

Contextual Stress in Structurally Marginalized Neighborhoods: How Adverse Experiences in  
Adolescence and Protective Factors Across Developmental Periods Contribute to  
Future Fathering

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APPROVAL OF THE DISSERTATION

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This dissertation (Contextual Stress in Structurally Marginalized Neighborhoods: How Adverse Experiences in Adolescence and Protective Factors Across Developmental Periods Contribute to Future Fathering) has been approved by the Graduate Faculty of the School of Education and Human Development in partial fulfillment of the requirement for the degree of Doctor of Philosophy.

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## REFLEXIVITY STATEMENT

The following dissertation explores the relation between exposure to contextual stress and parenting practices for individuals living in structurally marginalized neighborhoods. The study's sample is comprised of Black/African American and Hispanic/Latino men who have identified themselves as fathers. As a White woman in the final year of my doctoral training, I hold several privileged identities. Given these identities and my status as a non-parent, it is important to acknowledge that I do not have personal experience of living in a structurally marginalized neighborhood, of belonging to a historically and systemically marginalized racial or ethnic group, or of parenting. My own awareness of the effects of structural marginalization on mental health outcomes stems primarily from my professional work across research and clinical settings with youth exposed to significant contextual stress and their families.

While such statements are more often used in qualitative work, all quantitative analyses and interpretations can be affected by one's own lived experiences and intersectional identities. Thus, I believe it is important to acknowledge my positionality in the context of this dissertation.

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## CHAPTER I

**Statement of the Problem**

Individuals living in communities that have been structurally marginalized due to harmful, racially motivated practices and policies are likely to be disproportionately exposed to significant stress (Bailey et al., 2017). Particularly when this stress occurs during sensitive periods of development, such as in early childhood or adolescence, it can result in negative physical and mental health outcomes into adulthood (Bucci et al., 2016; Shonkoff et al., 2012). Stressful influences emanate from all levels of a youth's ecosystem, and those associated with living in a structurally marginalized community are most likely to present as neighborhood- and system-level factors, such as exposure to community violence, economic hardship, and racial discrimination (Thurston et al., 2018; Trent et al., 2019).

Experiences of adversity in youth may also affect future generations (Folger et al., 2018; Lange et al., 2019; Schickedanz et al., 2018). One well-supported path through which stress is transmitted to offspring is through parenting styles or practices (Conger et al., 2010). Caregivers who were exposed to elevated levels of life stress, as a result of individual- or family-level stressors during their own childhood or adolescence, are more likely to exhibit low warmth or employ harsh discipline practices (Bailey et al., 2012; Banyard, 1997). In turn, these parenting behaviors are linked to child internalizing and externalizing symptomatology, demonstrating how child and adolescent adversity can impact subsequent generations. A critical mediator of this process seems to be parental distress, the manifestation of stress as symptoms of psychopathology, which can be distinguished from simply having experienced events that may be considered traumagenic (Pereira et al., 2012). Thus, parental psychological distress may be



understood as precipitating some of the parenting behaviors that are related to negative psychosocial outcomes in children.

While several studies have examined the ways in which stressful life events and conditions such as abuse, neglect, and family dysfunction during childhood or adolescence impact future parenting, fewer have explicated the ways in which neighborhood- and societal-level factors prior to adulthood may affect levels of psychological distress and subsequently impact parenting practices. This focus on individual- and family-level factors may contribute to a dearth of effective systems-level efforts to promote healthy family functioning and reduce racial, ethnic, and socioeconomic inequality, which are likely to reach more families and to do so more durably than current parenting interventions. Moreover, studies that have examined the relation between neighborhood- or community-level stressors and family systems influences on development tend to focus on neighborhood, stress, and parenting concurrently rather than in a predictive manner.

Due to the concentration of adverse neighborhood conditions and societal constraints in communities that have been structurally marginalized, recent studies have called for more research to better understand the role of these stressors in affecting subsequent individual and family functioning (Murry et al., 2018). Importantly, differential conditions of development in such communities may be central contributors to mental health inequities (Thurston et al., 2018). Studies of how these conditions during adolescence negatively affect outcomes into adulthood (Duncan et al., 2012) and suggested mechanisms through which these conditions may be linked to subsequent parenting exist (Conger et al., 2010), but the linkage between contextual stress and parenting remains largely unexamined. Further, there is evidence that fathers may be particularly vulnerable to these stressors, as their involvement in parenting and use of different styles or

practices seem to be more affected than mothers by context (Jessee & Adamsons, 2018; Schoppe-Sullivan & Fagan, 2020).

While stressful conditions of development may differentiate populations, there is also considerable variation within populations exposed to similar circumstances in terms of long-term effects. In fact, research suggests that it is more common for individuals exposed to stress to remain psychologically healthy, a phenomenon often referred to as “resilience” (Southwick et al., 2016). However, many studies that examine the effects of stress neglect to co-examine the factors that may protect against negative outcomes in the context of stress or promote positive outcomes regardless of stress-exposure. The current study will center on both environmental risk and associated protective or promotive factors. One key protective factor in the stress-parenting linkage may be access to healthy or supportive social relationships across development (Ashton et al., 2021; Chainey & Burke, 2021; Hostinar et al., 2014; Southwick et al., 2016). In childhood, a positive relationship with a caregiver may minimize biological changes associated with stress exposure or serve to scaffold healthy coping (Power, 2004; Shonkoff et al., 2012). In adulthood, broader support from social networks may similarly protect against the pernicious effects of stress (Cohen, 2004). Social support from one’s family may be a particularly important protective or promotive factor to study in families who identify as Black/African American or Hispanic/Latine, as they tend to live in closer proximity to their kin networks than their White peers (Ackert et al., 2019; Spring et al., 2023). Relatedly, a positive relationship with a coparent may also decrease stress, especially in the context of parenting (Choi & Becher, 2019). However, these factors are not always considered in the literature that links stress and parenting. Better understanding the protective or promotive factors in conjunction with risk factors, particularly at different stages of the lifespan, can provide a more well-rounded, comprehensive, and realistic

picture of the relation between stress and parenting. Further, it can inform future community-based prevention and intervention efforts.

### **The Current Study**

As stated, there is considerable literature that suggests childhood and adolescent stress can affect adult functioning, inclusive of parenting. When the definition of stress expands to include neighborhood- and systems-level factors, the extent to which youth may be exposed to stress varies based on neighborhood due to systemic and historical patterns of racial/ethnic discrimination and economic inequality. These considerations suggest value in testing the link between experiences of stress and conditions of development to subsequent parenting, especially for youth growing up in structurally marginalized communities. Thus, the current study has two broad objectives. First, the study seeks to understand the relation between exposure to contextual stress in the critical developmental period of adolescence and later parenting practices in adulthood within a sample of fathers. A particular focus is whether this relation is mediated by parental psychological distress, as has been tested for individual- and family-level stressors and economic hardship in the literature. Second, the study aims to uncover whether positive parenting in adolescence or a high-quality relationship with a coparent or social support in adulthood serve as protective or promotive factors in the stress-parenting linkage.

Chapter II of this dissertation provides additional information about the basis for this study by reviewing the extant literature on the importance of parenting for child development, the rationale for studying fathers as parents, the impact of stress throughout the lifespan, and the protective or promotive social factors that may buffer against the negative effects of contextual stress. Further, the two frameworks, Social Determinants of Health and the Family Stress Model, that inform this dissertation study are described and their contributions to this research study are

explicated. Chapter III details this dissertation study's data collection approach, sample of fathers, measures, and data analytic strategy. Chapter IV presents the findings, and Chapter V describes a discussion of relevant findings, implications for developmental science, clinical practice, programs, and policy, limitations, and future directions.

## CHAPTER II

**Review of the Literature****Parenting and Child Development**

Extant research indicates that caregivers have a significant impact on child development. In particular, parenting has been cited as an important predictor of child outcomes across academic, behavioral, social-emotional, and psychological domains (Amato & Fowler, 2002; Amato & Gilbreth, 1999). A caregiver's impact begins in early childhood and continues throughout the lifespan; in fact, parenting styles and behaviors have demonstrated influence at several different developmental stages, including in young children (e.g., Landry et al., 2003), school-aged children (e.g., Prevatt, 2003), adolescents (e.g., Hoskins, 2014), and young adults (e.g., Hwang & Jung, 2021).

Across the literature, there have generally been two approaches to studying parenting and its resultant impact on youth. One has been to look at parenting typologies, which are most often referred to as authoritative, authoritarian, permissive, and neglectful/uninvolved. These groupings are based on two orthogonal dimensions: a parent's sensitivity to their child ("responsiveness") and the degree to which a parent sets expectations for their child ("demandingness;" Baumrind, 1967; Maccoby & Martin, 1983). The other approach has been to focus on individual constructs, ranging from parenting styles to behaviors, many of which are captured within or associated with responsiveness or demandingness. Some of the constructs that have been most frequently studied in parenting literature include expressions of emotional warmth, monitoring, behavioral control, and discipline. Further, when parenting is differentiated between mothering and fathering, involvement in caregiving emerges as an additional construct of interest, as it has been extensively studied in male parents due to sociocultural and political

trends in caregiving. This present study will take the latter approach with a broad focus on positive parenting behaviors, inclusive of involvement given the focus on fathers. Positive parenting behaviors will be conceptualized as use of consistent, not overly harsh discipline practices and positive behavioral principles meant to shape parent-identified adaptive child behaviors. While these do not represent all aspects of parenting, they are often measurable, as well as the focus of parenting-related treatment protocols, and thus, presumed to be malleable. Definitions of, as well as more details about the rationale for the selection of these aspects of what can be considered positive parenting behaviors, will be explicated below.

Early literature investigating the impact of parenting on child development focused almost exclusively on White, middle-class, two-parent families in Western cultures. This research set the stage for the development of parenting constructs and expectations of “typical” parenting. However, in the past several decades, research has progressed to include more diverse populations across racial/ethnic, socioeconomic, and structural domains; through this work, investigators have begun to examine the cultural fit of the practices identified as important in earlier research (Bornstein, 2012; Rothenberg et al., 2020). Results have generally been mixed (Lansford, 2022) as will be detailed in the following paragraphs.

In some cases, findings from earlier primarily White samples in the United States that demonstrated a relation between parenting styles or practices and child outcomes have been replicated in more diverse populations in this country and others, as well as in different targeted populations, including families of color, low-income families, and single-parent families (e.g., Amato & Fowler, 2002). While variations are found, the main finding in these studies has been consistency in how parenting styles or practices have effects on child development (e.g., Sahithya et al., 2019). Some studies have specifically examined the association between

parenting and child outcomes across populations within this country, differentiated by ethnicity and social class. One such study, using longitudinal data from the National Survey of Families and Households (NSFH), found little evidence that the relation between parental expressions of warmth or discipline methods and child outcomes, as measured by adjustment, grades, and behavior problems, differed across racial/ethnic and socioeconomic groups or between single-parent and dual-parent families. Thus, the research supported the hypothesis that “the benefits of [demonstrating these specific, measured parenting behaviors] are shared widely by children, irrespective of family context” (Amato & Fowler, 2002, p. 713).

In other cases, however, researchers have pointed to cultural variations in the function of certain parenting styles or behaviors. As an example, Rothenberg and colleagues (2020) found that there was not a universal relation between a parent’s exhibition of behavioral control and youth externalizing or internalizing disorders using a sample of almost 1,300 adolescents from twelve different cultural groups, defined by their country of origin. While for children in the United States, on average, parental behavioral control predicted decreases in externalizing behaviors, in other contexts, this parenting practice predicted increases in the same behaviors (Rothenberg et al., 2020).

Though only a couple of studies have been highlighted, there is general variation in findings in the extant literature. Additionally, parenting inherently exists and is interpreted in context, meaning a variety of factors across ecological levels impact parenting, and different parenting styles/practices can be more or less effective under different circumstances (Sorkhabi & Mandara, 2013; Taraban & Shaw, 2018). Thus, it is difficult to ascertain whether there is a common relation between parenting and child outcomes across/between cultural contexts and identities. However, within constructs, there is slightly more evidence regarding which parenting

behaviors may have similar impacts on child development across/between cultures and which may not. For example, some parenting behaviors have come to be considered “culturally universal” (e.g., exhibiting warmth or responsiveness; Lansford et al., 2022) and others, “culturally specific” (e.g., enacting behavioral control; Rothenberg et al., 2020; and engaging in parental supervision; Jones et al., 2008).

Moreover, the present study’s population (i.e., Black/African American and Hispanic/Latino coresident and nonresident fathers who grew up in structurally marginalized neighborhoods<sup>1</sup>) is one for which negative presumptions and stereotypes have dominated while empirical study has lagged. The studies that have been conducted have focused on risk and problems in parenting more so than capability and normative patterns. These limitations point to the value of an explicit focus on the parenting behaviors associated with child outcomes within such populations (Letiecq, 2010; see *Fathering in Context*). The present study will center on aspects of positive parenting, such as use of consistent, not overly harsh discipline practices and positive behavioral principles meant to shape parent-identified adaptive child behaviors, constructs for which there is either hypothesized cultural universality in impact or an indication within the studied population, Black/African American and Hispanic/Latino parents, of the relation between these behaviors and child outcomes. These constructs were also identified for this dissertation as they are particularly affected by parental psychological distress, a key study variable (see *Parental Psychological Distress as a Mediator*).

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<sup>1</sup> Throughout this paper, the term “structurally marginalized neighborhoods” will be used to describe the context within which the fathers who comprise the sample lived (at minimum, during adolescence). Structural marginalization refers to the ways in which systems “unevenly distribute benefits and burdens to different groups, and as a result, marginalize certain groups of people” (Arrington-Sanders et al., 2020, p. 8). Often, these marginalized groups are delineated based on socially constructed characteristics, such as race or ethnicity (Ford & Harawa, 2010; Powell, 2013). A structurally marginalized neighborhood is one in which policies and practices have resulted in financial disinvestment, fewer available resources, and limited power/disenfranchisement of its inhabitants. A connection is often made between structural marginalization and social influencers/determinants of health (see *Social Determinants of Health*).



### ***Positive Parenting Behaviors***

As previously stated, several specific parenting constructs have been widely studied and associated with child outcomes across the lifespan. The following section will further define and review the aspects of positive parenting included in the study: use of consistent, not overly harsh discipline practices and the use of positive behavioral principles to shape parent-identified behavior. The other construct of interest, involvement in caregiving, will be reviewed only as specific to fathering given its treatment in parenting literature (see *Fathering*).

The measurable behaviors within these constructs meet the criteria of being considered universally impactful across cultures and/or having been studied in conjunction with this study's population. Further, they are the focus of several evidence-based treatments that aim to improve child outcomes, particularly for externalizing disorders, including Parent-Child Interaction Therapy (PCIT; Zisser & Eyeberg, 2010) and Parent Management Training (PMT; Kazdin, 1997), suggesting their malleability and usefulness as potential targets for intervention. The subsequent section will provide detailed descriptions of these constructs and associated behaviors, as well as an overview of the literature surveying the impact of these parenting practices on children's externalizing and internalizing symptomatology.

**Discipline Practices.** Discipline has been widely examined in connection to child outcomes with different aspects of discipline as the foci of studies. There has been emphasis both on the effectiveness of discipline and on the actual practices themselves. Discipline may be considered effective if it guides children to perform more parent-identified adaptive behaviors and fewer parent-identified maladaptive behaviors (Nieman et al., 2004). While there are common practices likely to result in "effective discipline," such as the provision of appropriate and salient rewards and consequences, effective discipline can look different in each family and

between two children within a family (Grusec et al., 2017). Discipline is more likely to be effective when it is “given by an adult with an affective bond to the child; consistent, close to the behaviour needing change; perceived as ‘fair’ by the child; developmentally and temperamentally appropriate; and self-enhancing, i.e., leading to self-discipline” (Nieman et al., 2004, p. 37).

There are two specific aspects of discipline that will be centered in this study: consistency of discipline practices and harshness of discipline practices. Inconsistent discipline can be understood as a caregiver’s lack of following through with rules or expectations for their child’s behavior (Halgunseth et al., 2013; Melby et al., 1998). As an example, a parent who exhibits inconsistent discipline may be overly permissive in one moment and overly strict in another, confusing the child and making it difficult for the child to identify and/or exhibit the behaviors expected by their parent or in their environment.

Relatedly, maladaptive, or “harsh,” discipline has also been extensively studied in relation to child outcomes. Harsh discipline can be defined by the use of physical (e.g., spanking, pushing, grabbing) or verbal (e.g., yelling) practices that are associated with negative developmental trajectories (see *Discipline and Child Outcomes*; Li et al., 2023). While there is a spectrum of harsh discipline that may range from the occasional, normative raising of one’s voice to abusive offenses reportable to Child Protective Services, discipline practices can be considered “harsh” with a single egregious offense and/or the use of consistent harsh practices.

***Discipline and Child Outcomes.*** In general, the use of effective discipline practices has been connected to healthy development (Sege et al., 2018). Examining specific aspects of discipline more closely, the literature suggests that inconsistency in discipline practices has been associated with an increase in externalizing behaviors across time, especially as the children

subject to inconsistent practices may come to expect that they will not receive punishment for such behaviors (Grusec et al., 2017). An even more substantial portion of research on discipline practices and child outcomes relates to harsh discipline. It has been well documented that harsh physical and verbal discipline practices have been associated with higher rates of externalizing behaviors across development (e.g., Gershoff & Grogan-Kaylor, 2016; Lansford et al., 2010; Taylor et al., 2010; Wang & Kenny, 2014). Reviews of parenting literature have also uncovered a relation between harsh discipline and internalizing disorders, explicating that physical and verbal punishment are correlated with higher rates of anxiety and depressive symptoms (Halgunseth et al., 2006; Lansford et al., 2010; Wang & Kenny, 2014). In general, both inconsistent and harsh discipline are posited to contribute to a “coercive cycle” in which the child and the parent’s behaviors are mutually reinforcing and escalate over time (Lunkenheimer et al., 2016; Patterson, 2002). Further, when more positive discipline behaviors are demonstrated by a parent, that discipline is more likely to be effective, and the parent is less likely to rely on less adaptive parenting practices, such as harsh physical or verbal discipline tactics (Sege et al., 2018).

***Discipline and Cultural Considerations.*** There is an extensive literature regarding how discipline practices vary across different populations. Some studies have suggested that parents living in low-income and low-resource neighborhoods (and who disproportionately tend to be Black/African American or Hispanic/Latine due to structural racism) need to employ more stringent discipline practices, as their child’s exhibition of parent-identified positive behaviors may impact their physical safety (Kelley et al., 1992). In these cases, such discipline tactics may be considered “effective” in context. Other studies have attributed the correlation between income level and harsher parenting practices to the stress associated with the more limited access

that parents with lower incomes have to both physical and psychological resources (Conger et al., 1992).

Even if rates of different parenting strategies differ between populations, there is some indication that the effects of harsh discipline do not vary across cultures, including between different racial/ethnic groups (Lau et al., 2006). More specifically, harsh discipline has been associated with problem behaviors across externalizing and internalizing domains in both Black/African American (e.g., Coley et al., 2014; Lau et al., 2006) and Hispanic/Latine (e.g., Coley et al., 2014; Yildirim & Roopnarine, 2015) families, as well as in low-income families (e.g., Taylor et al., 2010).

**Positive Behavioral Principles.** A second, related aspect of what can be considered positive parenting is the use of positive behavioral principles to shape behavior. Research suggests that when parents take a supportive and reward-oriented approach to responding to their children when those children are engaging in behaviors that the parent deems positive, the identified behaviors will increase over time (Sigler & Aamidor, 2005). This approach is often referred to simply as “positive parenting” in the literature, which, when quantified, may look like verbal encouragement or include the provision of a reward. Such a reward does not need to be tangible; it may also be social, such as dedicated time spent with a parent (Leijten et al., 2019).

In some cases, “positive parenting” (i.e., use of positive behavioral principles) has some conceptual overlap with the general parenting style of warmth, as use of positive reinforcement often includes the demonstration of encouraging affect and may be more effective within the context of close relational interactions. Though more often considered a style rather than a practice, warmth can be defined and measured as the behavioral manifestation of being accepting and sensitive to a child’s needs. As examples, parents who exhibit high levels of warmth may

offer physical affection to their child; they may also provide significant and genuine praise when their child does something well or exhibits good effort on a task (Rohner, 1986). Such behaviors are not dissimilar to the praise and rewards provided as part of positive reinforcement.

***Positive Behavioral Principles and Child Outcomes.*** Parents' use of positive behavioral principles to shape behavior has been associated with favorable child outcomes, especially for externalizing symptoms. In fact, a recent meta-analysis of psychosocial parenting interventions aimed at improving disruptive behaviors in children indicated that the inclusion of positive reinforcement as a focused-upon parenting technique in such programs has been associated with better effects (Leijten et al., 2019). One study even found that parental use of positive reinforcement and demonstration of warmth were more connected to teacher-reported behavioral outcomes than harsh and inconsistent parenting (Clark & Frick, 2018). Further, an extensive meta-analysis that captured data from over 1,000 studies indicated that having a caregiver who exhibited warmth predicted decreases in both externalizing and internalizing patterns of behavior when examined longitudinally (Pinquart, 2017a, 2017b). The results of these studies suggest that positive reinforcement and warmth can protect against the manifestation of psychopathology in children and adolescents.

Positive reinforcement is seen to be important for development, as it may be more likely to help children learn and internalize prosocial behaviors than strategies focused on punishment (Clark & Frick, 2018; McHale et al, 2003). Additionally, warm and sensitive approaches to parenting are integral for development. Several well-established theories posit that individuals have a biological need for warmth from their caregivers for both attachment and survival purposes (e.g., Attachment Theory; Main, 2000; Interpersonal Acceptance-Rejection Theory; Rohner & Lansford, 2017). The fulfillment of said need allows for the development of effective

emotion regulation skills and further increases the child's willingness to engage in parent-identified positive behaviors, two factors associated with healthy development (MacDonald, 1992; Zisser & Eyeberg, 2010).

