factors as they relate to parent-child aggression risk trajectories over time. The Triple F study evaluates Social Information Processing (SIP) cognitive factors as they

relate to those contextual factors and how SIP variables change over time following the birth of a child. The aims of the current study vary from the Triple F study in that the current study adopts a broader ecological perspective to include macrosystem level factors, examining culture-specific factors as they relate to child abuse risk. The current study shares an interest in addressing the gap in maltreatment literature with regard to paternal abuse risk models; therefore, this project sought to examine gender specific variables of individual abuse risk as well.

Data for the Triple F study are collected over a three-year period involving three time points. Time one involved data collection from first-time expectant mothers and fathers during the third trimester of their pregnancy. Time two of data collection occurred following the birth of the child when the child was 6 months old. Lastly, time three of data collection occurs when the child turns 18 months old. Data for the current study consist solely of participants collected during the first wave of the larger study.

Participants were collected through flyers distributed at local hospitals and birthing classes across the Birmingham area. Individuals interested in participating contacted the number provided on the flyer in order to determine eligibility for the study (first-time parents in the third trimester of their pregnancy) and arrange a time to participate either in an in-home or in-lab family assessment. Informed consent from mothers and fathers was obtained upon the start of the data collection session. Following the consenting procedure, participants were placed in a private area to complete self-reported questionnaires and analog measures on laptop computers (mother and fathers complete the study independently). Responses to items were automatically saved to the laptop database and only identified by the assigned participant number. The entire

protocol took approximately 2-3 hours to complete depending on the parents' reading level. Each parent received \$60 as compensation for participation in the first wave of the study.

Materials

Covariate Measures

Demographic Controls included: age; a measure of education which was ordinally coded on a 7-point scale with 1 representing "grade school" and 7 representing "post graduate school" completion; household annual income, also coded ordinally ranging from 1 (\$0-2,999) to 12 (\$100,000+). Additionally, participants reported their relationship status with the other parent in the study using a dichotomous scale by responding either yes/no to indicate current status at the time of the study.

Social Support Resources Index (Vaux & Harrison, 1985) includes a Social Satisfaction subscale, with 10 items measuring the extent to which individuals feel satisfied by the two closest members of their social support system. Items are rated on a Likert scale (1 = strongly disagree to 5 = strongly agree), with greater scores indicating higher sense of support. The measure has demonstrated high internal consistency of .88 (Vaux & Harrison, 1985). Internal consistency in the current sample yielded a Cronbach's alpha of .90 for mothers and .92 for fathers.

Parent Abuse-Risk Measures

Child Abuse Potential Inventory (CAPI; Milner, 1986) is a 160-item inventory measuring characteristics associated with identified abusers, using six subscales to

capture abuse risk (Distress, Rigidity, Unhappiness, Problems with Child and Self, Problems with Family, and Problems from Others). Only 77 variably weighted items comprise the Abuse Scale, and the remaining items acting as experimental scales or distortion indices. The CAPI was developed as a screening tool to assess the extent to which parents endorse factors identified in substantiated perpetrators. Items are answered in an Agree/Disagree format. Higher scores on the Abuse Scale are associated with greater risk for engaging in physical abuse. The measure shows reliability across age, gender, education level, and ethnic group, with internal consistency for the Abuse Scale ranging from .92 to .96 for both abusive and non-abusive populations (Milner, 1986). The measure has shown an accurate classification rate at 89.2% for predicting confirmed child abusers (Milner, Gold, & Wimberley, 1986).

Adult - Adolescent Parenting Inventory-2 (AAPI-2; Bavolek & Keene, 2001) is a 40-item measure that assesses the degree of agreement with parenting beliefs and behaviors regarding child rearing associated with abuse risk on a 5-point Likert scale. The measure examines four domains: Inappropriate Expectations, Lack of Empathy, Belief in Corporal Punishment, and Parent–Child Role Reversal. Scores are obtained by totaling ratings across items, with *higher* scores indicative of more *negative* parenting attitudes and beliefs. The measure has demonstrated high internal consistency for the AAPI-2 Total score at .85 (Connors, Whiteside-Mansell, Deere, Ledet, & Edwards, 2006). Internal consistency of the AAPI-2 Total score in the current sample yielded a Cronbach’s alpha of .88 for mothers and .89 for fathers.

Future Parental Authority Questionnaire (FPAQ) was generated to assess expected parenting style. The original PAQ-R (Reitman, Rhode, Hupp, & Altobello,

2002) is a 30 item measure of parenting style. Items are scored on a 5-point Likert scale from Strongly Agree to Strongly Disagree (e.g. “I do not allow my children to question any decision I have made.”). The PAQ-R is based on Baumrind’s (1971) parenting styles designed to assess three styles: Authoritarian, Authoritative and Permissive. Therefore, the measure produces a total score for each of these styles. The PAQ-R has demonstrated moderate internal consistency for the three styles: $\alpha = .74$, authoritarian; $\alpha = .74$, permissive; $\alpha = .66$, authoritative (Reitman et al., 2002). All 30 items from the Parental Authority Questionnaire-Revised were modified to reflect parenting strategies participants expected to use in the future. Similar to the PAQ-R, all items on the modified version are scored on a 5-point Likert scale from Strongly Agree to Strongly Disagree (e.g. “I will not allow my children to question any decision I have made.”). A total score for each parenting style (Authoritarian, Authoritative and Permissive) is produced with total score oriented to convey more of that particular parenting style. The current study used the Authoritarian parenting score only as a predictor for abuse risk. Previous literature identified authoritarian as a maladaptive and “negative” style of parenting (Grolnick, 2013), associated with greater abuse risk and endorsements of harsh physical discipline strategies (Rodriguez, 2010). The reliability coefficient for the Authoritarian scale in the current sample was .79 for mothers and .82 for fathers.

Cultural Measures

Multigroup Ethnic Identity Measure (MEIM; Phinney, 1989) is a 20-item assessment of personal ethnic identity. The scale assess two aspects of an individual’s identity: 1) Affirmation, Belonging and Commitment, a measure of belonging and positive attitudes associated with ones’ ethnic group and 2) Ethnic Identity Search, the

amount of exploration of ethnic identity. Items are rated using a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree). The measure can be used with both adolescents and adults from any ethnic group. Example items include, “I have a clear sense of my ethnic background and what it means to me” and “I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.” Items are summed to create a total score, with higher scores demonstrating lower ethnic identification. The MEIM has demonstrated satisfactory reliability, with $\alpha = .84$ (Phinney et al., 2001). The current study focused on use of the Affirmation/Belonging scale alone, due to the goals of the study focusing on assessing the role of positive attitudes related to ones’ ethnic group. The alpha coefficient obtained for the current sample was comparable at .82 for mothers and .84 for fathers.

Sex Role Egalitarianism Scale-Short Form (SRES; King & King 1997) is a measure of attitudes toward the equality of men and women’s roles. The SRES Short Form is a 25-item measure containing items addressing beliefs about both women and men assuming non-traditional roles (e.g., “Home economics courses should be as acceptable for male students as for female students”). The measure has 5 subscales measuring attitudes regarding (1) educational roles, (2) employment roles, (3) marital roles, (4) parental roles, and (5) social-interpersonal-heterosexual roles. Items are scored on a 5-point Likert Scale ranging from Strongly Agree to Strongly Disagree. A summary score is created by summing item responses, with higher values indicating more egalitarian attitudes. The SRES-Short Form has demonstrated high internal consistency, with $\alpha = .87$ (Kingsbury & Coplan, 2012). The current sample demonstrated high internal consistency for mothers and fathers at .91 and .92, respectively.

