

ABSTRACT

Title of Dissertation: ROLE OF MATERNAL SOCIAL SUPPORT AND
 CHURCH ATTENDANCE IN MODERATING THE
 RELATIONSHIP BETWEEN MATERNAL
 DEPRESSION AND AFRICAN AMERICAN
 PRESCHOOLERS' BEHAVIOR PROBLEMS

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 Policymakers, educators, researchers and practitioners are devoting increasing attention to the challenges faced by low-income families in urban communities. Research indicates that poor women with young children are particularly susceptible to experiencing depression. Maternal depression has been associated with numerous negative outcomes for both mothers and their children. In view of the high prevalence of maternal depression and the myriad stressors faced by poor families in high crime neighborhoods, there is an urgent need to identify factors that may attenuate the negative impact of mother's depression on preschoolers' socioemotional development. Thus, the major purpose of this study was to examine the potential of social support and church attendance to moderate the relationship between maternal depression and children's behavior problems.

 The present study utilized secondary data from a larger, three-year study funded by the U.S. Department of Education. The sample for this study consisted of low-income African American mothers in violent neighborhoods in Washington, DC and Prince George's County, Maryland. All mothers had a three-to-five year old child enrolled in

Head Start. Data were obtained through face-to-face interviews utilizing culturally-sensitive measures. Multiple regression analyses were used to examine the main and interaction effects for predictor (maternal depressive symptoms), moderator (social support, church attendance), and criterion variables (child internalizing and externalizing behavior problems).

Results revealed that maternal depressive symptomology significantly predicted children's internalizing and externalizing behavior problems. Findings further revealed that social support moderated the relationship between maternal depressive symptoms and children's externalizing behavior problems. When the level of social support increased for mothers who did not exhibit extreme depressive symptomology, children had fewer externalizing behavior problems. In contrast, when social support increased for mothers with very severe depressive symptoms, children had greater externalizing problems. Maternal social support did not buffer preschoolers' internalizing problems. Maternal church attendance likewise failed to buffer the relationship between maternal depressive symptoms and internalizing or externalizing problems. Findings suggest a need for culturally-sensitive strategies to increase the support networks of low-income, urban, African American mothers of preschoolers. Such efforts may help educators and family practitioners to reduce the impact of maternal depression on preschoolers' externalizing behavior problems.

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CHAPTER I: INTRODUCTION

Family researchers, educators, policymakers, and practitioners have expressed increasing concern about the challenges confronting families living in low-income, urban communities (USDHHS, 2000; Yoshikawa & Knitzer, 1997). Researchers have found that mothers in these communities often experience a high level of psychological distress, as evidenced by fear, anger, anxiety, and post-traumatic stress disorder (Garbarino, Kostelny, & Dubrow, 1991; Osofsky, Wewers, Hann, & Fick, 1993). The prevalence of mental illness, including depression, is disproportionately high for low-income mothers as compared to their more affluent counterparts (Halpern, 1990; Liaw & Brooks-Gunn, 1994). Moreover, poor women with young children are particularly susceptible to experiencing depression and other forms of psychological distress (Kaplan, Roberts, Camacho, & Coyne, 1987; McLoyd, 1990; Pearlin & Johnson, 1977; Radloff, 1975).

Maternal depression has been associated with numerous negative outcomes for both mothers and their children. For example, depressed mothers are more likely than their nondepressed peers to experience unemployment (Lennon, Blome, & English, 2001), interference with job performance (Beck, 1999; Lennon et al., 2001), and lack of positive communication among family members (Albright & Tamis-LeMonda, 2002; Jacob & Johnson, 1997). A growing body of literature indicates that mothers who exhibit depression or high levels of psychological distress are more likely to engage in hostile, critical, unresponsive, disorganized, and less competent parenting than mothers exhibiting lower levels of distress (Gelfand & Teti, 1990; Goodman, 1992; Murray, 1997; Murray & Cooper, 1997). In one landmark observational study comparing the parenting behavior of African American and White mothers with higher and lower levels of

emotional distress, the more distressed mothers made greater use of threats, criticism, and physical discipline, and less use of praise, hugs, and supportive statements than non-distressed mothers (Conger, McCarty, Yang, Lahey, & Kropp, 1984).

The higher incidence of depression among low-income mothers is of particular concern because maternal depression has been associated with a variety of negative child outcomes among children of all ages (Downey & Coyne, 1990). Specifically, maternal depression has been linked with insecure attachments among infants, toddlers, and preschoolers (Cicchetti, Rogosch, & Toth, 1998; Teti, Gelfand, Messinger, & Isabella, 1995), as well as problems in social interaction, including low activity, negative affect, and mutually negative emotions exchanged between parent and child (Dawson et al., 1999; Field, 1995; Jameson, Gelfand, Kulcsar, & Teti, 1997). During the infant and toddler years, maternal depression has also been linked to impaired cognitive development (Lyons-Ruth, Connell, Grunebaum, & Botein, 1990; Petterson & Albers, 2001) and motor development (Petterson & Albers, 2001), as well as problems with emotional regulation (Cutrona & Troutman, 1986; Goodman & Gotlib, 1999). Further, infants and toddlers of depressed mothers have been found to be at increased risk of behavior problems (Beck, 1999; Dawson et al., 2003; Murray, 1992).

Some studies have also found that maternal depression increases the risk of behavior problems for preschool children (Beck, 1999; Downey & Coyne, 1990). Preschool children of mothers suffering from depression are more likely than peers with nondepressed mothers to exhibit internalizing and externalizing behavior problems (Alpern & Lyons-Ruth, 1993; Beck, 1999; Brennan et al., 2000; Dawson et al., 2003; Downey & Coyne, 1990) and lower levels of readiness for school (Downey & Coyne,

1990; Lennon et al., 2001; NICHD Early Child Care Research Network, 1999; Wright, George, Burke, Gelfand & Teti, 2000).

Irrespective of their mental health status, poor mothers confront a host of stressful situations each day, including the economic strain of trying to provide for their children with limited financial resources (Belle, 1990). These families often face difficulties associated with housing instability (Wigton & D’Orion, 1997), food insecurity (McKenzie & Bell, 1999), and social isolation (Ceballo & McLoyd, 2002). Moreover, a growing number of poor mothers are being forced to raise their children in neighborhoods characterized by delinquency, crime, illicit drug activity, and physical decay (e.g., Ceballo & McLoyd, 2002; Perkins & Taylor, 1996; USDHHS/PHS, 1992). Mothers and children residing in these neighborhoods confront a variety of violent events, including gunshots, muggings, robberies, stabbings, shootings, and homicides (Bell & Jenkins, 1993; Farver, Natera, & Frosch, 1999; Osofsky et al., 1993; Richters & Martinez, 1993; Sheidow, Gorman-Smith, Tolan, & Henry, 2001; Taylor, Zuckerman, Harik, & Groves, 1994). The presence of these dangers may contribute to mothers’ psychological distress and seriously impede their efforts to foster children’s socioemotional development (Harden & Koblinsky, 1999).

In recent years, researchers have emphasized the need to study the relationship between maternal mental health and child outcomes within diverse sociocultural, socioeconomic, and neighborhood contexts (e.g., Petterson & Albers, 2001). Given that African American families are disproportionately likely to be residents of both poor and violent urban communities (Huston, McLoyd, & Garcia-Coll, 1994; O’Hare & Mather, 2003; Sampson, Raudenbush, & Earls, 1997), there is a special need to examine factors

that may influence the effects of maternal depression on child development in this population. Information is needed about protective factors that may foster positive mental health and reduce the deleterious effects of maternal depression on the behavior of African American children in poor, urban communities.

One factor with the potential to buffer the negative effects of maternal depression on child outcomes is social support in parenting. Poor mothers, in particular, may benefit from obtaining instrumental and emotional assistance with parenting from individuals within their social support networks. Members of the mother's support network, including partners, relatives, friends, co-workers, and professionals such as social workers, therapists, teachers, and physicians, may be especially likely to help a mother cope with feelings of low-self esteem, loneliness, and heavy parenting responsibilities (McLoyd, 1990; 1998). Emotional and practical support from such network members may help mothers to feel less overwhelmed and socially isolated in their parenting arrangement, fostering greater use of nurturant parenting strategies and lower use of harsh, punitive methods (McLoyd, 1990; Weinraub & Wolfe, 1983). Improved parenting and mother-child relations may be reflected in more positive socioemotional development of young children. Social support for childrearing may also influence children directly through the provision of child care assistance, child economic support, and child guidance from social network members. Emotional support given to young children by alternate caregivers has been recognized as a protective factor contributing to children's social and emotional competence (Huffman et al., 2000).

A second factor that may attenuate the negative impact of maternal depression on child behavior is mother's church attendance. Churches and religious institutions provide

a place for families to gather with others to express their faith and experience a sense of emotional connectedness. Religion may have an internal influence on maternal behavior through a mother's internalization of spiritual values and normative beliefs about issues such as parenting (Pearce, Jones, Schwab-Stone, & Ruchkin, 2003). Church involvement may also function as an external regulator of maternal behavior through the provision of a network (peers and clergy) bonded by a commitment to moral values and social norms (Ellison & Levin, 1998; Pearce et al., 2003). Church attendance may be especially beneficial for low-income African American mothers because the Black church has always been a central institution within the community (Billingsley, 1999; Taylor & Chatters, 1988). More frequent church attendance may improve mothers' parenting and lessen the incidence of some stressful life events, such as food insecurity or the need for respite child care (Wiley, Warren, & Montanelli, 2002). Improvements in parenting or family resources that stem from church attendance and religious involvement may, in turn, enhance children's socioemotional functioning.

The major goal of this study was to investigate how social support in parenting and religious involvement influence the relationship between mother's depressive symptomology and her preschool child's socioemotional functioning. Specifically, the study assessed whether these variables moderate the relationship between maternal depressive symptoms and children's internalizing behavior problems, such as anxiety and withdrawal, and externalizing behavior problems, such as anger and aggression. These relationships were examined in a sample of African American mothers and young children who reside in urban neighborhoods characterized by high levels of community violence. The present study involves secondary analysis of data from a larger three-year

study that examined the role of family and school in promoting positive developmental outcomes for African American preschoolers in violent neighborhoods.

The current study expands the literature on maternal depression and child outcomes by focusing on an important, under-investigated population of low-income, African American mothers with preschool children. The majority of existing studies on this topic have been conducted with primarily Caucasian mothers and families (e.g., Cohn, Matias, Tronick, Connell, & Lyons-Ruth, 1986; Essex, Klein, Miech, & Smider, 2001; Teti et al., 1995; Wright et al., 2000) or racially mixed samples (e.g., Downey & Coyne, 1990; Eamon & Zuehl, 2001; Gelfand & Teti, 1990; Malcarne, Hamilton, Ingram, & Taylor, 2000; Petterson & Albers, 2001). Moreover, much of the research on clinical depression has focused on clinical samples of parents who exhibit severe disorders, a group that may not be representative of mothers with less acute symptoms in community populations (Downey & Coyne, 1990; Hammen, Shih, & Brennan, 2004). Given the large percentage of female-headed households among African American families, recently estimated at 43% (McKinnon, 2003), a mother's social network may operate as her primary source of parental support and therefore play an important role in buffering the disruptive effects of maternal depression on children. African American mothers' church attendance is another culturally important, but little examined variable, that has the potential to moderate the association between maternal depression and child behavior problems.

Finally, although previous studies have examined links between maternal depression and child outcomes, there is an urgent need for information about how maternal mental health problems are related to children's socioemotional development in

stressful environmental contexts. The current study is unique in exploring these relationships among low-income families who reside in communities characterized by high levels of violence. Halpern (1990) notes that the pressing physical and social realities of daily life in poor neighborhoods may include different demands, threats, and opportunities than in higher income areas. For example, poor minority families may be more likely than their more affluent peers to draw on non-cash resources such as social support or church involvement in order to meet their children's needs. Exposure to high levels of community violence in poor neighborhoods may likewise threaten young children's sense of safety and emotional security, contributing to a higher incidence of child behavior problems (Dubrow & Garbarino, 1989; Garbarino, 1976; Harden & Koblinsky, 1999; Holland, Koblinsky, & Anderson, 1995; Taylor et al., 1994). These challenges highlight the need to examine protective factors that may moderate the negative impact of mothers' depression and contribute to the enhanced social-emotional functioning of African American children in low-income, violent communities.

CHAPTER II: REVIEW OF LITERATURE

Theoretical Model

An ecological model can be used to examine the influence of social support for childrearing and church attendance on the relationship between maternal depression and preschool children's behavior problems (see Figure 1). The ecological model posits that the individual (microsystem), the family (mesosystem), the community (exosystem), and the culture (macrosystem) are four sources of influence on child outcomes (Bronfenbrenner, 1986). Within each level are risk and protective factors linked to child development. Moreover, factors in one level may impact the other three levels (Buboltz & Sontag, 1993; Harden & Koblinsky, 1999). Thus, stressors or risk factors from any level that affect the family may ultimately contribute to young children's behavior problems. Because the levels are interrelated and act as a system, protective factors at one level may likewise result in positive outcomes at one or more of the other levels.

In studying African American families, it is also important to recognize cultural influences on family relationships and interactions. Ogbu (1981) presents a cultural ecology model which emphasizes the need to examine cultural contexts that are central to the parenting attitudes, skills, and values within specific cultures. Thus, studies examining the relationship between maternal psychological distress and child functioning among African American families must also consider the group's unique cultural and historical roots. For example, researchers should recognize that African Americans often function as members of extended families or larger kin networks, and that these systems influence parents' ability to nurture and provide for their children (Billingsley, 1992;

Taylor & Roberts, 1995). The Black church has also been a traditional source of strength and guidance in African American communities (Billingsley, 1992).

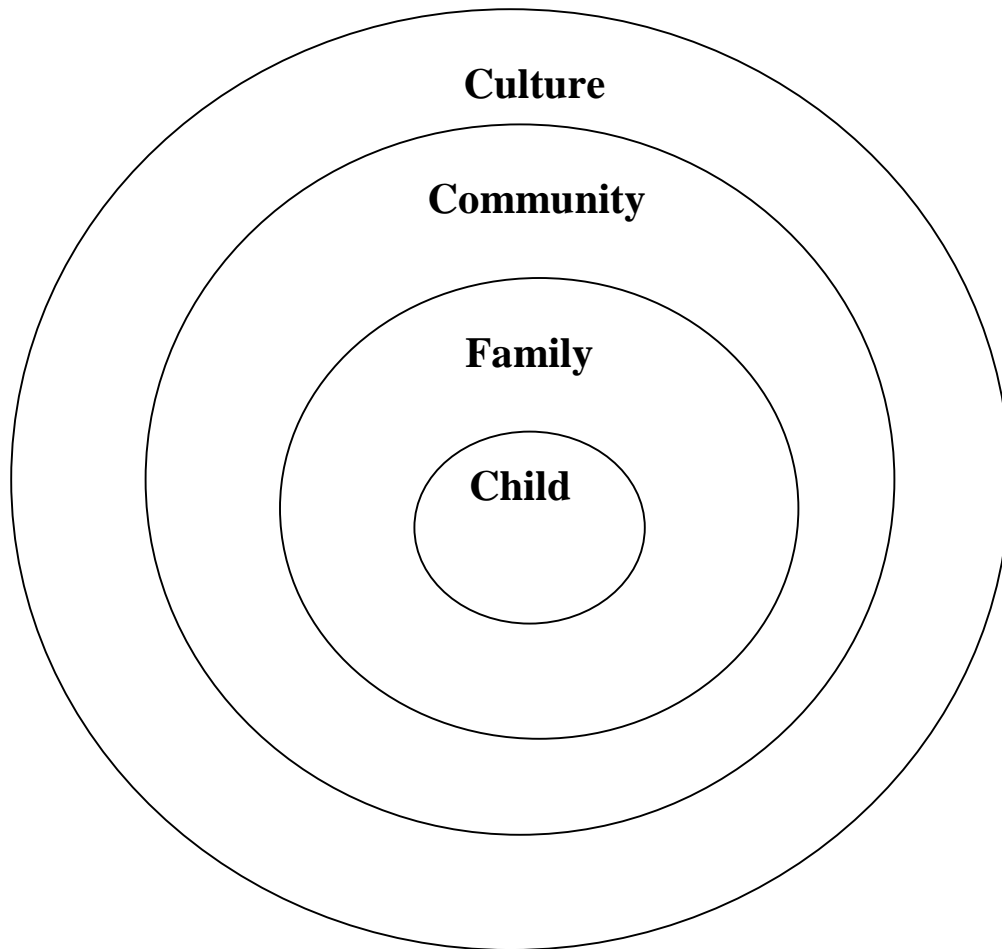


Figure 1. Bronfenbrenner's Ecological Model

Other theorists have expanded Bronfenbrenner's social ecology model to include larger contexts or ecologies that affect African American family functioning. For example, the Integrative Model of Development for Children of Color recognizes a wider array of cultural-level components in the macrosystem, including race, ethnicity, and socioeconomic status (Garcia-Coll et al., 1996). This model posits that in order to better

understand the well-being of individuals and families from specific racial/cultural groups, researchers must also consider the influences of promoting/inhibiting environments, such as neighborhoods and schools, as well as adaptive culture, such as economic histories, traditions and cultural legacies experienced by families of color.