***Positive Behavioral Principles and Cultural Considerations.*** Because the use of positive behavioral principles is typically subsumed under the term “positive parenting” in the literature, and there is not often a well-defined delineation between aspects of “positive parenting,” it is not always clear how the use of such practices is generalizable across non-White, non-middle-to-upper-class populations. However, there is some indication that positive behavioral principles are used in families with minoritized racial or ethnic identities (e.g., Latino families; Donovanick & Rodriguez, 2008; and Black families; McWayne et al., 2017).

Further, the associated construct of warmth, more so than other parenting styles or behaviors that are associated with child outcomes, is consistently related to lower rates of externalizing and internalizing psychopathology across cultural backgrounds, including when race/ethnicity are considered (Rothenberg et al., 2020). Such data indicate that it is an appropriate construct to examine both across and within cultural groups with the acknowledgement that more research is needed to better understand how positive behavioral principles may be enacted or interpreted differently in different populations or subpopulations.

In sum, the aforementioned positive parenting behaviors have been studied to varying degrees in conjunction with child outcomes in diverse families. Each warrant attention in research about how parents contribute to their child's maturation and, more specifically, the development of internalizing and externalizing symptomatology. While there are several other parenting constructs that have been underscored as important factors across development, they are less often key targets for evidence-based intervention (e.g., PMT, PCIT). Further, for some of

these other constructs (e.g., behavioral control; Rothenberg et al., 2020), the inconsistency in the relation between the parenting style or practice and child outcomes across cultures makes them less well suited for inclusion in this study.

When parenting is considered, the subject of the research is oftentimes presumed to be the mother. This study will take a different approach to studying parenting by centering on the father. Given said focus on the father, a third construct, involvement in caregiving, will be added as a focus of this study.

### ***Fathering***

Fathers have recently emerged as a topic of particular interest for many parenting researchers given their relative exclusion from historic parenting literature and the increasing recognition of their importance in child development (Goldberg et al., 2009). Though they have moved from marginal to of more central consideration in parenting research, there is still more limited empirical understanding of the predictors of fathering styles and practices and, in turn, their influence on child development when compared to mothers.

Societal shifts have fundamentally changed how fathering is viewed within the United States, particularly for heterosexual men. A primary driver has been the increase in the rate at which women have entered the labor force since the late-twentieth century (Cabrera & Peters, 2000). Fathers, whose most important role had historically been as the “breadwinner,” have become increasingly recognized as an integral component of the family system and, more specifically, as a caregiver or coparent (Pleck & Pleck, 1997). Though mothers still disproportionately bear the brunt of caregiving responsibilities (Connelly, 2016; Pew Research Center, 2015), on average, fathers are more involved with their children than in prior generations (Schoppe-Sullivan & Fagan, 2020). Further, current economic and sociopolitical shifts, such the

increasing inclusion of fathers in corporate family leave policies and mounting pressure to pass broader paid family leave legislation at the state and federal levels, may result in additional cultural changes and enable fathers to continue to increase their involvement in the years to come.

Additionally, the definition of what it means to be a father has evolved. Data from 2016 suggest that approximately 40 percent of children in the United States are born to unwed parents, a substantial increase from the 1990s (Wildsmith et al., 2018). This trend holds across racial/ethnic groups and education levels. However, after controlling for educational attainment, Hispanic and Black women have exhibited higher rates of nonmarital childbirth when compared to White women (Wildsmith et al., 2018). Such patterns lead to greater heterogeneity in family structure and implicate the role of the father. Men who do not live in the same home with their child or are not in a romantic relationship with their child's mother may continue to be involved in their child's life. In fact, nonresident fathers are seeing their children significantly more than they had in prior eras (Amato et al., 2009). Further, it has become more widely agreed upon that men can serve in father-like roles for non-biological children, which is often defined as "social" fathering (McDougal & George, 2016). In one recent study of African American children living in single-mother families, more than two thirds were able to identify a nonresident paternal figure, suggesting that most had involved fathers. When asked to identify who this father figure was, a quarter of respondents pointed to a nonresident social father (Cross & Zhang, 2022). Thus, the general definition of fathering has expanded to include coresident and nonresident fathers, as well as biological and social fathers. Given these sociocultural patterns and shifts in definition, while much of the "parenting" literature continues to focus on the mother, researchers urge increased attention to fathering (Cabrera et al., 2018).



**Father Parenting Practices.** The question of whether there is a differential impact between mothering and fathering on child development has been met with mixed findings. The accumulating research suggests there is overlap in both the mechanisms of and relative level of influence between mothers and fathers (Rothenberg et al., 2020; Schoppe-Sullivan & Fagan, 2020). Thus, though this understanding is still marked by substantial gaps in the study of fathers as parents when compared to mothers, many prominent fathering researchers warn against presuming difference, driving consensus that it is reasonable to examine the same constructs in studies with mother-only, mother/father, or father-only samples (Fagan et al., 2014). Thus, the present study will operate with the understanding that mothers' and fathers' parenting practices are similarly influential for child development, a supposition that is supported by findings related to father influence and child development within our constructs of interest (i.e., use of consistent, not overly harsh discipline practices and positive behavioral principles).

**Discipline.** Related to discipline, samples examining maternal and paternal influence also indicate that both mothers' and fathers' use of maladaptive discipline practices (e.g., harsh verbal discipline) are associated with child externalizing and internalizing symptomatology (Wang & Kenny, 2014). On the contrary, in both mothers and fathers, effective parenting practices, inclusive of discipline, are associated with lower rates of externalizing and internalizing challenges (McKinney et al., 2016).

**Positive Behavioral Principles.** Several aspects of positive parenting, including use of positive behavioral principles, such as supportive and reward-oriented practices, have been found to be equally important stemming from mothers and fathers (Okorn et al., 2022). Relatedly, research indicates that parental warmth, which can be shown through positive behavioral principles meant to shape behavior, contributes to lower rates of externalizing and internalizing

disorders with little to no variation between maternal and paternal impact (Pinquart, 2017a, 2017b). However, studies have also found that paternal warmth varies more than maternal warmth on average. This means that the gap between a high-warmth and low-warmth father may be larger than that between a high-warmth and low-warmth mother (Rothenberg et al., 2020). These findings suggest that for fathers, warmth may be impacted by external factors and also may be well suited for intervention.

**Father Involvement.** In addition to the aforementioned positive parenting behaviors, involvement captures another parenting construct that is frequently studied in fathers with resultant impacts on child developmental outcomes. In fact, until recently, the bulk of fathering research had centered solely on father involvement, with definitions of “involvement” varying from economic contribution and presence in the child’s household to more nuanced, multi-dimensional measures of fathering that incorporate caregiving activities (e.g., accessibility to, engagement with, and responsibility for the child; Lamb et al., 1985, 1987; Pleck, 2010). Understanding involvement and its component parts is particularly important due to the aforementioned heterogeneity in the fathering experience.

Across the board, work that has examined the relation between father involvement and child outcomes suggests that father involvement is beneficial for development (Pleck, 2012). More specifically, a systematic review of 24 studies indicated that paternal involvement was consistently associated with fewer externalizing symptoms for offspring, including lower levels of aggression and delinquency (Sarkadi et al., 2008). Other studies have revealed similar impacts on child and adolescent internalizing symptoms, including depression, anxiety, and social withdrawal (Temmen & Crockett, 2021). Importantly, father involvement may also have indirect

effects on child development, including buffering the effects of stress on a mother's parenting, subsequently mitigating her use of harsh practices (Jackson et al., 2019).

When involvement is considered, researchers have found that engagement, a construct that refers to the actual activities in which a father engages with his child, is especially important in impacting child outcomes (Sarkadi et al., 2008; Temmen & Crockett, 2021). These findings align with the overarching idea that aspects of father-child interactions may be more closely related to child outcomes than the amount of money a father contributes to his family or the mere amount of time he spends with his child (Pleck, 2010). Taken together, the present study will consider the aforementioned positive parenting practices, as well as the father-specific measurement of involvement, in its examination of parenting styles and practices. Involvement will refer specifically to a father's engagement with his child.

**Fathering in Context.** Another important distinction in the parenting literature that differentiates work on mothering versus fathering has gained some traction in recent years. Researchers suggest that fathers are likely more affected by context than mothers (Jessee & Adamsons, 2018; Schoppe-Sullivan & Fagan, 2020). Context can be understood as the socioecological factors that may impact their involvement or parenting practices. According to biopsychosocial theory (Engel, 1977), these contributors can include individual factors (e.g., adherence to masculine norms or depression; Shafer et al., 2019), family factors (e.g., relationship with the child's mother; Fagan & Barnett, 2003), and systems-level factors (e.g., sociopolitical context; Western & Wildeman, 2009). Thus, when studying fathers, consideration of their context is particularly important, which is the impetus for examining the contextual stress-parenting linkage through this study.

Systems-level factors emerge as particularly important when examining individuals whose intersectional identities have been marginalized. In the United States, due to the pervasive systemic racism that is deeply engrained in the systems within which families necessarily interact (such as, the education, healthcare, and housing systems, among others), individuals who identify as Black/African American or Hispanic/Latine are disproportionately more likely to occupy lower socioeconomic strata than their White peers (Reeves et al., 2016). Thus, there is significantly more overlap between race/ethnicity and low-income level for Black/African American and Hispanic/Latine individuals than would be expected in an equitable society (Teitz & Chapple, 1998). Importantly, one's self-identified racial or ethnic group is not a risk factor in and of itself for poverty or the negative developmental outcomes associated with poverty; instead, the racist practices and policies that disproportionately affect Black/African American and Hispanic/Latine individuals within the United States put those individuals at greater risk for negative outcomes through limiting their access to resources and increasing the psychosocial stressors that are experienced day-to-day while navigating unjust systems (Cogburn, 2019; Volpe et al., 2019). Though increased focus on racially and ethnically minoritized fathers, as well as fathers from lower socioeconomic strata, has occurred over the last two decades, understanding of how these fathers' contexts and access to resources may be impacting their fathering continues to be misrepresented. The prevailing narrative about men of color from low-income neighborhoods as uninvolved or as harmful influences for their children is based in derogatory stereotypes that may mischaracterize actual patterns of involvement or influence. As an example, when Cabrera and colleagues (2008) looked at the variation between nonresidential father involvement by racial/ethnic group, they found that African American and Latino fathers were significantly more involved with their young children than the White fathers in their sample,

contradicting the aforementioned presumption (Cabrera et al., 2008). These derogatory stereotypes may also promote the misattribution of statistical trends to personal deficits rather than systemic influences. As one example, though mass incarceration contributes to lower rates of involvement in Black fathers (Western & Wildeman, 2009), this is not always recognized in studies of Black fathering that focus on nonresidential status.

Thus, while men of color from structurally marginalized neighborhoods represent a population for whom fathering garners significant sociopolitical attention (e.g., Hansell, 2010; Obama, 2014), there is little empirical research that fully captures the ways in which context may impact their involvement and parenting practices (Johnson & Young, 2016; Letiecq, 2010). When studying this population of fathers, an understanding of context, including both risk and protective/promotive factors, is key to shifting conceptualization toward a more accurate and positive view of young fathers of color living in structurally marginalized communities (Gaylord-Harden et al., 2018; Johnson & Young, 2016). Further, an understanding of context can allow for the transition from supposition of individual responsibility to an acknowledgement of the ways in which racially-motivated practices and policies may be shaping individuals and families. The impetus should be on the broader system to change, rather than the parent himself.

The present study will contribute to the fathering literature by emphasizing the influence of context on parenting. As will be described in subsequent sections, various stressors can impact fathering, and this may begin prior to their entry into fatherhood. Many such stressors occur at higher rates in low-income and low-resource neighborhoods, which disproportionately house families of color for the aforementioned reasons. Thus, this study will focus on how stress in adolescence due to neighborhood and systems-level factors, including exposure to community violence, economic hardship, and racial discrimination, impact subsequent parenting practices.

While a disproportionate amount of research on fathers of color centers on men living in low-income and low-resource neighborhoods, which misrepresents the heterogeneity in fathering experiences among Black/African American and Hispanic/Latino men, the context in which these men live is not always considered (Cooper et al., 2019). Further, this study will contribute to the literature by not only exploring the risk factors associated with fathering in structurally marginalized neighborhoods, but also devoting significant focus to the protective or promotive factors that support fathering, allowing for a more nuanced account of within population variation.

### **Stress Across the Lifespan**

A mechanism through which context-related factors impact parenting is through the physiological and psychological stress response. Generally, stress during childhood or adolescence may disrupt normal development with resultant impacts across the lifespan. In 1998, a research team, in conjunction with Kaiser Permanente, published data from a landmark study in which they retrospectively screened over 13,000 individuals enrolled in the Kaiser Health Plan for experiences of potentially traumagenic events or circumstances during childhood, which included abuse (i.e., physical, emotional, and sexual abuse) and household dysfunction (e.g., exposure to domestic violence or cohabitation with an adult who misused substances or exhibited symptoms of mental illness; Felitti et al., 1998). For each individual, the researchers tallied the number of affirmative responses to comprise an adverse childhood experience (“ACE”) score. In this study, individuals who reported ACEs from their childhood were more likely to have physical (e.g., heart or lung disease, cancer) and mental health difficulties (e.g., depression, substance use concerns, suicide attempts) in adulthood. Further, the more ACEs one experienced,

the more likely one was to exhibit multiple physical and mental health risk factors (Felitti et al., 1998).

Results from this initial ACEs study have been replicated and expounded upon in several studies since the late 1990s. Though the exact wording of questions between studies has varied, the focus has remained primarily on abuse, neglect, and household dysfunction. A recent systematic review of such studies by Hughes and colleagues (2017) surveyed 37 articles capturing a total of over 250,000 participants to understand the magnitude of impact of multiple ACEs on different physical and mental health outcomes, which were posited to have general public health implications as well as effects on subsequent generations. Findings from this systematic review suggested that, on average, associations between ACEs in childhood and outcomes in adulthood were weaker for physical health outcomes (e.g., obesity, diabetes, self-rated health, cancer, and heart and respiratory issues) and stronger for mental health outcomes (e.g., general mental illness, alcohol and drug use, suicidality, and interpersonal violence; Hughes et al., 2017). These results underscore the significance of understanding how adverse life events in childhood or adolescence contribute to mental health trajectories.

### ***Impact of Adverse Child Events***

Importantly, results from the original ACEs study and the studies that followed also indicated that a substantial percentage of individuals (including over half of the population from the Kaiser Permanente study) have faced at least one of the categorical ACE stressors during their childhood, suggesting that some exposure to adversity is common (Felitti et al., 1998). Because not all people who have experienced a potentially traumagenic incident develop posttraumatic stress symptoms or otherwise have proximal or lifelong impacts, researchers

sought to understand the mechanisms through which adverse life experiences impact development.

One such framework to explain the impact of adverse life experiences on development was widely shared by the National Scientific Council for the Developing Child (2005/2014). Their model explicated when and how stress (including ACEs) impacts the brain. Researchers posit that exposure to adversity is inevitable and learning how to cope with everyday stressors is a normal part of healthy maturation. When one experiences stress, the body responds with increased heart rate, blood pressure, and production of stress hormones (e.g., cortisol). In someone who has experienced mostly normative stressors and thus, has developed a healthy stress response system, these levels return to baseline after some time. However, when adversity is experienced in an extreme or sustained manner during childhood, it can alter the stress response system (Shonkoff et al., 2012). In this scenario, the aforementioned biological stress reactions (i.e., increase in heart rate, blood pressure, and stress hormones) are activated by relatively minor stressors and are slow to return to a healthy baseline. Over time, these increased stress responses, particularly if the stressors are experienced during sensitive periods of brain maturation, may impact the brain's development by triggering an overproduction of neural connections in areas dedicated to anxiety and impulsivity and an underproduction in those focused on executive functioning (National Scientific Council for the Developing Child, 2005/2014). Subsequently, these physiological changes increase the risk of future physical and mental health difficulties (Bucci et al., 2016).

With this understanding, researchers defined three categories of stress and associated responses: positive stress, tolerable stress, and toxic stress. Positive stress refers to mild, short-acting stress responses, and learning to adapt to such responses is part of normal, healthy



development. Tolerable stress refers to stress responses that are potentially harmful but manageable with the right supports. Finally, toxic stress refers to the intense, frequently recurring, or prolonged activation of the stress response system that is the likeliest to result in damage to the developing brain and other bodily systems (National Scientific Council for the Developing Child, 2005/2014).

Several factors may differentiate tolerable from toxic stress. First, caregivers play a significant role in affecting how stress impacts child development and whether high levels of stress result in tolerable or toxic biological responses. The presence of a warm, responsive, and supportive caregiver can serve as a buffer against the impacts of extreme or prolonged stress (Shonkoff et al., 2012). Adults, above providing warmth, may also scaffold healthy coping (Power, 2004). Second, the level of severity, duration of the stressor, and the total number of stressors experienced may each distinguish tolerable and toxic stress responses, potentially even in the context of supportive relationships (National Scientific Council for the Developing Child, 2005/2014). Thus, as examples, experiencing the death of a loved one with other adults around to provide comfort may result in a tolerable stress response, and persistent exposure to abuse by a caregiver may result in a toxic stress response. However, it is always important to remember that there is heterogeneity of experience between individuals who have experienced the same events.

### ***Adolescence as an Important Developmental Period***

Toxic stress was originally conceptualized as a consideration of how early childhood experiences could shape biological and, subsequently, social-emotional development. As neuroscientific research has progressed, however, adolescence has been identified as another critical period for brain maturation (Aoki et al., 2017; Fuhrmann et al., 2015). Critical periods, or times of increased brain plasticity, represent intervals during which neural connections are

forming at a higher rate than other periods of development. Exposure to stress during these times can disproportionately impact the brain. Thus, while stress during other periods can affect development, early childhood and adolescence have been identified as particularly vulnerable moments. As such, toxic stress research has been extended to and tested with adolescent populations (Joos et al., 2019). The present study will examine stress during adolescence and its relation to psychological distress and parenting outcomes into adulthood.

A host of different adverse life events – in childhood or adolescence – can result in sustained stress over time. Adverse life events related to child abuse, neglect, and household dysfunction, as cited in the original ACEs study, have commonly been used in studies of toxic stress. Researchers posit, however, that context-related life events such as neighborhood, environmental, and systems-level circumstances may act in the same way as these adverse life events to impact child, adolescent, and adult development (Dowd, 2017).

### ***Social Determinants of Health***

The social determinants of health (SDH) framework guides understanding of how non-medical, contextual factors are important considerations in the study of physical and mental health and may contribute to the levels of stress that detrimentally impact functioning into adulthood (World Health Organization Commission on Social Determinants of Health, 2008). Essentially, the framework suggests that cumulative advantage and/or disadvantage stemming from the circumstances in which people live work together to influence development. More specifically, the SDH framework includes consideration of how the conditions that affect development are shaped by the distribution of power and resources, as well as policy decisions at local, state, and national levels (Viner et al., 2012). Examples of SDH include access to healthy food, education, household income, housing conditions, neighborhood resources, and racial

discrimination. The SDH framework lends suggestions to the types of experiences that may result in toxic stress responses above and beyond abuse/neglect and household dysfunction. Therefore, SDH is an apt framework to apply to studies that aim to understand how childhood and adolescent stress impacts development in structurally marginalized communities.

Within this framework, studies have examined how built and social environments have contributed to both positive and negative health outcomes. Accumulating evidence suggests that several SDH have impacts on physical and mental health trajectories (e.g., Alegria et al., 2018). For example, the contextual stressors at the center of this study (i.e., exposure to community violence, economic hardship, and racial discrimination) have all been associated with physical and mental health outcomes in childhood, adolescence, and adulthood. Such studies, in the context of the SDH framework, support the supposition that these neighborhood- and systems-level stressors may have detrimental effects on the stress response system and thus contribute to outcomes into adulthood.

Due to several longstanding systemic factors (e.g., structural racism), contextual stressors included as social determinants of health disproportionately affect specific populations of children and adolescents, such as non-White and low-income youth. Thurston and colleagues (2018) conducted one of the first studies considering community-level ACEs (which can also be understood as SDH), using a sample of over 65,000 participants via The National Survey of Children's Health. To capture community-level ACEs, the researchers asked questions about three circumstances not typically captured in previous ACEs studies: exposure to community violence, economic hardship, and racial discrimination. They found that there were significant discrepancies between racial/ethnic groups in terms of percentage who self-reported witnessing neighborhood violence (White, non-Hispanic: 8.1%; Hispanic: 12.2%; Black, non-Hispanic:

17.5%), living in a household affected by poverty (White, non-Hispanic: 18.5%; Hispanic: 28.1%; Black, non-Hispanic: 26.9%), and being treated unfairly due to race/ethnicity (White, non-Hispanic: 1.6%; Hispanic: 8.4%; Black, non-Hispanic: 12.4%; Thurston et al., 2018). Thus, the differential experience of such stressors may contribute to physical and mental health inequities across racial/ethnic groups.

The aforementioned contextual stressors, which include exposure to community violence, economic hardship, and racial discrimination, have been frequently studied in the literature. The following sections will provide an overview of the relation between each contextual stressor and associated health impacts. Though the focus of this study is on developmental and mental health, other studies may consider physical health outcomes in their investigation of the contextual stress-parenting linkage.