Measures of Attribution Bias

Noncompliance Implicit Association Task (Noncompliance IAT; Rabbit, 2013) is an analog assessment of parental attributions toward children. The task is modeled after the original Implicit Association Test (Greenwald, 1998) examining automatic associations that can influence our attitudes and behaviors by rapidly measuring an individual's attitudes that are not accessible to awareness. Similar to the original task, the current measure is a computer-based task requiring participants to sort words (e.g. "pleasant", "temper tantrum") into two attributional categories (e.g. "good" and "bad" or "obeying" and "disobeying"). Faster ("speeded") response categorizations are considered more strongly associated attributions than slower responses. The Noncompliance IAT adopted for use in this study involves a series of seven trials. First, participants were presented with a nonbiased categorization practice phase requiring individuals to sort items into categories of insects and flowers in order to familiarize participants to the task. Then the Noncompliance IAT is administered wherein participants complete a similar sorting procedure categorizing words into compliance categories. During the first trial, participants sort words (e.g., "talk back," "tantrum," "cooperate," "pay attention) into either an "obey" or "disobey" category. Second, respondents sort attributional words (e.g., "terrible," beautiful") into a "good" or "bad" category. The third trial then presents both sets of categories (good/bad and obey/disobey) in a combined task and requires participants to sort the attributes from both categories. For example, "Obey/Good" will be presented on the left side of the screen and "Disobey/Bad" will be presented on the right side of the screen. Participants are still presented with a single word and asked to identify if the word belongs to the "Obey/Good" category or the "Disobey/Bad" category. The

fourth trial is a repetition of trial three. Trial five essentially repeats the first task, with the presentation of categories reversed. For example, if Obey was presented on the left side of the screen and Disobey was presented on the right side of the screen on trial one, trial five will present Disobey on the left side of the screen and Obey on the right side of the screen. Trial six is a repetition of trial three; however, the categories are reversed. For example, instead of “Obey/Good” appearing on the left side of the screen, trial six will present “Obey/Bad.” Trial seven is a repetition of trial six. This Noncompliance IAT was scored using a standard algorithm that divides the difference between test block mean latency score by the standard deviation of all latencies with an error penalty, one of the recommended strategies for computing IAT scores (Greenwald, Nosek, & Banaji, 2003). Thus, a difference score is generated where higher scores indicate more negative child attributions.

The Plotkin Child Vignette (PCV; Plotkin, 1983) is a measure of parental attributions of child behaviors. The measure consists of 18 vignettes of child behavior in which parents are asked to imagine their own child was the one engaging in the presented behavior. Parents are then asked to rate the vignette for how much they believed their child acted to intentionally annoy them on a 9-point Likert scale ranging from 1 (my child did not mean to annoy me) to 9 (the only reason my child did this was to annoy me). In addition, parents are asked to rate their likelihood of punishing their child for the behavior exhibited in the vignette from 1 (I would not punish my child at all) to 9 (I would punish my child a great deal). Items are summed to create two subscale scores: 1) PCV Annoyance score and 2) PCV Likelihood to Punish score. Higher scores suggest greater attribution of children’s intentional annoyance and greater likelihood to punish,

respectively. The attribution scale, PCV Annoyance, was of particular interest in this study. The measure has demonstrated satisfactory internal consistency for both subscales ($\alpha = .83$ for Annoyance and $\alpha = .84$ for Punish; Rodriguez et al., 2012). Reliability analyses for PCV Annoyance in the current sample yielded a Cronbach's alpha of .85 for mothers and .88 for fathers, demonstrating high internal consistency.

Definition/Acceptability of Abuse Measures

The Parent-Child Aggression Acceptability Movie Task (P-CAAM Task; Rodriguez et al., 2011) is an analog measure assessing participants' acceptability of physical discipline strategies. During the task, participants watch 90-sec movie clips from eight different movies depicting a parent engaged in either physical discipline or physical abuse. Participants are asked to stop the video if and when they consider the scene has become abusive. Response latency to stopping the clips are timed, with slower response times suggesting greater acceptability of abuse. The P-CAAM has demonstrated acceptable internal consistency with $\alpha = .77$ (Rodriguez et al., 2011). The current sample demonstrated adequate reliability with $\alpha = .82$ for mothers and .84 for fathers.

Physical Abuse Vignettes (Shanalingigwa, 2009) was used to assess a participant's definitions of abuse. The eight vignettes were modeled after those created by Giovannoni and Becerra (1979) and depict a wide range of parent-child aggression. Each vignette describes a physically aggressive parental action and a consequence to the child. A 4-point scale was used to assess the severity of the parent-child interaction ranging from (1) low to almost nothing to (4) extremely serious, and each vignette is rated independently of every other. In addition, for each item, participants are asked if they feel the behavior was maltreatment and if they feel the incident should be reported to

the authorities. The current study only used individual endorsement of maltreatment. Items were summed to create a total score, with higher scores indicating greater acceptability of physically abusive discipline strategies. The current sample yielded modest internal consistency with $\alpha = .53$ for mothers and $.63$ for fathers.

Data Analyses

Preliminary analyses were conducted using SPSS 20 for Windows. First, analyses were conducted to assess normality of individual variables of interest. Violations of normality were observed for three variables, CAPI total, N-IAT and Plotkin total. Both CAPI total and Plotkin total evidenced a positively skewed distribution as observed on scatterplots. N-IAT scores evidenced a negative skewed distribution. However, due to the robust nature of multivariate analyses, the raw scores were retained to maintain interpretability of findings.

After the potential need for covariates and simple bivariate relationships were examined, study hypotheses were examined using multiple regression in SPSS 20 and multivariate interdependent modeling in Mplus, version 5.0 (Muthén & Muthén, 2007). Multivariate analyses accounted for the complexity of dyadic data. Full information maximum likelihood estimation was used to estimate the models, with the missing data option used to make full use of all available data. Overall, rates of missing data across scales were low (<5%); therefore, missing values were addressed using mean replacement. Given the sample size as it relates to available model parameters, measure scores were standardized and summed to create composite variables for Abuse Risk

(CAPI, APPI, Future Authoritarian), Attribution of Child Intent (Plotkin and N-IAT) and Acceptability of Abuse (PCAAM and Vignettes Definitions of Abuse scale).

Multiple regression analyses were used to examine racial differences in abuse risk in African American and White parents as they relate to variables of interest (Attribution Style, Acceptability of Abuse, and Racial Identity). Two separate models were created, one examining White parents' attributions of child intent, acceptability of abuse and racial identity as it related to abuse risk. Second, a model was created to examine the aforementioned factors as they relate to African American abuse risk. Initial analyses of the regression models were structured as follows: potential demographic controls (income, age, education, relationship status, and social support) were entered at Block 1, followed by Attribution, Acceptability of Abuse, and Racial Identity entered at Block 2. Consideration of multicollinearity diagnostics confirmed that all variables across all regressions demonstrated robust tolerance, with no evident multicollinearity (all VIFs < 2).

Second, an Actor-Partner Interdependence Model (APIM) was created to examine gender differences with regard to abuse risk while accounting for potential partner shared variance. Traditionally, research examining dyads has focused on examining each member of a couple individually, by assessing one's own behaviors or attitudes. However, this approach does not consider the dependency and potential impact of one individual on another's behavior. APIM allows the simultaneous and independent examination of the effect of an individual's score on their own dependent variable of interest (an actor effect) as well as how their individual score relates to another's dependent variable of interest (a partner effect) (Kashy et al., 2000; Cook & Kenny,

2005). Actor, partner, and actor by partner interaction effects are estimated simultaneously, controlling for one another. In effect, this approach recognizes that the dyad is an interpersonal nested system and that both people need to be considered simultaneously (see Figure 2). Goodness of fit indices were examined to evaluate the strength of the observed model. This was done through the use of chi-square, root mean square error of approximation (RMSEA), comparative fit index (CFI) and standardized root mean square residual (SRMR) analyses.

CHAPTER 3

RESULTS

Normative Comparisons

To characterize the sample, obtained scores were first compared with normative means for the outcome variables of interest. In the current sample, White mothers obtained a mean CAPI Abuse scale score of 69.09 ($SD = 62.49$), which is representative of low maternal abuse risk (lower than the normative mean of 91.0; Milner, 1986). White mothers also reported a mean AAPI-2 score of 145.53 ($SD = 15.42$), which is near the normative range for females (146-153, oriented in the original scoring with higher scores reflecting lower abuse risk; Bavolek & Keene, 2001). In contrast, African American mothers endorsed a mean CAPI Abuse scale score of 115.47 ($SD = 75.84$), higher than the normative mean of 91.0. In addition, African American mothers reported a mean AAPI-2 score of 128.82 ($SD = 18.30$), which is lower than the normative range of 146-153, wherein lower scores are indicative of higher abuse risk (Bavolek & Keene, 2001). Caucasian mothers attained a mean Future Authoritarian PAQ score of 33.44 ($SD = 5.99$) whereas African American mothers had a mean score of 35.33 ($SD = 6.75$) on the Future PAQ Authoritarian scale. No normative information, however, is available for comparison with the obtained Future PAQ Authoritarian scores.