Ecological theories assert that the family is a system interdependent with its physical and social-cultural environment. Thus, factors throughout the four levels of the ecosystem may affect the physical and social quality of individual and family life. When factors within these levels are protective and supportive, they facilitate positive developmental outcomes; when they are stressful, children are at physical, cognitive, and psychological risk (Harden & Koblinsky, 1999).

Adopting an ecological approach, Belsky (1984) posited that stress and social support can influence parenting behavior directly or indirectly by influencing parents' psychological resources. He proposed that the availability of social support could be an important resource contributing to more optimal parenting behavior. Rodgers (1993) presented a modified theoretical model of parenting that focused on the potential of social support to buffer stress. She hypothesized that when parents experience high levels of support, parental stress will have a diminished effect on parenting behavior. Applying this model to depressed mothers, the theory suggests that the impact of depression-related stress on the parenting role may be attenuated by mothers' social support.

As indicated in much of the literature (e.g., NICHD Early Child Care Research Network, 1999; Wright et al., 2000) maternal depression has a negative influence on parenting behaviors. Moreover, the adverse impact of maternal depression on young children's social adjustment has been well-documented (Gelfand & Teti, 1990; Jacob &

Johnson, 1997). Belsky (1984) asserts that parental threats to children's development, such as maternal depression, can be counteracted by other strengths in the ecological system. Therefore, one can speculate that factors which improve parents' childrearing practices by buffering the relationship between parental depression and parenting behavior may have a corresponding beneficial influence on preschool children's behavior.

Although children are influenced by the multiple environments in which they interact, it is believed that the factors at the family level have the greatest influence on young children's behavior (Bronfenbrenner, 1986). The current study examined the impact of one family-level factor and two community-level factors on young African American children's behavior problems. Maternal depressive symptomology represents a family-level variable. The first community-level variable to be investigated is mother's social support in childrearing, which includes emotional and instrumental support that is received from a mother's social network to help the mother raise her preschool child. Social network members may include relatives, other family members (e.g., fictive kin), friends, and professionals such as therapists, teachers, physicians, and social workers. The second community-level variable is the frequency of the mother's church attendance. Adopting the ecological framework, the major purpose of this study was to examine how mothers' level of social support and church attendance influence the relationship between maternal depressive symptoms and African American preschoolers' behavior problems. The study sought to examine the potential protective function of these two variables by determining whether they buffer or moderate the negative effects of maternal depression on young children's socioemotional functioning. These relationships were examined in a

sample of low-income African American families within the context of their residence in urban neighborhoods with a high level of community violence. The following sections review the literature on key study variables, including their anticipated effects on preschool children's socioemotional behavior.

Maternal Depression

In the United States, depression is one of the most common psychological disorders, affecting approximately 10 to 25% of adults annually (USDHHS, 1999b). Depression is a debilitating illness characterized by persistent sadness or despair, feelings of hopelessness and helplessness, low mood, apathy, social withdrawal, poor concentration, dysphoria, lethargy, excessive irritability, sleep disturbance, and decreased appetite (Albright & Tamis-LeMonda, 2002; American Psychological Association/APA, 1994; Lennon et al., 2001; USDHHS, 1999b; Wessel & Xtria, 2000). Depression affects individuals from all age categories, racial and ethnic backgrounds, socioeconomic groups, educational levels, and genders (Wessel & Xtria, 2000). However, prevalence rates vary across different groups as a function of particular biological and socio-demographic characteristics.

With respect to gender, women are 1.5 to 3 times as likely as men to suffer from depression (Lennon et al., 2001). Low-income women are nearly twice as likely to be depressed as their counterparts from higher income groups (Ehrle, Moore, & Brown, 1999; Lennon et al., 2001). Community studies further reveal that poor women with young children are among the groups most likely to suffer from psychological distress (Kaplan et al., 1987; Pearlin & Johnson, 1977; Radloff, 1977). In one study, almost half of the low-income mothers of young children scored within the clinical range of

depression (Hall, Williams, & Greenberg, 1985). More recently, researchers using data from the multi-state Infant Health Development Program reported that 28% of poor mothers compared to 17% of nonpoor mothers had high depressive symptomology (Liaw & Brooks-Gunn, 1994).

Research also reveals that the prevalence of mental illness among African American women is higher than among White American women (USDHHS, 1999b). For example, one study of 193 low-income African American mothers with preschool-age children from Georgia found that 47% of the sample had clinical levels of depressive symptomology (McGroder, 2000). It should be noted, however, that African Americans are over-represented in many of the groups at greatest risk of experiencing mental illness, including the poor, the homeless, the incarcerated, and those exposed to violence (USDHHS, n.d.; Murry et al., 2002). Taken together, these studies reveal that low-income African American mothers with young children are at particular risk for psychological distress, including depression.

Maternal Depression and Child Outcomes

The ecological perspective (Bronfenbrenner, 1986) emphasizes that individuals do not exist in isolation, but interact with and mutually influence those in their families and social networks. This theory suggests that maternal depression is not just a problem endured by the mother, but also affects the mother's family members. Numerous studies adopting this conceptual framework have examined the direct and indirect influence of maternal depression on children's development and behavior (e.g. Brennan et al., 2000; Eamon & Zuehl, 2001; Harden et al., 2000; Koblinsky, Randolph, Roberts, Boyer, & Godsey, 2000; Malcarne et al., 2000; NICHD Early Child Care Research Network, 1999;

Petterson & Albers, 2001). The majority of these studies link maternal depression to disturbed mother-child interactions in families of all socioeconomic backgrounds (Albright & Tamis-LeMonda, 2002; Jacob & Johnson, 1997). Specifically, depressed mothers have been found to be less sensitive to their children's needs (Ehrle et al., 1999; Gelfand & Teti, 1990; Harley, 2000), to employ harsh disciplinary practices (Ehrle et al., 1999) and to display more hostility (Bosquet & Egeland, 2001) than their nondepressed peers.

In an effort to examine the strength of the association between maternal depression and parenting behaviors, Lovejoy, Graczyk, O'Hare, and Neuman (2000) conducted a meta-analytic review of 46 observational studies. Findings revealed that maternal depression was strongly associated with negative maternal affect, irritability, and hostility toward the child. However, one study involving working-class and middle-class mothers did not find maternal depression to be linked to harsh physical punishment (Bluestone & Tamis-LeMonda, 1999). In two additional studies of low-income children, maternal depression did not predict parenting behaviors or mother-child relationship quality (Brody & Flor, 1998; Taylor, Roberts, & Jacobson, 1997). Some researchers have speculated that the relationship between maternal depression and parenting behavior may stem primarily from how it affects mothers' perception of the parenting role (McLoyd, Jayarante, Ceballo, & Borquez, 1994). Indeed, in another study of single, employed Black mothers, maternal depression predicted more negative perceptions of one's children (Jackson, 1994).

The vast majority of empirical research indicates that a mother's depression affects the entire family, including her children (Downey & Coyne, 1990). Research

reveals that children with a depressed mother are more likely to display behavioral and emotional problems, social skills deficits, and compromised academic competence as compared to peers living with a nondepressed mother (Ehrle et al., 1999). In an integrative review of 24 empirical studies on parental depression and child outcomes, Downey and Coyne (1990) conclude that teacher, parent, and child reports consistently find higher levels of internalizing and externalizing behavior problems in samples of school-age children with depressed parents. For infants and preschoolers, maternal depression has been linked to children's atypical frontal brain activity, which is positively related to child behavior problems (Dawson et al., 2003; Embry & Dawson, 2002). The literature on maternal depression indicates that living with a depressed parent increases the risk of maladjustment and developmental problems in children of all ages (Bosquet & Egeland, 2001; Wright et al., 2000). These findings are echoed in Downey and Coyne's (1990) review and in Beck's (1999) meta-analysis examining maternal depression and child behavior problems. Similar results are obtained regardless of whether depression is defined as a clinically diagnosed disorder (NICHD Early Child Care Research Network, 1999) or a set of self-reported symptoms, such as those measured by the Center for Epidemiological Studies Depression Scale (CES-D).

The Downey and Coyne (1990) review of the literature on children of depressed parents examined both parenting behaviors and children's psychosocial adjustment. The ages of the children ranged from infancy to 23 years, although none of the reviewed studies focused on preschool-age children. Higher levels of internalizing and externalizing behaviors were reported for infants and toddlers, school-age, preadolescent, and adolescent children with a depressed parent. Adolescents with a depressed parent

across the studies also exhibited significantly higher rates of conduct disorder and substance abuse than did their peers in families without a depressed mother or father.

Another study by Forehand, Jones, Brody, and Armistead (2002) examined the relationship between maternal depressive symptoms and African American children's adjustment. The study included 277 low-income, single mother families, the vast majority (97%) of whom were receiving public assistance. The families resided in metropolitan and nonmetropolitan counties in the southeastern region of the United States. Study children ranged in age from 7 to 15 years. Mothers and children were interviewed by the researchers, with mothers completing the Brief Symptoms Inventory and children completing the Child Behavior Checklist and Child Depression Inventory. Findings revealed that maternal depressive symptoms were significantly associated with child depressive symptoms in girls, but not boys. The authors noted the higher prevalence of depression among girls than boys at all ages, noting that girls may model the same internalizing behaviors (e.g., complaining, rumination) displayed by their depressed mothers. Boys, in turn, were more likely to display externalizing problems. The researchers concluded that both girls and boys with a depressed mother are at increased risk for socioemotional problems.

Wall and Holden (1994) examined the relationship between maternal depression and behavior problems among young Black children. The study included 85 predominantly African-American mother-child dyads in Baltimore, Maryland. Approximately two-thirds of the mothers were single and 68% were employed at the time of the study. Over half (53%) of the participants earned incomes below the poverty line and two-thirds were receiving public assistance. Their children ranged in age from 4 to 6

years of age at the time of the study. Findings revealed that both girls and boys with a depressed mother were at increased risk for internalizing and externalizing behavior problems. However, boys were found to be more vulnerable than girls to differences in the level of maternal depression. Boys were less aggressive and less assertive than girls when their mothers had higher levels of depression, yet more aggressive and more assertive than girls when their mothers' depressive symptomology was equal to or lower than the mean level. The mean level of depressive symptomology in the group reflected mild depression. Girls had essentially constant levels of aggression and assertiveness across all levels of maternal depressive symptomology.

Longitudinal studies involving preschool and younger school-age children with depressed mothers also find that this age group is at heightened risk for maladjustment and socioemotional problems (e.g., Downey & Coyne, 1990; Eamon & Zuehl, 2001; Gelfand & Teti, 1990). In one longitudinal study of 159 primarily White mother-child dyads, Dawson et al. (2003) examined the relationship between maternal depression and three year-old children's internalizing and externalizing behavior problems. Results indicated that children of depressed mothers had significantly higher levels of both internalizing and externalizing problems than their peers whose mothers were not depressed. Interestingly, preschool children whose mothers' depression remitted also exhibited higher levels of internalizing behaviors at 3½ years of age, suggesting an enduring negative effect of maternal depression on child outcomes. Other longitudinal studies (e.g., Brennan et al., 2000; NICHD Early Child Care Research Network, 1999) have also found that even a single episode of maternal depression can be linked to behavioral problems in young children.

One longitudinal study, conducted by Wright et al. (2000), examined the relationship between maternal depression experienced in the very early years of children's lives and their later adjustment to school. Participants in the longitudinal study were recruited when the child was three months to three years of age. All of the mothers were Caucasian, primarily married, and middle-income. Twenty-nine of the children, along with their mothers and teachers, participated in this study when the children were between the ages of five to eight. Findings revealed that children whose mothers were depressed during their infant and toddler years had problems with adjustment to school, including poor peer relations and poor academic performance. These children also exhibited behavior problems, and particularly externalizing problems such as aggression and antisocial behavior. Thus, the researchers theorized that children's maladjustment to school may have resulted from their early difficulties with a depressed mother, which may establish life patterns leading to social problems in the critical first years of school.

Several other studies examining maternal depression have similar findings. For example, Essex et al. (2001) conducted a longitudinal study involving 421 primarily Caucasian (94%) mothers in two Midwest cities. Participating mothers were primarily married (96%) and had a median income of \$47,000; they were recruited in their second trimester of pregnancy. When the children were in kindergarten, teachers rated their behaviors. Results revealed that children who were exposed to maternal depression during infancy exhibited significantly higher internalizing and externalizing symptoms than children who were never exposed to maternal depression. In an earlier study, Alpern and Lyons-Ruth (1993) examined the relationship between maternal depression and parent- and teacher-reported behavior problems of 64 low-income children between the

ages of four and six. Children whose mothers were chronically depressed during their children's infant and preschool years displayed higher rates of hostile or externalizing behaviors at ages four to six than children in a comparison group.

Other research has tested a mediational model of the effects of poverty on children's socioemotional problems, examining the role of maternal depression (Eamon & Zuehl, 2001). The 878 families in the sample were all headed by single mothers. Children ranged in age from four to nine years; 32% were Black, 9% were Hispanic, and 59% were White. Approximately half of the families were living below the poverty line. Maternal depressive symptomology was measured by a self-report questionnaire (the Center for Epidemiological Studies Depression Scale) and children's behavior problems were assessed with the Child Behavior Checklist. Findings revealed a direct relationship between maternal depressive symptomology and children's internalizing and externalizing problems. The researchers speculated that this direct relationship might reflect children's genetic predisposition to internalizing symptoms and/or inherited traits (e.g., shyness) that have the potential to increase children's susceptibility to socioemotional problems. In addition to genetic transmission, the researchers speculated that depressed mothers may model internalizing and externalizing behaviors, such as withdrawal, complaining, aggression, or coercion, and expose their children to other stressful situations, including conflicts with significant others. Children may learn to mimic these maternal behaviors, contributing to the development of internalizing and externalizing behavior problems.

The latter study also investigated the indirect effects of maternal depression on children's psychosocial adjustment (Eamon & Zuehl, 2001). Findings revealed that

maternal depression was linked to mothers' frequent use of physical punishment, which was directly related to children's internalizing and externalizing behavior problems. Moreover, poverty was directly related to both maternal depression and the use of physical punishment. The researchers speculated that frequent use of physical punishment may reflect, in part, an attempt to control children's behaviors in order to keep them safe in dangerous environments. They further proposed that children who experience physical punishment may model their mothers' behavior, developing externalizing problems such as bullying or aggression. Children may also internalize reactions to physical punishment and become fearful, anxious, or withdrawn.

Despite a growing literature on maternal depression, there is a current need for further research on the relationship between maternal depression and the behavior problems of African American children. Additional studies are needed to explore the relationship between maternal depression and preschool children's psychosocial adjustment. Specifically, information is needed about factors that may buffer African American preschool children from the adverse outcomes that have been associated with growing up with a mother who exhibits depressive symptomology. African American families living in impoverished neighborhoods are confronted with a host of stressors, only one of which is mother's psychological distress. For young children, the cumulative stress of factors such as poverty, community violence, and maternal depression may contribute to an increase in their internalizing and externalizing behavior problems. There is clearly a need to identify potential factors that may buffer the negative impact of one such factor, maternal depression, on the socioemotional development of low-income African American preschoolers.

Social Support as a Potential Buffer

One factor with the potential to buffer the negative effects of maternal depression on young children's socioemotional behavior is the mother's social support for childrearing. Social support has been defined as an individual's perception that she or he is reliably connected to others, is cared for and esteemed, and can obtain emotional and instrumental assistance from others in times of need (Barrera, 1986; Belle, 1983; Koblinsky & Anderson, 1993). Social support may come from a variety of sources, which can be categorized as formal or informal. Formal social support has been defined as assistance from institutions such as social services, mental health services, and educational programs (Hill, 1993). Informal social support has been defined as the material, financial, emotional or informational aid offered by members of an individual's informal network, such as family, friends, co-workers, and neighbors (Belle, 1983; McAdoo, 1980; Vaux & Harrison, 1985). Both forms of support can be useful resources in aiding individuals in stressful life situations, and may be especially valuable to families in poverty (Belle, 1982, 1983; Klebanov, Brooks-Gunn, & Duncan, 1994).

