

ABSTRACT

Title of Dissertation: THE ROLE OF PARENTING ATTITUDES,
DEPRESSIVE SYMPTOMS, MATERNAL
EDUCATION, AND SOCIAL SUPPORT IN THE
RELATIONSHIP BETWEEN ECONOMIC HARSHSHIP
AND PARENTAL SOCIALIZATION IN SINGLE-
MOTHER, AFRICAN AMERICAN FAMILIES

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Within the past decade, policymakers and family practitioners have become increasingly concerned about the challenges facing single-mother families. This heightened concern for single mothers was sparked by the 1996 welfare reform legislation, Personal Responsibility and Work Opportunity Reconciliation Act, which placed limits on welfare participation and required single mothers to leave welfare and enter the workforce. Since a large percentage of single mothers are disproportionately from marginalized populations and earn low wages, it has been expected that single-mother families would experience significant economic hardships. Economic hardship has been found to negatively impact single parenting. Consequently, there is a need to identify factors that may influence and protect against the impact of economic hardship on single mothering. Thus, the purpose of the current study was to examine four factors: 1) parenting attitudes and 2) depressive symptoms with the potential to mediate; and 3)

maternal education and 4) social support with the potential to buffer the impact of economic hardship on the parental socialization (i.e. nurturance, teaching/provision of stimulating materials, and discipline) of single mothers.

Secondary analyses were performed utilizing data from the Fragile Families and Child Well-being Wave II dataset, a nationally representative sample of single mothers in U.S. cities with a population of 200,000 or more that have been impacted by welfare reform. The current study utilized a subsample consisting of 678 African American, single mothers with children between 12 -18 months old.

Results revealed that economic hardship indirectly impacts the parental socialization of single mothers through its negative impact on maternal parenting attitudes. Maternal parenting attitudes significantly predicted parental socialization. Findings further revealed that maternal educational attainment and informal, instrumental social support moderated the indirect relationship between economic hardship and parental socialization. Specifically, the relationship between parenting attitudes and teaching/provision of stimulating materials was strengthened for mothers that obtained some college or more. Furthermore, as parenting attitudes increased, maternal discipline (i.e., spanking) decreased for mothers with instrumental supports. Findings suggest a need for culturally-sensitive strategies to expand educational opportunities and instrumental supports for low-income, African American single mothers of infants and toddlers. Implications for policy and research are discussed.

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SINGLE-MOTHER, AFRICAN AMERICAN FAMILIES**

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CHAPTER I: INTRODUCTION

Parental socialization is the process by which parents impact the development of their children by facilitating the development of skills, behaviors, knowledge, and values that help their children to become productive members of society (Maccoby & Martin, 1983). Unfortunately, parents vary in their ability to socialize their children. Research indicates that variations in parental socialization are linked to differences in family socioeconomic status. In a review of the literature in the fields of family studies, sociology, and child development, economic hardship surfaces as an important measure of family socioeconomic status impacting the parental socialization of children (Conger et al., 1992; Elder, 1985; Lempers, Clark-Lempers, & Simon, 1989). For example, Lempers et al. (1989) found that economic hardships eroded parenting skills in a study that examined 622 parents and children from Midwestern, White, working-class and lower-middle class families. The results of the study indicated that children 14-17 years of age from families with limited financial resources experienced less parental nurturance and more inconsistent discipline. Other research studies have consistently found evidence that mothers and fathers who experience economic loss transmit their distress to their children by becoming more rejecting (Conger et al., 1992; Elder, 1985).

The number of children growing up in families that are at risk for experiencing economic hardship and negative outcomes of parental socialization is increasing. National statistics indicate that in the past three decades, single-mother families have increased dramatically. In 1970, 10.7% of all births in the United States occurred outside of marriage, whereas today over one-third of children are born to single mothers (United States Census Bureau, 2004). A large percentage of these single mothers are women from

marginalized populations who have never married, have lower levels of education at or below a high school level, earn low wages, and have been the focus of welfare programs (Mink, 1995). Therefore, single-mother families are at particular risk for experiencing economic hardships.