White fathers reported a CAPI Abuse scale score of 64.59 ($SD = 45.20$) and an AAPI-2 score of 140.68 ($SD = 18.72$), both within the normative range. African American fathers obtained a mean CAPI abuse scale score of 112.10 ($SD = 62.59$), which is higher than the normative mean. African American fathers also endorsed AAPI-2 mean score of 120.61 ($SD = 16.00$), which falls below the identified normative range for males

(134-140; Bavolek & Keene, 2001), representative of high paternal abuse risk. White fathers obtained a mean Future PAQ Authoritarian score of 33.19 ($SD = 6.93$) and African American fathers obtained a mean Future Authoritarian PAQ of 35.97 ($SD = 6.19$).

Subgroup Demographic Comparisons

Demographic comparisons were conducted to examine subgroup differences across variables of interest on participant's age, income, education and social support. With regard to gender, mothers and fathers significantly differed in age, wherein fathers were significantly older than mothers (see Table 1). Mothers and fathers did not significantly differ in reported income, education and social support. Analyses examining racial differences revealed African American and White parents significantly differed across all demographic variables of interest. White parents were significantly older, reported a higher annual income, higher education level and more social support than African American participants.

Mothers' Demographic Analyses

Preliminary analyses were conducted to examine the need for statistical controls. For mothers, education, income, age, social support and relationship status were negatively correlated with abuse risk measures of AAPI-2 Total scores and CAPI Abuse Scale scores (see Table 3). Mothers' lower educational attainment, income, and age were associated with greater abuse risk. Future Authoritarian PAQ was not significantly correlated with any demographic variables for mothers. With regard to cultural variables of interest related to gender, education, income, social support and age were positively correlated with mothers' reported gender role ideologies, wherein greater egalitarian

gender role ideologies were related to greater social support and higher education and income level. Mothers' reported greater racial identification was only significantly related to lower educational level.

Fathers' Demographic Analyses

Similarly, fathers' education, income, age and relationship status were inversely correlated with abuse risk measures of AAPI-2 Total scores and CAPI Abuse Scale scores (see Table 4). Education was also significantly inversely correlated to fathers' Future Authoritarian PAQ, such that lower education level was associated with greater anticipated authoritarian parenting. Fathers reported social support was only negatively correlated to CAPI scores. Similar to maternal report, fathers' reported gender role ideologies were positively correlated with education, income, social support and age. Fathers' greater racial identification was only significantly related to greater social support.

Gender Comparisons

Paired t-test analyses were conducted to assess group mean differences based on sex and independent sample t-tests to assess mean differences by race across variables of interest (see Table 2). A significant mean difference was found between mothers and fathers on AAPI-2 Total score ($t(141) = -3.88, p \leq .01$), wherein mothers reported a significantly lower mean score ($M = 101.52, SD = 18.59$) than fathers ($M = 108.19, SD = 19.89$). Greater scores on the AAPI-2 Total were coded in this study to represent greater negative at-risk parenting. Therefore, in the current sample, fathers reported greater at-risk parenting beliefs. Mean differences were not found between mothers and fathers with regard to CAPI Abuse Scale and Future Authoritarian PAQ scores. With regard to gender

differences on cultural measures of interest, mean differences were found between mothers and fathers on gender role ideologies ($t(141) = 5.95, p \leq .001$), but not on racial identity ($t(141) = -.19, p > .05$). Mothers reported significantly higher ($M = 106.07, SD = 15.22$) SRES scores than fathers ($M = 98.16, SD = 17.50$), suggesting more egalitarian gender role ideologies compared to their partners.

Racial Comparisons

With regard to racial differences, a significant mean difference was found between White parents and African American parents on the AAPI-2 Total ($t(280) = -8.75, p \leq .001$), CAPI Abuse Scale ($t(281) = -6.35, p \leq .001$), and Future Authoritarian PAQ ($t(281) = -3.05, p \leq .001$). African American parents reported a higher AAPI-2 Total ($M = 114.94, SD = 17.45$), CAPI Abuse Scale ($M = 1.97, SD = .29$) and Future Authoritarian PAQ ($M = 35.67, SD = 6.44$) than White parents on the AAPI-2 ($M = 96.78, SD = 17.19$), CAPI Abuse Scale ($M = 1.71, SD = .31$), and Future Authoritarian PAQ ($M = 33.32, SD = 6.43$). African American parents reported greater at-risk parenting on all three measures of abuse-risk when compared to White parents.

Significant group differences were also noted between African American and White parents with regard to racial identity ($t(282) = 3.92, p \leq .001$) and gender role ideologies ($t(282) = 6.65, p \leq .001$). African American parents reported a significantly lower racial identity mean score ($M = 12.50, SD = 5.18$) than White parents ($M = 14.81, SD = 4.70$). Lower racial identity mean scores are suggestive of greater endorsements of the construct; therefore, African American parents reported a greater sense of affirmation, belonging and commitment to their racial group when compared to White parents.

Conversely, White parents reported significantly higher egalitarian gender role ideologies ($M= 107.69$ $SD= 13.42$) than African American parents ($M= 95.22$ $SD= 18.11$).

Preliminary Correlational Analyses of Outcome Variables

Initially, correlations between variables of interest were examined as they relate to maternal and paternal measures of abuse risk. Furthermore, intercorrelations between implicit and explicit measures of similar constructs were examined.

Maternal report

See Table 3 for detailed correlations between maternal variables of interest. As expected, all maternal abuse-risk measures were significantly intercorrelated. With regard to measures of acceptability of abuse, mothers' self-reported definitions of abuse and implicit analog measure of acceptability were significantly correlated. Conversely, implicit and explicit measures of attribution, as measured by the N-IAT and Plotkin Attribution self-report, were not significantly correlated. Mothers' reported abuse risk measures varied in relation to the other variables of interest. AAPI-2 Total scores were significantly correlated with all variables of interest. Refer to Table 3 for details regarding directionality. Mothers' reported CAPI Abuse Scale scores were significantly correlated with all measures of interest with the exception of racial identity and both implicit and explicit acceptability of abuse. Future Authoritarian PAQ was significantly correlated with all measures of interest except mothers' obtained N-IAT scores and explicit definitions of abuse.

Paternal Report

With regard to paternal variables of interest (see Table 4), fathers' reported abuse risk measures were not all intercorrelated. Fathers' AAPI-2 scores were correlated with both Future PAQ and CAPI Abuse Scale score; however, CAPI Abuse Scale scores and Future PAQ were not correlated with one another. With regard to intercorrelations between measures of attributions and definitions of abuse, similar to maternal report, implicit and explicit measures of acceptability of abuse (PCAAM and definition of abuse vignettes) were significantly inversely correlated; however, measures of attributions (N-IAT and Plotkin Annoyance) were not significantly related. Unlike maternal report, paternal reported AAPI-2 Total scores did not significantly correlate with all measures of interest. Paternal AAPI-2 Total scores did not correlate with racial identity scores. Paternal CAPI Abuse Scale scores differed from maternal findings; CAPI Abuse Scale scores only significantly correlated to paternal gender role ideologies and measures of attributions (Plotkin Annoyance and N-IAT). Fathers' Future Authoritarian PAQ correlated with all variables of interest with the exception of N-IAT scores.

Multivariate Analyses Examining Racial Differences

Separate hierarchical multiple regression analyses were performed to determine the unique roles of Attributions of Child Intent, Acceptability of Abuse, and Racial Identity in predicting parental Abuse Risk in White and African American parents. As noted above, regression models consisted of demographic controls (age, income, education, relationship status, and social support) in Block 1, followed by predictors in

Block 2. Tables 5 and 6 present the summary of regression models for White and African American parents, respectively. The full model results are reported in this section.