**Exposure to Community Violence.** Youth can be exposed to community violence through several different pathways. These include direct victimization or witnessing, having a close relationship with a victim of violence, or hearing about violence in an area in which the youth resides (McDonald et al., 2011). Though rates may vary, it is estimated that over 50% of youth living in low-income and low-resource urban areas have some exposure to community violence in childhood and adolescence, though rates of exposure are much higher for Hispanic/Latino and Black/African American youth (Zimmerman & Messner, 2013).

Exposure to community violence in childhood and adolescence has been associated with negative physical (Wright et al., 2017) and mental health outcomes (Fowler et al., 2009; Sanchez et al., 2013; Tolan, 2016a). A meta-analysis of 114 studies suggests that exposure to community violence predicts posttraumatic stress disorder symptoms and externalizing problems, as well as internalizing disorders to a lesser degree (Fowler et al., 2009).

**Economic Hardship.** Based on recent Census data, more than 10 million children in the United States live in poverty, and the child poverty rate is well above adult rates. Non-White children, namely Black/African American, Hispanic/Latine, and Native American children, disproportionately account for high rates of poverty. In fact, based on these data, children of color were two and a half times more likely than their White peers to be classified as living in poverty (Children's Defense Fund, 2020). Associated with economic hardship and contributing to its detrimental impacts are a variety of stressors, such as low access to essential resources, including food and housing (Probst et al., 2018).

Low family-level household income has been connected to several negative developmental outcomes, including depression (Wickrama et al., 2008), anxiety (Najman et al., 2010), and oppositional behaviors (Conger et al., 2002). Importantly, results from a systematic review of the literature suggest that the stress that emanates from economic hardship may be more closely connected to mental health outcomes than a measure of income itself (Lund et al., 2010). Further, from a biological perspective, neuroimaging research suggests that poverty may affect brain development, including areas of the brain important for emotion regulation (Luby et al., 2013).

**Racial Discrimination.** Racial discrimination refers to the unfavorable differential treatment of an individual based on their racial or ethnic background. Experiences of racial discrimination can range from "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group," which are often termed "microaggressions" (Sue et al., 2007, p. 273) to serious acts of violence. While the term microaggression may connote innocuity, it is important to understand that all levels of racial discrimination may have pernicious effects (Williams, 2020). As would be expected, Black and

Latine children and adolescents are disproportionately victims of racial discrimination when compared to their White peers (Thurston et al., 2018).

A recent meta-analysis indicated that racial discrimination has been associated with depression, substance use, behavioral problems, and other negative physical and mental health symptoms (Cave et al., 2020). A different meta-analysis that compared the strength of the relations between several different community-level ACEs and mental health outcomes found that experiences of racial discrimination represented the strongest association (Thurston et al., 2018). This finding may be due to the likely chronic nature of experiencing discrimination (e.g., microaggressions) and associated impacts of sustained high levels of cortisol (Berger & Samyay, 2014). Research has also found that exposure to racial discrimination may amplify the pernicious effects of other stressors (Bernard et al., 2021). Further, experiences of discrimination have been shown to affect parenting, highlighting the need to study racial discrimination in the stress-parenting linkage (Murry et al., 2022).

**Measurement of SDH.** Across studies, there is not a consistent approach taken to measure contextual stress exposure. In some studies, exposure is measured by duration of exposure (i.e., number of timepoints), and in other studies by cumulative amount of exposure (i.e., total number of exposures across time); increases in both duration and cumulative amount have been shown to have deleterious impacts on developmental outcomes, making it more likely that an individual would demonstrate a toxic stress response (National Scientific Council on the Developing Child, 2005/2014). Further, exposure is often measured in aggregate across types of stress, which makes it difficult to ascertain which stressors contribute most to physical and mental health outcomes. The present study will allow for examination of both duration and

cumulative amount of exposure, as well as differentiate between types of stress (i.e., exposure to community violence, economic hardship, and racial discrimination).

Though experiences of stress are pervasive in structurally marginalized communities and possible contributors to negative mental health outcomes, connoting significant risk, not all individuals who experience said stressors have deleterious developmental outcomes. In fact, research suggests that it is more common to demonstrate “resilience” in the context of stress (Southwick et al., 2016). Thus, it is imperative to consider the mechanisms that lead to resilience.

### *Protective or Promotive Factors*

In studying families, it is critical not only to examine the ways in which risk may predict differential outcomes, but also to co-examine possible protective or promotive factors that either buffer against stress exposure or contribute to flourishing in the absence of stress in a manner of equal importance. In particular, recent researchers have been appropriately critical of work that is solely centered on risk (Cooper et al., 2023; Tolan, 2016b). Though perhaps unintentionally, a singular focus on risk may contribute to a deficit mindset that places blame on families rather than the systems that disproportionately contribute to the conditions that generate risk. Therefore, this present study will co-examine the protective/promotive factors that may co-exist for fathers experiencing contextual stress.

In the literature, there are several factors that may differentiate populations that have been exposed to significant stress. In general, factors that have been found to mitigate risk are commonly referred to as “protective” factors. The present study will investigate three related protective factors, one measured during adolescence (i.e., positive parenting experienced during adolescence) and two measured during adulthood (i.e., social support and the coparenting relationship). All are somewhat related to positive relationships or social support, a contextual

factor that has been examined as protective/promotive across many studies with similar populations (and of fathers; Letiecq & Koblinsky, 2003).

**Positive Parenting in Adolescence.** Per the National Scientific Council on the Developing Child's (2005/2014) model, stress may become toxic if it occurs in the absence of a responsive and supportive relationship. Though this relationship may exist with any present adult, it is most often with a parent or caregiver. Ashton and colleagues (2021) conducted a retrospective study that examined the relation between ACE scores, access to caregiver support, and resilience resources (e.g., having supportive friends, knowing where to get help). For children who reported four or more ACEs, having access to a supportive adult was associated with significantly more resilience resources (Ashton et al., 2021). This finding underscores the role of a supportive caregiver in scaffolding healthy coping and highlights the parent-child relationship as a key area of focus in the protective factors literature.

More specifically, in a study examining almost 30,000 participants using data from the National Survey of Children's Health, positive parenting practices protected against the negative effects of having experienced one or more adverse childhood experiences on a child's development, measured through social-emotional skills and general developmental outcomes (Yamaoka & Bard, 2019). Though this study was conducted with cross-sectional data, it calls for longitudinal research examining similar questions.

Caregiver responsiveness and supportiveness have also been targets of intervention efforts to buffer against the pernicious impacts of toxic stress responses on development. As one example, Dozier and colleagues (2008) evaluated a relationship-based clinical trial (Attachment and Biobehavioral Catch-up; ABC) for caregivers of foster children meant to bolster the children's ability to regulate their physiological responses to stress. Children whose caregivers



received the ABC treatment presented with lower levels of cortisol during a stressful situation when compared to children whose parents were in the control group. This finding suggests that warmth, support, and responsiveness are malleable and can mitigate the potentially harmful effects of stress for youth (Dozier et al., 2008).

**Social Support in Adulthood.** Social support can be defined as “a social network’s provision of psychological and material resources intended to benefit an individual’s ability to cope with stress” (Cohen, 2004, p. 676). Inherent within the definition is the idea that relationships can protect against the impact of stress. Neuropsychological research underscores this supposition, as individuals with more psychosocial resources present with less cortisol reactivity after completing stressful tasks (Taylor et al., 2008). Notably, social support has been tested as a moderator of parenting stress with positive findings. A review of social support and parenting indicates that support from social networks has been shown to buffer against pernicious effects of contextual stress (e.g., poverty and discrimination) and be associated with positive parenting practices across a number of studies. However, the authors of the review note that the quality of support and the source of support matter in the stress-parenting linkage (Taraban & Shaw, 2018). Further, irrespective of stress, social support has also been frequently studied with fathers as an important contributor to father involvement (Castillo & Sarver, 2012).

**Coparenting in Adulthood.** Regardless of family structure (e.g., married or unmarried parents; romantically involved or not romantically involved parents; coresidential or nonresidential parents; or parents with biological or social children), there is opportunity for coparenting between caregivers. In the simplest terms, coparenting can be described as “the ways that parents work together in their roles as parents” (Feinberg, 2002, p. 173). Research suggests that a supportive coparenting relationship can be associated with less parental stress, more

parental sensitivity, and use of fewer harsh parenting practices (Choi & Becher, 2019; Taraban & Shaw, 2018). Some researchers have hypothesized that fathers are particularly vulnerable to discord in the coparenting relationship (Taraban & Shaw, 2018). Importantly, coparenting is also viewed as malleable. There are existing interventions that explicitly target the coparenting relationship (see McHale et al., 2012), some of which specifically focus on father-related outcomes (see Pilkington et al., 2019).

The present study will evaluate the protective influence of positive parenting in adolescence and broader social support and coparenting in adulthood. All three factors have most frequently been conceptualized and tested as “protective” factors in development. As previously stated, a protective factor can be understood as one which buffers against negative outcomes in the context of risk (Masten, 2013). Additionally, because of the recent emphasis in the literature on the potential promotive impact of positive developmental factors, each will also be tested as a “promotive” factor. Unlike protective factors, promotive influences are beneficial regardless of individual risk (Masten, 2013). There is emerging indication that social support may be a promotive factor (e.g., Chainey & Burke, 2021); this exploratory analysis may result in a better understanding of the mechanism through which these factors may contribute to positive developmental outcomes (see *Analytic Approach*). Further, by examining protective or promotive influences at multiple timepoints (i.e., adolescence and adulthood), there is greater opportunity to refine prevention and intervention efforts.

### **Theoretical and Conceptual Framework**

Though there are myriad theoretical underpinnings that could be explicated in the context of this study, two are particularly helpful in understanding the relation between contextual stress and fathering practices with resultant implications for child development. One, which has already

been reviewed, is the Social Determinants of Health (SDH) model (see *Stress Across the Lifespan*). The second, which will be detailed in the forthcoming section, is the Family Stress Model.

Overall, the SDH framework provides theoretical grounding for an investigation of how contextual stressors affect developmental trajectories. One of the ways in which stress has been posited to impact child development is through parental psychological distress and subsequently parenting practices, which can better be explained via the Family Stress Model. Together, these two models connect the ideas presented thus far, including that stress can emanate from neighborhood- and systems-level influences, that stress impacts individual development into adulthood, inclusive of parenting, and that a father's parenting is important to his child's development.

### ***Family Stress Model***

The Family Stress Model (FSM) was originally developed and tested to explicate the relation between one social determinant of health (i.e., economic hardship) and child outcomes. This theoretical framework broadly suggests that economic hardship experienced by a parent contributes to their child's externalizing and internalizing symptoms through parenting (Conger et al., 2002; Conger et al., 2010). More specifically, in the model, economic hardship is associated with parenting styles/behaviors, such as decreased positive behavioral principles/warmth and increased use of maladaptive discipline practices (Conger et al., 2002). Though much like most parenting models it was originally developed with mothers, it has been tested with father-only populations in recent years (e.g., White & Roosa, 2012). Further, the FSM is appropriate for use with the present study's sample, as it has been tested and validated with racially/ethnically diverse and socioeconomically diverse populations (Conger et al., 2002).

**Parental Psychological Distress as a Mediator.** Importantly, the FSM proposes a mechanism through which economic hardship impacts parenting practices: parental psychological distress (Conger et al., 2000; Pereira et al., 2012). Psychological distress can be defined as the manifestation of stress as psychopathology, which can include symptoms of anxiety and depression. Thus, the understanding is that economic hardship (whether tested cross-sectionally or longitudinally) disrupts the parents' own stress response system and contributes to increased levels of psychological distress, which in turn makes it less likely that parents will exhibit the behaviors correlated with positive developmental outcomes for children (e.g., positive parenting) and more likely that they may instead turn to maladaptive practices (e.g., inconsistent or harsh discipline, or low warmth; Conger et al., 2000). These parenting styles and behaviors serve as the path through which stress from one generation impacts the next generation.

Though more recent research using the FSM has identified several other mediating pathways (e.g., marital discord; Cummings et al., 2014), parental psychological distress is central to most of its applications and thus, has been most widely tested. For fathers, psychological distress is a particularly compelling mediator between adverse life events and parenting, as the association between psychopathology and both involvement and fathering styles/practices has been well documented (Bronte-Tinkew et al., 2007; Chu & Lee, 2019; Coates & Phares, 2014; Davis et al., 2011). Based on this understanding, the present study will evaluate whether psychological distress serves as a mediator in the analyses. To better parse out the influence of adverse life events on parental psychological distress, adolescent depression will be used as a control variable.

**FSM and ACEs.** Though originally considered as an explanation of how economic hardship impacts child development through psychological distress and parenting practices,

researchers have recently encouraged expansions of the FSM to include consideration of how other factors, aside from just economic hardship, impact child development (e.g., Murry et al., 2018). Thus, several studies have used the FSM or very similar model analyses to understand how ACEs (e.g., abuse and household dysfunction) relate to future parenting practices (e.g., Lange et al., 2019), including in father-only samples (e.g., Seteanu & Giosan, 2021; Shafer & Easton, 2021). These studies have generally shown that experiences of adverse life events in childhood increase risk for psychological distress and affect parenting (Lange et al., 2019; Seteanu & Giosan, 2021). As one example, in a sample of over 2,000 fathers, researchers found that ACEs were associated with less parental warmth and engagement in caregiving, weaker father-child relationship quality, and use of more harsh discipline practices. These outcomes were mediated by internalizing and externalizing parental distress (Shafer & Easton, 2021).

To date, however, there has been minimal work testing the FSM with contextual stressors aside from economic hardship, especially in samples of fathers. At the same time, there have been researchers urging inclusion of these contextual factors to gain a better understanding of how macro-level stressors, particularly for families of color and low-income families, impact individual parents and subsequently their families (Murry et al., 2018). Thus, the present study will examine the aforementioned contextual stressors (i.e., exposure to community violence, economic hardship, and racial discrimination) in a sample of fathers of color from structurally marginalized neighborhoods. Further, the present study will contribute to the literature by providing a longitudinal understanding of these contextual stressors and future parenting styles/practices, a benefit given the mostly retrospective nature of data collection in studies of ACEs and parenting. This research is particularly important, because the stress-parenting linkage

may provide insight into a mechanism for the intergenerational transmission of stress from one generation to the next.

The FSM provides proposed mechanisms for how SDH factors from one generation may impact the mental health of future generations. The present study will use the FSM as a template for testing the relation between several contextual stressors disproportionately present in structurally marginalized neighborhoods and both father involvement and parenting practices.

### **The Present Study**

The present study aims to build upon previous theoretical and empirical work in several ways. First, this study investigates how exposure to community violence, economic stress, and racial discrimination, when experienced during the critical developmental period of adolescence, may impact future parental psychological distress and subsequently parenting practices, responding to calls in the FSM literature to further investigate the relation between several social determinants of health (SDH) and parenting styles/practices (e.g., Murry et al., 2018). Second, and of equal importance, this study co-examines how protective or promotive factors in adolescence and adulthood may buffer against the possible negative effects of exposure to contextual stress, allowing for both a risk- and resilience-based analysis of context in the stress-parenting linkage. Third, this study focuses such an investigation on fathers, a group for which parenting research has been underdeveloped and whose role is increasingly acknowledged as important in the American family system (Cabrera, 2022; Pleck & Pleck, 1997). Relatedly, in addition to measuring the impact of contextual stress on parenting behaviors, the present study draws on fathering literature and includes an evaluation of whether these stressors also contribute to father involvement in caregiving activities, another factor associated with positive child- and family-level outcomes (Pleck, 2012). Finally, the study devotes attention to better understanding

low-income Black/African American and Hispanic/Latino fathers living in structurally marginalized communities in context. Though frequently studied, this population has often been the subject of unfair stereotypes that have contributed to policy determinations (Johnson & Young, 2016; Letiecq, 2010). Findings from this study may shed light on the role that the adverse life circumstances and conditions that individuals from structurally marginalized communities are disproportionately exposed to due to systemic racism and associated discriminatory practices and policies play in shaping parental distress, parenting practices, and potentially mental health inequities in future generations (Evans & English, 2002; Thurston et al., 2018). Further, findings may also illuminate the many ways in which individuals from structurally marginalized neighborhoods demonstrate resilience in the context of exposure to significant stress.

To achieve these goals, the present study uses data from several waves of the Chicago Youth Development Study (CYDS). Contextual stressors will be measured across five waves and will be used to predict fathering in the final wave(s). Parental psychological distress during the final wave(s) will be tested as a mediator of the relation between contextual stress and parenting, and positive parenting in adolescence, and social support and relationship quality with coparent(s) in adulthood will be examined as potential protective or promotive factors. Further information about this study's aims and hypotheses can be found in the following section. Additionally, a model depicting said aims can be found in Appendix A.

### *Aims and Hypotheses*

**Aim 1: Relation Between Contextual Stress and Parenting.** The first aim seeks to understand the relation between contextual stressors, including experiences of exposure to community violence, economic hardship, and racial discrimination, during adolescence and

future fathering in adulthood. Conception of fathering will include both father involvement and measurement of positive parenting practices (defined as use of consistent, not overly harsh discipline practices and positive behavioral principles meant to shape parent-identified adaptive child behaviors). Further, this aim seeks to delineate if this relation is different when stress is measured by duration of exposure (i.e., number of timepoints; “chronicity”) or by cumulative amount of exposure (i.e., total number of exposures across time; “extent”).

**Hypothesis.** The experience of potentially stressful contextual circumstances during adolescence will be negatively associated with positive parenting constructs, including involvement. This association will hold across the examination of both chronicity of exposure and extent of exposure.

**Aim 2: Parental Distress as a Mediator.** The second aim investigates whether parental distress explains the relation between contextual stress (i.e., exposure to community violence, economic hardship, and racial discrimination) in adolescence and subsequent fathering in adulthood when controlling for the father’s history of psychological distress (i.e., depressive symptoms in adolescence).

**Hypothesis.** Parental distress will mediate the relation between contextual stress in adolescence and parenting practices in adulthood based on copious prior studies using the Family Stress Model (Conger et al., 2010).

**Aim 3: Relationships as a Protective or Promotive Factor.** The third aim explores the protective or promotive role of supportive relationships at different developmental periods (i.e., adolescence and adulthood) and their relation to parenting practices. In particular, the present study will examine whether the experience of positive parenting in adolescence, or a positive relationship with a coparent or general social support in adulthood serve either to buffer against



the impact of stress on parenting outcomes or independently promote positive parenting behaviors. While there is more focus in the literature on the protective role of such factors, the present study will test each type of social support as both a protective and a promotive factor. This aspect of Aim 3 represents an exploratory analysis to determine if it would be more appropriate to consider such factors as promotive in future studies and/or in the consideration of intervention design or implementation.

***Hypothesis.*** Based on both biological and psychological studies, the experience of positive parenting in adolescence and both social support and a good relationship with a coparent in adulthood will serve as protective factors that lessen the strength of the relation between contextual stress and subsequent parenting practices. Due to the exploratory nature of examining supportive relationships as a promotive factor, no hypothesis is made.

## CHAPTER III

### Methods

#### Data

Data for this dissertation come from the Chicago Youth Development Study (CYDS), a longitudinal examination of developmental risk among Black/African American and Hispanic/Latino males living in structurally marginalized neighborhoods in Chicago (Tolan et al., 2003). Approximately six hundred participants were first recruited as fifth- through seventh-grade students. They were oversampled for aggressive behaviors; approximately half of the participants were randomly selected from those ranked at or above the 90<sup>th</sup> percentile for aggression based on the Child Behavior Checklist (CBCL) and associated Teacher Report Form (Achenbach, 1991). The other half were randomly drawn from those ranked below the 90<sup>th</sup> percentile on those measures (Henry et al., 2001). The study's eventual sample size at the first wave of data collection ( $n = 362$ ) was deemed appropriate by the research team based on the understanding of statistical power at the time of the study's conception (1988) to detect relations in multivariate longitudinal analyses. Prior research with these data suggest little evidence of bias due to participant attrition (Tolan et al., 2003). See Appendix B (Figure 2) for a table adapted from Sheidow et al. (2014) detailing the sampling methodology and subject attrition prior to Wave 1.

#### Procedures

Data were collected every year for the first four years (Waves 1 through 4) and then approximately every other year moving forward (Waves 5 through 8). During the first six waves, both participants and their caregivers were assessed via in-person or telephone interviews. The participants themselves were then interviewed during Waves 7 and 8 when attention turned

toward the males within the sample who identified as fathers. At this point, fathers were 28 years old on average (range 24-31 years old).

### **Sample Selection**

Due to this study's interest in investigating fathering, only men for whom there were data available during Waves 7 and 8 ( $n = 165$ ) were included in the analyses. However, data for these 165 participants come from Wave 2 through Waves 7 and 8. Data from Wave 1 were excluded due to the limited data collected for the predictor variables of interest (see *Contextual Stress*). Appendix B contains more information about the sample, including sample size at each included wave (Table 1).

To maximize the sample size for the study, the latest wave of data on which a given subject was interviewed was used to capture fathering and other constructs included from the final waves of data collection. Data for  $n = 35$  fathers were included from Wave 7, representing 21.21% of the sample, while the remainder of the data were from Wave 8 ( $n = 130$ ; 78.79%).

### **Final Sample**

The final study sample is comprised of primarily Black/African American (72.73%) and Hispanic/Latino (26.06%) men with 73.33% reporting their annual income as less than \$50,000. When fathers were asked about their parenting, they provided information about up to five of their children ( $n = 380$ ). On average, each father reported on 2.3 children, 84.47% of whom were their biological children and 48.95% with whom they were coresidential. Additional demographic information for the sample can be found in Table 2.