Research studies have shown that African American, single-mother families are at particular risk for experiencing economic hardships that negatively impact parenting (Brody & Flor, 1998; Brody, Flor, & Gibson, 1999; Luster & Kain, 1987). For example, Brody et al. (1999) with a sample of 139 rural, single parent, African American families with a child 6 to 9 years old, found that inadequate financial resources were linked to mothers' parenting practices, such as unroutinized home environments, negative mother-child interactions, and mothers' limited involvement in school activities. Consequently, there is an urgent need to identify factors that may influence and attenuate the negative impact of economic hardship on parental socialization within low-income, African American, single-mother families.

A review of the research literature reveals four factors, parenting attitudes, depressive symptoms, maternal education, and social support, with the potential to mediate or buffer the negative impact of economic hardship on the parental socialization of single mothers. There is research evidence suggesting that the first two factors, parenting attitudes and depressive symptoms, may mediate (i.e., explain) the relationship between economic hardship and parental socialization. In other words, research indicates that economic hardship through parenting attitudes and depressive symptoms impacts parental socialization. The other two factors, maternal education and social support, have been indicated to moderate the impact of economic hardships on the parenting of single

mothers. The moderating factors, maternal education and social support, reflect the context or conditions under which economic hardship works to impact parental socialization of single mothers.

Parenting attitudes are the expressions of the values individuals have about raising children and include thoughts, beliefs, and judgments about child care (Sharabany, Scher, & Gal-Krauz, 2006). Parenting attitudes can be negative or positive. There is some research indicating that increased economic hardship is associated with negative parenting attitudes. McCurdy (2005) studied a sample of 212 mothers, 14.8% Caucasian, 24.1% Filipina, 25.9% Hawaiian, and 35.2% other. A large percentage of the mothers in the sample were single mothers (83%). Although most participants completed high school (72%), over two-thirds were not employed, and 69% received some form of public assistance. Mothers were interviewed within the first month of the child's birth and again at 12 months post-partum. The study showed that increased stress related to financial hardships predicted more punitive attitudes towards child rearing. In addition, research utilizing a nationally representative sample of 1,000 parents (82% White, 12% Black, and 6% other) found that across all socioeconomic groups, parents with negative attitudes towards children were more likely to use harsh parenting practices, such as physical discipline (S. Jackson et al., 1999).

The second factor appearing in the research literature with the ability to mediate the relationship between economic hardship and the parenting of low-income single mothers is maternal depressive symptoms. Conger et al. (1992) found that economic hardship, such as unstable employment, was associated with depression and demoralization for mothers, which were related to less nurturant and involved parenting

in a sample of 205 white, primarily middle class families. Furthermore, some research has shown that as maternal depressive symptoms increase the quality of parenting practices decreases (Albright & Tamis-LeMonda, 2002). Albright and Tamis-LeMonda examined 53 low-income, inner city mothers. Eighty percent of the mothers were Latina, 9% were African American, and 11% were White. Increased depressive symptoms were associated with less sensitivity, engagement, and affection, and more rigidity in mothers' parenting.

A third factor, maternal education, may have the potential to buffer the negative impact of economic hardship on the parenting of single mothers. Research clearly shows that maternal education beyond a high school level is associated with positive outcomes of parental socialization within single-mother families (Brody & Flor, 1997, 1998; A. Jackson, 1992, 1993, 1994). For example, Brody and Flor (1998) examined a sample of 156 African American, single mother-headed families with 6 to 9 year old children from non-metropolitan counties in Georgia, 85% of whom lived in poverty. The researchers found that higher levels of maternal education were related to mothers' positive perceptions of their finances and positive outcomes of socialization, such as game playing and story telling. Other studies analyzing the impact of maternal education (below a high school level, at the high school level, and beyond the high school level) on parental socialization found that maternal education beyond a high school level was correlated with less frequent spanking (A. Jackson, Gyamfi, Brooks-Gunn, & Blake, 1998) and predicted decreased strain in single, African American mothers as they performed parenting roles (A. Jackson, 1992, 1993). In contrast, maternal education at or

below the high school level was associated with negative outcomes of parental socialization.