With regard to White parents, the full model results in an $R^2 = .40$, $F(8, 148) = 12.25$, $p < .01$ (see Table 5). White parents' reported attributions of child intent significantly related to individual abuse risk after controlling for potential covariates. An association was not found between White parents' acceptability of abuse and abuse risk beyond demographic controls. White parents' reported racial identity was found to directly relate to greater parental abuse risk (see Figure 3). Contrary to hypotheses, for African American parents, however, racial identity did not significantly relate to individual abuse risk beyond demographic controls. The full model for African American parents obtained an $R^2 = .35$, $F(8, 118) = 7.90$, $p < .01$ (see Table 6). Similar to White parents, only attributions of child intent was found to have a significant relation to individual abuse risk in African American parents when controlling for demographic covariates. African American parents' reported acceptability of abuse remained nonsignificant (see Figure 4).

Actor-Partner Analyses Examining Gender Differences

Actor-Partner Interdependence Modeling (APIM) was used to test the proposed model examining gender role ideology as it relates to abuse risk between mothers and fathers for the second goal of the study. This model simultaneously tests the unique contributions of self-reported abuse risk, partner-reported abuse risk, individual attributions, acceptability of abuse, and self-reported gender role ideology for both mothers and fathers. Each of the three predictors was correlated with the partner-reported

corresponding predictor (i.e. maternal attribution was correlated with paternal attribution). In addition, maternal and paternal abuse risk composites were correlated. First, a full model was created containing all covariates of interest to include age, income, education, relationship status and social support. Model fit indices for the full model suggested poor fit. Chi square analyses of overall fit of the observed model resulted in a significant Chi square statistic $\chi^2 = 1179.48$, $p < .01$ ($df_M = 131$). However, a significant test statistic is suggestive of poor model fit. With regard to RMSEA, the current model obtained an RMSEA = 0.24 (90% CI 0.23 -.25; $p < .05$) and is also indicative of poor fit to the data. In addition, the CFI index was examined to compare the proposed model to a null/baseline model. Higher scores indicate greater fit. The current model obtained a CFI = .14 thereby demonstrating poor model fit in comparison to the null/baseline model. Lastly, the current model obtained an SRMR index score of 0.29, indicative of poor fit.

A second actor-partner model was created to assess model differences with a more parsimonious model that included only significant covariates to include social support and education. Goodness of fit statistics suggest a slightly better fitting model. Chi square analyses of overall fit of the observed model resulted in a significant chi square statistic $\chi^2 = 212.33$, $p < .01$ ($df_M = 50$). As noted above, a significant test statistic is suggestive of poor model fit. With regard to RMSEA, the current model obtained an RMSEA = 0.15 (90% CI 0.13 -.17; $p < .05$) and is also indicative of poor fit to the data. The current model obtained a CFI = .49 thereby demonstrating poor model fit in comparison to the null/baseline model. Lastly, the SRMR for this second model is 0.20 and demonstrates poor model fit. Overall, this model is significantly different from the

full model; however, the model continues to evidence poor fit. Therefore, it is not appropriate to interpret mean differences using this model.

A third model examining only independent variables of interest as they relate to mothers' and fathers' abuse risk was analyzed. This third model yielded a chi square statistic $\chi^2=40.26$, $p < .05$ ($df_M = 16$). A significant test statistic is suggestive of poor model fit. With regard to RMSEA, the current model obtained an RMSEA = 0.10 (90% CI 0.06 -.14; $p < .05$) and is also indicative of poor fit to the data. The current model obtained a CFI= .82 thereby demonstrating slightly better model fit in comparison to the null/baseline model. Lastly, the SRMR for this second model is 0.11 and demonstrates poor model fit as well.

Due to poor fit indices observed in the aforementioned models, a fourth model was created removing nonsignificant relations between mothers' and fathers' attributions and between maternal and parental acceptability of abuse. The significant correlation between maternal and paternal gender role ideologies was retained. This model yielded a chi square statistic $\chi^2=28.07$, $p < .05$ ($df_M = 12$). The current model obtained an RMSEA = 0.10 (90% CI 0.05 -.14; $p < .05$), a CFI= .88, and SRMR of 0.08. This fourth model demonstrated moderate fit and was the best fitting model relative to the previous three models. Results relating to maternal and paternal abuse risk will be interpreted based on findings from this model as depicted in Figure 5.

Figure 5 presents the abuse risk APIM for mothers and fathers. For mothers, negative attributions of child intent were directly and significantly related to greater abuse risk. Fathers' reported attributions of child intent were not significantly related to fathers' individual abuse risk. Conversely, mothers' and fathers' acceptability of physical

discipline strategies was not significantly related to abuse risk. Both mothers' and fathers' gender role ideologies inversely related to individual abuse risk, wherein less egalitarian gender ideologies related to greater individual abuse risk. Furthermore, significant partner effects were observed with regard to gender role ideologies and both maternal and paternal abuse risk. Fathers' reported gender role ideologies significantly related to maternal abuse risk and mothers' reported gender role ideologies significantly related to paternal abuse risk.

Implicit vs. Explicit Measures

Analyses were conducted to assess the adjunct nature of implicit measures with already established explicit measures. First, a model was performed containing only explicit measures of attribution (Plotkin Annoyance), acceptability of abuse (Definitions of Abuse Vignettes), and variables of interest (racial identity and gender role ideologies) assessing the relation with the Abuse Risk composite. Second, a model was created containing both aforementioned explicit measures, as well as implicit measures (N-IAT and PCAAM) and variables of interest (racial identity and gender role ideologies). Lastly, exploratory analyses were conducted to examine a model containing implicit measures alone with variables of interest (racial identity and gender role ideologies) as they relate to individual abuse risk. This was completed separately for mothers and fathers to examine potential gender differences.

Maternal Implicit v. Explicit Measurement Models

First, a model was created containing maternal only explicit measures of attributions, definitions of abuse and gender role ideologies. Model fit indices for the

model suggested poor fit. Chi square analyses of overall fit of the observed model resulted in a significant chi square statistic $\chi^2 = 23.62$, $p < .01$ ($df_M = 3$), suggestive of poor model fit. With regard to RMSEA, the current model obtained an RMSEA = 0.22 (90% CI 0.14 -.31; $p < .05$) and is also indicative of poor fit to the data. In addition, the CFI was examined to compare the proposed model to a null/baseline model. Higher scores indicate greater fit. The current model obtained a CFI = .79 thereby demonstrating moderate model fit in comparison to the null/baseline model. Lastly, the current model obtained an SRMR index score of 0.14, indicative of moderate fit.

A second model was created containing both explicit and implicit measures of attributions of intent and acceptability of physical discipline as well as, gender role ideologies. The model yielded a chi square statistic $\chi^2 = 55.07$, $p < .01$ ($df_M = 10$), RMSEA = 0.18 (90% CI 0.14 -.23; $p < .05$), CFI = .60, suggestive of poor fit. However, the model obtained an SRMR index score of 0.14, indicative of moderate fit.

Based on aforementioned analyses, the model containing explicit measures alone was a better fitting model, evidencing moderate fit. Further exploratory analyses were conducted to examine fit for a model containing implicit measures alone. These analyses yielded a model chi square statistic $\chi^2 = 23.58$, $p < .01$ ($df_M = 3$), RMSEA = 0.22 (90% CI 0.14 -.31; $p < .05$), CFI = .66, suggestive of poor fit. However, the model obtained an SRMR index score of 0.12, indicative of moderate fit. Overall, findings for mothers suggest a model containing explicit measures alone is the best fitting model, in which implicit measures did not significantly improve model fit.