To further understand the sample, comparisons were examined between the sample at Wave 2 ( $n = 292$ ) and Waves 7 and 8 ( $n = 165$ ) using independent samples *t*-tests and chi-square analyses. The final analytic sample had a significantly higher number of Black/African American

participants ( $\chi^2(3, n = 287) = 22.01, p < .001$ ) and were more likely to have scored lower on a parent-reported measure of depression at Wave 2 ( $t(282) = 2.00, p = .02$ ). Otherwise, this sample did not differ meaningfully on most characteristics tested, including parent-reported measures of other psychological concerns (i.e., aggression, attention problems, delinquency, externalizing behaviors, somatization, social problems, and thought problems) and demographic characteristics (i.e., household income) at Wave 2.

## **Measures**

### ***Fathering***

Fathers were asked about various aspects of their parenting during Waves 7 and 8 of data collection. Because parenting can vary between children, fathers were asked to report on their involvement and styles/practices for up to five of their biological and social children. This approach was undertaken to obtain information about each father's overall parenting; it was intended to capture variation in parenting (including in both involvement and styles/practices) across children. In the case of this study, however, the interest was in incorporating that variation as averaged for children given the study's focus on understanding how contextual stress holistically contributes to fathering. Also, as one-third of participants only had a single child, the consideration of variation among children would have been constrained. Further data regarding the number of children upon which each father reported can be found in Table 3. Thus, across outcome measures, parenting is represented by the average score across children in instances in which there was more than a single child. See Table 4 for both total and average *ns* for each dependent variable.

**Involvement.** Fathers were asked about their involvement with each of their children using a measure based on Lamb and colleagues' (1985, 1987) conceptualization of paternal

involvement. Through this measure, participants reported on their accessibility to each of their children, engagement with said children related to caregiving, educational, and recreational domains, and responsibility for planning for, making financial contributions for, and influencing decisions about each child (Lamb et al., 1985, 1987). Only the engagement subscale was included in the analyses due to its consistent connection to child outcomes in the literature, inclusion in more recent conceptualizations of father involvement (e.g., Pleck, 2010), and theoretical similarity to the other included parenting measures (Pleck, 2012). The specific items capturing involvement were created by the DADS Initiative as part of a broader effort to measure fathering (Cabrera et al., 2004; Cabrera & Peters, 2000). The following section will detail how the engagement measure was scored.

**Engagement.** Father engagement was captured by nine items ( $\alpha = .95$ ) that asked fathers how often they had participated in specific activities with their child in the last month (e.g., read stories to or go for a walk with their child; 1 = *at least once per day*, 2 = *a few times per week*, 3 = *a few times per month*, 4 = *rarely*, and 5 = *not at all in the last month*). Items were reverse coded, such that higher scores indicate greater self-reported father engagement with the child. Mean scores of non-missing items from 1 to 5 were calculated. All fathers were administered the father involvement scales, including the questions that comprise the engagement scale, regardless of their child's age.

**Parenting Practices.** Fathers also reported on their parenting practices with each of their children. Two separate measures were provided to fathers based on the current age of their child at the time of survey administration. While these measures were provided by the CYDS study team to capture similar aspects of parenting, interpretation should be made very cautiously with consideration of each measure's original intended purpose. Additional information about these

measures will be explicated in further detail below. Importantly, these measures of parenting practices were only administered to fathers that reported more than minimal contact with their child. Fathers were included if, when asked how often they see their child, they responded (3 = *sometimes; about once a month or so*, 4 = *often; not every day but several times a week or month*, or 5 = *every day*).

*Younger Children.* For children who were between the ages of two and seven at the time of survey administration, fathers were provided The Parenting Scale, developed by Arnold and colleagues (1993), to assess their parenting practices. The Parenting Scale was specifically designed to assess discipline practices, focusing on the practices that have been associated with negative outcomes for children across both research and clinical settings (Arnold et al., 1993). Fathers were asked to report on their parenting behaviors in response to 30 provided scenarios ( $\alpha = .74$ ). Responses were on a seven-point Likert scale. Example scenarios included: “When there’s a problem with my child...” (1 = *things build up and I do things I don’t mean to do* to 7 = *things don’t get out of hand*) and “When my child misbehaves...” (1 = *I raise my voice or yell* to 7 = *I speak to my child calmly*). Some items required reverse coding to ensure higher values consistently represent use of fewer maladaptive discipline practices (i.e., more positive parenting practices). To create the total score, mean scores of non-missing items from 1 to 7 were generated.

Though there are four possible scores that can be generated from The Parenting Scale, the total score was used for several reasons. First, the total score has produced the highest internal consistency in prior research, as well as in this sample (Arnold et al., 1993). Second, it incorporates each of the 30 items in the scale, including those not built into any of the subscales, enabling a more comprehensive measure of parenting practices. Third, empirical research reveals

inconsistent factor loading in two of the subscales (i.e., laxness and over-reactivity scales) across different samples (see Salari et al., 2012 for a review). Though originally tested with mothers, The Parenting Scale has been used and validated with samples of fathers (Rhoades & O’Leary, 2007).

*Older Children.* For children who were eight years of age or older at the time of survey administration, fathers were provided the Pittsburgh Youth Study’s Positive Parenting Scale (Loeber et al., 1998) to measure parental practices. Fathers were asked six questions ( $\alpha = .88$ ) about how often they provide their child with a reward “when [their] child does something good.” Responses were on a three-point Likert scale (1 = *almost never* to 3 = *almost always*). Example behaviors included: “give youth a wink or smile about it,” “say something nice about it,” and “give a special privilege for it.” Mean scores of non-missing items from 1 to 3 were calculated with higher scores representing more positive parenting practices.

Throughout this dissertation study, the term “parenting practices” will continue to be used, and the primary designation between the two measures will be “for children between the ages of two and seven” or “for children eight years of age or older.” Again, interpretation should always be made with respect to the specific measurement tool applied for each age group.

### ***Contextual Stress***

During Waves 1 through 6, adolescents (prior to their designation as “fathers” in Waves 7 and 8) and their primary caregivers participated in the CYDS Stress and Coping Interview (Tolan, 1988) in which they were asked about a series of stressors. In relation to each, they shared a) whether they had ever experienced the stressor (0 = *no*, and 1 = *yes*), b) whether they had experienced the stressor in the last year (0 = *no*, and 1 = *yes*), and c) how many times or the number of months during which they had experienced the stressor in the last year. In cases in

which a participant answered “no” to either a) whether they had ever experienced the stressor or b) whether they had experienced the stressor in the last year, they were not asked the subsequent question(s) for that stressor (-2 = *missing due to survey-indicated skip*). Those responses were assumed to be “no” (b) or “none” (c) and recoded as such (0 = *no* or 0 = *none*) for analyses.

For this study, stressors related to exposure to community violence, economic hardship, and racial discrimination were included in analyses. Because limited items were included in Wave 1 due to questionnaire expansion in Wave 2, these data were excluded from analysis, and the analytic sample began at Wave 2. Additionally, the items related to racial discrimination were only captured during Waves 5 and 6, as they were added at that time by the research team. Details regarding how each scale was coded for analyses will follow their respective descriptions (see *Extent* and *Chronicity*).

**Exposure to Community Violence.** Adolescents responded to eight questions about experiences of exposure to community violence in the last year. Items included whether property had been wrecked or damaged, a family member had been robbed or attacked, someone other than a family member had been robbed or attacked, they had seen someone beaten up, they had seen someone shot or killed, they had been the victim of a violent crime, they had been a victim of a non-violent crime, or they had witnessed any violent crime.

**Economic Hardship.** Each adolescent’s primary caregiver reported on two conditions of economic hardship in the last year including facing a serious financial problem or receiving public financial aid.

**Racial Discrimination.** Adolescents were asked about six possible experiences of racial discrimination in the last year. Items included whether they had been accused of doing something because of their race, put down because of practicing customs of their race/ethnicity,



excluded because of their race, criticized by friends for hanging out with people from a different race/culture, and called a racial name to put them down. They were also asked whether they had heard people say bad things about their race. As previously stated, these data were only collected during Waves 5 and 6.

Each measure of contextual stress was aggregated in two different ways to capture both the extent and chronicity of stress-exposure.

**Extent.** The number of specific incidences (for exposure to community violence and racial discrimination; self-report) or months (for economic hardship; parent-report) of stress across all waves was summed per each of the three categories of contextual stress. To account for variability in the total number of waves during which each participant provided data on the CYDS Stress and Coping Interview, the sum score was divided by the number of waves in which data were available for that specific participant; this denominator was calculated inclusive of waves for which participants did not provide a specific number of incidences or months of stress exposure due to having said “no” to items asking if they had ever experienced those stressors and/or experienced those stressors in the last year. In analyses, this final score (i.e., the total incidences or months divided by the number of waves with responses) represents the extent to which the cumulative magnitude of exposure to each category of contextual stress is associated with the relevant dependent variables (i.e., involvement and parenting styles/practices).

In some cases, there were outliers in the data (i.e., a participant reporting experiencing an event “99” or “100” times in a given year). These cases were recoded to the next highest reported number (e.g., “30”). They were not coded as missing because they provided at least some information about likely stress exposure.

**Chronicity.** Chronicity refers to the duration of time during which a participant experienced contextual stress. To approximate chronicity, a sum score was created to capture the number of waves in which a participant experienced at least one stressor within the last year per category of stress. Again, to account for missingness, this sum score was divided by the total number of waves for which the participant responded to the corresponding items on the CYDS Stress and Coping Interview. Thus, final scores for each participant were 0 to 1 with 1 representing exposure across all waves for which responses were available.

For individuals who only responded to one wave (full sample: exposure to community violence:  $n = 32$ ; economic hardship:  $n = 38$ ; racial discrimination:  $n = 72$ )<sup>2</sup>, a proportion may be misleading and overestimate the persistence of stress exposure across time. Therefore, in analyses, data were only included for participants who responded to a minimum of two waves per category of stress. In analyses, this index serves to capture the extent to which the chronicity of exposure to each category of contextual stress impacts the relevant dependent variables.

### ***Mediator of Parenting***

**Parental Distress.** During Waves 7 and 8, fathers were administered the Brief Symptom Inventory (BSI), a 53-item measure ( $\alpha = .95$ ) of psychological functioning (Derogatis, 1993). Through this measure, fathers were asked about the extent to which they had experienced symptoms of psychopathology in the last seven days with each of the 53 items having five response-stems (0 = *not at all* to 4 = *extremely*). Example symptoms included: being “suddenly scared for no reason,” “feeling no interest in things,” and experiencing “feelings of worthlessness.”

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<sup>2</sup> In the father-only sample, there were fewer participants who only responded to one wave (exposure to community violence:  $n = 3$ ; economic hardship:  $n = 5$ ; racial discrimination:  $n = 36$ ).

In addition to the condition-specific (e.g., depression, anxiety) scales, there is a Positive Symptom Distress Index (PSDI), which approximates overall level of distress experienced by the participant and was used in analyses. To calculate this index, the number of items for which a participant had non-zero responses are first summed to create the Positive Symptom Total (PST). Then, the value of each of the non-zero items (1 through 4) are summed and divided by the PST. In general, the BSI has demonstrated good psychometric properties in the literature, including construct validity (Derogatis & Melisaratos, 1983).

### *Protective or Promotive Factors*

**Parenting in Adolescence.** During Waves 2 through 5, adolescents (prior to their designation as “fathers”) were asked about their primary caregiver’s parenting using the same scale used to capture positive parenting practices in Waves 7 and 8 (see *Older Children*; Loeber et al., 1998). However, during these earlier waves, in lieu of a parental self-report measure, adolescents commented upon how often their parents were engaging in positive parenting practices (e.g., “give youth a wink or smile about it”) when they behaved well. Responses were scored on the same three-point Likert scale and were averaged per wave, creating an overall composite of 1 to 3. An average score across the four waves in which they were gathered was generated to best approximate positive parenting over the general developmental period of adolescence.

**Coparenting in Adulthood.** During Waves 7 and 8, fathers were asked about their relationship with their child’s mother via the question “In general, would you describe your relationship with [your child’s mother] as excellent, very good, good, fair, or poor?” (1 = *excellent* to 5 = *poor*). Items were reverse coded, such that higher scores indicate a higher self-reported quality relationship with the father’s coparent.

**Social Support in Adulthood.** During the final two waves, each father's perceived social support was also assessed. Fathers were asked to what extent various individuals in their lives (i.e., child's mother, child's mother's adult female relatives, child's mother's adult male relatives, child's mother's friends, his adult female relatives, his adult male relatives, and his friends) were supportive of them in their role as a father. Items had four response-stems (1 = *very supportive* to 4 = *try to prevent you*). Items were reverse coded, such that higher scores indicate higher levels of perceived support. Mean scores of non-missing items from 1 to 4 were then calculated.

Because fathers who had children with multiple partners potentially could have different scores based on their differing relationships with each child's mother and her family members, the final coparenting relationship quality and social support scores used in analyses were the average across children, within father (see *Parenting* for more details regarding this averaging approach).

### ***Other Predictors***

**Demographic Characteristics.** In similar studies, several demographic characteristics have been used as predictors or control variables in the examination of the relation between stress and parenting. These include the father's age, educational attainment (0 = *did not graduate high school* and 1 = *graduated high school*), current employment (0 = *not employed* and 1 = *employed*), and income bracket (1 = *less than \$5,000*, 2 = *\$5,000–\$9,999*, 3 = *\$10,000–\$14,999*, 4 = *\$15,000–\$19,999*, 5 = *\$20,000–\$24,999*, 6 = *\$25,000–\$29,999*, 7 = *\$30,000–\$39,999*, 8 = *\$40,000–\$49,999*, and 9 = *\$50,000 or more*) at the last wave for which the father provided data. Though often included in similar studies, residential status was not included in analysis due to the averaging of fathering scores across children.

Because of the inclusion of a measurement of racial discrimination in analyses, fathers' race/ethnicity was added as a covariate, as experiences of racial discrimination may vary by racial/ethnic identity (Dulin-Keita et al., 2011). Because there were three racial/ethnic groups (*Black/African American*, *Hispanic/Latino*, and *Other*), these variables were dummy coded (0 = *not belonging to that racial/ethnic group*, and 1 = *belonging to that racial/ethnic group*) with Black/African American fathers, the largest group, serving as the reference racial/ethnic identity. Further, because data were drawn from both Waves 7 and 8, the wave at which data were gathered (0 = *Wave 7* and 1 = *Wave 8*) was also controlled for in the analyses to account for the variation between participants in time between experiencing contextual stress in adolescence and fathering in adulthood.

### ***Covariates***

**Adolescent Depression.** Adolescent depression was used as a control variable in the model which investigated Aim 2 (see *Aim 2: Parental Distress as a Mediator*). During Wave 2, adolescents (prior to their designation as “fathers”) completed the Child Depression Inventory (CDI; Kovacs, 1992) to measure baseline psychological distress. The CDI is a 27-item self-report measure ( $\alpha = .84$ ) normed for children and adolescents between the ages of 7 and 17, which asks about symptoms of depression. Items had 3 response-stems (e.g., 0 = *I am sad once in a while*, 1 = *I am sad many times*, and 2 = *I am sad all the time*). Scores were summed to create a total score (0 to 54) with higher scores representing more symptoms of depression.

With other samples, the CDI has also shown high internal consistency as well as relative effectiveness in distinguishing children who are more emotionally distressed than the average child (Saylor et al., 1984).

A reference table with information regarding from which waves all study variables come can be found in Appendix C (Table 5).

### **Analytic Strategy**

A series of models using Stata IC Version 15.1 (Stata Corp, 2017) were run to test this dissertation study's hypotheses. Prior to analyses, assumptions of linearity and homogeneity of variance were examined using histograms, scatter plots, and residual plots. For several models, the residuals were not normally distributed, and robust standard errors were used (Field & Wilcox, 2017). Further, to account for missing data and to retain as many cases as possible, Full Information Maximum Likelihood (FIML) was used as the estimation strategy across models (Enders & Bandalos, 2001).

With the three outcome variables and two approaches to measuring contextual stress (i.e., extent and chronicity of exposure), a minimum of six models needed to be run to address Aim 1; a minimum of three models were required for Aims 2 and 3. Models were run using a stepwise approach per aim, and each will be explicated below. Covariates for each model included: father's age, race/ethnicity, household income, and employment status, as well as the wave at which outcome data were captured.

### ***Aim 1***

Multiple linear regression models were run to examine the relation between contextual stress exposure (with measurement of the extent and chronicity of stress exposure run in separate models) during adolescence and the three outcome measures of interest several years later: father involvement and parenting practices for younger (between two and seven years of age) and older (eight years of age or older) children. Global effect sizes ( $R^2$ ) and individual coefficients were examined to determine the relation between the predictors and the outcomes. More specifically,

standardized coefficients were calculated and reported to support ease of interpretation, except in cases in which the predictor was categorical (Bauer & Curran, 2012).

Through Aim 1, analyses also examined whether patterns of results were similar when considering the two separate approaches to contextual stress measurement, which determined whether both extent and chronicity of stress exposure continued to be included in the models meant to address subsequent aims.

### ***Aim 2***

To address the second aim, parental psychological distress was tested as a potential mediator of the stress-parenting linkage. Additionally, adolescent depression was included as a covariate. Path analyses were conducted using structural equation modeling, and mediation was tested by calculating 95% confidence intervals (CIs) using bootstrapping (1,000 replications; Bollen & Stine, 1992). These analyses determined whether a simple regression model or a mediation model was most appropriate as the base model for Aim 3; if a simple regression model was chosen, psychological distress would continue to be included due to its predicted relation to parenting in the context of stress (McLoyd, 1990).

### ***Aim 3***

To assess the third aim, variables capturing positive parenting in adolescence and both relationship quality with the father's coparent and broader social support in adulthood were added to the multiple linear regression models examining the outcomes of interest (see *Aim 1*). These variables were added individually and as interaction terms with each category of contextual stress to test whether self-reported positive parenting in adolescence, coparenting relationship quality, or social support in adulthood served as promotive or protective factors in the stress-parenting linkage.

When an interaction term was statistically significant in the model, additional steps were taken to aid interpretation. These analytic steps necessitated relying on only the portion of the sample for which full data were present. First, distributions of each of the possible moderating variables were examined to help guide meaningful contrasts. Due to the non-normal score distributions of each of the variables, contrasts using cut-points of the 25<sup>th</sup> and 75<sup>th</sup> percentiles were selected due to the determination that they provided the best understanding of how different levels of the moderator might affect the relation between the predictors and outcomes. Next, linear slopes at these cut-points were inspected for contrast and tested for significant differences from zero. Finally, pairwise comparisons were made to determine at which level(s) of contextual stress there was a statistically significant difference between someone scoring at one versus the other of the moderator cut-points on the predicted score of the outcome (i.e., measure of parenting).

As previously stated, a graphic depiction of study models can be found in Appendix A (Figure 1).



## CHAPTER IV

**Results****Descriptive Statistics and Bivariate Correlations**

Descriptive statistics (means, standard deviations, and ranges) for the key dependent and independent variables, including hypothesized mediating and moderating variables, are presented in Appendix D (Table 6). On average, fathers reported engaging with their children a few times a month or more ( $m = 3.26$ ; possible range: 1–5). In terms of their parenting practices, they were likely to report use of more positive practices with their children across both age groups (for children between the ages of two and seven:  $m = 4.93$ ; possible range; 1–7; for children eight years and older:  $m = 2.55$ ; possible range: 1–3). During adolescence, the young men who were later included as fathers reported encountering between 0 and 41.5 ( $m = 4.59$ ) incidences of exposure to community violence and between 0 and 27.5 ( $m = 2.38$ ) incidences of racial discrimination per wave. They experienced at least one stressor related to exposure to community violence, on average, during more than half of the waves during which they provided data ( $m = 0.69$ ) and less frequently reported having encountered at least one incident of racial discrimination ( $m = 0.35$ ). The adolescents' parents reported experiencing a cumulative average of 3.80 months (between 0 and 18.2 months) of economic hardship in a given year, considering *both* the number of months they faced a serious financial problem and the number of months they received public financial aid. These parents acknowledged experiencing either of these stressors during fewer than half of the waves ( $m = 0.32$ ) for which they provided data, on average.

In addition to general comparisons made between the included and excluded sample at Wave 2 (the first wave used in the analytic sample) based on their inclusion in Waves 7 and 8 as

fathers (see *Methods*), independent samples t-tests were examined to determine if there were any differences between fathers and non-fathers in relation to experiences of contextual stressors during adolescence. There were no statistically significant discrepancies in the extent or chronicity of exposure to community violence, economic hardship, or racial discrimination between the included and excluded sample at Wave 2. More details regarding these analyses can be found in Table 7.

Bivariate correlations between key variables were also examined and are reported in Table 8. Regarding the outcome variables of interest, a father's average involvement with his children was positively associated with his use of adaptive parenting practices ( $r = .47, p < .001$ ) with children who were eight or older at the time of the interview but *not* with children who were between two and seven ( $r = -.12, p = .19$ ). There was only one significant correlation between an outcome of interest and a measure of contextual stress. The extent to which a participant experienced racial discrimination in adolescence was associated with the use of more maladaptive parenting practices ( $r = -.22, p = .02$ ), on average, for children between two and seven years at the time of the interview.

However, there were several significant relations between the predictor variables of interest. As would be expected, within each type of contextual stress, the extent of and chronicity of exposure to that specific stressor were associated (within exposure to community violence:  $r = .47, p < .001$ ; within economic hardship:  $r = .86, p < .001$ ; and within racial discrimination:  $r = .65, p < .001$ ). Additionally, the extent and chronicity of exposure to community violence were significantly associated with the extent and chronicity of experiences of racial discrimination (extent/extent:  $.28, < .001$ ; extent/chronicity:  $r = .27, p < .001$ ; chronicity/extent:  $r = .20, p = .01$ ;

and chronicity/chronicity:  $r = .18, p = .02$ ). Extent of exposure to community violence was also significantly related to the chronicity of economic hardship in adolescence ( $r = .16, p = .04$ ).