Several studies have examined the influence of social support on the childrearing practices of parents and caregivers (e.g., Hashima & Amato, 1994; Stevens, 1988). Overall, the results of these studies suggest that social support is linked to parenting behaviors that may contribute to positive child development outcomes. One study, conducted by Stevens (1988), examined the relationship between the availability of social support by kin and professionals and mothers' parenting skills. The sample consisted of three groups of low-income mothers of infants, including African American teenagers, African American adults, and White adults. Of the 74 Black teenage mothers, those who

accepted advice and assistance with childrearing problems from their extended family members were more skillful parents. For the White adult mothers, the use of formal support services was a significant predictor of parenting skill. The author concludes that informal social ties may provide young African American parents with childrearing information that enhances their parenting skills.

Studies have also examined whether positive social support has the potential to buffer the impact of numerous life stresses confronted by mothers (Garbarino, 1976; Mallinckrodt, 1992; McCullough & Scherman, 1998). For example, Crnic and Greenberg (1990) conducted a study with a sample of 74 predominantly White mothers and their five-year-old children. One-fifth (20%) of the families received public assistance. Findings revealed that mothers' friendships and community social support moderated the effects of minor daily stresses on parenting. Social support was shown to have a protective function, buffering mothers from perceived parenting hassles while increasing parental satisfaction.

Other research has explored the role of social support in reducing the potential for child abuse and maltreatment. Some of these studies have found that child maltreatment is positively correlated with isolation from family and community support (Garbarino, 1976; McCullough & Scherman, 1998). Mothers in families with low levels of social support are more likely to exhibit attitudes of indifference, hostility, and even rejection towards their children (Bronfenbrenner, 1986). For example, in one study of adolescent mothers' risk of engaging in child abuse, Haskett, Johnson and Miller (1994) examined parenting attitudes in a sample of 66 predominantly African American (86%) teen

mothers and their risk potential during the perinatal period. Findings revealed that limited availability of social support was associated with a higher risk of child abuse.

Some research has found that mothers who report having adequate social support engage in more optimal parenting behavior than those dissatisfied with their support (e.g., Jennings, Stagg, & Connors, 1991). Thus, several studies have been conducted to determine whether at-risk mothers believe they have a sufficient amount of parenting support. One study, conducted by Jayakody, Chatters and Taylor (1993), investigated kin-based support networks as providers of emotional and parenting assistance among a representative sample of single and married African American mothers age 18 or older. The data were obtained from The National Survey of Black Americans, with the sample including 620 mothers of a child aged 17 or younger. (The mean age of the children was not provided.) Findings revealed that 80% of the mothers received emotional support from their extended families, which appeared to be the most prevalent form of support.

An earlier study conducted by Hogan, Hao and Parish (1990) examined kin networks and assistance among mother-headed households in a nationally representative sample of Black and White American mothers. Currently married mothers who are in their first marriage were also included for purposes of comparison. In this study, 45% of single young Black mothers lived with their own mothers. Of all Black mothers in the study, nearly half received child care assistance from a grandparent and 20% received this aid from another relative. Forty-three percent of Black mothers used unpaid child care. Yet, only 33% of these mothers reported having adequate access to child care. Regarding income, 19% of Black mothers in the study (25% of single Black mothers) received at least half of their income from individuals other than their spouses. Despite

this level of support in the form of both income and child care, the authors concluded that it was still insufficient to adequately compensate for the stressors associated with single motherhood.

Reducing the impact of parenting stress on mothers may be especially important for young children's healthy adjustment. Belsky (1984) contends that stressors, such as maternal depression, poverty, and living in a violent neighborhood, can influence parenting behavior, and in turn, affect children's development either directly or indirectly. Previous research has found that greater stress is significantly associated with more child behavior problems and lower child competence. For example, Crnic and Greenberg (1990) found that parenting stress was linked to greater child behavior problems and lower child social competence among five-year old children.

The provision of social support from family and friends – including child care assistance, economic support, and help with practical family needs – may improve parenting, which in turn has beneficial effects on child outcomes. Social network members may also directly provide children with guidance and connect them to positive community resources, such as educational activities and cultural events. Such support may help to buffer young children from the negative impact of stressors such as maternal depression, especially in neighborhoods where environmental conditions are most taxing (Ceballo & McLoyd, 2002).

Hashima and Amato (1994) conducted another study that demonstrated the positive influence of parental social support for African American women and children residing in low-income neighborhoods. The study examined the associations among poverty, social support, and parenting using data from the National Survey of Families

and Households. A racially-mixed subsample of 1,035 parents whose children were under the age of five was used in the study. Results revealed a significant moderating effect of social support such that increased perceived social support weakened the relationship between income and punitive parenting. This finding was strongest for poor families, suggesting that social support may be particularly protective for lower-income parents and children. Additional analyses further revealed that assistance with child care, one form of social support, was a significant predictor of more optimal parenting behaviors. The authors noted that assistance with childrearing may be the most salient form of social support in moderating parents' punitive behaviors.

Another national study (Murphy et al., 1998), utilized a racially mixed sample of parents whose children had been seen for outpatient medical visits to investigate the direct relationship between social support and child outcomes. The sample consisted of 9,626 parents of children ages 4 to 15. The income level of the families was not reported. Parents completed a measure of social support, the Family APGAR, as well as the Pediatric Symptom Checklist (PSC), which measures children's psychosocial dysfunction. Physicians rated the presence of new or recurrent psychosocial problems exhibited by the child. Overall, child psychosocial problems were identified by the PSC in 12% of the cases, and by physician rating in 18% of the cases. However, results indicated that 50% of the children from families with low levels of social support were identified as having a problem by either the PSC, physician report, or both. Moreover, children from families with a lack of social support were 4.3 times as likely to receive scores indicating impairment on the PSC and 2.2 times as likely to be identified as having psychosocial problems by the physician report as children from families with sufficient

support. Thus, the authors concluded that lack of family social support is linked to children's psychosocial dysfunction.

Recent studies of African American Head Start families living in low-income neighborhoods with high community violence reveal that some mothers report inadequate levels of social support (Randolph, Koblinsky, & Roberts, 1996; Randolph, Koblinsky, Beemer, Roberts, & Letiecq, 2000). Lower levels of social support appear particularly likely to increase the stress of parenting in such neighborhoods. Maternal awareness of neighborhood dangers, often coupled with the responsibility of being the sole caretaker of one's children, may contribute to less optimal parenting behavior. With limited outside support, mothers may be preoccupied with maintaining their households, meeting their children's physical needs, and insuring children's safety. Their focus on basic physical and safety needs may diminish the time they have available to engage in warm, responsive, stimulating, authoritative parenting with their child. The demands of parenting with little social support may, in turn, result in negative cognitive and socioemotional outcomes for young children (Baumrind, 1967; Coolahan, 1997; Robinson, Mandlco, Olsen, & Hart, 1995).

In summary, the current literature reveals the potential for social support to have a positive impact on low-income families. A number of studies have examined the protective role of social support with respect to parenting practices (e.g., Hashima & Amato, 1994; Stevens, 1988). The provision of social support has been shown to be directly related to more optimal parenting behaviors, and to moderate the impact of stress on parenting. One study (Murphy et al., 1998) has shown a link between a lack of family social support and children's psychosocial development in a racially-mixed sample.

However, few other studies have examined the direct relationship between social support given to parents and children's behaviors. Even less is known about whether social support is able to buffer the negative effects of stressors, such as maternal depression, on young children's socioemotional development.

Given the large and growing number of stressors in the lives of low-income families, and the disproportionately high rates of depression among African American mothers, research on this issue is urgently needed. Studies investigating the protective power of social support for young children are especially important in inner-city areas, where low-income parents are confronting poverty, community violence, drug-related crime, and social isolation (Randolph et al., 1996). Therefore, this study explored the potential for social support for childrearing to buffer the relation between African American mothers' depressive symptoms and their preschool children's behavior problems in poor, urban neighborhoods characterized by high levels of violence.

Church Attendance as a Potential Buffer

A second factor that may reduce the negative impact of maternal depression on the behavior problems of young African American children is mothers' attendance at church services and events. Religion has traditionally had a significant influence on African American families (Williams & Dixie, 2003). Seventy-eight percent of African Americans report that religion is important to their lives (Logan, 1996). Moreover, 84% of African Americans state that they are religious, and nearly 70% of African Americans are church members (Billingsley & Caldwell, 1991). Several studies indicate that two dominant sources of support for African Americans are religiosity and spirituality (Hill, Hawkins, Raposo, & Carr, 1995; Lincoln, 1984; Logan, 1996).

Historically, the Black church has been an independent institution where many African Americans practice their religious and cultural beliefs, as well as organize around political issues (Alex-Assensoh & Assensoh, 2001; D'Apolito, 2000; Lincoln, 1984; Logan, 1996; Morris & Robinson, 1996). The Black (Christian) church has provided spiritual and emotional resources that have contributed to the resilience of African Americans throughout the 20th century, helping Black citizens to cope with the Depression, World Wars I and II, and other hardships, such as racism, discrimination, and segregation (Starling, 1999). Church-sponsored services have addressed the specific needs of African American individuals and families, including their mental health concerns and parenting needs (Blank, Mahmood, Fox, & Guterbock, 2002). The Black church has also served as a dominant source of social activity for church and community members (Blank et al., 2002). Overall, the institution has played a major role in facilitating a sense of community among African American adults and youth (Morris & Robinson, 1996).

Recent literature suggests that when individuals and families utilize church-based services and resources, church attendance may serve as a protective factor promoting child and adult resilience (Rubin, Billingsley, & Caldwell, 1994). Morris and Robinson (1996) emphasize the significant role of the Black church in the mental health of African Americans, providing a sense of community and coping mechanisms that help attendees to handle stressful life situations.

The Black church may also be an important resource contributing to the resiliency of African American children because of its potential to provide a peer group with positive moral values and to reinforce positive parenting practices (Baldwin, Baldwin, &

Cole, 1990; Mandleco & Peery, 2000). Researchers have speculated that religion may affect parents' behavior through both internal and external mechanisms (Pearce et al., 2003). Religion may have an internal influence through a mother's internalization of spiritual and moral values, and through adoption of the church's normative beliefs on issues such as childrearing (Cochran, Beeghley, & Bock, 1988). Religious involvement may also function as an external regulator of maternal behavior by providing a social network of other adults and clergy that is tied together by acceptance of and commitment to spiritual values and social norms (Krause, Ellison, Shaw, Marcum, & Boardman, 2001). Interactions within this network may inhibit problematic behavior (e.g., substance abuse, conflict with others) and encourage a range of prosocial behaviors (Pearce et al., 2003).

To date, a majority of the literature investigating the relationship between religious involvement and individual behavior among residents of low-income communities has focused on adolescents, rather than on parents or younger children. Moreover, most of these studies investigate delinquent youth. A recent review of 40 studies conducted between 1985 and 1997 explored the relationship between religious involvement/spirituality and delinquency, which was defined as "any criminal or status offense committed by a juvenile" (Johnson, De Li, Larson, & McCullough, 2000). In over 80% of the studies, religiousness was linked to lower delinquent behavior. Two studies suggested that religion may have particularly positive effects for youth residing in high risk neighborhoods (Johnson, De Li et al., 2000; Tittle & Welch, 1983). Specifically, the researchers found that the more disordered the neighborhood, and the fewer the number of secular controls, the more constraining the influence of religiousness

on adolescents' delinquent behavior. In one of the studies, which involved African American youth between the ages of 15 and 21, involvement in religious institutions buffered the effects of neighborhood disorder on serious, but not minor, crime (Johnson, De Li et al., 2000).

More recently, researchers used data from the longitudinal Social and Health Assessment Survey to examine the protective effects of religiousness and parent involvement for the development of youth conduct problems (Pearce et al., 2003). Participants included more than 1,700 high-risk adolescents in urban Northeastern neighborhoods. Youth religiousness and parental involvement were each uniquely linked to a decrease in conduct problems. In addition, two dimensions of adolescent religiousness (self-ranked religiousness, private religious practices) moderated the relationship between violence exposure and conduct problems, buffering the adverse effects of exposure to violence.

Fewer studies have examined religious involvement as a resource used by high-risk parents to strengthen their parenting and promote positive child outcomes. However, in one investigation, more religious, low-income African American mothers employed more child-centered disciplinary techniques than less religious mothers (Kelley, Power, & Wimbush, 1992). In another study of predominantly African American parents, more religious parents were less hostile to children and exhibited more favorable parenting practices than their less religious peers (Strayhorn, Weidman, & Larson, 1990). These studies indicate an inverse linkage between religious involvement and problematic parenting behaviors, which may contribute to more positive child outcomes.

A more recent study (Wiley et al., 2002) investigated the interrelationships between African American mothers' religiosity, stressful life events, and parenting practices in rural communities. The participants were 92 low-income African American mothers with a child between the ages of 8 and 12 who were living in rural areas of Illinois. Religiosity was defined in terms of the frequency of church attendance and the amount of faith in God. Findings revealed that more religious parents reported using fewer coercive parenting strategies and experiencing fewer stressful life events than their less religious peers. These results suggest that for some parents, religiosity may prevent mothers from coming into contact with risky, stressful life events. Religious involvement may also act to reduce some stressful events that were not assessed in the study, such as daily parenting hassles and normative child development challenges. The researchers note that some churches focus on these issues through programming and services that provide food, clothing, financial, and parenting assistance. Parents who attend church on a regular basis are also likely to take their children to Sunday School, and these children may be easier to parent. Taken together, the findings suggest that greater maternal church attendance and personal faith have beneficial effects on parenting in rural, low-income communities.

Church attendance may also have a positive influence on the stress experienced by poor, urban families because the communities in which they live often have few other institutions of authority and social control (Johnson, Jang, De Li, & Larson, 2000; Tittle & Welch, 1983). Low-income mothers who reside in these communities may develop depression and psychological distress in response to their individual fears and to the challenges of living in a dangerous environment. Often such mothers adapt by isolating

themselves and their families from those around them (Furstenberg, 1993). Frequent church attendance may counter some of the effects of social isolation, as church attendance provides a means for members to connect with others and to receive spiritual, emotional, and instrumental support. Hill et al. (1995) found that urban African American families dealing with community violence often utilized religion and prayer as coping mechanisms. The latter study further revealed that the involvement of African American boys in the church during childhood was a protective factor against later involvement in violent activities.

In summary, research has suggested that religious involvement may be a protective factor for low-income African American families. Most research regarding religiosity in low-income communities has focused on adolescents, and has identified religious involvement as a potential deterrent to adolescents' criminal behaviors. A few studies (e.g., Kelley et al., 1992; Strayhorn et al., 1990) have linked religious involvement with more optimal parenting practices. Despite the latter studies, there is a paucity of research on the role of church attendance or religiosity in the lives of low-income African American mothers residing in violent neighborhoods. Few empirical studies have examined the influence of church attendance or religious involvement on low-income mothers' parenting practices, parent-child interactions, or children's socioemotional development. This lack of research is somewhat surprising given that the church is a vital institution within the African American community, second only to the family (Taylor & Chatters, 1988).

Given the sparse investigation of the role of parental church attendance in promoting positive outcomes among young children (Gordon & Song, 1994; Masten,

Best, & Garmezy, 1990), there is a strong need for further research examining the protective power of various aspects of parents' religious involvement. Information is needed about whether regular parental church attendance buffers the deleterious impact of maternal depression and psychological distress on young children's socioemotional behavior. Therefore, this study explored the role of maternal church attendance in moderating the impact of maternal depression on African American preschoolers' behavior problems.

Purpose of the Study

To address gaps in the existing literature, the current study adopts an ecological framework to examine factors with the potential to moderate the impact of maternal depression on African American children's behavior problems. The current study aimed to explore the influence of two cultural resources that may reduce negative outcomes for African American children living in poor urban neighborhoods: the social support network and the Black church. Such an approach can provide valuable information about the protective strategies that poor African American parents might employ to help their children succeed in high-risk communities (Jarrett, 1997).

Specifically, the major goal of the current study was to examine how maternal social support for childrearing and church attendance influence the relation between maternal depressive symptoms and preschool children's behavior problems. This study asked three questions:

- 1) Does maternal social support for childrearing moderate the effect of maternal depressive symptoms on child behavior problems?

- 2) Does maternal church attendance moderate the effect of maternal depressive symptoms on child behavior problems?
- 3) Is African American mothers' depressive symptomology related to child behavior problems among young children in poor, violent communities?

This study tested the proposition that the deleterious effects of maternal depression on children's internalizing and externalizing behavior problems will vary depending on the level of the mother's social support in parenting, and on the frequency of her church attendance.