Paternal Implicit v. Explicit Measurement Models

A second set of models was created to examine the role of implicit and explicit measures as they relate to paternal report. First a model containing explicit measures alone was examined. This model obtained a chi square statistic $\chi^2 = 10.04$, $p < .05$ ($df_M = 3$), suggestive of poor fit. However, the current model yielded an RMSEA = 0.13 (90% CI 0.05 -.22; $p > .05$), CFI = .91, and an SRMR index score of 0.09, indicative of good model fit. Next, a second model was created to assess the adjunct role of implicit measures with regard to paternal report and included both explicit and implicit measures as well as gender role ideologies. This model yielded a chi square statistic $\chi^2 = 59.58$, $p < .01$ ($df_M = 10$), RMSEA = 0.19 (90% CI 0.14 -.23; $p < .05$), CFI = .38, and an SRMR = 0.13 suggestive of moderate fit. Lastly, exploratory analyses were created to examine a model containing implicit measures alone. This model obtained a chi square statistic $\chi^2 = 16.73$, $p < .01$ ($df_M = 3$), RMSEA = 0.18 (90% CI 0.10 -.27; $p < .05$), suggestive of poor fit. However, the model obtained a CFI = .78 and an SRMR index score of 0.11 suggestive of moderate fit. Similar to mothers, findings for fathers suggest a best fitting model to include explicit measures alone. The model containing implicit measures in addition to explicit measures significantly worsened model fit, but suggested moderate fit for fathers. Therefore, there were no significant observed gender differences as both mothers and fathers appeared to evidence best fitting models to include explicit measures alone.

CHAPTER 4

DISCUSSION

The current study sought to examine physical abuse risk in first-time expectant mothers and fathers. The study adopted an ecological approach to examining abuse risk by assessing both proximal and distal factors beyond the traditional focus on intra-individual processes alone. Specifically, proximal, individual-level risk factors such as attributions of negative child intent and definitions of abuse were examined in conjunction with distal, cultural protective factors such as gender role ideologies and racial identification. These specific factors were targeted 1) to address the relative gap in extant literature assessing nuances of cultural differences with regard to abuse risk and, 2) due to the mixed literature regarding contributions of these risk factors in mothers and fathers. Previous literature has also primarily focused on maternal samples; therefore, models assessing paternal abuse risk are less clear. The current study sought to extend the literature and examine these aforementioned factors in fathers as well as mothers while assessing for gender differences related to the variables of interest.

First, the present study examined racial differences in abuse risk and hypothesized both negative attributions of child intent and greater acceptability of parent-child aggression would relate to greater abuse risk in African American and White parents. Racial identity was also hypothesized to demonstrate a protective role in African American families to thereby evidence lower abuse risk. A significant relation between White parents' racial identity and abuse risk was not predicted. A second goal of the

study was to examine potential gender differences in abuse risk and examine the relation between attributions of child intent and acceptability of abuse on both maternal and paternal abuse risk. Greater negative attributions of child intent and more acceptable definitions of abuse were expected to relate to greater abuse risk in both mothers and fathers. Additionally, this study examined the potential protective role of egalitarian gender role ideologies as they relate to parenting. Greater egalitarian gender role ideologies were predicted to relate to lower abuse risk in both mothers and fathers. Lastly, methodological concerns in the extant literature were addressed by examining variables of interest using both implicit and explicit methods of assessment. It was hypothesized that models utilizing both implicit and explicit measures would best predict child abuse risk versus models containing either implicit or explicit measures alone. The following discussion will summarize results addressing these three aforementioned goals and then focus on clinical and empirical implications.

The proposed hypotheses of the study were partially supported. The overall findings contributed to the aims of the study in examining potential gender and racial differences with regard to abuse risk and underscored the importance of assessing macrolevel cultural factors as they relate to individual risk. The present findings indicate differences between African American and White parents with regard to the role of racial identity on abuse risk. Furthermore, findings suggest potential gender differences with regard to individual-level predictors of abuse risk, but a shared buffering role of gender role ideologies on both maternal and paternal abuse risk. The ensuing discussion focuses first on examining both risk and protective factors across racial groups then between

mothers and fathers. Lastly, the discussion will assess the role of implicit methodology in measuring constructs of interest as they relate to abuse risk.

Findings for White Parents

As noted above, the current study sampled African American and White expectant mothers and fathers from the greater Birmingham area. Sample statistics suggest group differences with regard to variables of interest by race. White parents reported lower abuse risk scores on the CAPI and AAPI-2 when compared to African American parents. Furthermore, White parents abuse risk scores were consistent with normative means for each abuse risk measure, suggesting the current sample of White parents was comparable to a community low-risk sample. With regard to demographic differences, White parents were significantly older, reported higher income, and reported higher educational attainment than African American parents. These contextual factors play a significant role with regard to the quality of parenting, practices, and beliefs. Past literature identifies a relation between education and abuse risk, such that those with higher educational attainment have a greater fund of knowledge with regard to discipline strategies and more adaptive parenting practices (Black et al., 2001). In addition, higher education is associated with greater access to economic resources, which mitigates financial distress (Krieger et al., 1997).

With regard to cultural variables of interest, White parents were found to endorse greater egalitarian gender role ideologies. Less traditional gender role ideologies are suggestive of greater shared child-rearing responsibilities, which are important for reducing maternal stress (Kalil, Ziol-Guest, & Coley, 2005). Stress is a well-established

predictor of abuse-risk in parents (Miller-Perrin, 2012; Whipple & Webster-Stratton, 1991); therefore, families in which egalitarian attitudes are endorsed, and child-rearing responsibilities are shared, may demonstrate lower abuse risk. Findings demonstrated racial differences with regard to racial identity, such that White parents endorsed significantly lower racial identification compared to African American parents. These results will be discussed further in upcoming sections examining multivariate model results.

Multivariate regression analyses were conducted to examine abuse risk in White parents. A regression model was created examining the relation between attributions of child intent, definitions of abuse and racial identity on abuse risk while controlling for age, education, income, relationship status, and social support. The regression model suggested a direct relation between attributions of child intent and abuse risk for White parents such that greater negative attributions of children's intentions were related to higher abuse risk. These findings were consistent with proposed hypotheses and previous literature identifying a relation between parental negative attributions of intent and self-reported abuse risk (Leung & Slep, 2006). This factor is important to examine given the significant relation between prenatal negative attributions of intent and later implementation of harsh physical discipline strategies (Bugental & Happaney, 2004). Negative attributions of a child's behavior can result in biases that do not allow a parent to effectively consider alternative interpretations for a child's transgressions before selecting a discipline strategy (Milner, 2003).

Findings examining acceptability of child abuse in White parents were inconsistent with hypotheses, demonstrating a nonsignificant relation with abuse risk.

Extant literature examining this construct offers mixed results. Some studies have identified a relation between high abuse risk individuals and their acceptability of parent-child aggression (Bower-Russa, 2005; Rodriguez et al., 2011); whereas, other studies have not found significant differences between high and low risk groups (Kelley, 1992; Trickett & Susman, 1988). This inconsistency in present findings with past literature may be due to the methodology used in assessing the construct. Past literature has focused on the use of either a self-reported questionnaire or an implicit measure of assessment alone. Studies have not utilized a combination of both implicit and explicit measures to assess acceptability of discipline strategies. Further research is needed to clarify this relation. Additionally, the current study implemented a less established self-report measure of definitions of abuse, in which individuals were explicitly asked to indicate if they believed vignettes of parent-child aggression were abusive. Individuals were possibly responding in a socially desirable manner due to the transparency of the explicit measure. The current findings suggest a need for further examination of individual acceptability of abuse as it relates to parental factors. Furthermore, there is continued need for development of sound measures assessing the construct.