The variable hypothesized to mediate the relation between contextual stress and parenting (i.e., psychological distress) was significantly associated with involvement ( $r = -.28, p < .001$ ) but not parenting practices (for children between the ages of two and seven:  $r = -.13, p = .21$ ; for children eight years and older:  $r = -.07, p = .60$ ). Finally, regarding the protective or promotive factors, there were neither significant correlations between experiences of positive parenting across adolescence and parenting during Waves 7 and 8 nor these experiences in adolescence and any type of contextual stress. However, participants' experiences of positive parenting in adolescence and social support in adulthood were correlated ( $r = .21, p < .01$ ), as were the quality of coparenting relationships and social support ( $r = .64, p < .001$ ). Relationship quality with a coparent, on average, was inversely associated with exposure to community violence in adolescence ( $r = -.21, p < .01$ ). In adulthood, the quality of the coparenting relationship(s) was positively associated with father involvement ( $r = .27, p < .001$ ), though this pattern was not found for parenting practices (for children between the ages of two and seven:  $r = .04, p = .68$ ; for children eight and older:  $r = .16, p = .20$ ). Similarly, there was a significant positive relation between social support in adulthood and a father's involvement ( $r = .26, p < .001$ ), but this relation was not significant for social support and parenting practices (for children between the ages of two and seven:  $r = .05, p = .62$ ; for children eight years and older:  $r = .22, p = .08$ ).

### **Aim 1 Results**

The results for the models that examined the relation between contextual stress and parenting can be found in Appendix D. For each dependent variable, models were run separately to test each method of measuring contextual stress, extent (Table 9) and chronicity (Table 10).

***Aim 1(A)***

**Extent of Exposure.** Across models, the predictors, which included the three categories of contextual stressors and covariates, explained between 11 and 14 percent of the variation in the respective parenting outcomes (involvement:  $R^2 = .11$ ; parenting practices for children between the ages of two and seven:  $R^2 = .14$ ; parenting practices for children eight years of age or older:  $R^2 = .14$ ). The relations between any of the three categories of contextual stress (exposure to community violence, economic hardship, or racial discrimination) and any of the parenting measures were not significant. However, several covariates were associated with parenting. Fathers who identified as Hispanic/Latino were more likely to self-report more involvement with their children ( $\beta = .55$ ;  $p < .01$ ) and use of more positive parenting practices for their children eight years of age or older than those who identified as Black/African American ( $\beta = .33$ ;  $p < .001$ ). Parents who graduated from high school were more likely to self-report use of positive parenting practices ( $\beta = .27$ ;  $p = .02$ ), particularly as they related to discipline, for their children between the ages of two and seven, when compared to parents who did not graduate from high school.

**Chronicity of Exposure.** Observed patterns were similar when the contextual stressor variables were measuring chronicity (i.e., duration of time) rather than extent (i.e., number of specific occurrences/months) of exposure to stress. Between nine and 15 percent of the variability across parenting measures could be explained by the contextual stress predictors and covariates in each of these models (involvement:  $R^2 = .09$ ; parenting practices for children between the ages of two and seven:  $R^2 = .14$ ; parenting practices for children eight years of age or older:  $R^2 = .15$ ). Again, in the analyses, the relations between the three contextual stressors and any of the parenting measures were not independently significant. Fathers who identified as

Hispanic/Latino self-reported more involvement ( $\beta = .53; p < .01$ ) and use of more adaptive parenting practices for children eight years of age or older ( $\beta = .27; p < .01$ ); however, they self-reported use of fewer adaptive ( $\beta = -.27; p = .03$ ) practices for children between the ages of two and seven when compared to fathers who identified as Black/African American. Education level predicted self-reported use of more adaptive discipline practices for children in the younger age group ( $\beta = .29, p = .01$ ).

### ***Aim 1(B)***

In addition to there being significant correlations between individuals' scores on extent of and chronicity of stress exposure across all types of contextual stress, there was little difference in the patterns observed in the models that included measurement of the extent of stress exposure versus measurement of the chronicity of stress exposure variables, and there was greater participant inclusion when measurement of extent was considered. Thus, all future models were run with solely measurement of the extent of stress exposure variables.

### **Aim 2 Results**

The results of the models that address Aim 2 can be found in Figures 3, 4, and 5. In these path models that were run, there were zero degrees of freedom to estimate fit statistics (e.g., RMSEA). In general, tests of psychological distress did not demonstrate significant mediation of the relation between contextual stressors (i.e., exposure to community violence, economic stress, and racial discrimination) and parenting (i.e., involvement and positive parenting practices). There were no significant direct effects between the contextual stressors and parental psychological distress. There was a significant direct effect of parental psychological distress on involvement ( $\beta = -0.24; p = .02$ ). Due to the results of Aim 2, it was decided that the moderators would be added to the base model (*see Aim 1 Results*) rather than the mediated model.

### Aim 3 Results<sup>3</sup>

The results of the models that address Aim 3 can be found in Table 11. When the three hypothesized protective or promotive factors (e.g., positive parenting across adolescence, relationship quality with coparent(s) in adulthood, and social support in adulthood) were added as main effects and as interaction terms with each type of contextual stress to the models, the models explained between 26 and 43 percent of the variance across parenting outcomes (involvement:  $R^2 = .26$ ; parenting practices for children between the ages of two and seven:  $R^2 = .31$ ; parenting practices for children 8 years and older:  $R^2 = 0.43$ ).

In the model that examined involvement, the interaction between parent-reported experiences of economic hardship and self-reported experiences of positive parenting, which were both collected during adolescence, was significant, suggesting that the relation between economic hardship in adolescence and a father's involvement with his child(ren) in adulthood differed for fathers based on their experiences of positive parenting across their own adolescent development ( $\beta = -1.09$ ;  $p = .02$ ). For fathers who rated their experiences of positive parenting, on average across adolescence, lower (25<sup>th</sup> percentile; cutoff of 2.0), the relation between economic stress and involvement was not significant ( $b = -0.01$ ;  $p = .71$ ) while for those who rated it higher (75<sup>th</sup> percentile; cutoff of 2.5), there was a negative relation approaching significance between parent-reported economic stress in adolescence and involvement in adulthood ( $b = -0.09$ ;  $p = .05$ ). Pairwise comparisons did not yield significant differences between groups at any level of economic stress. At eighteen months of cumulative economic

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<sup>3</sup> The samples that were used to aid in the meaningful interpretations of significant moderation results in Aim 3 were samples for which full data were present. Sample sizes represented seventy-three percent of the total possible sample for father involvement ( $n = 121$ ), eighty-six percent of the total possible sample for positive parenting of children between two and seven years of age ( $n = 96$ ) and seventy-six percent of the total possible sample for positive parenting of children eight years of age or older ( $n = 47$ ).

stress per wave (the highest measured within this sample), the difference did approach significance ( $p = .07$ ). Parental distress, which had been added to the models as a covariate, was a significant predictor of involvement ( $\beta = -0.23; p = .01$ ). No other key predictors or interactions were statistically significant in this model.

In the model that examined parenting practices for children between the ages of two and seven, there was an inverse relation between the average quality of a father's relationship(s) with his coparent(s) and his use of positive parenting practices ( $\beta = -0.42 p = .01$ ). Three moderators were statistically significant. First, there was a significant interaction between exposure to community violence in adolescence and coparent relationship quality in adulthood ( $\beta = 1.39 p = .01$ ). For fathers who rated the average quality of their relationship(s) with their coparent(s) lower (25<sup>th</sup> percentile; cutoff of 2.93), there was a significant negative relation between experiences of community violence in adolescence and positive parenting in adulthood ( $b = -0.03; p = .001$ ). For fathers who rated the quality of their relationship with their coparent higher (75<sup>th</sup> percentile; cutoff of 4.35), the relation between the aforementioned variables was not significant ( $b = 0.03; p = .33$ ). When pairwise comparisons were made, no significant differences in parenting practices at any level of exposure to community violence were detected; at the highest levels, the difference between groups was approaching significance (e.g., at forty exposures per year,  $p = .08$ ). Second, there was a significant interaction between experiences of racial discrimination and coparent relationship quality. For fathers at the 75<sup>th</sup> percentile, there was a significant negative relation between racial discrimination and positive parenting ( $b = -0.08; p = .003$ ), but no significant relation between these variables for fathers at the 25<sup>th</sup> percentile ( $b = 0.03; p = .21$ ). The difference between groups on positive parenting became significant at an average of 6 self-reported experiences of racial discrimination per wave ( $p =$

.046), and significance persisted as experiences of racial discrimination increased. Third, there was a significant interaction between self-reported experiences of racial discrimination and social support in adulthood. For fathers who self-reported less social support (2.86; 25<sup>th</sup> percentile), there was a negative relation between experiences of racial discrimination and positive parenting practices ( $b = -0.06$ ;  $p = .02$ ), but no significant non-zero relation for those who scored at a higher level (3.79; 75<sup>th</sup> percentile;  $b = 0.04$ ;  $p = .21$ ). Pairwise comparisons revealed marginal significance between these two groups (i.e., 25<sup>th</sup> versus 75<sup>th</sup> percentile) beginning at the highest levels of experiences of racial discrimination (e.g., 24 experiences;  $p = .05$ ). Parental psychological distress, which had been added as a covariate, predicted use of less positive parenting practices for children between the ages of two and seven ( $\beta = -0.32$ ;  $p < .01$ ).

Finally, in the model that examined parenting practices for children eight years and older, more parent-reported economic hardship in adolescence was associated with more positive parenting practices in adulthood ( $\beta = 5.14$   $p = .001$ ). Having self-reported experiencing more positive parenting in adolescence predicted use of more positive parenting practices as a father in adulthood ( $\beta = 0.47$   $p < .01$ ). In terms of interactions, the relation between parent-reported economic hardship across adolescence and social support in adulthood was significant ( $\beta = -2.54$   $p = .02$ ). Additionally, the relation between self-reported racial discrimination across adolescence and coparenting relationship quality was marginally significant ( $\beta = -3.31$   $p = .05$ ). However, in the sample for which full data were available, both slopes (i.e., at 25<sup>th</sup> versus 75<sup>th</sup> percentile) for both interactions were non-significant.

Additionally, several of the other demographic covariates that were significant in the models that addressed Aim 1 continued to be predictive of parenting outcomes; relevant coefficients are available in Table 11. Summary information regarding the steps taken to aid



meaningful interpretation of possible protective factors in the stress-parenting linkage, as well as results produced through said steps, can be found in Tables 12, 13, and 14.

## CHAPTER V

**Discussion**

Youth who grow up in structurally marginalized neighborhoods are disproportionately likely to be exposed to contextual stress across their development assuming they remain in those neighborhoods over time (Bailey et al., 2017). While there has been study of how individual- and family-level stressors in childhood or adolescence impact future parenting, attention to the conditions of and stressors associated with structurally marginalized neighborhoods has not been incorporated into most of the research in this area. Few studies assess how experiences of contextual stress, such as exposure to community violence, economic hardship, and racial discrimination, affect parenting practices in adulthood. Moreover, most parenting impact studies have emphasized how women's parenting is affected. Thus, there is a particular dearth of such work in populations of men who become fathers, despite the long recognized critical role of fathers in child development (Lamb, 2010). Because fathering is thought to be more likely to be affected by context than mothering, such work is particularly important (Jessee & Adamsons, 2018; Schoppe-Sullivan & Fagan, 2020). This study centers on the stress-parenting linkage with a focus on contextual stress in a sample of fathers who grew up in structurally marginalized neighborhoods.

The first aim of this study was to understand the relation between exposure to contextual stress during the critical developmental period of adolescence and later parenting practices in early adulthood. This longitudinal approach provides a unique contribution to the extant literature, as most related study has relied on concurrent correlations or use of retrospective recall about stress and parenting. An equally important aim was to elaborate on the stress-parenting linkage by investigating whether positive parenting in adolescence, or the quality of

the coparenting relationship or level of social support in adulthood serve as protective or promotive factors in this linkage. Implications of this dissertation study include guiding future work to understand the stress-parenting linkage, uncovering possible mechanisms for the intergenerational transmission of stress and stress responses, and proposing structural changes for the benefit of healthy child development within the context of families.

This dissertation utilizes the Chicago Youth Development Study (CYDS), a longitudinal examination of development from early adolescence through participants' mid-twenties among a group of Black/African American and Hispanic/Latino males living in structurally marginalized neighborhoods in the 1990s and 2000s. This sample represents a frequently commented about but less often empirically and thoughtfully studied subset of fathers situated in a particular context and time period. All analyses must be interpreted with consideration of the sample characteristics.

### **General Exposure to Contextual Stress**

As was expected, most youth within this sample reported experiencing some contextual stressors during adolescence, suggesting that such exposure is indeed present within structurally marginalized neighborhoods. More specifically, on average, participants in the sample self-reported experiencing at least four incidents of exposure to community violence and two incidents of exposure to racial discrimination per wave; their parents reported experiencing an average of three months of significant financial hardship cumulatively per wave. Approaches to measuring contextual stress and estimates for general exposure to such stressors vary greatly (e.g., with between 50-96% of urban youth reporting witnessing community violence per year based on one account; Zimmerman & Messner, 2013). For these reasons, and because this study did not have a comparison group, it is not possible to draw conclusions about whether youth

within this sample disproportionately experienced more contextual stressors than youth in other structurally marginalized neighborhoods or than those in more well-resourced and highly invested in neighborhoods. However, the likelihood of disproportionality is high based on extant literature (Stolbach & Anam, 2017; Thurston et al., 2018), and any level of exposure to community violence, economic hardship, and racial discrimination is cause for concern due to implications for developmental outcomes related to both physical and mental health (Cave et al., 2020; Fowler et al., 2009; Lund et al., 2010).

Further, within this study, patterns in the data around these youth's exposure to contextual stress emerged that are worth noting due to their implications for future research, practice, and policy. First, there was a high correlation between the extent to which youth experienced a type of contextual stress (i.e., how many times one experienced the stressor or for how many months within a wave the stressor was present) and how chronic that exposure was over time (i.e., the number of waves during which a participant experienced the stressor). This finding suggests that within structurally marginalized neighborhoods, contextual stress may be unevenly impacting specific individuals. There seem to be some youth for whom exposure is minimal, as they are experiencing very few stressors, and when they do experience stress, it is infrequent or incidental. Other youth, however, may be exposed to many stressors and repeatedly exposed to such stress over time. While any exposure to contextual stress may be harmful, science shows that stress that occurs more times or more consistently is more likely to lead to a toxic stress response, a well-cited mechanism that contributes to negative outcomes (National Scientific Council for the Developing Child, 2005/2014).

Additionally, data suggest a high level of overlap between exposure to community violence and experiences of racial discrimination within this sample. Such a finding is notable, as

there is consistent and extensive evidence that exposure to community violence and experiences of racial discrimination can each be detrimental for developmental outcomes (Cave et al., 2020; Fowler et al., 2009). Additionally, research suggests that exposure to community violence can exacerbate negative outcomes for children experiencing racial discrimination (Sanders-Phillips, 2009). Racism has similarly been hypothesized to amplify harm for individuals who have experienced other forms of stress (Bernard et al., 2021).

The following sections will more specifically address findings related to each of the study's aims.

### **Contextual Stress as a Risk Factor for Fewer Positive Parenting Behaviors (Aim 1)**

Extant literature suggests that there is a relation between individual- and family-level stressors in adolescence and future parenting practices in adulthood, and this relation seems to be mediated by the parent's experience of psychological distress (Bailey et al., 2012; Banyard et al., 1997; Conger et al., 2010; Pereira et al., 2012). Only preliminary research has begun to investigate this pattern when examining contextual stressors across development, such as exposure to community violence and racial discrimination (e.g., Carreras et al., 2019; Murry et al., 2022).

This dissertation study adds to the limited literature by extending the assessment of the stress-parenting linkage to include neighborhood- and systems-level factors, testing these relations longitudinally, and examining these relations with a particular focus on fathers' parenting in a specific developmental and ecological context. The pattern that emerged through our analyses was that there were few significant correlations between key constructs of interest (i.e., measures of contextual stress, psychological distress, and parenting). This finding is neither consistent with other studies nor does it lend support to our hypotheses.

Much of the prior research on the Family Stress Model (FSM) and of how stressors experienced in childhood impact adult outcomes either relies on concurrent correlations between stress and present parenting, or asks participants to retrospectively report on the stress they experienced earlier in their development at the same time they are asked about their current functioning. These represent less stringent methods of assessing the long-term impacts of stress and may have led to overestimates of relations over time. Additionally, these approaches may measure qualitatively different relations, with both methods emphasizing the correlation between current stress and current outcomes. Thus, stress may be more impactful at the time in which it is acutely experienced, rather than it having a lasting impact. This hypothesis raises the possibility of unmeasured potential protective or promotive factors being present for youth in structurally marginalized neighborhoods, especially as there were no significant correlations found between experiences of contextual stress in adolescence and psychological distress in adulthood (see *Future Directions*). In addition, when parenting is considered, aside from a few examples, mothers have comprised study samples. The focus on fathering in this study may also have contributed to the divergence in findings; evidence that fathers are more affected by context than mothers may only be applicable to concurrent context. Each of these potential contributing factors merits further investigation to uncover the basis for differences in findings between those from this study and those inferred from most prior research.

Notably, there were no differences in patterns when stress was measured as extent of exposure (i.e., number of specific incidences or number of months experienced) versus chronicity of exposure (i.e., the duration of time during which a participant experienced contextual stress). This finding suggests it may be appropriate to look at either extent or chronicity in the contextual stress-parenting linkage, especially as both are considered important

contributing factors to the development of toxic stress responses (National Scientific Council on the Developing Child, 2005/2014).

### **Psychological Distress as a Mediator of the Stress-Parenting Linkage (Aim 2)**

Contrary to the hypothesis, psychological distress did not significantly mediate the relation between experiences of contextual stress in adolescence and fathering practices in adulthood within this sample. Given the lack of significant bivariate relations between stress and parenting, it was not surprising that this mediation was not significant. This finding may reflect that such a relation does not persist over this length of time for this sample. Alternatively, such a relation may be less relevant when contextual stressors are considered or in this developmental ecology for these young men. It may also be the case that there are more complex risk and resilience relations that interact across development, and the measurement approach used in this study simply did not capture those subtleties.

### ***Psychological Distress as a Predictor of Parenting***

While psychological distress did not present as a significant mediating variable in analyses, in both the mediation and moderation models, psychological distress was a consistent significant predictor of paternal involvement. Fathers who self-reported more psychological distress were less likely to be involved with their children. This finding is consistent with the literature that suggests that fathers with depression are less likely to engage with their children with consequences for child development across physical and mental health domains (Bronte-Tinkew et al., 2007).

Further, in one tested model, more psychological distress was associated with use of fewer positive parenting practices for children between the ages of two and seven. This relation between psychological distress and harsh or inconsistent discipline is also supported throughout

existing literature. Using the Fragile Families dataset, fathers who endorsed symptoms that would likely meet criteria for a depressive disorder per the DSM-IV were more likely to engage in harsh discipline practices than fathers with fewer or without such symptoms (Davis et al., 2011). Notably, however, in this study, this finding was not consistent across models that included both psychological distress and parenting practices for children between the ages of two and seven.

Contrary to what would be expected, there was no significant relation detected between psychological distress and positive parenting practices for children eight years of age or older.

### **Positive Parenting in Adolescence and Social Support in Adulthood as Protective or Promotive Factors in the Stress-Parenting Linkage (Aim 3)**

A third objective of this dissertation study was to examine whether a positive relationship with a caregiver in adolescence, or a high-quality relationship with a coparent or broader social support in adulthood served as protective or promotive factors in the stress-parenting linkage. Across models, a consistent picture did not emerge. The relations found were not the same across possible protective factors (i.e., experience of positive parenting from a caregiver, quality of relationship with a coparent, and level of social support) and aspects of parenting (i.e., involvement and specific positive parenting practices across age groups), nor always in the same or hypothesized direction.

However, the data indicated that some of the identified protective or promotive factors may serve as moderating variables or independent predictors in the stress-parenting linkage. Experiences of positive parenting practices across the developmental period of adolescence predicted fathers' own use of such practices for their children eight years of age or older. Particularly because the same measure of positive parenting was used at both timepoints



(adolescence and adulthood), this finding lends support to theories that suppose that parenting styles or practices, including those seen as both positive and negative, may be transmitted from one generation to the next (Belsky et al., 2009). This result also underscores the supposition that experiences of positive parenting across development may serve as a promotive factor, regardless of stress exposure.

Additionally, though not as hypothesized, there was a significant relation between a father's relationship with his coparent and his parenting practices. In this sample, a better relationship with a coparent (or, on average, with coparents) was associated with fewer positive parenting practices (i.e., harsher and more inconsistent discipline) for fathers with children between the ages of two and seven. Research suggests very little about why this might be the case. The literature does indicate, however, that maternal gatekeeping decreases when mothers have a good relationship with their child's coparent (Schoppe-Sullivan et al., 2008). Perhaps fathers with a better relationship with their child's mother may have more opportunities to be involved in the day-to-day tasks of childrearing and thus, naturally given more autonomy over discipline-related decisions. Fathers with less contact in a parenting role may report better parenting practices, because they are less often put in a position to make difficult parenting decisions. Though this is less often the case contemporarily, discipline has been seen as a more "masculine" or "male" role, perhaps making it more likely for fathers to take this role in a secure partnership, especially if the fathers adhere to masculine norms (Petts et al., 2018). A high-quality relationship with a coparent also seemed to predict more risk for more negative parenting for children between the ages of two and seven in the context of increasing self-reported experiences of racial discrimination during adolescence. Again, because these findings were

contrary to hypotheses and not heavily supported in the literature, more research is needed in this area to draw meaningful conclusions.