The current study extends existing research on the linkages between maternal depression and child outcomes in urban, low-income African American families, an understudied population. The study is also unique in investigating the moderating effects of two variables, social support and church attendance, that have traditionally protected African American families from adversity. Such knowledge may play a critical role in helping family practitioners to design interventions that alleviate the deleterious effects of maternal depression on internalizing and externalizing child behavior problems.

Operational Definition of Variables

Maternal Variables

Maternal depression: The mother or female caregiver's level of depressive symptomology, which includes such factors as feelings of guilt and worthlessness, helplessness, loss of appetite, and sleep disturbance.

Social Support: The perceived amount of help that family members, friends, coworkers, partners, social groups, parenting groups, physicians, social workers, and

other professionals provided to the mother or female caregiver in raising her Head Start child over the last three to six months.

Church Attendance: The frequency with which the mother or female caregiver attended church services (less than once a month to more than once a week).

Child Variables

Internalizing Behavior Problems: The child's display of symptoms such as fearfulness, sadness, guilt, social withdrawal, anxiety, and/or somatic complaints.

Externalizing Behavior Problems: The child's display of behaviors such as impulsivity, aggression, anger, defiance, and coercive interactions with peers and parents.

Control Variables

Maternal age: The mother's or female caregiver's age in years.

Maternal education: Number of years of formal education completed by the mother or female caregiver.

Child's sex: Sex of the target preschool child, girl or boy.

Maternal age is a control variable because it has been linked to children's cognitive and socioemotional development. Specifically, there have been noted risks to children born to adolescent mothers, including lower cognitive development, worse educational outcomes, and higher rates of behavior problems than children born to older mothers (Kirby, 1997). Families headed by single women who began childrearing in their adolescent years often experience greater economic and social problems than families headed by older mothers and two-parent families, which often contribute to poorer outcomes for the children (Elise, 1995; Wertheimer & Moore, 1998).

Maternal education is a second control variable. Maternal education may be a protective factor in a challenging living environment because a better educated mother appears more likely to possess parenting knowledge and to employ parenting practices associated with positive child outcomes (Bluestone & Tamis-LeMonda, 1999; Kelley et al., 1992; Kelley, Sanchez-Hucles, & Walker, 1993; Luster & McAdoo, 1994; McGroder, 2000; Querido, Warner, & Eyberg, 2002). Moreover, Ahluwalia, McGroder, Zaslow, and Hair (2001) report that higher levels of maternal literacy appear to moderate the relationship between maternal depression and unfavorable child outcomes in low-income families.

Child sex is a third control variable because some researchers have found differential behavioral problems exhibited by boys and girls. Forehand et al. (2002) found that maternal depressive symptoms were significantly associated with African American school-age children's depressive symptoms in girls, but not boys. Boys, however, were more likely to display externalizing problems. Wall and Holden (1994) further found that four-to-six year old African American boys were more aggressive and more assertive than girls when their mothers' depression level was equal to or lower than the mean range, but less aggressive and less assertive than girls when their mothers had higher levels of depression.

Hypotheses

Based on theory and previous research, the following hypotheses were made:

1. Level of social support for childrearing will moderate the relationship between maternal depressive symptoms and preschool children's behavior problems.

Specifically, as mothers' level of social support increases, the relationship

between maternal depressive symptomology and children's internalizing and externalizing behavior problems will weaken.

2. The frequency of church attendance by the mother or caregiver will moderate the relationship between maternal depressive symptoms and preschool children's behavior problems. Specifically, as mother's frequency of church attendance increases, the relationship between maternal depression and children's internalizing and externalizing behavior problems will weaken.
3. Maternal depressive symptomology will predict a significant amount of the variance in preschool children's internalizing and externalizing behavior problems. Specifically, higher levels of depressive symptomology will be related to higher levels of children's internalizing and externalizing behavior problems.

CHAPTER III: METHODOLOGY

Sample

This study involves secondary analysis of data from a larger three-year study examining the role of family and school in promoting positive developmental outcomes for African American preschoolers in violent neighborhoods. The current sample was comprised of 308 African American mothers or female caregivers functioning in the mother's role (e.g., grandmothers, aunts). For the remainder of this study, the term "mothers" will be used for all female caregivers serving in the maternal role. All mothers had a three-to-five year old child enrolled in a Head Start program in Washington, DC or Prince George's County, Maryland. All mothers were "low-income," defined by their meeting the income criteria established by the Head Start program, which is less than or equal to the Federal poverty line. In 1999, the maximum annual income for a family of four to be eligible for Head Start was \$16,700 (USDHHS, 1999a).

All mothers and their preschool children resided in urban neighborhoods characterized by high levels of community violence. These neighborhoods were identified using crime data from District of Columbia and Maryland police departments, including the Uniform Crime Report and the Violent Crime Index (Federal Bureau of Investigation, 1998). The Violent Crime Index provides a measure of robberies, assaults, homicides, and rapes within specific geographic areas. The neighborhoods in Maryland were identified as "hot spots" for criminal activity, and the majority of crimes were categorized as larceny, robbery, and aggravated assault (Maryland State Police, 1995). There were high levels of community violence in neighborhoods housing both the Head Start centers and the participants' homes and apartments (located within a 15-block

radius of the centers). Some centers had installed bullet-proof windows and limited the times children were allowed to be outside on playgrounds in an effort to keep children safe. For example, in some centers children were not permitted to play outside after the high school day ended because of fears of gang activities on the streets. Environmental scans of the target neighborhoods further revealed abandoned and boarded-up apartments, iron bars in windows, graffiti on building exteriors, uncollected trash, and streets without plantings. The only businesses were small grocery stores, liquor stores, and check-cashing establishments, with evidence that many former businesses (e.g., drugstores, restaurants) had been shut down. Most parents restricted children's use of neighborhood playgrounds because of rusted or broken equipment, drug activity (including discarded syringes), and fear of violence involving older adolescents. Head Start mothers and teachers confirmed police data and Head Start administrator reports concerning community violence levels, describing high levels of drug trafficking, vandalism, assaults, and gunshots in most of the targeted neighborhoods.

Measures

Demographic Background. Demographic items addressed such factors as: maternal age, initial childbearing age, maternal education, marital status, maternal employment status, age of the target preschool child, sex of the target child, number of children in the home, and number of other adults in the home (see Appendix A).

Maternal Depression. The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was used to assess mothers' depressive symptomology (see Appendix B). This 20-item scale uses a 4-point Likert type scale in which the mothers respond to questions, such as "During the past week, how often did you feel

lonely?”, “How often did you have a poor appetite?”, and “How often did you have crying spells?” Responses for the CES-D range from 0 = “rarely or none of the time (less than 1 day)” to 3 = “most or all of the time (5-7 days).” Indices of depressive symptomology are computed by summing the ratings of each of the 20 items, with reversed scores for the four positive mental health items (items 4, 8, 12, and 16). Total scores may range from 0 to 60, with lower scores indicating lower levels of depressive symptoms. A score of 16 or above on the CES-D is considered clinically significant for depressive symptoms (Radloff, 1977). For the current study, CES-D scores were examined as continuous variables. The CES-D has been shown to be a reliable measure, with high internal consistency. Adequate construct and concurrent validity have also been found with a wide variety of populations (Ensel, 1986; Radloff, 1977). Alpha coefficients have ranged from .84 to .90. The CES-D has been shown to be a reliable measure in many studies with African Americans, with coefficient alphas ranging from .84 to .88 (Harnish, Dodge, & Valente, 1995; Jackson, Gyamfi, Brooks-Gunn, & Blake, 1998; Lutenbacher & Hall, 1998).

Social Support. The Family Support Scale (FSS; Dunst, Jenkins, & Trivette, 1984) was used to assess the mothers’ informal and formal social support in rearing her preschool child (see Appendix C). This 19-item self-report questionnaire utilizes a 5-point Likert-type scale and asks the mother to report how helpful a certain person/group has been in helping her to raise her young child during the last three to six months. The ratings range from (0) “not at all helpful” to (4) “extremely helpful.” Indices of helpfulness are computed by summing the ratings of each of the 19 items. Total scores

may range from 0 to 76. Higher scores are more desirable, as they indicate receipt of more childrearing support.

The reliability and validity of the Family Support Scale was established by Dunst et al. (1984) using a sample of parents of developmentally at-risk and physically and mentally challenged preschool children. The internal consistency of the measure, as measured with a coefficient alpha, was .85, and the test-retest reliability of the scale (taken one month apart) was .91 for the total scale scores. A study by Letiecq, Anderson, and Koblinsky (1996) of predominantly African American homeless and low-income housed mothers of preschool children also found the Family Support Scale to be a reliable measure of support, with a Cronbach's alpha of .81 for the total scale. Research further supports the scale's content, criterion, and construct validity (Dunst et al., 1984).

Maternal Church Attendance. The frequency of maternal church attendance was obtained from an item in the demographic section of the questionnaire (see Appendix A, item 13). The open-ended question asked mothers how often they attend church services or events. Mothers gave a response which the interviewer immediately coded using the following scale 1 = "more than once a week", 2 = "weekly", 3 = "twice a month", 4 = "once a month", or 5 = "less than once a month." If the mother's first response did not fit one of these categories, the interviewer asked the mother to clarify the frequency of her church attendance so her response could be placed in the most accurate category. For analyses in the current study, the scores were reversed so that higher scores represented greater church attendance.

Maternal Age. Maternal age was obtained from an item in the demographic section of the questionnaire (see Appendix A, item 6). The question asked mothers

“What is your age?” Mothers gave an open-ended response, which is reported as years of age.

Maternal Education. Maternal education was obtained from an item in the demographic section of the questionnaire (see Appendix A, item 9). The question asked mothers to indicate the highest grade they completed in school. Mothers gave a response which the interviewer recorded in years on a scale that included grades 1-8, the high school grades (9-12, with GED coded as grade 12), and five college years (with 17+ as the highest scale item).

Child Sex. The target child’s sex was obtained from an item in the demographic section of the questionnaire (see Appendix A, item 3). The question asked mothers whether the target child was a boy or girl. Mothers gave a response which the interviewer immediately coded as either 0 = “boy” or 1 = “girl.”

Child Behavior Problems. The Child Behavior Checklist Parent Form (CBCL; Achenbach, 1991) was used to assess children’s internalizing and externalizing behavior problems. This version of the CBCL consists of 85 symptoms rated by mothers on a three-point scale, including 0 = “not true”, 1 = “sometimes true”, and 2 = “very/often true.” The parent is asked how often her child exhibited each CBCL behavior within the past six months. The internalizing subscale assesses behaviors such as acts sad, feels guilty, feels worthless or inferior, is moody, has trouble sleeping, is shy or timid, and cries a lot. The externalizing subscale examines children’s display of behaviors such as has a temper, fights, screams a lot, teases a lot, destroys other’s property, and physically attacks people. Raw scores are converted to *T* scores that are based on normative data. *T* scores can range from 50 to 100, and the mean *T* score for the normative sample is 60.

Higher *T* scores represent more behavior problems. *T* scores in the range of 60-63 are considered borderline clinical, and scores of 64 or over are in the clinical range. For the current study, CBCL scores were examined as continuous variables. The CBCL has high reliability and criterion-related validity (Achenbach, 1991), and has strong psychometric properties in studies involving children from diverse socioeconomic and racial/ethnic backgrounds. The CBCL is copyrighted and available from the test author (Achenbach, 1991).

Procedure

As noted earlier, this study uses data from a larger three-year study funded by the U.S. Department of Education (USDOE) entitled “The Role of Family and School in Promoting Positive Developmental Outcomes for African American Preschoolers at Risk for Exposure to Community Violence” (Grant # R307F60099). The study was conducted by the University of Maryland, College Park, in collaboration with the United Planning Organization and Prince George’s County Public Schools Head Start programs from 1996 to 1999.

In each year of the study, a new sample of Head Start families participated. Mothers of the target Head Start child were invited to participate in the study through letters distributed to them by the Head Start teachers. Interested mothers completed a parent interview at the Head Start center. Only one Head Start child per family was discussed in the interview. In cases where the mother had more than one child enrolled in the Head Start program, the oldest was selected as the target child.

Mothers provided demographic information and completed various measures of family functioning and child behavior during the interview, which lasted approximately

90 minutes. The interviewers were all females and consisted of family studies graduate students, a post-doctoral fellow, and two faculty members. Approximately half of the interviewers were African American and half were Caucasian. There were no race of interviewer effects on any of the study measures. Training of interviewers included review of the instruments, role-playing of interviewer -mother interviews, and observation of actual interviews administered by experienced interviewers.

Interviewers explained to the mothers that a major purpose of the study was to examine how parents were raising their preschool children in city neighborhoods characterized by high levels of community violence. Mothers signed an informed consent form (see Appendix D) indicating that participation in the study was voluntary and that all information would be confidential. Mothers who completed the interviews were provided a stipend of \$25. To ensure confidentiality, a code number was immediately assigned to each completed interview. Raw data have been kept in a locked file cabinet at the University of Maryland, College Park. The master codebook linking participants' names to their code numbers is kept in a separate file in order to maintain standards of confidentiality. A separate data file, with no identifying information except the code number, was created for input into the SPSS-PC data analysis program. Approval for this study was obtained from the University of Maryland Institutional Review Board (IRB).

Data Analysis Plan

A cross-sectional design was employed in this study. Descriptive statistics, including means, standard deviations, and percentages, were utilized to summarize the demographic characteristics of all mothers and their target preschool children in the

sample. Cronbach's coefficient alphas were computed to examine the internal consistency of the CES-D, FSS, and CBCL. Means and standard deviations were calculated for all maternal and child measures. Bivariate analysis and linear regression analyses were conducted to examine the relationships among the variables.

Testing of Study Hypotheses

To test the study's hypotheses (page 36-37), four multiple regression equations were used. The first two regression equations explored the interaction effects of maternal depressive symptomology and social support, and maternal depressive symptomology and church attendance, on children's internalizing behavior problems in one equation and externalizing behavior problems in another equation. The conceptual model depicting potential moderating effects on two types of child behavior problems are presented below in Figure 2. Three demographic control variables that have been conceptually or empirically linked to child behavior problems and maternal depression – mother's age, mother's education, and preschool child's sex – were included in each model. When there were no significant moderation effects, multiple linear regression analyses without the interaction terms were used to explore the main effects of maternal depressive symptomology, social support, church attendance, and the control variables (maternal age, maternal education and child sex) on children's internalizing and externalizing behavior problems, respectively.

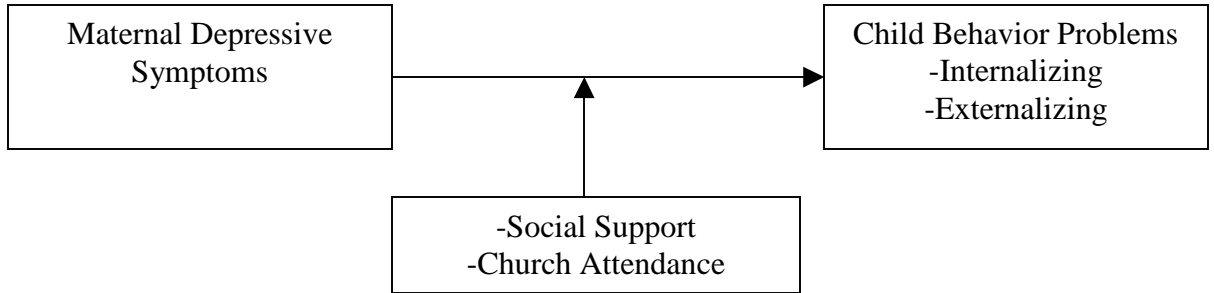


Figure 2. Conceptual model testing moderating effects of social support and church attendance on child behavior problems

CHAPTER IV: RESULTS

Demographic Characteristics of the Sample

As noted earlier, this sample of African American mothers/caregivers and their preschool children was drawn from neighborhoods characterized by high levels of community violence in Washington, DC and Prince George's County, Maryland. Table 1 presents the demographic characteristics of the sample. These data include means and standard deviations for initial childbearing age, maternal age, preschool child age, maternal education, the number of children in the home, and the number of other adults living in the home. Additionally, the frequencies and percentages for participant's relationship to the child (e.g., mother, grandmother), marital status, father presence in the home, mother/caregiver employment status, and the sex of the Head Start child are provided. Finally, the table presents frequencies for participants' church attendance and exposure to gunfire in their neighborhoods. It should be noted that a small number of the female caregivers functioning in the mother's role in this study were grandmothers (11%) or other relatives (4%). All study analyses were run with mothers only and with the full sample with similar results. The reported results include all of the study participants.