Contrary to proposed hypotheses, a significant negative relation was found between White parents' reported racial identity and abuse risk, such that greater racial identity was associated with greater abuse risk. Proposed hypotheses predicted a significant relation only for African American parents due to previous literature suggesting racial socialization processes and racial pride are associated with positive outcomes in African American psychosocial well-being (Brown, 2008; Coard et al., 2004; Thornton et al., 1990). However, a significant relation was not hypothesized in

White parents. Due to greater economic advantages of White privilege, White families are not often required to racially socialize their children the same way ethnic minority families must in order to promote cultural pride and preparation for racial discrimination. Rather, previous research has suggested White identity or privilege is often invisible to many White Americans, especially those with limited contact with ethnic minorities (Delgado & Stefancic, 1997; Leonardo, 2002). Traditionally, the literature has often viewed “White” as an unmarked identity or normative comparison group, similar to classifications of heterosexuality (Brekhus, 1998). Contrary to other ethnic minority groups, White individuals are not confronted with their race daily. Past literature has demonstrated that White individuals fail to see a connection between systemic structural advantages and racial identity (Lipsitz, 2005; Duster, 2001) and rather view “Whiteness” as normative. Therefore, the current study did not anticipate a significant relation between White parents’ racial identity and at-risk parenting attitudes. However, contemporary research has suggested White racial identity should be further explored as it may vary based on contextual factors, such that identity does not consist of uniform privilege but rather, a complex social identity dependent on the context in which the individual resides. Some contemporary research has examined racial socialization practices in White families and how they disseminate patterns of privilege and power to their children (Brown & Lesane-Brown, 2006; Grossman & Charmaraman, 2009; Twine & Gallagher, 2007; Umana-Taylor & Guimond, 2012). Of these studies, findings are varied and suggest a number of complexities with regard to the context of such practices, including parental education and socioeconomic status. Findings from the current study identified greater racial identity in White parents significantly related to greater abuse

risk. Furthermore, the relation was found even after controlling for demographic variables of interest. This further underscores the need for additional research examining the nature of White racial identity as a construct rather than simply a comparison group. Low White racial identity may serve as a risk factor for abuse risk; therefore, underscoring the need to identify ways to strengthen this construct as it relates to parenting; however, literature examining this relation is limited and requires further attention.

Findings for African American Parents

Preliminary analyses revealed African American mothers and fathers endorsed greater abuse risk scores on the CAPI and AAPI-2 compared to White parents. These scores were also higher than normative means for each measure and consistent with previous literature demonstrating ethnic minority parents often endorse greater abuse risk related to culturally prescribed parenting practices (Ferrari, 2002). Past studies have suggested African American parents hold more positive attitudes with regard to the use of corporal punishment as a discipline strategy (Lansford et al., 2004) and African American children are spanked more often than White children (Wissow, 2001). With regard to demographic differences, African American and White parents significantly differed across age, income, education and social support. African American parents reported significantly lower age, income and education. Demographic differences can likely be attributed to overrepresentation of ethnic minorities in impoverished communities with limited resources potentially contributing to socioeconomic distress in an individual and ultimately impacting parenting attitudes and practices (Sedlak et al., 2010). For example,

lower educational attainment is often associated and used as a proxy for lower household income and socioeconomic status (Sedlak et al., 2010). Macrolevel socioeconomic factors are considered one of the strongest predictors of abuse risk, such that lower SES is associated with greater abuse risk (Drake & Jonson-Reid, 2013). Regarding age, previous literature suggests younger parents are at greater risk for engaging in physically abusive discipline practices due to immaturity, lack of resources, education, and lower income (Connelley & Straus, 1992).

Additionally, African American parents were also observed to endorse more traditional gender role ideologies when compared to White parents who identified greater egalitarian roles. This finding is inconsistent with previous literature that suggests gender role attitudes are less traditional for African Americans (Kane, 2000), because African American mothers are less likely to be economically dependent on men (O'Hare et al., 1991). Extant literature also indicates that African Americans are generally more liberal and tolerant of working mothers when compared to White women (Buchanan & Selmon, 2008).

Multivariate regression analyses were conducted to examine the relation between attributions of child intent, definitions of abuse, and racial identify on abuse risk while controlling for age, education, income, relationship status and social support for African-American families. Findings partially support the hypotheses and are similar to White parents demonstrating a direct relation between attributions of child intent and abuse risk for African American parents, such that, greater negative attributions of children's intentions were related to higher abuse risk. As reported above, this finding is consistent with previous research identifying ethnic minority parents' use of corporal punishment

when negatively attributing children's intent (Burchinal, Skinner, Reznick, 2010).

Regarding attributions, current findings suggest a significant relation for both African American and White parents suggesting this may be a cognitive mechanism by which individual across racial groups are placed at a heightened risk. Universal parenting interventions that are implemented across racial groups should consider targeting cognitive restructuring as it relates to children's misbehavior and promote parents to consider alternative explanations before implementing a disciplinary response.

Contrary to expectations, the model identified a nonsignificant relation between African American parents' reported acceptability of child maltreatment, or definitions of abuse and individual abuse risk. This finding is consistent with results for White parents in the current study. However, previous literature has suggested African American parents often hold more positive views about corporal punishment as a discipline strategy (Jambunathan, Burts & Pierce, 2000), thereby indicating more acceptability with regard to parent-child aggression. As noted above, current findings may be related to the methodology used to measure the construct, therefore, underscoring the need for further explicit measures of acceptability of abuse.

Contrary to the proposed hypothesis, a direct relation was not found with regard to African American racial identity and abuse risk. The proposed hypothesis predicted a negative relation, such that greater racial identity was expected to relate to lower abuse risk in African American parents. However, this significant relation was not found in the current study. Racial identification as a construct falls within the larger framework of racial socialization, a process by which African American parents educate their children and promote cultural pride, kinship, and preparation for discrimination and racism

(Brown, 2008; Coard et al., 2004; Peters, 1985). Few studies have examined factors regarding racial socialization as they relate to parenting practices. Existing literature has demonstrated moderate racial socialization in mothers is related to greater positive parenting compared to mothers who exhibit high or low racial socialization (Frabutt, Walker & Mackinnon-Lewis, 2002). In the current study and as predicted, African American parents as a whole endorsed significantly greater racial identity when compared to White parents. However, racial identity did not significantly relate to parenting attitudes above and beyond demographic variables of interest. It may be possible the current African American sample's racial identification may not be serving as a protective factor related to abuse risk. Previous studies have suggested individuals who reside in neighborhoods with high concentrations of African Americans are less likely to actively engage in racial socialization practices than parents who live in more racially diverse neighborhoods (Thornton et al., 1990). The greater Birmingham area consists of a high populations of both African American and White individuals; however, neighborhoods are heavily concentrated by race (City of Birmingham Development Department, 2014). If a majority of African Americans in the sample reside in high concentration neighborhoods, this regional factor may provide some explanation for the observed nonsignificant findings. Therefore, future research should examine this finding while considering contextual neighborhood demographic characteristics as they relate to abuse risk. Further, additional interventions can be informed by examining the relation between racial identity and abuse risk across regions of the country in order to evaluate potential differences associated with parental abuse risk by region.

Findings for Mothers

Overall, gender differences were not found on demographic variables of interest. However, a significant relation was found such that mothers' lower educational attainment, income, and age were associated with abuse risk. These associations are consistent with previous literature discussed above suggesting demographic characteristics can significantly contribute to individual distress and abuse risk. Regarding abuse risk measures, gender differences were found only on the AAPI-2, wherein, mothers reported significantly lower abuse risk than fathers. Differences were not observed on the CAPI Abuse Scale and Future Authoritarian measures.

When examining cultural factors of interest, mothers and fathers did not differ in their endorsements of racial identity; however, mother's lower racial identification was related to greater educational attainment. This finding is contrary to expectation as it was predicted that higher education may relate to more exposure and fund of knowledge with regard to other cultures thereby contributing to a more securely racially identified individual. Additionally, mothers significantly differed from fathers in their gender role attitudes, endorsing more egalitarian attitudes and less traditional roles. These findings are consistent with past literature that suggests women often hold more egalitarian ideologies regarding gender (Bryant, 2003). Continued progress and more positive focus on the feminism movement in society over the years may explain this finding by encouraging women to move out of traditional roles to become autonomous individuals. Further, mothers' egalitarian gender role ideologies were related to greater educational attainment. This is consistent with previous literature that suggests individuals who have higher educational attainment have more egalitarian gender roles (Crompton & Lyonette,

2005) likely due to more exposure in the education system to both male and female role models and greater opportunities to confront stereotype myths (Brooks & Bolzendahl, 2004). Additionally, higher education affords opportunities for higher paying jobs and the ability for both men and women to contribute to the family financially (Raley, Mattingly, & Bianchi, 2006).

Actor-Partner Structural Equation Modeling was conducted to examine maternal abuse risk while controlling for dyadic effects of paternal abuse risk and attitudes. Four models were created to examine variables of interest (attributions of child intent, acceptability of abuse, and gender role ideologies) for each parent. First, a model was created examining variables of interest while controlling for age, education, income, relationship status and social support. This model was a poor fitting model; therefore, a second model was created containing social support and education, and demographic variables that were significant in the larger model containing the aforementioned variables of interest. However, once again the model demonstrated poor fit and was not retained. A third model was created containing independent variables only; however, the model continued to demonstrate poor fit; therefore a fourth model was created containing only significant covariance paths and independent variables of interest.