Finally, when the protective or promotive factors were added to the models as both independent terms and interaction terms, higher levels of economic stress independently predicted use of more positive parenting practices for children eight years of age or older. This finding is also contrary to hypotheses; it suggests that for fathers who grew up in families facing more economic stress, something about this experience translated to them using more reinforcement and supportive parenting with their future children. Additional research is required to better understand the mechanism behind this relation.

### **Implications and Recommendations for Developmental Science, Clinical Practice, Programs, and Policy**

This longitudinal examination of contextual stress and parenting among Black/African American and Hispanic/Latino men growing up in low-income and low-resource urban communities suggests that the relation between the stress associated with living in a structurally marginalized neighborhood and future fathering is more complicated than expected. It seems that contextual stress is not a clear predictor of differences in parenting behaviors nor is stress exposure expected not to have any impact on adult outcomes. Further, there is some indication that positive interpersonal relationships may play a role in the stress-parenting linkage, though clear patterns of how these factors interact with contextual stressors did not emerge.

As findings are contextualized in the broader literature and their implications explicated, several methodological and conceptual advancements are worth noting. This study applied a longitudinal design, engaged men directly to study fathering, considered population-specific developmental ecology for understanding the stress-parenting linkage, and included potential

mediators and moderators, such as psychological distress and positive relationships across timepoints. In translating findings into implications for developmental science, clinical practice, programs, and policies, careful consideration of how this study differs from prior work and thoughtfulness about the likely complexities of how stress-parenting linkages exist in reality is required.

### *Developmental Science*

Before specific recommendations are reviewed, there are broad implications for developmental science. The developmental science literature has become increasingly self-aware of how exclusive focus on deficits and risks when studying men of color and low-income men can pathologize the group and perpetuate unequal treatment (Barbarin et al., 2020; Gaylord-Hardin et al., 2017; Stevenson, 2016; Tolan, 2016b). When considering Black and Latino men, low-income men, and men otherwise from structurally marginalized communities and their fathering, focus has historically been on how to improve fathering with the assumption that the impetus is on the individual to gain skills or change behaviors. This research often fails to acknowledge the human experience of parenting as a man of color or an individual living in poverty in the United States. Further, it ignores the social and developmental assets that can be found among fathers of color and low-income fathers, including those who grew up in structurally marginalized communities (Tolan, 2016b). While this study examines risk factors, it targets neighborhood- and systems-level stressors rather than individual deficits. Moreover, the focus on study of positive parenting and inclusion of protective and promotive factors allowed for the identification of patterns that underscore forms of resilience and positive development in structurally marginalized contexts.

In particular, in this study, descriptive analyses indicated that despite experiencing significant contextual stress during adolescence, the fathers in this sample were largely involved with their children and exhibiting positive parenting behaviors both as biological and social fathers, and residential and non-residential fathers. Though it was not the purpose to describe patterns of involvement or parenting practices, this finding is worth acknowledging. As sociocultural patterns shift, fathers from structurally marginalized neighborhoods continue to be involved in their children's lives as likely positive influences on development. Thus, framing around these fathers in research, programs, policy, and public discourse ought to acknowledge typical and normative patterns of involvement and positive parenting, rather than presuming negative influence unless proven otherwise. Additionally, while this study did not find that variation in exposure to contextual stress experienced in adolescence contributed to variation in parenting among the fathers in the sample, it does not rule out the possibility that other neighborhood- or systems-level stressors may have been associated with differential parenting practices.

Developmental risk continues to be a focus of the fathering literature for Black/African American and Hispanic/Latino men and low-income men, as it is in this study. However, an approach to framing research and translating findings into practice, programs, and policy is to identify how to build on protective or promotive factors. Based on the results of this study, when men experience positive parenting in adolescence, they are more likely to exhibit positive parenting practices when they become fathers themselves. There is opportunity to better understand what individual-, family-, and community-level assets are contributing to the use of positive parenting practices and to acknowledge how adaptive practices are passed down from generation to generation in families.

With awareness of the theoretical and ethical considerations around how to think and talk about young men from structurally marginalized communities, additional recommendations are detailed in the forthcoming sections. These primarily pertain to the following key findings from this study. First, many individuals in the study reported experiencing exposure to community violence, economic hardship, and racial discrimination. Moreover, those who reported more exposure to community violence also reported encountering more racial discrimination, suggesting that there can be a “piling up” of stress for these young men (see *General Exposure to Contextual Stress*). Interventions, whether they be individual, family, institutional, or policy-oriented, must be attuned to this “piling up.”

Second, there was some evidence that psychological distress in adulthood predicted less paternal involvement and use of more harsh or inconsistent discipline practices for children between the ages of two and seven. Thus, relief of such distress may dually impact both fathers and their children, given the extensive literature that suggests involvement and discipline practices have implications for the development of child psychopathology.

### ***Clinical Practice***

**For Youth.** Due to the extant literature that suggests that exposure to community violence and racial discrimination may each cause a stress response that can vary from mild to significant, it is important for mental health professionals to be aware of the high correlation between experiences of each type of stress when working with individuals from populations similar to that from this study. For a clinician who may be treating a Black/African American or Hispanic/Latino adolescent male from a structurally marginalized neighborhood for posttraumatic stress symptoms following exposure to community violence, for example, it should be assumed to be important to inquire about and process possible experiences of racial

discrimination. White clinicians are less likely to talk about the impact of racial or ethnic identity in mental health spaces (Baima & Sude, 2020; Beck, 2019). However, having such conversations is a matter of compliance with ethical standards of care for behavioral health professionals.

Training, supervision, and genuine interest and empathy are required if clinicians are to provide competent and ethical clinical services with cultural humility. There are existing measures, such as the Race-Based Traumatic Stress Symptom Scale (RBTSSS; Carter et al., 2013, 2018) and the UConn Racial/Ethnic Stress and Trauma Scale (UnRESTS; Williams et al., 2018), that have been developed to help clinicians identify racial trauma, conceptualize cases in a culturally informed manner, and, if indicated, consider racism when diagnosing posttraumatic stress disorder (Cénat, 2023). Further, relevant guidelines for conversations about working with individuals who have experienced racial trauma and suggestions for treatment are available and should be utilized (see Cénat, 2023; Pieterse et al., 2023).

**For Fathers.** There are also clinical implications for fathers who may be receiving treatment for behavioral health concerns and, in particular, for their own psychological distress. Findings from this study suggest that it may be more important for clinicians to focus treatment on current causes of psychological distress rather than to process past exposure to contextual stressors from childhood or adolescence. While there may be other reasons to discuss potentially traumagenic incidents from earlier in development, exposure to contextual stress during adolescence does not seem to be a primary cause of the psychological distress that may be impacting a father's parenting practices.

### ***Programs***

**For Youth.** Within structurally marginalized neighborhoods, some adolescents are exposed to many stressors and exposed to such stressors relatively frequently. If, in certain

communities, those individuals most impacted by exposure to contextual stress can be identified, it is possible to develop evidence-informed, community-driven programs to support them. However, a sole focus on the risk factors these youth face is one-sided. Researchers and advocates have rightfully urged for a shift in conceptualization from risk mitigation to positive youth development (PYD; Barbarin et al., 2016; Gaylord-Harden et al., 2017; Lerner et al., 2021). Thus, supportive interventions would not only target risk; rather, they would promote healthy developmental outcomes by aligning strengths and available resources (Damon, 2004; Gaylord-Harden et al., 2017). Program development can move beyond a resilience framework and focus more on promotion of positive outcomes regardless of risk exposure. One approach may be to focus on building developmental assets. Search Institute has curated a list of 40 such assets. These include both external (e.g., types of positive relationships and opportunities in the community) and internal (e.g., social-emotional skills and personal values) factors likely to contribute to developmental success (Benson et al., 2011; Leffert et al., 1998; Scales et al., 2017). Additionally, research on both protective and promotive factors that are specific to youth who have been exposed to community violence, economic hardship, and racial discrimination have been identified (see *Future Directions* for examples) and can be leveraged in program design.

There is existing research, including theoretical models (e.g., Phenomenological Variant of Ecological Systems Theory; PVEST; Spencer, 2006), that provides guidance for how to take a social justice approach to implementing PYD (see Lerner et al., 2021 for an overview). These models call for an explicit focus on specificity, meaning that scientists and practitioners should be clear about how development occurs in context for specific subgroups, identify the unique strengths of youth in structurally marginalized communities, and acknowledge how youth

interpret their lived experience (Lerner et al., 2021). Related to such work, it is clear that youth voice in the development of child- and adolescent-targeted programs should be incorporated (Gaylord-Hardin et al., 2017; Lerner et al., 2021).

While implications for programs may be important for youth currently exposed to potentially traumagenic circumstances as a result of living in a structurally marginalized neighborhood, building resilience in these adolescents or developing positive youth development programs to promote thriving cannot be the only answer. Structural policy changes are concurrently needed to lessen the likelihood that such youth would be exposed to significant contextual stress in the first place (see *Policy*).

**For Fathers.** This study also adds to the growing literature that paternal psychological distress impacts parenting, including in measures of involvement and parenting practices for young children (between the ages of two and seven). Thus, psychological distress may be an important target for intervention. Though men may be less likely to seek professional help for mental health symptoms or conditions for myriad reasons (e.g., stigma; Clement et al., 2015), they do come into contact with physical and behavioral health professionals in a variety of settings (e.g., their own primary care, specialty clinics, criminal legal system). With the appropriate training, these professionals may be set up to provide mental health assessment, referrals, and/or services particularly geared toward fathers. When female-identifying individuals present to these settings, they are often asked about their parenthood status. However, the same cannot be said for males (Stover et al., 2018). A male-identifying individual's status as a father should be acknowledged and their psychological distress screened for and treated. Such practices will not only benefit their own health but also are likely to have positive impacts for the wellbeing of their children. There are examples of burgeoning programs that target fathering in



non-child-serving settings (e.g., substance use treatment) that are modeled after interventions in similar settings that take a mother's gender and parenthood status into account (e.g., Just Beginning; Richeda et al., 2015; Fathers for Change; Stover et al., 2018). Furthermore, clinicians across care settings should be thoughtful in terms of when fathers may be most vulnerable and, thus, most in need of support. There are specific times during fatherhood that have been documented as particularly risky in terms of likelihood of developing depressive symptoms, such as following the birth of a child (Bamishigbin et al., 2020).

### *Policy*

Youth in the United States continue to grow up in the context of urban poverty due to racially-motivated practices and policies that allow for the structural disinvestment of specific neighborhoods. Evidence from this study makes clear that many young men in these neighborhoods are at least minimally, if not persistently, exposed to the contextual stressors that are often associated with structurally marginalized communities (e.g., community violence, economic hardship, and racial discrimination). Policy makers at the local, state, and federal levels should heed calls to make research- and community-informed decisions to de-concentrate root causes of contextual stress such as poverty, poor economic opportunity, limited affordable housing, and underinvested in educational systems (Gaylord-Hardin et al., 2017). Anti-racist policy proposals exist and have, at least nominally, been acted upon (e.g., the recent Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government signed by President Biden in 2021). As they are and continue to be enacted, researchers should devote attention to studying what policies work and for whom. Moreover, policy makers should prioritize legislation that meaningfully incorporates the voices of young men and fathers from structurally marginalized communities for the provision of resources for

government-funded programs. Such legislation should also account for issues of access to programs, such as transportation, proximity, and cost, which have emerged as persistent barriers for engagement in programming (Gaylord-Hardin et al., 2017).

### **Limitations**

While this dissertation study represents an important step in examining the stress-parenting linkage for a population of fathers who grew up in structurally marginalized neighborhoods, several limitations within the current study exist that should guide interpretation of findings and upon which future research can improve.

### ***Measurement***

There are several measurement considerations that warrant attention. First, most measures, with the exception of experiences of economic stress in adolescence, were collected via self-report. In some respects, using self-report data from young boys and, later, fathers, represents a strength of this study. Historically, much of the research concerning men as fathers hinged primarily on the child's mother's report of his involvement and parenting practices (Wical & Doherty, 2005). Thus, while removing the father's perspective is not advisable, including more perspectives across development (e.g., parents or neighborhood data in adolescence and coparents or family members in adulthood) may have enhanced this study. Other limitations that pertain to specific measures are detailed in the following sections.

**Parenting.** Though all included measures of parenting have been used and validated in other studies, they are not without limitations. First, in the present study, the two scales representing positive parenting are not measuring the exact same constructs. While both aim to capture aspects of positive parenting (conceptualized in this study as the use of consistent, not overly harsh discipline practices and positive behavioral principles meant to shape parent-

identified adaptive child behaviors), the way in which they measure positive parenting, and the type and number of included items differ. One measure (i.e., for parents of children between the ages of 2 and 7) is primarily focused on effective discipline and contains thirty items (Arnold et al., 1993); the other measure (i.e., for parents of children 8 years of age or older) inquires about positive reinforcement and consists of 6 items (Loeber et al., 1998). The research team decided to use separate scales to allow for valid, developmentally appropriate measurement of positive parenting, as the scale developed by Arnold and colleagues (1993) had only been tested with children through age 7. However, the aforementioned differences across these two measures affect substantive comparison and interpretation.

Second, these measures were not specifically developed for fathers, for individuals living in structurally marginalized neighborhoods, or with Black/African American or Hispanic/Latino cultural norms and values around parenting at the forefront. At the time of this study, few such measures were widely available and/or used, as most research on fathers centered around White, middle-to-upper-class men. However, more tailored and appropriately normed measures may be more sensitive to the aspects of parenting that most directly contribute to child outcomes within these specific sub-populations within the United States.

Lastly, fathers were asked to report on their involvement and parenting practices for each of their individual children. While this represents a strength of this study because it reflects research that suggests that parents may interact with each of their children differently based on a variety of characteristics, such as the child's gender (Leavell et al., 2012; Mascaro et al., 2017), it complicated analyses. For this dissertation study, a within-father average was calculated rather than examining the data in a nested, multi-level manner due to the large proportion of fathers

who had only one child. However, this approach limits understanding of the possible variation that exists within fathers.<sup>4</sup>

**Stress.** In relation to the predictor variables of interest, while research suggests that exposure to community violence, economic hardship, and racial discrimination are three significant contributors of stress for children and adolescents, there are limitations to the ways in which they were measured in this study. Adverse childhood experiences are often grouped into one measure to examine how overall stress contributes to developmental outcomes (e.g., Felitti et al., 1998). Given this approach, it would be worth considering whether an overall measure of contextual stress may be a stronger predictor of psychological distress and subsequently parenting than if this stress were measured individually (i.e., including exposure to community violence, economic stress, and racial discrimination as separate predictors). Within this study, however, it was not feasible or practical to create a combined score to approximate overall contextual stress due to differences in terms of who reported the data (i.e., child-report versus parent-report), when it was reported (i.e., at which waves), how the questions were asked (i.e., “how many times” versus “how many months”), and concerns about general missingness in the data.

Within each type of contextual stress measured, there were more specific limitations. When considering economic stress, the items that were asked only captured two aspects of economic stress (i.e., for how many months a parent had faced a serious financial problem or was receiving financial aid). While these may be good approximations of what it means to face economic hardship, they do not capture all facets of economic stress. Other studies using the

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<sup>4</sup> Notably, the same method of calculating a within-father average was also used for measures of coparenting and social support (i.e., the hypothesized protective/promotive factors captured during adulthood). Thus, if men had children with different partners with whom their relationship quality differed or from whose families they received markedly different levels of social support, this variation would have been tempered due to averaging.

Family Stress model ask more specifically about challenges associated with paying bills or acquiring items to fill basic needs (Masarik & Conger, 2017).

In terms of racial discrimination, items were only captured at two waves during adolescence, which limited possible variation in responses. Conceptually, it is clear from the extant literature, that racial discrimination does not begin in late adolescence; rather, it occurs throughout development (Berry et al., 2021). Further, the included items capture important aspects of interpersonal discrimination, but they do not ask about structural discrimination. Both interpersonal and structural discrimination can have impacts on physical health, mental health, and overall wellbeing (Yearby, 2020). While it may be assumed that all individuals living in a structurally marginalized neighborhood may be facing structural discrimination in the form of neighborhood disinvestment, there are likely other forms of structural discrimination differentially affecting specific individuals within the sample (e.g., in schools, within healthcare contexts, or through family involvement in the criminal legal system).

Perhaps more importantly, these measures did not capture how these experiences of stress were coded or interpreted by the individuals themselves, missing a mechanism by which stress may contribute to psychological distress and subsequently other outcomes, such as parenting practices. Research indicates that among the many who are exposed to stress across development, only a percentage experience the accompanying negative outcomes, such as depression, anxiety, or posttraumatic stress (Substance Abuse and Mental Health Services Administration, 2014). Therefore, simply asking individuals if they have been exposed to stress may not be sufficient to understand how stress impacts future outcomes, including later psychological distress and subsequent parenting practices.

Finally, within this dissertation study, stress is only captured during adolescence. While adolescence is an important developmental period, the present research study did not control for stress experienced during other points of development. As an example, early childhood is another critical period during which exposure to stress may disproportionately affect developmental outcomes (Nelson & Gabard-Durnam, 2020). A third key timepoint, when considering parenting, may be during the transition to parenthood (Baldwin et al., 2018; Pinto et al., 2020).

**Psychological Distress.** Psychological distress was measured at the same time as parenting practices. Both from a conceptual and a statistical perspective, this is not an ideal approach, despite being necessitated by the available data.

### *Statistical*

In addition to measurement limitations, there were some statistical limitations. The small sample size (particularly when considering parenting practices for children eight years of age or older) may have limited power to detect meaningful relations in the data. It is unlikely, however, that a larger sample size would have substantially changed results due to the limited bivariate correlations between variables. Additionally, there was some missingness across the data, particularly in terms of the number of times (i.e., waves) in which participants provided data about their exposure to contextual stressors. The approach of creating a proportion was taken in measurement of both the extent and chronicity of exposure to stress. While this allowed for an approximation of stress per wave or over time, the missingness remains a limitation, as exposure to stress can vary over time. Further, in the examination of cut-off comparisons for the moderation models, only the full sample was used, despite FIML being used for the primary analyses.

### ***Generalizability***

The purpose of this study was to examine how fathers living in structurally marginalized neighborhoods may be impacted by past exposure to contextual stressors and whether protective/promotive factors across their development moderate that risk. While individuals who identify as Black/African American or Hispanic/Latine may disproportionately be more likely to comprise such neighborhoods due to structural racism, they do not represent the full diversity of racial or ethnic backgrounds present. Additionally, this research centers cisgender men in heterosexual relationships, a limitation that exists across the fathering literature more broadly. Further, these data were collected in the late 1990s and early 2000s. There have been significant sociocultural shifts in conceptualization of fathering, enactments of public and private sector policies that support father involvement (e.g., paid family leave), changes in patterns of community violence, economic shifts, and increasing national acknowledgement of and discussions about individual, systemic, and structural racism. Thus, as in all research, it is important to acknowledge that the generalizability of this study is limited to this very specific sample living in a particular place and time.

### **Future Directions**

Several key directions for future research are offered. First, an updated measure of parenting that is sensitive to both culture and context should be used. A recent systematic review of parenting scales revealed that very few parenting scales have been examined for measurement invariance/equivalence across different racial and ethnic groups (Rodriguez et al., 2023). The researchers who conducted this review recommended using community based participatory research (CBPR) approaches to engage individuals who hold historically and structurally marginalized identities in the development of new culturally sensitive measures, as well as

incorporating more qualitative methods into parenting research. Such procedures may allow for the creation of more appropriate measures for specific subpopulations and for researchers to better understand how their questions are interpreted in different racial, ethnic, or socioeconomic groups (Rodriguez et al., 2023). Other approaches to including culturally specific and sensitive measurement may include using scales intentionally developed for specific subpopulations within structurally marginalized neighborhoods, with particular attention to race/ethnicity, socioeconomic status, the parent's gender, and the age of the children.

Measures that consider the context in which parenting is occurring should also be incorporated. As an example, one study conducted by Letiecq and Koblinsky (2003) examined five different protective strategies fathers implement in efforts to mitigate the effects of exposure to community violence for their children. While within this dissertation study's sample there was no measure used that indicated within which context the men were parenting, the study by Letiecq and Koblinsky represents an example of taking context into consideration when thinking about what parenting practices are adaptive within that family's context. Future studies can incorporate empirically tested and validated measures that similarly attend to the context in which fathers are parenting.

Second, it may be beneficial to include a different approach to measurement of contextual stress. There are several considerations that may improve future studies, many of which are detailed in *Limitations*. Namely, future studies should include an overall measure of contextual stress to determine if capturing stress as a composite increases the detectability of the relation between contextual stress and parenting. Researchers have explicated several approaches to measure cumulative risk (CR) that can be leveraged (see Ettekal et al., 2019). However, a single measure should not be used alone, as this approach may limit further understanding of which



types of stress impact parenting. Additionally, a measure that approximates the impact of exposure to stress (i.e., how the stress is understood and processed by the individual) would help future studies better differentiate between exposure to stress and significant stress responses. Further, future studies should think about examining stress across different developmental periods, including the critical periods of early childhood and during the transition to fatherhood. All of these considerations for future studies will help researchers to better understand the mechanisms that contribute to the stress-distress and distress-parenting linkages.