As displayed in Table 1, the sample consisted of 308 African American Head Start mothers. Hereafter, the term "mothers" will include all female caregivers serving in the maternal role. Of the sample, 263 (85%) were mothers of the target Head Start child. An additional 34 (11%) were grandmothers and another 11 (4%) were other female relatives functioning in the mother's role. The age of the mothers in the current study ranged from 18 to 67 with a mean age of 32.2. On average, mothers had completed 12 years of education and were 20 years old at the birth of their first child. Children's ages

Table 1

Demographic Characteristics of the Sample

Demographic Characteristic	Mothers & Female Caregivers (<i>N</i> =308)	Range
	<i>M (SD)</i>	
Mother's Age in Years	32.2 (10.09)	18-67
Age at Birth of First Child	20.1 (4.87)	12-42
Preschool Child's Age in Months	53.5 (7.15)	36-67
Number of Years of Maternal Education	12.0 (1.69)	5-17
Number of Children in the Household	2.7 (1.45)	1-9
Adults in Home	1.9 (0.98)	1-8
		<i>N (Percentage)</i>
Female Caregiver's Relationship to Child		
Mother		263 (85.4%)
Grandmother		34 (11.0%)
Other Relative		11 (3.5%)
Marital Status of Mother/Female Caregiver		
Single/Divorced/Separated/Widowed		214 (69.5%)
Married/Cohabiting		93 (30.2%)
Missing Information		1 (0.3%)
Father Presence in Household		
Present		70 (22.7%)
Not Present		237 (76.9%)
Missing Information		1 (0.3%)

Table 1 (continued)

Demographic Characteristics of the Sample

Demographic Characteristic	Mothers
	<i>N</i> (Percentage)
Employment Status	
Employed	125 (40.7%)
Not Employed	182 (59.3%)
Missing Information	1 (0.3%)
In School or Job Training (% yes)	63 (20.5%)
Child's Sex	
Male	144 (46.8%)
Female	164 (53.2%)
Church Attendance	
More than once a week	36 (11.7%)
Weekly	69 (22.4%)
Twice a month	47 (15.3%)
Once a month	26 (8.4%)
Less than once a month	128 (41.6%)
Missing Information	2 (0.6%)
Heard Gunshots in Neighborhood	
Yes	222 (72.0%)
No	85 (28.0%)
Missing Information	1 (0.3%)

ranged from 36 to 67 months, with a mean of 54 months. Thus, the mean age of a preschool child in this sample was 4½ years old. Forty-seven percent of the children were boys and 53% were girls. Mothers further reported having an average of three children and two adults (including themselves) living in the household. Approximately 23% of the sample reported that the child's father resided in the same household.

Overall, nearly one-third of the mothers were married or living with a male partner.

Approximately 41% of the mothers were working and 21% were in school or job training programs. On average, a third of the mothers attended church at least once a week.

Moreover, 72% of mothers reported that they had heard gunshots in their neighborhood.

Reliability of Study Measures

Cronbach's coefficient alphas were computed to examine the internal consistency of three study measures (see Table 2). The alpha for maternal depressive symptomology, measured using the CES-D, was .78. The alpha for social support, measured with the FSS, was .84. The CBCL was used to measure children's internalizing and externalizing behaviors. The coefficient alphas for African American children in this study were .88 for girls and .86 for boys on the internalizing subscale, and .88 for both girls and boys on the externalizing scale. All of these reliability coefficients are in an acceptable range.

Scores on Study Measures

Table 2 also presents means and standard deviations for mothers' scores on the CES-D, FSS, the measure of church attendance, and for children's scores on the CBCL. The CES-D measured mothers' depressive symptomology, with lower scores indicating lower levels of depressive symptoms, and a score of 16 or above considered clinically significant for depressive symptomology (Radloff, 1977). Study participants' mean score on the CES-D was 15, and 41% of the sample had scores at or above 16.

The 19-item FSS assessed the level of social support mothers received in raising children during the last three to six months. Higher scores indicate the receipt of more support in parenting and are thus optimal. Study participants had a mean score of 29.3 on the FSS. Dividing the mean score by the total number of items revealed that, overall, mothers received social support that was "sometimes" to "generally" helpful ($M=1.54$).

Table 2

Sample Statistics and Coefficient Alphas for Study Measures

Measure	Number of Items	Sample Range	Mean	Standard Deviation	Coefficient Alpha
CES-D	20	0-50	15.0	10.5	.78
FSS	19	2-66	29.3	11.9	.84
Church attendance	1	1-5	3.5	1.5	NA
CBCL					
Internalizing		33-76			
Boys	48		53.5	10.5	.86
Girls	50		51.5	8.4	.88
Externalizing		30-79			
Boys	36		55.2	9.8	.88
Girls	28		56.4	9.9	.88

Mothers were also asked how often they attended church. Responses range from (1) “less than once a month” to (5) “more than once a week.” According to the mothers, on average, they attended church on a monthly or bi-monthly basis.

Preschoolers’ behavior problems were measured using the CBCL’s subscales for internalizing and externalizing behavior. Lower scores indicated fewer behavior problems. Scores obtained by preschoolers in this study were compared to rational norms for this age group (Achenbach, 1991). The mean internalizing *T* scores for the current sample’s girls ($M=51.5$, $SD=8.4$) and boys ($M=53.5$, $SD=10.5$) did not differ significantly from the non-clinical standardization sample scores for girls ($M=50.1$, $SD=9.7$) or boys ($M=50.2$, $SD=9.9$). Mean externalizing *T* scores for sample girls ($M=56.4$, $SD=9.9$) and boys ($M=55.2$, $SD=9.8$) in this sample, however, were significantly higher than the *T* scores for the standardization sample of girls ($M=50.0$, $SD=9.6$) and boys ($M=49.9$, $SD=9.8$); for girls, $t(783)=4.21$, $p<.001$; and for boys, $t(726)=2.84$, $p<.01$.

Bivariate Relationships Between Variables

Table 3 presents a correlation matrix depicting the relationships between all of the study variables. Maternal depressive symptoms, as measured by the CES-D, was significantly negatively correlated with maternal education ($r=-.144, p<.05$) and church attendance ($r=-.218, p<.001$). Maternal depressive symptomology was also positively correlated with children's internalizing ($r=.443, p<.001$) and externalizing ($r=.377, p<.001$) behavior problem scores on the CBCL. Social support, as measured by the FSS, was significantly positively related to church attendance ($r=.175, p<.01$). Church attendance was significantly positively related to maternal education ($r=.118, p<.05$) and maternal age ($r=.260, p<.001$), and significantly negatively related to children's externalizing behavior problems ($r=-.186, p<.01$). Maternal age was significantly negatively related to internalizing child behavior problems ($r=-.165, p<.01$) and externalizing child behavior problems ($r=-.183, p<.01$). Maternal education was negatively related to externalizing child behavior problems ($r=-.130, p<.05$). Child sex was negatively related to internalizing behavior problems ($r=-.165, p<.01$), indicating that boys were more likely than girls to display internalizing behavior problems. Finally, there was a strong positive relationship between internalizing and externalizing behavior problems among the study children ($r=.606, p<.001$).

Regression Models

A major objective of this study was to identify factors that may buffer African American preschoolers from the negative effects of living with a depressed mother by examining the moderating potential of social support and church attendance on the relationship between maternal depressive symptoms and children's internalizing and

Table 3

Bivariate Relationships Between Study Variables

Variables	MD	FSS	CA	MA	ME	SC	INT	EXT
Predictors								
Maternal depressive symptoms (MD)	-----							
Social support for childrearing (FSS)	-.070	-----						
Church attendance (CA)	-.218***	.175**	-----					
Maternal age (MA)	-.104	-.029	.260***	-----				
Maternal education (ME)	-.144*	-.005	.118*	.028	-----			
Sex of child (SC)	-.105	.002	-.021	.003	-.093	-----		
Outcomes								
Internalizing behaviors (INT)	.443***	-.005	-.084	-.165**	-.046	-.125*	-----	
Externalizing behaviors (EXT)	.377***	-.059	-.186**	-.183**	-.130*	.061	.606***	-----

¹Child's sex: 0 = boys, 1 = girls

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

externalizing behavior problems. Mother's age, mother's education, and child's sex were selected as control variables because they had been conceptually or empirically linked to child behavior problems in the literature (e.g., Forehand et al., 2002; McGroder, 2000, Wertheimer & Moore, 1998). Multiple linear regression analyses were used to examine the main and interaction effects of the variables.

Table 4 presents the results of a multivariate regression model examining the potential moderation effects for children's internalizing behavior problems. The overall model was significant and explains 22% of the variance in child internalizing behavior problems ($R^2=.22, p<.001$). As indicated in Table 4, neither social support for childrearing nor church attendance moderated the relationship between maternal depressive symptomology and children's internalizing behavior problems. Contrary to the study's hypotheses, the interaction terms were not significant, indicating that the relationship between maternal depressive symptoms and preschoolers' internalizing behavior problems did not vary as a function of mother's social support or church attendance. However, maternal age was found to be a significant predictor of internalizing behavior problems, with younger mothers having children who display more internalizing behavior problems ($p=.02$).

Table 5 presents results of the regression model examining the potential moderation effects for externalizing behavior problems. The model explains 20% of the variance in children's externalizing behavior problems ($R^2=.20, p<.001$). Results support one of the hypothesized relationships depicted in Figure 2 (page 46), providing evidence of moderation of the relationship between maternal depressive symptoms and children's externalizing behavior problems. Specifically, as hypothesized, social support for

childrearing moderated the relationship between maternal depressive symptoms and preschool children's externalizing behavior problems ($p=.01$). Contrary to expectations, there was no evidence of church attendance moderating the relationship between maternal depressive symptomology and Head Start children's externalizing behavior problems. The depression by church attendance interaction term was not significant. However, maternal age was found to be a significant predictor of externalizing behavior problems, with younger mothers having children who display more externalizing behavior problems ($p=.01$).

Table 4

Multiple Regression Analysis Examining Moderators of Children's Internalizing Behavior Problems

Parameter	<i>B</i>	<i>SE</i> ¹	<i>t</i>	<i>p</i>
Intercept	50.98	5.18	9.84	<.001
Maternal depression	0.42	0.13	3.14	0.00
Maternal education	0.04	0.29	0.15	0.88
Maternal age	-0.12	0.05	-2.45	0.02
Child sex	-1.57	0.98	-1.60	0.11
Social support	-0.00	0.07	-0.00	1.00
Church attendance	0.54	0.57	0.94	0.35
Depression x Social support	0.00	0.00	0.10	0.92
Depression x Church attendance	-0.02	0.03	-0.49	0.62

N=305
 $F(8,296) = 10.44, p < .001$
 $R^2 = 0.22$

¹Standard Error

²Child's sex: 0 = boys, 1 = girls

Table 5

Multiple Regression Analysis Examining Moderators of Children's Externalizing Behavior Problems

Parameter	<i>B</i>	<i>SE</i> ¹	<i>t</i>	<i>p</i>
Intercept	62.04	5.39	11.52	<.001
Maternal depression	0.15	0.14	1.10	0.27
Maternal education	-0.44	0.31	-1.44	0.15
Maternal age	-0.13	0.05	-2.53	0.01
Child sex	1.65	1.02	1.62	0.11
Social support	-0.19	0.08	-2.56	0.01
Church attendance	0.51	0.60	0.85	0.39
Depression x Social support	0.01	0.00	2.56	0.01
Depression x Church attendance	-0.05	0.03	-1.61	0.11

N=305

F (8, 296) = 9.18, *p*<.001

*R*² = 0.20

¹Standard Error

²Child's sex: 0 = boys, 1 = girls

Given there were no significant moderation effects for the model with internalizing behavior problems, multiple regression without the interaction terms was used to test for main effects. The overall model, shown in Table 6, was significant with an *R*² of .22, *p*<.001. This model explains 22% of the variance in children's internalizing behavior problems. As expected, maternal depressive symptomology was a significant predictor of internalizing child behavior problems (*p*<.001). Mothers who had higher levels of depressive symptomology had children who exhibited more internalizing

behavior problems. Maternal age was also a significant predictor of internalizing behavior problems, with younger mothers having children who display more internalizing behavior problems ($p=.02$). Social support, church attendance, maternal education, and child sex were not found to be significant predictors of children's internalizing behavior problems.

Table 6

Multiple Regression Analysis Examining Predictors of Children's Internalizing Behavior Problems

Parameter	<i>B</i>	<i>SE</i> ¹	<i>t</i>	<i>p</i>
Maternal depression	0.43	0.05	8.08	0.00
Social support	0.01	0.04	0.16	0.87
Church attendance	0.50	0.35	0.91	0.37
Maternal age	-0.13	0.05	-2.43	0.02
Maternal education	0.01	0.29	0.15	0.88
Child sex ²	-0.08	0.98	-1.60	0.11

N=305
 $F(6, 298) = 13.96, p < .001$
 $R^2 = .22$

¹Standard Error

²Child's sex: 0 = boys, 1 = girls

Given that church attendance was not a significant moderator of the relationship between maternal depressive symptoms and children's externalizing behavior problems, a multiple linear regression analysis was tested that excluded the depression x church attendance interaction term. Results of the regression model are presented in Table 7.

The overall model was significant with an R^2 of .19, $p < .001$. This model explains 19% of

the variance in children’s externalizing behavior problems. Results again provide evidence that social support for childrearing moderated the relationship between maternal depressive symptoms and preschool children’s externalizing behavior problems ($p=.03$). Maternal age was a significant predictor of externalizing behavior problems, with younger mothers having children who display more externalizing behavior problems ($p=.02$). Church attendance, maternal education, and child sex were not found to be significant predictors of children’s externalizing behavior problems.

Table 7

Multiple Regression Analysis Examining Children’s Externalizing Behavior Problems Excluding the Depression x Church Attendance Interaction

Parameter	<i>B</i>	<i>SE</i> ¹	<i>t</i>	<i>p</i>
Intercept	63.25	5.35	11.83	0.00
Maternal depression	0.06	0.13	0.49	0.62
Social support	-0.17	0.07	-2.26	0.02
Church attendance	-0.25	0.36	-0.69	0.49
Maternal age	-0.13	0.05	-2.45	0.02
Maternal education	-0.44	0.31	-1.45	0.15
Child sex ²	1.66	1.02	1.62	0.11
Depression x Social support	0.01	0.00	2.23	0.03

$N=305$

$F(7, 297) = 10.06, p < .001$

$R^2 = .19$

¹Standard Error

²Child’s sex: 0 = boys, 1 = girls

A final multiple linear regression analysis without the interaction terms was conducted for externalizing behavior problems to test for main effects. Results of this

regression model are presented in Table 8. The overall model was significant with an R^2 of .18, $p < .001$. This model explains 18% of the variance in children's externalizing behavior problems. As hypothesized, maternal depression is a significant predictor of externalizing child behavior problems ($p < .001$). Mothers who had higher levels of depressive symptomology had children who exhibited more externalizing problems. Maternal age was also a significant predictor of externalizing behavior problems, with younger mothers having children who display more externalizing behavior problems ($p = .02$). Social support, church attendance, maternal education, and child sex were not found to be significant predictors of children's externalizing behavior problems.

Table 8

Multiple Regression Analysis Examining Predictors of Children's Externalizing Behavior Problems

Parameter	<i>B</i>	<i>SE</i> ¹	<i>t</i>	<i>p</i>
Maternal depression	0.35	0.05	6.36	0.00
Social support	-0.04	0.04	-0.76	0.45
Church attendance	-0.05	0.37	-0.87	0.39
Maternal age	-0.13	0.05	-2.35	0.02
Maternal education	-0.06	0.31	-1.16	0.25
Child sex ²	0.09	1.03	1.60	0.11

$N = 305$

$F(6, 298) = 10.77, p < .001$

$R^2 = .18$

¹Standard Error

²Child's sex: 0 = boys, 1 = girls

Examining the model for externalizing behavior problems in Table 5, it is evident that the impact of maternal depressive symptoms on children's externalizing behavior

problems does vary as a function of social support. The significant interaction indicates that the regression of externalizing behavior problems on maternal depressive symptomology is dependent upon the specific value of social support at which the slope of externalizing behavior problems on maternal depression is measured. Thus, there is a different line for the regression of externalizing behavior problems on maternal depressive symptoms at different values of social support.

Using techniques recommended by Aiken and West (1991), the significant interaction term (maternal depression x social support) was plotted to gain a deeper understanding of this interaction. Three regression equations were plotted, utilizing high, mid-range, and low FSS scores of 50, 30, and 10, respectively. The mid-range score of 30 was chosen because it approximated mothers' mean score ($M=29.3$) on the social support measure. High and low scores of 20 points above and below 30 were selected in order to clearly see the pattern of children's externalizing behavior scores at various levels of social support and maternal depressive symptoms. The regression lines are graphically depicted in Figure 3. As illustrated, the three regression lines intersect when the CES-D score is approximately 20. Moreover, the slope of the regression line for low social support (FSS = 10) is flatter than the slope of the regression line for high social support (FSS = 50). The slope of the regression line for high social support is the steepest of the three lines. In the group of mothers whose CES-D scores are 20 or below, children have fewer externalizing behavior problems when the level of social support is high as compared to lower levels of social support. The pattern appears different when mothers' CES-D scores are greater than 20, indicating extreme depressive

symptomology. In this group, children had more externalizing behavior problems when maternal social support was higher as compared to lower levels of support.