Findings in the present study partially support the hypotheses and vary based on gender. For mothers, as predicted, negative attributions of child's intent was significantly related to greater abuse risk. This is consistent with the proposed hypotheses and past literature discussed above, identifying a relation between high parental abuse risk and greater likelihood to attribute children's misbehavior as intentional (Ateah & Durrant, 2005).

Contrary to expectations, findings in the current study did not identify a significant relation between maternal reported acceptability of parent-child aggression and individual abuse risk. Greater acceptability of physical discipline strategies in mothers was predicted to place them at a higher risk for engaging in physically abusive discipline strategies.

With regard to gender role ideologies, as hypothesized, maternal egalitarian gender role ideologies were inversely correlated with individual abuse risk. More traditional gender ideologies, wherein mothers are considered caregivers and fathers are viewed as breadwinners, were related to higher abuse risk. A possible explanation for this finding may be that traditional households may value patriarchy and masculinity, such that families with these attitudes may endorse stereotypically masculine behaviors to include aggression and dominance (Maccoby, 1990; Thompson & Pleck, 1986). Strict adherence to traditional roles may also promote more rigidity and aggression with regard to misbehavior in parent-child interactions, thereby placing individuals with traditional gender ideologies at a greater risk for becoming physically abusive toward their children.

Interestingly, partner effects were observed with regard to maternal abuse risk and fathers' reported gender role attitudes, such that fathers' greater reported traditional ideologies were related to higher abuse risk in mothers. One explanation for this finding is the likely interconnectedness of parenting beliefs between mothers and fathers as demonstrated in previous studies (Guterman et al., 2009), suggesting individual abuse risk is an interactive process within dyads. Furthermore, with regard to gender roles specifically, this observed partner effect may be due to the traditional view of interdependence of men and women in the household with a clear distinction of power

(Gershuny, Bittman, & Brice, 2005; Rogers & Amato, 2000; Zuo, 2004), suggestive of a patriarchal dynamic wherein men provide instrumental support and less emotional support (Rogers & Amato, 2000). If fathers hold more traditional gender role ideologies, they are likely to be less involved in child rearing (Bianchi, Milkie, Sayer, & Robinson, 2000), often placing the primary burden of parenting on mothers. Thus, lack of father involvement in parenting may exacerbate maternal stress levels and contribute to mothers' higher individual abuse risk (Kalil, Ziol-Guest, & Coley, 2005; Miller-Perrin, 2012; Whipple & Webster-Stratton, 1991).

Findings for Fathers

Similar to mothers, fathers' lower income, educational attainment and age was related to higher abuse risk. On abuse risk measures, fathers reported significantly greater abuse risk than mothers on the AAPI only. Mothers and fathers did not significantly differ in their endorsements of risk on the CAPI and future Authoritarian PAQ. This gender difference is relatively consistent with previous literature suggesting mixed findings with regard to maternal and paternal abuse risk. Some past findings identify similarities between mothers and fathers in their endorsements of severe physical discipline (Nobes & Smith, 1997); however, other studies suggest fathers often engage in more severe forms of physical discipline (Stiffman et al., 2002). Furthermore, previous literature is suggestive of greater similarities than differences between maternal and paternal physical discipline practices (Margolin, 1992), which is consistent with findings in the present study, wherein few gender differences were found across variables of interest.

Fathers' reported racial identity did not relate to demographic factors. Fathers were, however, found to endorse significantly more traditional gender role beliefs than mothers. Additionally, for fathers, higher educational attainment, income and age were associated with greater egalitarian gender role ideologies.

Actor-partner multivariate analyses partially supported proposed hypotheses for paternal abuse risk. Both attributions of child intent and acceptability of parent-child aggression did not significantly relate to paternal abuse risk. Greater negative attributions of child intent were expected to relate to greater abuse risk in fathers. Similarly, it was predicted greater acceptability of abuse would relate to higher abuse risk. Literature examining abuse risk in fathers, however, is relatively limited. Furthermore, literature examining cognitive factors such as intent attribution and acceptability of abuse as they relate to paternal parenting is slim. A majority of previous literature has focused on assessing demographic factors as they relate to fathers abuse risk. For example, past literature has identified a relation between younger age (Lee, Guterman, & Lee, 2008), unemployment and income (Wolnfer & Gelles, 1993) as relating to abuse risk in males. To date, studies examining attributions of child intent in expectant parents focuses only on mothers, not fathers. Therefore, the current study addresses a gap in the literature by examining the relation with a paternal sample. A significant relation was not found between paternal attributions of child intent and abuse risk, thereby suggesting potential differences in cognitive risk factors between mothers and fathers. Negative attributions of a child's behavior may not impact fathers' abuse risk as strongly as mothers. Therefore, researchers may need to consider alternative cognitive processes as they uniquely relate to fathers.

Similar to mothers, and as hypothesized, more traditional gender role ideologies related to greater abuse risk in fathers. Additionally, a partner effect was also found for fathers wherein greater maternal traditional gender role ideologies related to higher abuse risk in fathers. Findings support previous literature suggesting synchrony in parenting practices, wherein mothers and fathers endorse similarities with regard to attitudes about parenting and use of harsh physical discipline (Margolin, 1992; Nobes & Smith, 1997). Further, previous research has identified parenting as an interactive process, such that paternal characteristics have been found to relate to maternal abuse risk (Guterman et al., 2009). Current findings support previous literature and extend research by also identifying partner effects for fathers, such that maternal characteristics (i.e. gender role ideologies) were found to relate to paternal abuse risk.

Methodological Findings

Traditionally, child maltreatment literature has relied heavily on self-report methods of assessing constructs. These overt methods of gathering information limits anonymity of responses and is subject to socially desirable responses due to the sensitive nature of the information assessed (Fazio & Olsen, 2003). Therefore, individuals may be more likely to misrepresent information, thus contributing to source bias (Bennet, Sullivan & Lewis, 2006). Sole dependence on self-report measures significantly limits understanding of child maltreatment processes (DeGarmo, Reid, & Knutson, 2006). Contemporary research has slowly begun to incorporate implicit methods of assessment. Through these analog methods of assessment, individuals are not overtly aware of what the task is intended to assess. Thus, individuals are less likely to misrepresent information

(Rodriguez, 2013). To date, few studies have examined implicit and explicit measures of the same construct directly to compare effectiveness and the adjunct effects of incorporating implicit measures of assessment. Therefore, this study attempted to address this concern.

Models were run separately for mothers and fathers. First, a model was created using explicit self-report measures only. Second, a model containing implicit and explicit measures was created. Lastly, a model containing implicit measures alone was examined. For mothers, the model containing explicit self-report measures alone demonstrated the best fit. Models examining implicit measures both with explicit measures and alone demonstrated poor fit. Similarly findings for fathers revealed the best fitting model was one containing explicit measures alone. Implicit measures were found to significantly worsen model fit. Based on the current findings, implicit measures did not significantly contribute to improved model fit relative to explicit measures when examining abuse risk in parents. One possible explanation for this finding may be related to the characteristics of the present sample. Participants in the current study were a community sample of individuals self-motivated to participate in a research study. Therefore, they may be less threatened and more forthcoming thereby less likely to misrepresent information in self-report measures compared to high risk or substantiated parents. At-risk and substantiated parents may have more motivation to misrepresent sensitive information related to parenting practices. Therefore, these findings should be further examined across risk groups. In addition, abuse risk was only assessed in this investigation with explicit measures and thus explicit predictors may be more likely to relate to explicit dependent variables.