Much like this study, it is important to continue to examine possible protective or promotive factors when assessing stress to allow for a fuller picture of the factors that contribute to developmental outcomes for youth and their families. As previously stated, many individuals who are exposed to stress do not exhibit negative outcomes. Instead, they demonstrate resilience. Resilience is often referred to as a static individual trait, but it can exist and be cultivated at the individual, family, or community level (Southwick et al., 2014). It is possible that such protective or promotive factors, if available during adolescence, dull the stress in adolescence and parenting practices in adulthood linkage. In samples of Black and Latine youth exposed to contextual stress, several factors have been shown to protect against negative outcomes or independently promote positive outcomes. At the individual level, factors such as academic competence and self-worth (Copeland-Linder et al., 2010), spirituality (Jocson et al., 2020), and perseverance, self-regulation, and adaptability (Woods-Jaeger et al., 2020) have been cited as resilience-promoting. At the family level, familism<sup>5</sup> (Romero et al., 2020), living in a home that emphasizes the importance of religion (Jocson et al., 2020), and engagement in racial

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<sup>5</sup> Familism refers to “positive family relationships and family closeness, cultural values that prioritize family relationships, interdependence of daily behaviors, regular communication, and family support” (Romero et al., 2020, p. 268).

socialization practices (Anderson & Stevenson, 2019) have been shown to contribute to success in the face of contextual hardship. Finally, at the community level, factors highlighted in the contextual stress-resilience literature include neighborhood cohesion (Romero et al., 2020), and community communalism and connectedness (Woods-Jaeger et al., 2020). Again, these aforementioned factors serve as examples of possible protective/promotive factors in adolescence. Though they do not represent the full spectrum of possible protective/promotive factors, they have been shown to mitigate against a range of negative outcomes including depression, posttraumatic stress, and substance use, or to independently promote thriving despite the presence of neighborhood- or community-level stressors (Jocson et al., 2020; Romero et al., 2020; Woods-Jaeger et al., 2020). Such factors, and others, may be included in future studies as possible moderators of the stress-parenting linkage.

Lastly, part of the impetus for studying the impact of contextual stress on parenting is to improve the lives of subsequent generations. Thus, it would be helpful for future studies to also include a measure of child outcomes in addition to father involvement and parenting practices. Other studies using the FSM have modeled such use, as well as have explored more complex pathways in the stress-parenting linkage (see Masarik & Conger, 2017).

## **Conclusion**

This dissertation study contributes to the extant literature investigating the long-term effects of exposure to stress in adolescence, the consequences of living in structurally marginalized neighborhoods, the protective or promotive power of relationships across development, and the multi-level predictors of parenting practices for men who identify themselves as fathers. Future studies should continue to co-examine contextual stress and protective/promotive factors in the stress-parenting linkage to better understand the mechanisms

around the intergenerational transmission of stress and stress responses and point to systemic interventions that address inequities and improve the developmental outcomes of children.

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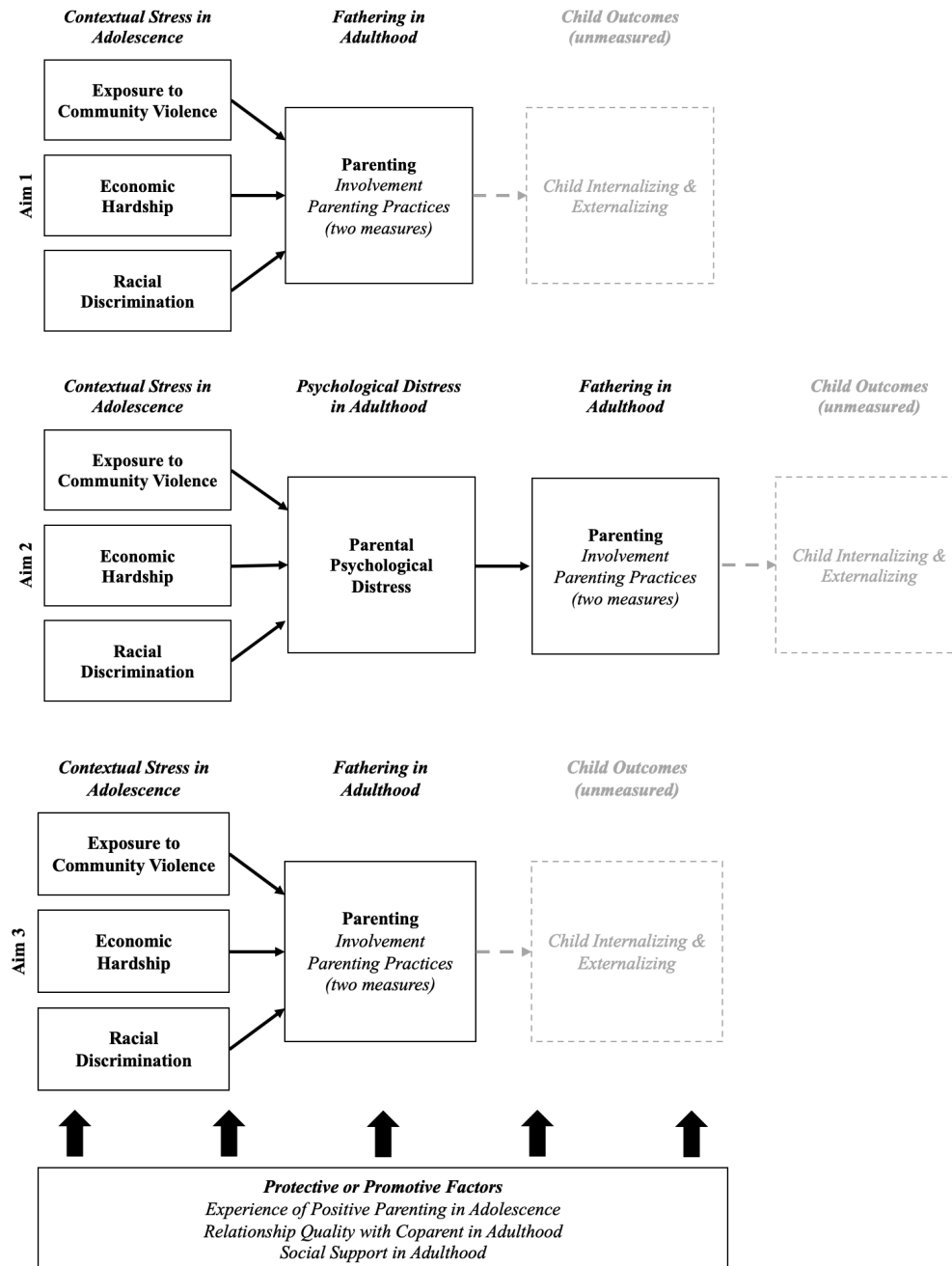
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APPENDIX A

Figure 1

*Study Models<sup>6</sup>*



<sup>6</sup> The Aim 3 figure depicts the actual models that were run in analyses. If psychological distress had been found to be a statistically significant mediator in the stress-parenting linkage through Aim 2, the protective or promotive factors would have been added to the model seen in Aim 2 (rather than Aim 1).

APPENDIX B

Figure 2

*Sample Methodology (Sheidow et al., 2014)*

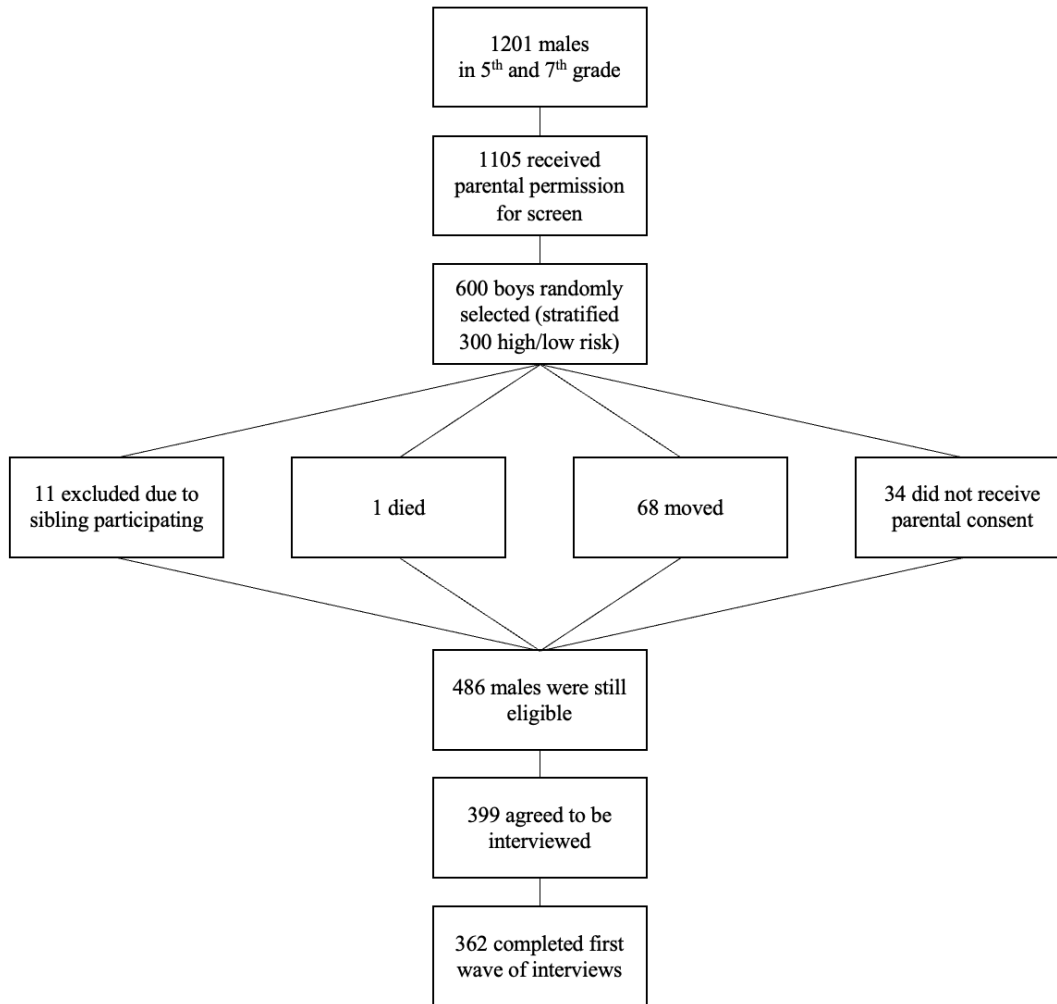


Table 1

*Sample Size Per Wave of Data Collection*

| Wave | <i>n</i> |
|------|----------|
| 2    | 292      |
| 3    | 261      |
| 4    | 271      |
| 5    | 290      |
| 6    | 258      |
| 7/8  | 165      |

Table 2

*Sample Demographics*

| <i>Sample Demographics for Fathers (n = 165)</i> |     |       |       |      |               |
|--|-----|-------|-------|------|---------------|
|  | n   | %     | Mean  | SD   | Range         |
| Age  | 163 | –     | 28.30 | 1.52 | 24.79 – 31.77 |
| Employment Status                                | 148 |       | –     | –    | –             |
| Not Current                                      |     | 32.43 |       |      |               |
| Current  |     | 67.57 |       |      |               |
| Race/Ethnicity                                   | 165 |       | –     | –    | –             |
| Hispanic/Latino                                  |     | 26.06 |       |      |               |
| Black/African American                           |     | 72.73 |       |      |               |
| Other  |     | 1.21  |       |      |               |
| Income   | 165 |       | –     | –    | –             |
| < \$5,000  |     | 13.94 |       |      |               |
| \$5,000-\$9,999                                  |     | 8.48  |       |      |               |
| \$10,000-\$14,999                                |     | 10.30 |       |      |               |
| \$15,000-\$19,999                                |     | 4.24  |       |      |               |
| \$20,000-\$24,999                                |     | 8.48  |       |      |               |
| \$25,000-\$29,999                                |     | 7.27  |       |      |               |
| \$30,000-\$39,999                                |     | 11.52 |       |      |               |
| \$40,000-\$49,999                                |     | 9.09  |       |      |               |
| ≥ \$50,000                                       |     | 26.67 |       |      |               |



|   | n   | %     | Mean | SD | Range |
|---|-----|-------|------|----|-------|
| Education Level                                   | 148 |       | –    | –  | –     |
| < High School Graduate                            |     | 31.41 |      |    |       |
| ≥ High School Graduate                            |     | 69.59 |      |    |       |
| <i>Sample Demographics for Children (n = 380)</i> |     |       |      |    |       |
|   | n   | %     | Mean | SD | Range |
| Age Group   | 380 |       | –    | –  | –     |
| < Six   |     | 49.47 |      |    |       |
| ≥ Six   |     | 50.53 |      |    |       |
| Gender  | 380 |       | –    | –  | –     |
| Female  |     | 49.47 |      |    |       |
| Male  |     | 50.53 |      |    |       |
| Relationship with Child                           | 380 |       | –    | –  | –     |
| Non-Biological or Social                          |     | 15.53 |      |    |       |
| Biological  |     | 84.47 |      |    |       |
| Residential Status of Father                      | 380 |       | –    | –  | –     |
| Nonresidential                                    |     | 51.05 |      |    |       |
| Residential                                       |     | 48.95 |      |    |       |
| Relationship Between Parents                      | 242 |       | –    | –  | –     |
| Currently Married                                 |     | 17.36 |      |    |       |
| Previously Married                                |     | 1.65  |      |    |       |
| Currently Romantically Involved                   |     | 24.79 |      |    |       |
| Previously Romantically Involved                  |     | 43.39 |      |    |       |
| Other   |     | 12.81 |      |    |       |

Table 3

*Number of Children Per Participant*

| Number of Children | N  | Percentage | Cumulative Percentage |
|--------------------|----|------------|-----------------------|
| 1                  | 54 | 32.93      | 32.93                 |
| 2                  | 46 | 28.05      | 60.98                 |
| 3                  | 40 | 24.39      | 85.37                 |
| 4                  | 11 | 6.71       | 92.07                 |
| 5                  | 13 | 7.93       | 100.00                |

Table 4

*Number of Responses Per Dependent Variable (Total and Averaged Within Father)*

| Variable   | Child Age | <i>n</i> (Total) | <i>n</i> (Average) |
|--|-----------|------------------|--------------------|
| Engagement                                       | All       | 344              | 157                |
| Parenting Practices (Discipline; Age 2-7)        | 2-7       | 163              | 112                |
| Parenting Practices (Positive Parenting; Age 8+) | 8+        | 81               | 62                 |

## APPENDIX C

Table 5

*Study Variables by Wave Collected*

|  | CYDS Wave Number |   |   |   |   |     |
|--|------------------|---|---|---|---|-----|
|  | 2                | 3 | 4 | 5 | 6 | 7/8 |
| <b>Parenting</b>                                 |                  |   |   |   |   |     |
| Involvement                                      |                  |   |   |   |   | x   |
| Parenting Practices (Discipline; Age 2-7)        |                  |   |   |   |   | x   |
| Parenting Practices (Positive Parenting; Age 8+) |                  |   |   |   |   | x   |
| <b>Contextual Stress</b>                         |                  |   |   |   |   |     |
| Exposure to Community Violence                   | x                | x | x | x | x |     |
| Economic Hardship                                | x                | x | x | x | x |     |
| Racial Discrimination                            |                  |   |   | x | x |     |
| Parental Distress <sup>7</sup>                   |                  |   |   |   |   | x   |
| Positive Parenting in Adolescence                | x                | x | x | x |   |     |
| Relationship with Coparent in Adulthood          |                  |   |   |   |   | x   |
| Social Support in Adulthood                      |                  |   |   |   |   | x   |
| <b>Other Predictors/Covariates</b>               |                  |   |   |   |   |     |
| Father Factors                                   |                  |   |   |   |   | x   |
| Adolescent Depression                            | x                |   |   |   |   |     |

<sup>7</sup> Parental distress, which is used to investigate Aim 2 as a mediator variable in analyses, was collected at the same time as the outcome variables of interest, representing a limitation of the study (see *Discussion*).

## APPENDIX D

Table 6

*Descriptive Analysis of Dependent and Independent Variables*

|   | <i>n</i> | Mean | SD   | Range       |
|---|----------|------|------|-------------|
| Involvement                             | 157      | 3.26 | 1.78 | 1.00 – 5.00 |
| Parenting Practices                     |          |      |      |             |
| Discipline (Age 2-7)                    | 112      | 4.93 | 0.58 | 3.62 – 6.42 |
| Positive Parenting (Age 8+)             | 62       | 2.55 | 0.43 | 1.00 – 3.00 |
| Exposure to Community Violence          |          |      |      |             |
| Extent (Incidences)                     | 165      | 4.59 | 5.03 | 0 – 41.5    |
| Chronicity (Full Sample)                | 165      | 0.69 | 0.28 | 0 – 1.00    |
| Chronicity (2+ Waves)                   | 163      | 0.69 | 0.28 | 0 – 1.00    |
| Economic Hardship                       |          |      |      |             |
| Extent (Months) <sup>8</sup>            | 163      | 3.05 | 3.80 | 0 – 18.20   |
| Chronicity (Full Sample)                | 163      | 0.32 | 0.30 | 0 – 1.00    |
| Chronicity (2+ Waves)                   | 158      | 0.32 | 0.29 | 0 – 1.00    |
| Racial Discrimination                   |          |      |      |             |
| Extent (Incidences)                     | 159      | 2.38 | 4.74 | 0 – 27.50   |
| Chronicity (Full Sample)                | 159      | 0.34 | 0.41 | 0 – 1.00    |
| Chronicity (2+ Waves)                   | 123      | 0.35 | 0.38 | 0 – 1.00    |
| Parental Distress                       | 151      | 1.52 | 0.52 | 1.00 – 3.17 |
| Positive Parenting in Adolescence       | 162      | 2.30 | 0.32 | 1.33 – 3.00 |
| Relationship with Coparent in Adulthood | 164      | 3.52 | 1.05 | 1.00 – 5.00 |
| Social Support in Adulthood             | 164      | 3.29 | 0.56 | 1.80 – 4.00 |

<sup>8</sup> This variable can be interpreted as the cumulative number of months in which a caregiver reported experiencing the two stressors about which they were asked (i.e., facing a serious financial problem or receiving financial aid). Thus, though caregivers were responding to the question “how many months in the last year have you experienced [stressor],” possible scores can exceed 12 (months). See *Methods* for more information about how this variable was coded for analyses.

Table 7

*Independent Samples Tests for Key Predictor Variables*

|                                       | t     | df  | Sig.<br>(2-tailed) | Difference |            | 95% CI       |
|---------------------------------------|-------|-----|--------------------|------------|------------|--------------|
|                                       |       |     |                    | Mean       | Std. Error |              |
| <b>Exposure to Community Violence</b> |       |     |                    |            |            |              |
| Extent (No. of Incidences)            | -0.97 | 328 | 0.33               | -0.64      | 0.66       | -1.95 – 0.66 |
| Chronicity (Full Sample)              | -0.75 | 328 | 0.45               | -0.03      | 0.03       | -0.09 – 0.42 |
| <b>Economic Hardship</b>              |       |     |                    |            |            |              |
| Extent (No. of Months)                | -0.30 | 330 | 0.76               | -0.13      | 0.43       | -0.98 – 0.71 |
| Chronicity (Full Sample)              | 0.24  | 330 | 0.81               | 0.01       | 0.04       | -0.06 – 0.08 |
| <b>Racial Discrimination</b>          |       |     |                    |            |            |              |
| Extent (No. of Incidences)            | 0.51  | 275 | 0.61               | 0.31       | 0.62       | -0.91 – 1.53 |
| Chronicity (Full Sample)              | 0.29  | 276 | 0.77               | 0.01       | 0.05       | -0.08 – 0.11 |

Table 8

*Summary of Intercorrelations for Dependent and Primary Independent Variables (Incl. Hypothesized Mediators and Moderators)*

| Variables <sup>9</sup>                     | 1       | 2     | 3    | 4      | 5    | 6      | 7    | 8      | 9     | 10   | 11    | 12     | 13   |
|--|---------|-------|------|--------|------|--------|------|--------|-------|------|-------|--------|------|
| 1. Involvement                             | 1.00    | --    | --   | --     | --   | --     | --   | --     | --    | --   | --    | --     | --   |
| 2. Parenting Practices (2-7) <sup>10</sup> | -.12    | 1.00  | --   | --     | --   | --     | --   | --     | --    | --   | --    | --     | --   |
| 3. Parenting Practices (8+) <sup>4</sup>   | .47***  | .06   | 1.00 | --     | --   | --     | --   | --     | --    | --   | --    | --     | --   |
| 4. Comm. Violence (E)                      | -.12    | -.15  | -.19 | 1.00   | --   | --     | --   | --     | --    | --   | --    | --     | --   |
| 5. Comm. Violence (C)                      | -.02    | -.09  | -.09 | .47*** | 1.00 | --     | --   | --     | --    | --   | --    | --     | --   |
| 6. Economic Stress (E)                     | -.07    | -.09  | .01  | .14    | .02  | 1.00   | --   | --     | --    | --   | --    | --     | --   |
| 7. Economic Stress (C)                     | .02     | -.13  | .02  | .16*   | .07  | .86*** | 1.00 | --     | --    | --   | --    | --     | --   |
| 8. Racial Discrimination (E)               | -.09    | -.22* | -.01 | .28*** | .20* | .06    | .10  | 1.00   | --    | --   | --    | --     | --   |
| 9. Racial Discrimination (C)               | -.14    | -.12  | .12  | .27*** | .18* | .10    | .13  | .65*** | 1.00  | --   | --    | --     | --   |
| 10. Psychological Distress                 | -.28*** | -.13  | -.07 | -.04   | -.02 | -.01   | .04  | -.04   | .02   | 1.00 | --    | --     | --   |
| 11. Positive Parenting                     | .001    | .12   | .17  | .04    | .10  | -.14   | -.04 | -.06   | -.01  | -.03 | 1.00  | --     | --   |
| 12. Rel. with Coparent                     | .24**   | .04   | .16  | -.21** | -.07 | -.03   | .001 | .02    | .05   | -.14 | .07   | 1.00   | --   |
| 13. Social Support                         | .26***  | .05   | .22  | -.13   | -.10 | -.03   | .03  | -.09   | -.16* | -.15 | .21** | .64*** | 1.00 |

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

<sup>9</sup> Abbreviations are used to signify extent of stress exposure (E) and chronicity of stress exposure (C). For the chronicity of stress exposure variables, the full sample was used to produce this correlation table rather than the sample that excludes those with only 1 wave of responses.