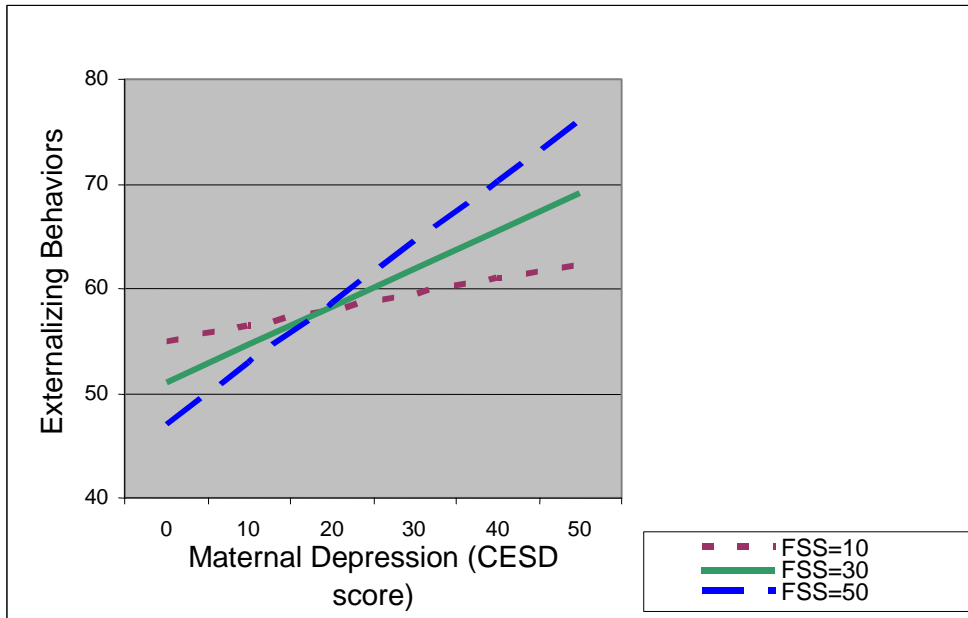


Figure 3. Graphic depiction of moderation effect of social support on relationship between maternal depressive symptoms and child externalizing behavior problems

CHAPTER V: DISCUSSION

The current study utilized an ecological model to examine two potential moderators of the relationship between maternal depressive symptoms and young children's behavior problems in a sample of low-income, urban, African American families. This model focused on three factors that may influence preschool children's behavior: the family level factor of maternal depressive symptomology, and the community level factors of social support for childrearing and maternal church attendance. Specifically, the ecological model adopted in this study examined whether maternal social support in parenting and maternal church attendance might buffer the relationship between maternal depressive symptoms and preschool children's internalizing and externalizing behavioral problems. Maternal social support was defined as the level of assistance that mothers felt they had received from various formal and informal sources in rearing their preschool child within the past six months. Maternal church attendance assessed the frequency of mothers' attendance at religious services or events. Greater maternal social support and more frequent church attendance were expected to reduce the deleterious effects of maternal depressive symptomology on preschoolers' internalizing and externalizing behavior problems.

A large body of literature has documented the deleterious effects of maternal depression on the socioemotional development of children as young as the preschool years (e.g., Alpern & Lyons-Ruth, 1993; Beck, 1999; Brennan et al., 2000; Dawson et al., 2003; Dawson et al., 1999; Field, 1995; Jameson et al., 1997). Yet relatively few studies have focused exclusively on low-income, African American preschoolers, particularly those who are experiencing additional risks associated with residing in violent, urban

neighborhoods. The current study provided a unique opportunity to examine whether two community-level factors would moderate the negative impact of maternal depressive symptoms on the behavior problems of young, economically-disadvantaged African American children.

The current study further contributes to the literature on urban African American families by examining the potential buffering role of two factors that have historically helped to sustain African American families in times of adversity: social support and involvement with the Black church (Billingsley, 1999; Hogan et al., 1990; Jayakody et al., 1993; McAdoo, 1980; Stack, 1974; Taylor & Chatters, 1988). Specifically, the study investigated whether maternal social support for childrearing and church attendance served a protective function for families in poor, inner-city, violent neighborhoods by moderating the relationship between maternal depressive symptoms and preschoolers' internalizing and externalizing behavior problems. However, before addressing the potential buffering effects of maternal social support and church attendance on child behavior, it is important to examine the functioning of mothers and children within this neighborhood context.

Characteristics of Mothers

Ecological models emphasize the need to examine the larger context or ecologies that may influence individual functioning. Therefore, it is vital to have an understanding of the backgrounds of the mothers and children who participated in this study. Mothers/female caregivers were primarily unmarried and averaged 12 years of education, or a high school degree. The average mother gave birth to her first child at age 20, although the range of initial childbearing was from 12 to 42 years of age. Mothers reported an

average of two to three children, including the targeted preschool child. Overall, study participants had demographic characteristics that were similar to those of mothers in other investigations involving low-income, African American women living in urban environments (e.g. Brodsky, 1999; Osofsky et al., 1993; Shahinfar, Fox, & Leavitt, 2000; Wall & Holden, 1994).

Study mothers reported an average of one additional adult living in their home. Previous research has found it common for low-income African American mothers to reside in their household with an additional adult relative or friend, such as a mother, an aunt, or a non-related adult (Bauman & Downs, 2000; Billingsley, 1992; Hofferth, 1984; Hogan et al., 1990; Taylor & Roberts, 1995). Almost one-third of the study mothers were married (16%) or living with a male partner (14%), and approximately 23% of mothers reported that their preschool child's father resided in the same household. Nationally, 35% of African Americans are currently married (McKinnon, 2003), but poor mothers are significantly less likely to marry (Spraggins, 2000). Moreover, 20% of African American children in the U.S. live with their mother and her unmarried partner (U.S. Census Bureau, 2004), as compared to 14% of the children in the current study.

It is notable that two fifths (41%) of the study mothers were working and another fifth (21%) were in school or job training programs. Mothers' work force involvement may, in part, be a consequence of recent welfare reform legislation and its emphasis on transitioning low-income women into the workforce (Secombe, Walters, & James, 1999). It is also interesting that half of the mothers in this study attended church once a month or less, with more than 40% of mothers reporting that they attended church less than once per month. Given that nearly 70% of African Americans are church members

(Billingsley & Caldwell, 1991), the low-income mothers in these urban, high violence neighborhoods appeared to exhibit relatively low rates of church attendance.

Maternal Depression

Although the primary objective of this study was to examine two community level factors that might buffer urban African American preschoolers from the negative effects of maternal depression, it is also important to consider the family level factor of depressive symptomology among study mothers. Findings revealed a high incidence of depressive symptoms among study mothers, with 41% of mothers considered at high risk for clinical depression. High levels of depression have also been found in previous studies of low-income African American mothers. For example, McGroder (2000) found that 47% of the low-income African American mothers with preschool-age children in Atlanta, Georgia had clinical levels of depressive symptomology. In another study conducted with a national sample of low-income African American mothers of three-year old children, 31% of the sample reported high levels of depressive symptomology (Administration for Children and Families, 2003).

Many low-income mothers are currently dealing with the daily stressors of poverty, neighborhood violence, housing instability, and social isolation (Pettersen & Albers, 2001), with the added pressure of being forced to move from welfare to work (Paschall & Hubbard, 1998). The limited education of mothers in the current study (with the average mother holding a high school degree), as well as the lack of high-paying jobs in their communities, appear likely to create both financial and emotional strain. Given these stressors, it is not surprising that many of the economically disadvantaged mothers in this study experienced depressive symptoms and/or psychological distress. The high

incidence of maternal depressive symptomology is troubling given that previous research finds depressed mood to be a central mechanism through which low economic status affects parenting, and thereby contributes to adverse child outcomes (e.g., Conger et al., 1984).

Child Behavior Problems

In addition to documenting a high rate of depressive symptomology among mothers, the current study examined levels of preschool children's internalizing and externalizing behavior problems. The internalizing behavior problems of low-income, African American preschool children in this study were slightly higher, but not statistically different, from those of children in the CBCL standardization sample (Achenbach, 1991). However, both male and female preschoolers in this study exhibited significantly more externalizing behavior problems than standardization sample children (Achenbach, 1991).

The higher rates of externalizing behavior problems exhibited by preschoolers in this study may stem from several factors, including many children's contact with mothers who are experiencing depressive symptomology and other daily stressors, such as unemployment, social isolation, and community violence. When mothers are dealing with multiple pressures, they may engage in coercive, highly-controlling behaviors; criticize and express anger toward children and significant others; and exhibit outbursts of physical aggression (Eamon & Zuehle, 2001). Children may learn to mimic some of these maternal behaviors, exhibiting anger, temper tantrums, bullying, and/or other externalizing behavior problems. Some preschoolers may also engage in impulsive,

aggressive behaviors in an effort to gain attention from preoccupied or unresponsive mothers.

The higher than average level of externalizing behavior problems displayed by preschoolers in this study may also result, in part, from children's residence in violent neighborhoods. Mothers may adopt highly controlling behaviors – insisting on strict obedience to family rules – in order to protect their children from the dangers of random gunshots, gang fights, and other incidents of street violence. Mothers may confine children to small apartments and other indoor housing spaces during their after school hours, limiting children's physical activity, enhancing sibling and peer conflict, and increasing rates of verbal and physical aggression. As noted, 72% of study mothers reported that they heard gunshots in their neighborhoods, and many Head Start teachers kept children inside during the late afternoons when high schools dismissed their students and gang activity increased. Under these conditions, young children may also directly witness aggressive behavior and occasional violent events committed by neighborhood teenagers and adults (Osofsky, 1995).

Current findings revealing more externalizing behavior problems among preschoolers when compared to national norms are consistent with previous studies finding that poor preschoolers exhibit more socioemotional problems than their economically advantaged peers (e.g., Bolger, Patterson, Thompson, & Kupersmidt, 1995; Duncan, Brooks-Gunn, & Klebanov, 1994). However, it should also be noted that the CBCL standardization sample includes low numbers of African American and low-income preschoolers (Achenbach, 1991; Randolph et al., 2000). Additional normative data on the behavior problems of African American preschoolers from diverse

socioeconomic and urban/suburban/rural backgrounds will help researchers to interpret the contributions of ecological factors to child behavior outcomes.

Maternal Depression as a Predictor of Child Behavior Problems

In this study, it was hypothesized that the family level factor, maternal depression, would predict Head Start children's internalizing and externalizing behavior problems. Higher levels of maternal depressive symptoms were expected to predict greater child behavior problems. As expected, mothers with higher levels of depressive symptomology in this study had children with more internalizing and externalizing behavior problems. These findings are consistent with other studies demonstrating a link between maternal depression and child behavior problems among young children (e.g., Bosquet & Egeland, 2001; Downey & Coyne, 1990; NICHD Early Child Care Research Network, 1999; Wall & Holden, 1994; Wright et al., 2000). Current results are also similar to two other studies that find a significant relationship between maternal depression and children's behavior problems in African American families (Forehand et al., 2002; Wall & Holden, 1994).

Findings from the current study which focuses on low-income, African American families add to an existing literature documenting the relationship between maternal depression and child maladjustment in samples that include predominantly White or mixed race parents. Moreover, results provide important information about the relationship between maternal depressive symptoms and the behavior problems of preschool children – a group that was not represented in Downey and Coyne's (1990) integrative review of 24 studies on parental depression and child outcomes. The higher prevalence of internalizing and externalizing behavior problems among preschool

children of poor, African American mothers with higher depressive symptomology provides further evidence that the deleterious effects of maternal depression transcend child age, race/ethnicity, and socioeconomic boundaries.

Potential Moderators of Child Behavior Problems

Moderating Role of Social Support

A major goal of this study was to identify ecological factors that might buffer urban African American preschoolers from the negative effects of maternal depression. One community-level variable that was examined as a potential moderator of the adverse effects of mother's depressive symptoms on children's behavioral problems was social support for childrearing. On average, mothers in the study rated the support they received in parenting their young child from "sometimes" to "generally" helpful (with possible responses ranging from "not at all helpful" to "extremely helpful"). The level of social support for childrearing received by mothers in this study was very similar to that reported by another sample of low-income, predominantly African American mothers of preschoolers who were living in permanent housing in the Baltimore-Washington, DC metropolitan area (Letiecq et al., 1996). Study mothers further reported that there were, on average, two adults living in their household. Such findings are consistent with other studies of African American families and their kin and non-kin networks (e.g., Billingsley, 1992; Hogan et al., 1990; Ooms, 2001; Taylor & Roberts, 1995) which report that low-income African American mothers often "double up" with a relative or friend in their household. Additional adults in the home may provide both emotional and instrumental support to African American mothers of young children.

In this study, it was hypothesized that social support for childrearing would buffer the relationship between maternal depressive symptomology and child behavior problems. As expected, maternal social support was found to moderate the relationship between maternal depressive symptomology and preschoolers' externalizing behavior problems. When the level of social support increased for mothers who did not exhibit extreme depressive symptomology (scores of 20 or below on the CES-D), children had fewer externalizing behavior problems. Social support appeared to attenuate the impact of maternal depressive symptomology on externalizing child behavior problems for almost three quarters (73%) of the families, including those where mothers had CES-D scores considered "clinically significant" for depression (16 or above) but were not in the extreme range (above 20). In contrast, when social support increased for mothers with very severe depression (CES-D scores above 20), children had greater externalizing problems.

Current findings suggest that in urban, low-income families where mothers do not experience extreme depressive symptomology, greater social support in parenting may buffer preschoolers from the adverse affects of maternal depression on preschoolers' externalizing behavior problems. These results are consistent with previous research linking higher social support to more optimal parenting behavior among African American adolescent parents (Stevens, 1988). Greater social support may enhance the quality of parenting, which in turn, reduces the likelihood of externalizing child behavior problems. The young children in this study may have also benefited directly from stronger social support networks. For example, members of the mothers' support network, such as relatives and friends, may have provided children with emotional

support and cognitive stimulation by taking them to neighborhood, church, school, and cultural activities (e.g., museums, plays, musical performances). Such adult involvement in preschoolers' lives may have reduced impulsive, attention-seeking, externalizing behaviors or the aggressive behaviors that may stem from children's frequent confinement to their apartments/homes in dangerous neighborhoods.

A review of previous research on school readiness has also found that emotional support by alternate caregivers can be a protective factor contributing to healthy socioemotional development and successful transition to kindergarten (Huffman et al., 2000). Conversely, the demands of raising children with little childrearing support may contribute to negative cognitive and socioemotional outcomes for preschool children (Baumrind, 1967; Coolahan, 1997; Robinson et al., 1995). In a study of children ages 4 to 15 from diverse racial/ethnic groups, Murphy et al. (1998) found that when families do not have sufficient social support, children are at greater risk of psychosocial dysfunction (Murphy et al., 1998). Findings from the current study suggest that greater social support, including the availability of alternate caregivers to actively assist with parenting, may reduce the prevalence of externalizing child behavior problems when mothers do not exhibit high depressive symptomology.

In the current study, when social support for childrearing increased for mothers with very severe depressive symptoms, children had greater externalizing problems. At these very high levels of maternal depressive symptomology (exhibited by approximately one quarter of study mothers), there may be a different etiology for the externalizing behavior problems of preschoolers (e.g., genetic, biological factors) than for children whose mothers exhibit less extreme levels of depressive symptomology. In families

where mothers were exhibiting extreme depressive symptomology, family members may have actively engaged professional support persons (e.g., doctors, social workers) or other relatives to help depressed mothers care for children with externalizing problems.

Contrary to expectations, social support for childrearing did not moderate the relationship between maternal depressive symptomology and preschoolers' internalizing behavior problems. The availability of greater social support in parenting to low-income mothers with varying levels of depressive symptoms did not reduce the impact of maternal depressive symptoms on preschool children's internalizing behavior problems.