As noted above, to date there are few previous studies comparing implicit and explicit measures of the same construct. Therefore, current findings provide much needed explorations of these comparisons. Although implicit measures in the current study did not significantly improve models, implicit measures did relate to individual abuse risk, thereby underscoring the need for multiple forms of assessment. Inclusion of implicit measures offers a nuanced examination of child abuse risk. Previous research has suggested implicit measures vary in the level of conscious awareness of the construct being assessed (Fazio & Olson, 2002). Analog tasks are intended to unconsciously measure attitudes, which does not necessarily mean the participant is entirely unaware they have these attitudes. Analog measures can be conceptualized on a continuum in which those requiring a low level of conscious processing are more likely to indirectly target true attitudes. However, more explicit analog measures in which a participant may deduce what is being measured is subject to greater misrepresentation of information, and greater correlations with self-report measures of the same construct (Fazio & Olson, 2002). Findings from the current study corroborate past research as results varied based on construct. When examining intercorrelations of measures, attributions of child intent measures were not significantly correlated, whereas, acceptability of abuse measures were significantly related. It is possible the highly implicit nature of the N-IAT involved minimal conscious processing and therefore, yielded a low correlation with self-reported attributions on the Plotkin attribution vignettes. In contrast, the PCAAM may be further along the continuum allowing greater conscious processing, thus correlating with the self-reported definitions of abuse measure. The use of self-report methodology alone continues to remain a major cited limitation in maltreatment literature due to potential

bias in reporting (DeGarmo et al., 2006). By continuing to incorporate implicit, alternative forms of assessment, researchers can obtain a more nuanced understanding of constructs.

Limitations

Although the current findings address a gap in the current literature with regard to cultural and gender differences in abuse risk, there are some limitations to consider. The current study was representative of a diverse sample, examining cultural factors in African American and White parents; however, the study is limited due to the focus on these two groups alone. Future investigations should examine these relations with additional cultural groups in order to further assess nuances with regard to child maltreatment and parenting practices. By continuing to examine cultural protective factors, we can better inform preventative parenting interventions that are sensitive to cultural attitudes and norms. Current observed differences across racial groups with regard to parenting and abuse risk further confirms the need for culturally sensitive practices in intervention. Furthermore, the current study sampled individuals from Birmingham, Alabama alone. Attitudes regarding parenting, gender, and racial identity may be influenced by regional culture. Southern culture is often considered conservative and traditional which may impact ideologies with regard to gender roles and parental responsibilities in the household (Burris 1983; Hurlbert 1989; Mason, Czajka & Arber 1976; Rice & Coates 1995). Furthermore, Birmingham was the southern center of the civil rights movement in the 1960s, a time of heightened racial conflict throughout the nation (Goldfield, 1990). These factors may contribute to parental racial identity and

racial socialization practices in parenting. Therefore, it will be important to examine these cultural factors across regions of the country to assess any potential differences in efforts to promote culturally sensitive parenting.

The present study offered a novel contribution to the literature by examining attitudes in first-time expectant mothers and fathers, whereas a majority of extant literature has focused on substantiated samples. The current findings can be strengthened by assessing these cultural variables of interest across risk groups (i.e. expectant parents, at-risk parents and substantiated parents) to assess potential differences. Additionally, the study design utilized a cross-sectional approach to examine the constructs of interest; however, future research should examine these processes in a longitudinal design. In doing so, findings can be examined beyond simple correlational associations and provide some information on potential causal relations among variables. This design could more directly inform prevention and intervention strategies.

Further, due to subgroup sample sizes, the analyses in the present study required the creation of composite variables of each construct rather than assessing the individual effects of each measure. The current models can be strengthened by increasing sample sizes to allow for more sophisticated analyses. Additionally, some concerns remain regarding the self-report measure used to assess acceptability of abuse. The measure used was a less established measure examining few vignettes of parent-child physically aggression. It will be important for future research to identify additional sound measures assessing this construct to be used in conjunction with implicit analogs.

In order to assess racial identity, the current study employed a measure that can be applicable across racial groups. This approach may have limited cultural sensitivity with

regard to attitudes and practices unique to African American racial identity development and socialization. Therefore, additional research may consider utilizing measures more salient to each culture's norms. For example, alternative results may be found if a measure created for use with African American populations was implemented. Additionally, given the region of the nation this study was implemented, future research should consider the role of religion as it relates to parenting practices and racial identity formation. Previous literature has identified a significant relation with regard to religious orientation and abuse risk (Rodriguez & Henderson, 2007). It will be important to examine this factor as a potential covariate when examining parenting practices in the South.

Clinical and Experimental Implications

The present study identified a significant relation between attributions of children's negative intent and abuse risk for mothers and across both White and African American parents. This finding supported previous research and emphasized the importance of examining cognitive processes in the SIP model, suggesting attributions of a child's behavior may inform decision-making during disciplinary encounters. Findings from the current study support the continued need to examine attributions and cognitive processes as they relate to abuse risk in future research studies and demonstrate the need to focus intervention strategies that address this construct. By identifying these relations prior to the birth of the child, we can implement preventative educational interventions that may encourage parents to think of alternative interpretations and potentially offset and reduce abuse risk in parents. Evidence from intervention efforts suggests that

providing supplemental education focused on increasing alternative parenting practices is associated with reduced abuse potential, and more positive parenting attitudes (Bavolek & Hodnett, 2012; Palusci, Crum, Bliss, & Bavolek, 2008). For example, preventative parenting interventions may consider implementing psychoeducation about normative child transgressions and encourage discussion of child intentionality as it relates to misbehavior.

Conversely, a relation was not found between acceptability of parent-child aggression and abuse risk. This finding emphasizes the need for more creative assessment strategies to assess this construct. There are few well-established measures, and limited self-report assessments of this construct. Future research can benefit from identifying alternative methods of assessment and continuing to examine this factor as it relates to child maltreatment and use of harsh physical discipline strategies.

With regard to racial differences, interestingly, racial identity was found to significantly relate to abuse risk in White parents but not in African American parents. Findings demonstrate the need to examine cultural and racial variables in White populations. Traditionally, racial identity has been largely overlooked in White populations, as they are often considered the normative comparison group who is unaware of their racial identity. However, present findings suggest differently and demonstrate that stronger racial identity in White parents may be a risk factor with regard to abuse risk. It will be important to further explore nuances related to this construct, as well as racial socialization practices and differences in White families. Although a significant relation was not found for African American parents, it is important to continue to examine both racial identity and other racial socialization practices

potentially with more applicable measures as they relate to African American parenting in order to inform culturally sensitive interventions to address observed disparities with regard to abuse risk and discipline beliefs.

Overall, findings identify greater similarities than differences between maternal and paternal abuse risk. There were some differences with regard to individual predictors, thus emphasizing the need to examine parental factors dyadically, as fathers may have unique cognitive predictors of abuse risk compared to mothers. Importantly, continued examination of paternal parenting factors contributing to abuse risk is needed due to increased involvement by fathers in child-rearing responsibilities. Additionally, interventions targeting fathers is limited. Of the few, existing programs include the Nurturing Fathers Program derived from the Nurturing Parents Program (Bavolek, 2015) and The Fatherhood Project at Massachusetts General Hospital, which are limited by region or focus heavily on specific populations (i.e. divorced fathers or incarcerated parents). To date, well-established universal father preventions do not exist. By examining risk and protective factors that contribute to fathers' abuse risk and parenting, we can inform intervention and prevention efforts. Furthermore, present findings demonstrate individual abuse risk is an interactive process as individual gender role ideologies were found to significantly relate to partner abuse risk. Future research should therefore examine parenting attitudes within the parenting dyad and consider potential partner effects that may contribute to individual risk. With regard to interventions, partner effects highlight the importance of adopting a family systems approach to intervention efforts by including both parents, rather than solely focusing on mothers as the primary caregiver. Interventions may focus on discussion of supporting partners in their child-

rearing responsibilities and encouraging joint participation in activities that mitigate stress. Given findings to suggest greater egalitarian gender role ideologies are related to lower abuse risk, interventions may also benefit from providing psychoeducation about distress related to heightened involvement in parenting in order to increase empathic perspective-taking and understanding of how shared parenting responsibilities can mitigate distress.

Lastly, although the current study did not find a significant added benefit of implicit methods of assessments, analog measures demonstrated a significant relation to abuse risk. Further, use of self-report measures alone limits studies as findings are subject to potential reporting bias. By incorporating both implicit and explicit methods of assessment, researchers can examine nuances of child maltreatment risk not otherwise observed with self-report measures alone.

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