<sup>10</sup> Only select fathers ( $n = 43$ ) have data associated with both the scales which were given for children 2-7 and 8+, which should guide interpretation of the above correlations.

Table 9

*Aim 1 Results with Extent of Contextual Stress*

| Variable                        | Involvement <sup>11</sup> |               |          | Parenting Practices (Age 2-7) |               |          | Parenting Practices (Age 8+) <sup>5</sup> |               |          |
|---------------------------------|---------------------------|---------------|----------|-------------------------------|---------------|----------|---|---------------|----------|
|                                 | $\beta$                   | <i>SE (b)</i> | <i>p</i> | $\beta$                       | <i>SE (b)</i> | <i>p</i> | $\beta$                                   | <i>SE (b)</i> | <i>p</i> |
| Exposure to Community Violence  | -.075                     | .017          | .300     | -.044                         | .011          | .643     | -.266                                     | .019          | .099     |
| Economic Hardship               | -.048                     | .027          | .580     | -.019                         | .013          | .837     | .091                                      | .020          | .575     |
| Racial Discrimination           | -.107                     | .027          | .323     | -.112                         | .012          | .268     | .134                                      | .019          | .275     |
| Age                             | -.084                     | .058          | .144     | -.019                         | .038          | .622     | .010                                      | .034          | .764     |
| Race/Ethnicity: Hispanic/Latino | .549                      | .193          | .005     | -.198                         | .122          | .105     | .335                                      | .102          | .001     |
| Race/Ethnicity: Other           | .438                      | .205          | .033     | .052                          | .391          | .895     | .339                                      | .080          | .000     |
| Education Level                 | -.298                     | .246          | .227     | .274                          | .117          | .019     | .050                                      | .142          | .727     |
| Employment Status               | .192                      | .297          | .519     | .039                          | .131          | .766     | .014                                      | .195          | .941     |
| Household Income                | -.006                     | .045          | .895     | .032                          | .024          | .170     | -.005                                     | .028          | .850     |
| Wave                            | .329                      | .243          | .176     | .010                          | .136          | .943     | -.085                                     | .150          | .570     |
| Constant                        | 5.551                     | 1.602         | .001     | 5.165                         | 1.049         | .000     | 2.315                                     | .932          | .013     |

<sup>11</sup> Robust standard errors were used due to the non-normal distributions of the residuals.



Table 10

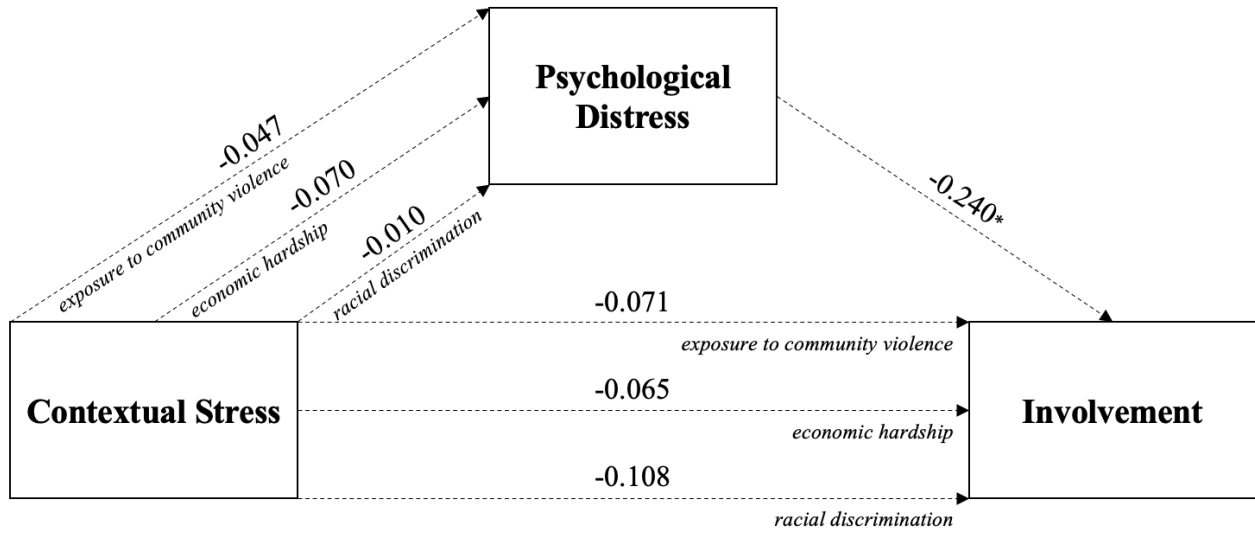
*Aim 1 Results with Chronicity of Contextual Stress*

| Variable                        | Involvement <sup>12</sup> |               |          | Parenting Practices (Age 2-7) |               |          | Parenting Practices (Age 8+) <sup>6</sup> |               |          |
|---------------------------------|---------------------------|---------------|----------|-------------------------------|---------------|----------|---|---------------|----------|
|                                 | $\beta$                   | <i>SE (b)</i> | <i>p</i> | $\beta$                       | <i>SE (b)</i> | <i>p</i> | $\beta$                                   | <i>SE (b)</i> | <i>p</i> |
| Exposure to Community Violence  | .016                      | .290          | .812     | -.113                         | .187          | .233     | -.144                                     | .170          | .197     |
| Economic Hardship               | .014                      | .346          | .869     | -.050                         | .177          | .597     | -.004                                     | .256          | .985     |
| Racial Discrimination           | -.096                     | .285          | .308     | .077                          | .160          | .461     | .227                                      | .151          | .060     |
| Age                             | -.092                     | .061          | .134     | -.036                         | .039          | .351     | .010                                      | .031          | .751     |
| Race/Ethnicity: Hispanic/Latino | .527                      | .202          | .009     | -.269                         | .121          | .027     | .271                                      | .100          | .007     |
| Race/Ethnicity: Other           | .450                      | .245          | .066     | .101                          | .396          | .799     | .350                                      | .095          | .000     |
| Education Level                 | -.242                     | .244          | .321     | .289                          | .116          | .013     | .131                                      | .158          | .406     |
| Employment Status               | .257                      | .245          | .384     | .079                          | .129          | .539     | .044                                      | .187          | .815     |
| Household Income                | -.002                     | .045          | .958     | .033                          | .023          | .155     | -.012                                     | .026          | .661     |
| Wave                            | .341                      | .249          | .171     | -.012                         | .136          | .932     | -.139                                     | .160          | .376     |
| Constant                        | 5.510                     | 1.750         | .002     | 5.720                         | 1.085         | .000     | 2.325                                     | .869          | .007     |

<sup>12</sup> Robust standard errors were used due to the non-normal distributions of the residuals.

Figure 3

*Aim 2 Results: Involvement*

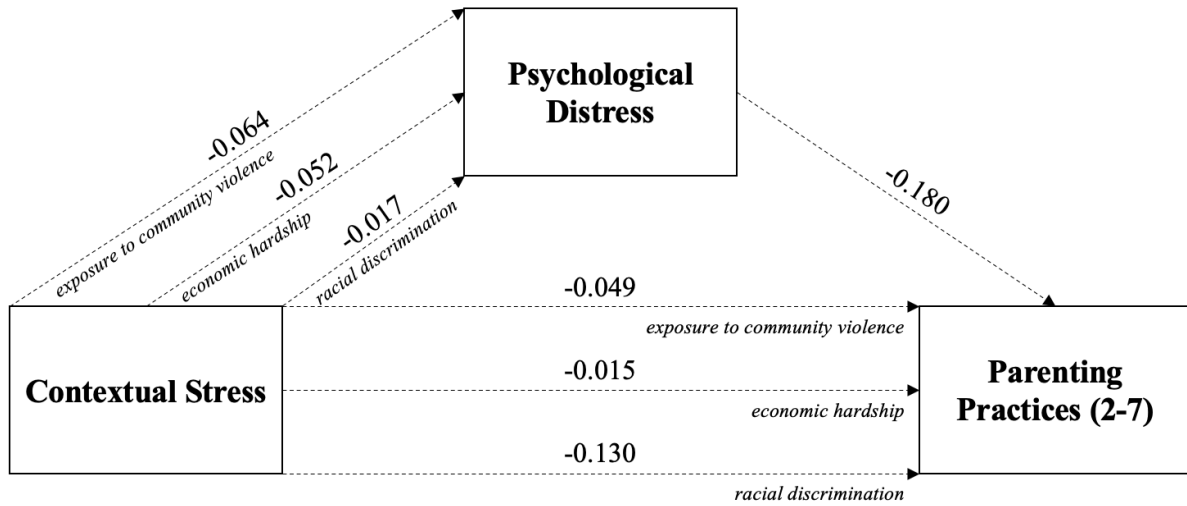


\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

*Note:* Covariates were included in these models, however, they are not depicted for simplicity of reporting.

Figure 4

*Aim 2 Results: Parenting Practices (2-7)*

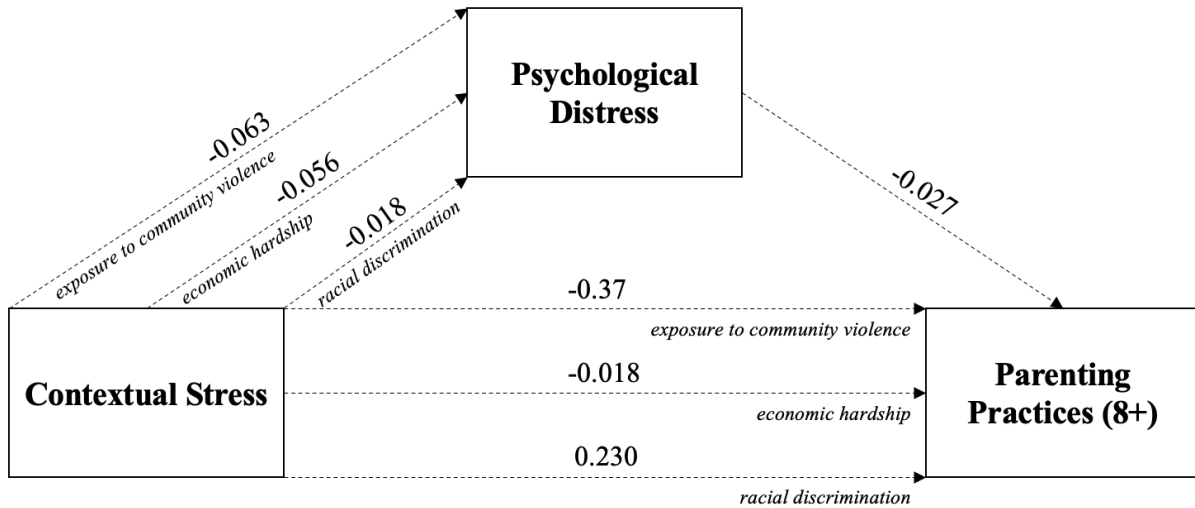


\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

*Note:* Covariates were included in these models, however, they are not depicted for simplicity of reporting.

Figure 5

*Aim 2 Results: Parenting Practices (8+)*



\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

*Note:* Covariates were included in these models, however, they are not depicted for simplicity of reporting.

Table 11

*Aim 3 Results*

| Variable                            | Involvement <sup>13</sup> |               |          | Parenting Practices (Age 2-7) |               |          | Parenting Practices (Age 8+) <sup>7</sup> |               |          |
|-------------------------------------|---------------------------|---------------|----------|-------------------------------|---------------|----------|---|---------------|----------|
|                                     | $\beta$                   | <i>SE (B)</i> | <i>p</i> | $\beta$                       | <i>SE (B)</i> | <i>p</i> | $\beta$                                   | <i>SE (B)</i> | <i>p</i> |
| Exposure to Community Violence      | -0.625                    | 0.145         | .312     | -1.954                        | 0.133         | .091     | -1.817                                    | 0.221         | .324     |
| Economic Hardship                   | 0.878                     | 0.165         | .099     | 1.180                         | 0.101         | .097     | 5.142                                     | 0.197         | .001     |
| Racial Discrimination               | -0.508                    | 0.277         | .647     | 0.535                         | 0.144         | .648     | 2.289                                     | 0.499         | .476     |
| Positive Parenting (PP)             | 0.135                     | 0.442         | .256     | 0.029                         | 0.280         | .851     | 0.469                                     | 0.245         | .007     |
| Relationship with Coparent (RC)     | 0.062                     | 0.174         | .689     | -0.418                        | 0.098         | .013     | 0.149                                     | 0.137         | .547     |
| Social Support (SS)                 | 0.066                     | 0.300         | .639     | 0.256                         | 0.191         | .149     | 0.271                                     | 0.197         | .247     |
| Exposure to Community Violence x PP | 0.536                     | 0.069         | .438     | 2.048                         | 0.051         | .055     | 0.385                                     | 0.067         | .752     |
| Economic Hardship x PP              | -1.085                    | 0.068         | .021     | -0.851                        | 0.037         | .119     | -1.413                                    | 0.056         | .150     |
| Racial Discrimination x PP          | -0.336                    | 0.099         | .709     | -1.245                        | 0.068         | .320     | -1.457                                    | 0.133         | .436     |
| Exposure to Community Violence x RC | 0.365                     | 0.029         | .346     | 1.391                         | 0.020         | .012     | 0.142                                     | 0.023         | .805     |
| Economic Hardship x RC              | -0.040                    | 0.035         | .923     | 1.233                         | 0.025         | .063     | -0.789                                    | 0.026         | .283     |
| Racial Discrimination x RC          | -0.650                    | 0.032         | .188     | -2.189                        | 0.024         | .002     | -3.307                                    | 0.074         | .048     |
| Exposure to Community Violence x SS | -0.338                    | 0.047         | .597     | -1.597                        | 0.041         | .185     | 0.669                                     | 0.042         | .486     |
| Economic Hardship x SS              | 0.200                     | 0.056         | .736     | -1.514                        | 0.037         | .081     | -2.541                                    | 0.040         | .020     |
| Racial Discrimination x SS          | 1.402                     | 0.058         | .064     | 2.713                         | 0.046         | .026     | 2.755                                     | 0.132         | .333     |
| Psychological Distress              | -0.227                    | 0.210         | .014     | -0.320                        | 0.144         | .007     | -0.429                                    | 0.134         | .132     |
| Age                                 | -0.045                    | 0.049         | .361     | -0.014                        | 0.037         | .717     | 0.028                                     | 0.026         | .293     |
| Race/Ethnicity: Hispanic/Latino     | 0.493                     | 0.188         | .009     | -0.263                        | 0.122         | .031     | 0.362                                     | 0.118         | .002     |
| Race/Ethnicity: Other               | 0.585                     | 0.418         | .161     | 0.155                         | 0.164         | .346     | 0.351                                     | 0.120         | .004     |
| Education Level                     | -0.415                    | 0.225         | .066     | 0.282                         | 0.111         | .011     | -0.096                                    | 0.139         | .489     |
| Employment Status                   | 0.106                     | 0.286         | .711     | -0.075                        | 0.133         | .572     | 0.050                                     | 0.186         | .787     |
| Household Income                    | -0.012                    | 0.043         | .779     | 0.025                         | 0.024         | .292     | 0.005                                     | 0.026         | .839     |
| Wave                                | 0.040                     | 0.223         | .859     | -0.061                        | 0.151         | .686     | -0.181                                    | 0.116         | .119     |
| Constant                            | 3.753                     | 1.664         | .024     | 5.617                         | 1.316         | .000     | -0.429                                    | 1.030         | .677     |

<sup>13</sup> Robust standard errors were used due to the non-normal distributions of the residuals.

Table 12

*Aim 3 Results: Involvement*

*Interaction Effects Between Protective Factors and Types of Contextual Stress*

| Interaction <sup>14</sup>              | Statistical<br>Significance | Non-Zero Slope <sup>15</sup>              |  | Difference at Level<br>of Stress <sup>16</sup> |
|--|-----------------------------|---|--|--|
|  |                             | 25 <sup>th</sup> Percentile               | 75 <sup>th</sup> Percentile                        |  |
| Exposure to Community<br>Violence x PP | No                          |   |  |  |
| Economic Hardship x PP                 | Yes                         | No<br>( <i>b</i> = -0.01; <i>p</i> = .71) | Approaching<br>( <i>b</i> = -0.09; <i>p</i> = .05) | None   |
| Racial Discrimination x PP             | No                          |   |  |  |
| Exposure to Community<br>Violence x RC | No                          |   |  |  |
| Economic Hardship x RC                 | No                          |   |  |  |
| Racial Discrimination x RC             | No                          |   |  |  |
| Exposure to Community<br>Violence x SS | No                          |   |  |  |
| Economic Hardship x SS                 | No                          |   |  |  |
| Racial Discrimination x SS             | No                          |   |  |  |

<sup>14</sup> See Table 11 for relevant abbreviations.

<sup>15</sup> Linear slopes representing the relation between stress and involvement at two cut-points of the moderating variable(s) (25<sup>th</sup> and 75<sup>th</sup> percentile) were inspected for contrast and tested for significant differences from zero.

<sup>16</sup> Pairwise comparisons were made to determine at which level(s) of contextual stress there was a statistically significant difference between someone scoring at one versus the other of the moderator cut-points on the predicted score of the outcome (i.e., measure of parenting).

Table 13

*Aim 3 Results: Parenting Practices (2-7)*

*Interaction Effects Between Protective Factors and Types of Contextual Stress*

| Interaction <sup>17</sup>              | Statistical<br>Significance | Non-Zero Slope <sup>18</sup>               |  | Difference at Level<br>of Stress <sup>19</sup> |
|--|-----------------------------|--|--|--|
|  |                             | 25 <sup>th</sup> Percentile                | 75 <sup>th</sup> Percentile                |  |
| Exposure to Community<br>Violence x PP | No                          |  |  |  |
| Economic Hardship x PP                 | No                          |  |  |  |
| Racial Discrimination x PP             | No                          |  |  |  |
| Exposure to Community<br>Violence x RC | Yes                         | Yes<br>( <i>b</i> = -0.03; <i>p</i> < .01) | No<br>( <i>b</i> = 0.03; <i>p</i> = .33)   | None   |
| Economic Hardship x RC                 | No                          |  |  |  |
| Racial Discrimination x RC             | Yes                         | No<br>( <i>b</i> = 0.03; <i>p</i> = .21)   | Yes<br>( <i>b</i> = -0.08; <i>p</i> < .01) | 6+<br>( <i>p</i> < .05)                        |
| Exposure to Community<br>Violence x SS | No                          |  |  |  |
| Economic Hardship x SS                 | No                          |  |  |  |
| Racial Discrimination x SS             | Yes                         | Yes<br>( <i>b</i> = -0.06; <i>p</i> = .02) | No<br>( <i>b</i> = 0.04; <i>p</i> = .21)   | None   |

<sup>17</sup> See Table 11 for relevant abbreviations.

<sup>18</sup> Linear slopes representing the relation between stress and involvement at two cut-points of the moderating variable(s) (25<sup>th</sup> and 75<sup>th</sup> percentile) were inspected for contrast and tested for significant differences from zero.

<sup>19</sup> Pairwise comparisons were made to determine at which level(s) of contextual stress there was a statistically significant difference between someone scoring at one versus the other of the moderator cut-points on the predicted score of the outcome (i.e., measure of parenting).

Table 14

*Aim 3 Results: Parenting Practices (8+)*

*Interaction Effects Between Protective Factors and Types of Contextual Stress*

| Interaction <sup>20</sup>              | Statistical<br>Significance | Non-Zero Slope <sup>21</sup>             |  | Difference at Level<br>of Stress <sup>22</sup> |
|--|-----------------------------|--|--|--|
|  |                             | 25 <sup>th</sup> Percentile              | 75 <sup>th</sup> Percentile              |  |
| Exposure to Community<br>Violence x PP | No                          |  |  |  |
| Economic Hardship x PP                 | Yes                         |  |  |  |
| Racial Discrimination x PP             | No                          |  |  |  |
| Exposure to Community<br>Violence x RC | No                          |  |  |  |
| Economic Hardship x RC                 | No                          |  |  |  |
| Racial Discrimination x RC             | Marginal                    |  |  |  |
| Exposure to Community<br>Violence x SS | No                          |  |  |  |
| Economic Hardship x SS                 | Yes                         | No<br>( <i>b</i> = 0.11; <i>p</i> = .24) | No<br>( <i>b</i> = 0.02; <i>p</i> = .68) | None   |
| Racial Discrimination x SS             | No                          |  |  |  |

<sup>20</sup> See Table 11 for relevant abbreviations.

<sup>21</sup> Linear slopes representing the relation between stress and involvement at two cut-points of the moderating variable(s) (25<sup>th</sup> and 75<sup>th</sup> percentile) were inspected for contrast and tested for significant differences from zero.

<sup>22</sup> Pairwise comparisons were made to determine at which level(s) of contextual stress there was a statistically significant difference between someone scoring at one versus the other of the moderator cut-points on the predicted score of the outcome (i.e., measure of parenting).