There is currently a paucity of previous research examining the potential for social support to buffer the negative effects of maternal depression on young children's socioemotional development, and particularly their internalizing behavior problems. It is notable that internalizing problems among preschool-age children are often underreported in both teacher and parent reports (Fantuzzo, Bulotsky, McDermott, Mosca, & Lutz, 2003; Love, 1999). Child internalizing problems such as anxiety, fearfulness and withdrawal, are generally less disruptive than aggressive, impulsive externalizing behaviors and often go unrecognized. Unlike externalizing problems in the current study (which exceeded national norms), the internalizing problems of preschoolers in this study did not differ from those in the national standardization sample. The similarity in the frequency of internalizing problems among children in this study and those in the standardization sample, despite the current sample's residence in violent, low-income neighborhoods, may reflect mothers' provision of warmth and nurturance to their preschoolers. These younger children may be protected from some of the adverse effects of their environment by this maternal nurturance and children's participation in the Head

Start program. The low-income mothers in this study may have been more effective in conveying a warm, caring attitude toward their children than they were in controlling their behavior; hence children's externalizing problems may have exceeded those of the normative sample while the children's internalizing problems did not differ significantly from national norms.

The failure for social support in childrearing to buffer the impact of maternal depressive symptoms on children's internalizing behaviors in this study may result in part, from the fact that these problems are less visible or interfere less with family functioning than externalizing behavior problems, and also garner less attention from members of mothers' social support networks. Internalizing problems may be more difficult for friends, extended family, and other adult professionals to detect, report, and address than externalizing, "acting out" behaviors, which can be handled with techniques such as isolating a child (e.g., "time out") or removing a privilege. Moreover, social network members may not feel adequately equipped to assist preschoolers in dealing with internalizing problems, such as the anxiety and withdrawal that often follow exposure to a traumatic event (e.g., witnessing community or domestic violence). Extended family members and friends may recognize that such problems often require professional assistance and considerable time to overcome. Therefore, members of the mother's informal social support network may relinquish responsibility for dealing with children's internalizing problems to the mother, teachers, or other professionals. Network members may encourage mothers, for example, to obtain counseling for children experiencing severe anxiety or trauma from Head Start mental health workers or pediatricians. Thus, increased social support may not have reduced the negative impact of maternal

depressive symptoms on preschoolers' internalizing behavior problems because of the limited visibility and intrusiveness of such problems, and social network members' hesitancy or inability to effectively intervene in helping children handle internalizing problems.

Potential Moderating Role of Church Attendance

A second community-level variable, church attendance, was also examined as a potential buffer of the deleterious consequences of having a depressed mother on young children's behavior. Notably, half of the mothers in this study attended church once a month or less. Only a third of the study mothers reported high rates of church attendance, attending services and events weekly or more often. One study examining church attendance in inner-city neighborhoods obtained similar results, and found that family structure was a significant predictor of church attendance (Alex-Assenoh & Assenoh, 2001). In particular, African Americans involved in never-married families were significantly less likely to attend church on a weekly basis than their counterparts in either current or previously married families.

Contrary to one of the study's hypotheses, church attendance was not found to be a significant moderator of the relationship between maternal depressive symptomology and children's internalizing or externalizing behavior problems. The failure of church attendance to buffer the relationship between maternal depressive symptoms and preschoolers' behavior problems may stem from a variety of factors. First, the vast majority of mothers attended church on less than a weekly basis, minimizing its potential positive impact on their own and their children's behavior. Although previous research suggests that the Black church has historically contributed to the resilience of low-income

African American families (Starling, 1999), mothers may need to attend church regularly in order to obtain such benefits as the sense of communalism, spirituality, and social support (Blank et al., 2000). Higher levels of attendance may help mothers to alleviate stressors associated with financial problems, social isolation, and limited employment, as well as fears stemming from community violence.

Mother's attendance at church services in the current study may have been influenced by several factors. First, there was a strong negative relationship between depressive symptoms and church attendance in the present study, which may result from depressed mothers' lower levels of energy and physical activity (APA, 1994; Wessel & Xtria, 2000). Secondly, mothers may feel excluded from the churches located in their neighborhoods, as many congregants of these long-established institutions drive in from the suburbs and no longer reside in the church neighborhood. Under these conditions, the local Black churches may focus more on the needs of these more affluent members than the local, poor residents. Low-income mothers facing multiple stressors may not feel welcomed by ministers or congregations in their immediate neighborhood. Studies have found that some Black churches are reluctant to address sensitive social issues, such as sexuality and AIDS prevention (Randolph, Billingsley, & Caldwell, 1994), and therefore poor mothers may find they offer less support for their families. Finally, mothers' social isolation in the neighborhood may lessen their likelihood of attending church.

When considering the church attendance of study mothers, it is also important to note that low-income mothers may engage in other types of religious or spiritual activity. Study participants may have practiced their religious beliefs outside of the church through involvement in prayer, reading religious materials, and accessing services and

sermons through the media, such as radio and television. Previous research has indicated that these private practices of religious expression are common among African Americans (Chatters, Taylor, & Lincoln, 1999).

Given the varying forms of religious expression likely practiced by the mothers in the current study, church attendance may not serve as an appropriate proxy for religiosity or spirituality. Additionally, prior research has found these constructs to be difficult to measure. Studies attempting to measure religiosity have defined it as both a behavioral and an attitudinal measure (e.g., Jang & Johnson, 2001; Johnson, Jang, et al., 2000). Both attendance at religious events/services and self-reported religious commitment/conviction form the construct of religiosity. In some of the literature, the terms religiosity and spirituality are used interchangeably. However, some individuals consider themselves spiritual, but not religious. Spirituality can be defined as an individual's sense of purpose, peace, and connection to other people, as well as one's personal beliefs about the meaning of life (National Cancer Institute, 2003). In contrast, religiosity has been defined as an individual's commitment to his/her religion and its teachings such that it is reflected in personal attitudes and behaviors (Johnson, Jang, et al., 2000). There is a dearth of investigations measuring the religiosity and spirituality of poor African American women, although such research might shed light on how these belief systems help to protect mothers and children from the deleterious effects of mental health problems and neighborhood stressors.

In summary, mother's church attendance was not a significant buffer of preschool children's internalizing and externalizing behavior problems. Feelings of estrangement from local churches in their neighborhoods and maternal depression may limit how often

mothers attend religious services, with low attendance potentially minimizing the beneficial influence. Moreover, simply measuring the frequency of church attendance may not accurately assess a mother's actual practice of her faith.

Summary

This study utilized an ecological approach to examine the potential of social support for childrearing and church attendance to moderate the relationship between maternal depressive symptomology and preschoolers' behavior problems in a sample of African American families residing in violent, urban neighborhoods. Participating mothers exhibited a high level of depressive symptoms, and these symptoms were predictive of both internalizing and externalizing behavior problems among Head Start children. As hypothesized, social support in parenting moderated the relationship between maternal depressive symptoms and preschool children's externalizing behavior problems. Specifically, the relationship between maternal depressive symptoms and children's externalizing behavior problems weakened as maternal social support increased in the group of mothers who did not exhibit extreme depressive symptomology. Social support for childrearing did not, however, have a buffering effect on preschoolers' internalizing behavior problems. Finally, contrary to the study's hypotheses, church attendance did not moderate the relationship between maternal depressive symptoms and Head Start children's internalizing or externalizing behavior problems.

Study Limitations

Although the current study extends existing literature by examining factors that may buffer the impact of maternal depression on the behavior of urban, low-income African American children, the research has several limitations. First, this study is a

secondary data analysis. Therefore, the researcher was limited to using data that had been collected in the original study and was unable to add new measures, such as additional instruments or items assessing mothers' religiosity. Secondly, the study is cross-sectional and therefore, the reader cannot infer causation in the detected relationships. Thirdly, the study used mothers as the sole reporters on their children's behaviors, suggesting the potential for bias in maternal reports. It is possible, for example, that depressed mothers perceived their preschoolers' behaviors as extremely problematic due to their own depressive symptoms. Although one study suggests that depressed mothers may overreport child behavior problems (Fergusson, Lynskey, & Horwood, 1993), Richters (1992) did not find sufficient evidence for such bias in 17 previous studies of maternal depression and child behavior.

There were additional threats to the internal validity of this study that may have affected the results. It should be noted that all of the participants were African American, but only half of the interviewers were African American and half were Caucasian. Some of the mothers may have been less comfortable with Caucasian interviewers, influencing their responses to particular study items. However, analyses of study data revealed no race of interviewer effects.

Another threat to internal validity relates to participants' reactivity to the study context. All study data were collected through verbal interviews, so some mothers may have given socially-desirable responses to selected items, such as their church attendance, despite being informed that their answers would be kept confidential. Thus, church attendance may have been even lower than mothers reported to the project interviewers.

Participants may have responded differently if they were given anonymous, written questionnaires.

One likely methodological limitation of the study was the measurement of the moderating variable, church attendance. As previously noted, in this study church attendance was measured by the frequency of the mother attending church services or events. The item included no information about a time period, so mothers could have responded based on their activity in the last month, year, or some other time span. No information was solicited about whether the target child attended church with the mother. Moreover, mothers were not asked about their interactions with church members and leaders, nor their participation in church groups/activities. The researchers also failed to ask mothers whether they took advantage of church services that may have been offered, such as food banks, support groups, or benevolence funds. Mothers' level of engagement, interaction, and feelings of acceptance by church members and services may be a better way to examine the church's influence on mothers than simply asking about the number of times they attended church. Moreover, as noted earlier, additional measures of religiosity and spirituality may be necessary to examine how parental practice of one's faith affects preschool children's development.

There were also potential threats to the external validity of the study. First, the sample was not random. Participants not only chose to participate in the study, but also to enroll their child in a Head Start program, demonstrating a commitment to early childhood education. Therefore, the findings may not be generalizable to all low-income, urban African American mothers of preschool children, including those residing in violent communities. Current findings may also fail to generalize to African American

mothers from other socioeconomic groups, or to urban Head Start families from other ethnic backgrounds. As noted, this study was conducted with families who lived in urban communities characterized by high levels of violence. Findings may not generalize to low-income African American families who live in rural communities or urban communities with lower levels of violent crime, regardless of whether families have children in Head Start.

Programmatic and Policy Implications

Despite several limitations, results of the current study have important implications for educators and other family practitioners interested in reducing the negative effects of maternal depression on young children's behavior problems.

These findings are important given the many challenges that African American mothers and children confront in low-income, urban neighborhoods characterized by high levels of community violence.

First, the study revealed that poor, urban African American mothers had a high rate of maternal depression, with 41% of mothers exhibiting depressive symptomology. Moreover, findings revealed that maternal depressive symptomology was a significant predictor of both internalizing and externalizing behavior problems among the mothers' preschool children. Thus, there is a clear need for interventions to improve urban, low-income mothers' mental health. Head Start staff and other family professionals working with low-income mothers should receive training in how to identify the symptoms of depression, and be prepared to refer mothers to Head Start mental health professionals and other community-based mental health programs.

Mothers with high levels of depressive symptomology may benefit from therapy, family support groups, and respite child care. The Black church and faith-based institutions may also be a source of alternative mental health care (Blank et al., 2002). Such institutions could provide, for example, various types of mental health services, including individual counseling, family counseling, group therapy, and support groups. Efforts to increase access to mental health services are especially important in violent urban communities, where both the current study and previous investigations have found higher than average rates of maternal depression, fear, anger, and anxiety (Garbarino et al., 1991; Osofsky et al., 1993). Materials advertising the availability of family mental health services should be widely available at places where low-income mothers are likely to gather, such as Head Start centers, job training programs, neighborhood public schools, and social service agencies where clients obtain WIC checks, food stamps, TANF, and other public assistance. Mental health professionals may provide an important source of formal support as families attempt to deal with a variety of psychological and economic stressors, and to raise children in neighborhoods where safety is a major concern.

Second, the preschool children in this study were found to exhibit higher than average rates of socioemotional problems, exhibiting significantly more externalizing behavior problems than children in a national standardization sample. These findings suggest a need for educators and family practitioners to provide Head Start staff and parents with training in how to reduce the externalizing problems of children in stressful urban environments. Interventions should prepare mothers and teachers to handle problems such as child anger and aggression with the techniques of time out, behavioral contracts, loss of privileges, effective limit setting, management of sibling rivalry, and

appropriate monitoring of child behavior. Efforts should also be made to educate significant adults about techniques that build positive social skills and nurture young children's social competence and self esteem, such as praise, consistent attention, "catching the child being good," positive behavior incentive charts, and positive parent-child communication. Educating mothers and caregivers about effective parenting techniques appears especially important in ecological environments where children have restricted access to outdoor play due to safety concerns. Interventions may require that professionals be available to work with the most troubled, out-of-control children on an individual basis. Moreover, mental health professionals can help parents and Head Start staff to better understand mental health issues and can encourage parents to participate in mental health services provided to their children.

One of the major findings of this study was that greater availability of maternal social support for childrearing helped to shield preschoolers from the adverse effects of maternal depression on externalizing child behavior problems when mothers did not exhibit extreme depressive symptomology. This outcome emphasizes the need to build stronger informal and formal support networks for low-income mothers, especially in violent neighborhoods where families are coping with social isolation and psychological distress. Given the relatively high levels of maternal depressive symptoms found in this community sample, the provision of social support in parenting can be a major focus of intervention programs aimed at reducing children's externalizing behavior problems. This strategy is specifically promising for mothers and female caregivers who do not exhibit severe depression, a group that comprised approximately three quarters of the current sample. It should be noted that mothers with more extreme levels of depressive

symptomology (scores above 20 on the CES-D) may need different, more intensive interventions, such as clinical treatment and ongoing individual and/or family therapy.

Individuals working with families in low-income, violent communities should be educated about how social support networks may help to buffer many preschool children from the deleterious impact of maternal depressive symptoms on externalizing behavior problems. Specifically, early childhood and Head Start staff should receive training in how to build informal support networks and nurture friendships among the parents of children enrolled in their programs, especially in violent neighborhoods where mothers often fear getting involved in community life (Jarrett & Jefferson, 2004).

Based on the priorities set by Head Start regarding mental health and parental involvement (Yoshikawa & Knitzer, 1997), there are several strategies that Head Start professionals can pursue. First, Head Start home visitors can help families to identify “building personal support networks” as a goal in their Family Partnership Agreement. Secondly, as Head Start seeks to increase parental involvement, teachers may help mothers build friendships and mutual supports with fellow parents, through classroom volunteer work, attendance at center workshops, and participation in parents’ meetings that address childrearing strategies, coping with neighborhood problems (e.g., violence), and involvement in community programs (e.g., church, neighborhood watch). Such activities may help mothers to feel less isolated in their communities and may reduce feelings of helplessness and depression.

Current results also emphasize the need for Head Start staff and other family practitioners to educate families about the availability of formal support services within their communities. Family practitioners should inform parents about the various

institutions that may assist their families, such as mental health/social service organizations, churches/mosques/synagogues, health care agencies, and family life education programs. Head Start staff should make special efforts to connect families with resources within their own neighborhoods, such as local churches, food banks, law enforcement agencies, health centers, libraries, and community groups. African American families in poverty have traditionally drawn on supports, such as the Black church, to sustain their families (Stack, 1974). Reestablishing such relationships may empower African American mothers to obtain social support and beneficial services for their children and families, and contribute to a reduction in young children's externalizing behavior problems. These efforts are consistent with Head Start's social services component that seeks to assist families in identifying and accessing community resources and services (Yoshikawa & Knitzer, 1997).

It should be noted that low-income African American families often do not receive the support services that they need (Bennett, 2002; Letiecq et al., 1996; Randolph et al., 1996). This issue may be exacerbated for families living in communities plagued by high levels of violence, as neighborhood disorder may prevent residents from relying on one another for support (Jarrett & Jefferson, 2004). Neighborhood violence may enhance feelings of isolation among mothers of young children, as well as access to more formal sources of support. Thus, from an ecological perspective, current findings underscore the need to assist mothers in building informal and formal support networks that may provide emotional and instrumental support, and help to protect mothers and preschoolers from the harmful effects of maternal depression and social isolation.

Although church attendance did not buffer the impact of depressive symptoms on child behavior problems in the current study, the Black church may be a good site to build social support groups and other outreach initiatives. Studies of programs implemented in churches have shown promising results with respect to engendering a sense of general well-being and building formal and informal social supports (Blank et al., 2000). Moreover, Black churches are increasingly implementing and adapting services to meet the needs of the communities they serve (Williams & Dixie, 2003). In the current study, it is notable that more than 40% of mothers attended church less than once a month. Given the relatively low levels of church attendance among low-income, predominantly-single study mothers, practitioners should strive to reconnect these families with the Black church, a traditional source of strength for poor, African American families (Billingsley, 1999). Efforts should be made to engage ministers and their congregations in addressing the social, educational, economic, and health needs of these lower-income families, which are often headed by single mothers. Practitioners should also recognize that an increasing number of younger African Americans are practicing religions other than those traditionally found in the Black (Christian) Church. For example, an increasing number of African Americans are turning to the Islam religion, the fastest growing religion in the world (Williams & Dixie, 2003). African Americans are also exploring and practicing other Eastern faith traditions, including Hinduism and Buddhism (Williams & Dixie, 2003). Thus, efforts to enhance the supports and mental health services available to low-income African American mothers should be provided at a broad range of institutions of faith.

Finally, the current study suggests that Head Start staff and other child/family professionals should consider the background characteristics of families and characteristics of their neighborhoods in developing prevention and intervention programs (Bronfenbrenner, 1986; Buboltz & Sontag, 1993). For example, this study revealed that although the majority of African American mothers were single, most had a mother or other relative living in their home. Given that greater social support in parenting was found to buffer some of the detrimental effects of maternal depressive symptomology on children's behaviors, practitioners should attempt to assess the extent to which additional adults in the home provide support or additional sources of stress. As sources of support, additional adults in the home may be included in workshops and/or sessions with mental health professionals to enable them to support the healthy socioemotional development of children. Gaining the support of adults who share residence with mothers and preschoolers may help buffer some of the stressors experienced by mothers of young children. Program designers should also evaluate mothers' access to church and to potential support networks in urban neighborhoods characterized by high levels of violence.

Intervention programs that build on cultural values and strengths may be most effective in overcoming maternal and child problems, as well as combating the families' sense of social isolation. For example, recognizing the historical role of extended family and spirituality in the lives of African Americans should be a central component of any interventions targeted to this population. Moreover, partnerships with community leaders and key stakeholders should be forged to ensure the cultural relevance and feasibility of any planned interventions.

In summary, given the current limited funding for educational and social service interventions, programmatic and policy recommendations should focus on three main issues. First, at the community-level, education should be provided to early childhood educators and other family practitioners regarding maternal depression, child mental health problems (especially externalizing behavior problems), and the importance of social support in helping to offset the negative effects of maternal depression on young children. Second, at the family-level, efforts should be made to foster and build mothers'/female caregivers' social support networks, including the informal support of family, friends, and other Head Start parents, and the more formal support provided by churches, educators, and health/mental health agencies. Finally, at an individual level, mothers and preschool children with socioemotional problems should receive individual counseling and other assistance (e.g., respite child care) from mental health professionals, early childhood educators, parenting specialists, and church and faith-based organizations. Such endeavors are plausible, promising, and likely to prove both effective and cost-efficient.

Directions for Future Research

The current findings present important information about the potential for maternal social support and church attendance to reduce the impact of maternal depression on preschoolers' behavior problems. However, this study also highlights the need for future research. First, more information is needed about the depression of low-income, African American mothers of preschoolers in violent communities. Efforts should be made to identify factors that enhance and/or ameliorate the prevalence of psychological distress among such mothers, as both the current study and previous

research illustrate disproportionately high rates of maternal depressive symptomology among this group. Among the variables that might be addressed are exposure to community violence, partner/family conflict, maternal education, physical health, and employment status. Future studies examining the relationship between maternal depression and child behavior problems should also employ additional measures of child behavior beyond maternal reports, such as teacher reports and naturalistic observations of child behavior.

Secondly, current findings indicate a need for more information about the extent to which particular types of social support are able to buffer the negative effects of maternal depression on specific child behavior problems. For example, it would be interesting to determine whether the provision of high emotional support to families has the potential to reduce internalizing problems among preschoolers with a depressed mother. Studies might also explore whether instrumental social support to families reduces the externalizing and/or internalizing behavior problems of children whose mothers are experiencing psychological distress. Future studies might also attempt to evaluate the direct impact of social support on preschool children's behavior problems by measuring, for example, the time that network members spend with preschool children.

Given strong kinship relations in African American families (Stack, 1964; Taylor & Roberts, 1995), future research should explore support from important members of mothers' kin networks, including the father of her child(ren). Fathers and father figures of preschool children may be important sources of support, but also potential sources of conflict (Murry, Bynum, Brody, Willert, & Stephens, 2001; Nitz, Ketterlinus, & Brandt, 1995). In some low-income families, fathers may compete with children for the mother's

time and attention, which negatively affects mother-child relationships and may contribute to child behavior problems (Murry et al., 2001).

Future studies might assess the potential for fathers and other members of mothers' support networks to reduce the impact of maternal depression on young children's behavior. Studies might attempt to isolate support from informal sources, such as fathers, male partners, grandmothers, and friends, and formal support persons, such as early childhood educators and doctors/mental health professionals. As noted, prior research on African American single mothers has shown that other adults living in the home may be a source of support and a source of stress (Brodsky, 1999). Such stress may negatively influence the mother's psychological resources, as well as her children's socioemotional development. Thus, it is important to examine the nature and amount of support provided by various categories of individuals within the mothers' formal and informal support networks.

In investigating factors that may buffer the impact of maternal depression on child behavior problems, future studies should measure other aspects of mothers' religiosity. In addition to focusing on church attendance, as in the current study, researchers should attempt to assess self-rated religiousness, private religious practices (e.g., prayer, listening to services on the radio/TV), and spirituality. Evaluations of church attendance should specify a specific time period and examine the nature of mothers' involvement with the church. Specifically, items should assess participation in religious services, choir and church activities, use of church counseling and other church assistance (e.g., food and clothing banks). Future research should also examine barriers and incentives to low-income mothers' church attendance, including the extent to which church leaders and

congregations provide a welcoming environment and address the needs of economically disadvantaged families. Such efforts may help to disentangle aspects of mothers' religiosity and determine which elements have the potential to protect mothers and children from the adverse consequences of maternal depression.

In the current study, previous research was used to identify potential moderators of child behavior outcomes. However, there is clearly a need to examine other ecological factors that may have been omitted from this study. In particular, there is a need to identify additional variables that may moderate the influence of maternal depression on young children's internalizing behavior problems. Studies might examine, for example, the role of children's involvement in early childhood programs or their contact with mental health professionals in buffering the impact of maternal depression on preschoolers' internalizing problems.

Finally, future studies should explore the relationship between maternal depression, parenting practices, and child outcomes for African American families residing in violent neighborhoods. Previous studies have identified depression as a central mechanism through which poverty affects parenting practices, and thereby contributes to adverse child outcomes (e.g., Conger et al., 1984). Future research should examine the mediating and moderating potential of parenting on the relationship between maternal depression and preschoolers' socioemotional development in poor urban communities, including those with high neighborhood violence.

Conclusion

The major purpose of this study was to examine the potential for maternal social support for childrearing and church attendance to moderate the relationship between

maternal depressive symptomology and preschoolers' behavior problems in a sample of African American families in violent neighborhoods. Participating mothers exhibited a high level of depressive symptoms, and these symptoms were predictive of internalizing and externalizing behavior problems among their preschool children. Findings revealed that maternal social support had a buffering effect on preschoolers' externalizing problems when mothers did not exhibit extreme levels of depressive symptomology. Under the latter conditions, the relationship between maternal depressive symptoms and children's externalizing behavior problems was weakened as maternal social support increased. Maternal church attendance failed to attenuate the relationship between maternal depressive symptoms and child behavior problems in the current study.

Current findings underscore the need for Head Start and other family professionals to develop culturally-sensitive strategies for increasing social support among low-income, urban African American mothers of preschoolers. Such interventions may benefit the majority of families with young children in these neighborhoods (whose mothers do not exhibit extreme depressive symptoms) in helping to reduce the aggressive, externalizing behavior problems that seriously jeopardize young children's ability to establish positive peer relationships and succeed in school (Blair, 2001; Fantuzzo et al., 2003; Huffman et al., 2000). This study also emphasizes the importance of future research designed to identify other protective factors/processes that may decrease the impact of maternal depression on children's internalizing behavior problems, such as fear and anxiety. Researchers should examine, for example, a wider range of beliefs and behaviors that characterize mothers' religiosity and spirituality. Taken together, such efforts will insure that practitioners and policymakers are better

equipped to meet the mental health needs of this vulnerable population of mothers and children residing in poor, urban communities characterized by high levels of violent crime.

Appendix A: Demographic Items

FAMILY INFORMATION

- ___ 1. What is your name? _____ 1b. Relationship to child _____
- ___ 2. What is your child's name? _____
- ___ 3. Is (child) a girl or boy? Sex: 1. Boy 2. Girl
- ___ 4. What is your child's Date of Birth? ___/___/___ Age/mos: _____
- ___ 5. When did (child) begin attending Head Start? mo/yr ___/___

NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT YOU.

- ___ 6. AGE: How old are you? (years) _____
- ___ 7. MARITAL STATUS: Are you... [elicit response without reading categories]
(circle one)
1. Single 2. Single, living with partner 3. Married, living with spouse
4. Married, not living with spouse 5. Separated 6. Divorced 7. Widowed
8. Other (specify) _____
- ___ 8. RACIAL/CULTURAL GROUP: What do you consider to be your cultural or
ethnic background (circle one)
1. Black 2. Hispanic 3. White 4. Asian 5. Other (specify) _____
- ___ 9. EDUCATION: What is the highest grade you completed in school?
(circle one)
Grades High School College
1-8 9 10 11 12 GED 13 14 15 16 17+
- ___ 10. OCCUPATION: Are you presently working at a job for money
1. Yes 0. No

(If yes) What is your current job? _____

(If yes) How many hours per week do you work? _____
- ___ 11. How many of the last 12 months did you work? _____
- ___ 12. SCHOOL/JOB TRAINING: Are you currently going to school or attending a
job training program? 1. Yes 0. No

- ___ 13. RELIGION: How often do you attend church services or events? (don't read options)
 1. More than once a week 2. Weekly 3. Twice a month 4. Once a month
 5. Less than once a month

NOW I'D LIKE TO ASK YOU SOME QUESTIONS ABOUT YOUR CHILD/REN.

- ___ 14. How old were you when you had your first child? _____
- ___ 15. How many children do you have? _____
- ___ 16. How many are older than (Head Start child)? _____
- ___ 17. How many are living with you now? _____

NOW, I HAVE A FEW QUESTIONS ABOUT (CHILD'S) FATHER.

- ___ 18. Does _____'s (name of child) father live in the same household with you?
 Yes 0. No
- ___ 19. Can you tell me the highest school grade that (child's) father completed?
 Highest grade completed (circle one):

Grades	High School	College	Don't Know
1-8	9 10 11 12 GED	13 14 15 16 17+	DK
- ___ 20. Is (child's) father presently working at a job for money?
 1. Yes 0. No 2. Don't Know
 ___ (If yes) What is his current job? _____
- ___ 21. How often does (child) see his/her father? Would you say...
 1. Rarely or never 2. Several times a year 3. Several times a month
 4. Several times a week 5. Every day
- ___ 22. Is there someone else who is like a father to (child)?
 0. No (Go to #23) 1. Yes (If yes), who is this person? Is he...
 ___ 1. Your spouse or partner
 ___ 2. A male relative of the child who lives in the household
 ___ 3. A male relative of the child who doesn't live in the household
 ___ 4. A friend of the family who lives in the household
 ___ 5. A friend of the family who doesn't live in the household

NOW I WANT TO ASK YOU ABOUT WHO YOU LIVE WITH.

- ___ 23. Do you currently live with your mother, father, or grandmother?
1. Yes (Go to 25) 0. No
- ___ Which one(s)? 1.Mother only 2. Father only 3. Both parents 4.Grandmother
- ___ 24. How far away (miles) does your mother live from you? ____ miles.
- ___ 25. Including yourself, how many adults age 18 and older live in your household?

- ___ 26. Including (child), how many children age 17 and younger live in your household? _____
- ___ 27. (Interviewer:) Total adults and children in residence.

Appendix B: Center for Epidemiological Studies
Depression Scale (CES-D)

This next set of questions deals with some of your own feelings over the past week. Please look at the card in front of you. I'll read a statement about a feeling such as being happy or lonely, and you tell me how often you felt this way in the past week.

The card shows possible answers such as

0	1	2	3
Rarely or none of the time (Less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

Some of the things I ask you may sound the same. Let's try one.

[Interviewer: write in number which corresponds to answer]

DURING THE PAST WEEK, HOW OFTEN...

- ___ 1. Were you bothered by things that don't usually bother you?
- ___ 2. Did you not feel like eating; your appetite was poor?
- ___ 3. Did you feel that you could not shake off the blues even with help from your family or friends?
- ___ 4. Did you feel that you were just as good as other people? (Reverse)
- ___ 5. Did you have trouble keeping your mind on what you were doing?
- ___ 6. Did you feel depressed?
- ___ 7. Did you feel that everything you did was an effort?
- ___ 8. Did you feel hopeful about the future? (Reverse)
- ___ 9. Did you think your life had been a failure?
- ___ 10. Did you feel fearful?
- ___ 11. Was your sleep restless?
- ___ 12. Were you happy? (Reverse)
- ___ 13. Did you talk less than usual?
- ___ 14. Did you feel lonely?
- ___ 15. Were people unfriendly?
- ___ 16. Did you enjoy life? (Reverse)
- ___ 17. Did you have crying spells?

- ___ 18. Did you feel sad?
- ___ 19. Did you feel that people disliked you?
- ___ 20. Could you not “get going”?

Source: Radloff, L. (1977).

Appendix C: Family Support Scale (FSS)

Now I'd like to talk with you about some of the people who may have helped you in raising your children. Please look at the card in front of you. I'd like to ask you how helpful some specific people are, like your parents or members of your church, in raising your family.

The alternatives are:

4	3	2	1	0	"N/A"
Extremely helpful	Very helpful	Generally helpful	Sometimes helpful	Not at all helpful	Not applicable (Doesn't apply)

Please think about the last 3 to 6 months. As I read the name of each person or group, I'd like you to tell me how helpful they've been to your family.

In the last 3-6 months, how helpful was each in raising your child?

- _____ 1. Your parents
- _____ 2. Your relatives/kin
- _____ 3. Your friends
- _____ 4. Your partner or husband
- _____ 5. Your husband's/partner's parents
- _____ 6. Your husband's/partner's relatives/kin
- _____ 7. Your husband's/partner's friends
- _____ 8. Your own children
- _____ 9. Other parents
- _____ 10. Co-workers
- _____ 11. Head Start parent groups or other parent groups
- _____ 12. Social groups/clubs

- _____ 13. Church members/minister
- _____ 14. Your family's or child's doctor(s)
- _____ 15. Professional helpers like social workers, therapists, teachers, etc.
- _____ 16. Professional agencies like social services, public health or
mental health agencies
- _____ 17. Your child's Head Start program
- _____ 18. Other school/day care center
- _____ 19. Other person or group (Specify: _____)

Source: Dunst, C., Jenkins, V., & Trivette, C. (1984).

Appendix D: Consent Form

Introduction of Consent Form (Parent)

Role of Neighborhood and School in Young Children's Development

We are from the Department of Family Studies at the University of Maryland, and we are doing a study of families with children in Head Start or other preschool programs in Maryland and Washington, DC. The study has three phases. The purpose of the first two phases is to learn more about the development of your preschool child and how your neighborhood affects the way you parent your child. After we learn more about the strategies you use to protect your children from some of the things – such as violence – that may occur in your neighborhood, we plan to develop an intervention program. Now, if you would like to participate in the study, please read and sign the attached form. Parents who participate in the study will receive payment for their time.

Address questions or comments to:

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Associate Professor
Dept. of Family Studies
Room 1204 Marie Mount Hall
University of Maryland
(301) 405-4012

Dr. Debra Roberts
Research Associate
Dept. of Family Studies
Room 1204 Marie Mount Hall
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(301) 405-4002

Consent Form (Parent)
Role of Neighborhood and School in Young Children's Development

I understand that I will be interviewed for about an hour and a half. During this interview, I will be asked about my background, my child, my neighborhood, and the ways I raise my child. I may be asked to participate in a small group discussion on another occasion. I also give my permission for my child's teacher to answer written questions about his/her development and for my child to complete assessment activities in a half-hour session with one of the researchers.

All information collected and reported in the study is confidential, and my name will not be identified at any time. Instead, the information will be identified using code numbers which will be logged and kept in a locked file cabinet. Only the researchers will know the code for each participant. I understand that there are no personal risks associated with participating in this study. However, the researchers are obligated to report signs of child abuse to the Head Start staff for referral to the appropriate authorities.

I understand that the study is not designed to help me personally, but that the investigator hopes to learn more about the role of neighborhood and school on young children's development. I understand that I will be paid a small monetary stipend for my family's participation in the study; however, I am free to ask questions or to withdraw from participation at any time without penalty.

I state that I have read the above, I am over 18 years of age, and wish to participate in a program of research being conducted by Dr. Suzanne Randolph and Dr. Sally Koblinsky at the University of Maryland, College Park, Department of Family Studies.

Signature (Interviewer)

(Date)

Name of Subject (please print)

(Date)

Signature (Interviewer)

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