Research also indicates that social support, the fourth factor, may moderate the negative effects of economic hardship on parenting (Hashima & Amato, 1994; Henly, Danziger, & Offer, 2005; Lyons, Henly, & Schuerman, 2005). Lyons et al. (2005) examined a sample of 826 mothers, 56% African American, 39% Caucasian, 3% Hispanic, and 2% other, in which many of the mothers had never been married (49%). Nearly one-third (31%) had not been employed full-time for over 2 years and had children between the ages of 5 and 10 years. The study found that mothers with high levels of support available to them are exposed to less financial strain and experience fewer depressive symptoms than those with less support. The results suggested that increasing levels of support may have some potential to reduce the amount of financial strain and depression that mothers experience and to improve some aspects of their parenting practices.

As previously stated, research clearly indicates that maternal education above a high school level may weaken the negative impact of economic hardship on parental socialization. However, extant research is somewhat unclear on the potential of specific levels of education beyond high school to buffer the effects of economic hardship on parental socialization. Additional research is needed to analyze whether different types of education (e.g., college and technical/trade school) are related to positive outcomes of parental socialization. Furthermore, additional research is needed to examine the potential of social supports to protect against the negative impact of economic hardship on parental socialization of single mothers affected by new welfare regulations. Few research studies

have examined the ability of formal and informal supports to moderate the impact of financial hardships on the parenting of single mothers affected by welfare reform.

The three major goals of the current study were to 1) expand the literature on economic hardship and parental socialization by examining the mediating roles of parenting attitudes and maternal depression in the relationship between economic hardship and parental socialization, 2) move toward a clearer understanding of whether maternal educational attainment influences the relationship between economic hardship and parental socialization by assessing whether or not different levels of maternal education moderate the relationship between family economic hardship and parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and discipline), and 3) study the potential of formal and informal social supports to protect against the impact of economic hardship on parental socialization outcomes.

Examining the mediating roles of parenting attitudes and depressive symptoms may provide important data related to providing well-being programs for single-mother families affected by welfare reform. The current study assessed whether economic hardship directly or indirectly impacts the parenting of African American, single mothers. Some research studies indicate that maternal depression and parenting attitudes may mediate the relationship between economic hardships and parental socialization (Leadbeater & Linares, 1992; McCurdy, 2005). Contrastingly, other studies show that economic hardships directly impact the parenting of African American, single mothers in low-income communities (Patcher, Auinger, Palmer, & Weitzman, 2006).

In addition, gaining a clearer understanding of whether different types of maternal education moderate the relationship between economic hardship and parental

socialization is relevant to the development of educational interventions for mothers at risk of inadequately socializing their children (e.g., single mothers transitioning from welfare dependence). The current research study examined to what extent an increase in maternal education weakens the effects of economic hardship on a mother's ability to socialize her children. Also, would these benefits be found if the mother obtained forms of postsecondary education, such as vocational training or community college coursework? Current welfare reform programs emphasize work-first strategies and provide limited postsecondary education opportunities. The current research study considers whether the federal government and states are overlooking an important opportunity to improve the functioning of single-mother families by expanding educational opportunities for welfare recipients.

Furthermore, assessing whether different types of social support moderate the relationship between economic hardship and parental socialization is pertinent to the development of support programs for low-income, single-mother families. Specifically, the current research study determined whether or not formal supports, such as Healthy Start and Head Start programs, and informal supports, such as money and in-kind assistance, weakened the negative effects of economic hardship on a single mother's ability to socialize her children. The study examined these questions using data on a nationally representative sample of African American, single mothers affected by welfare reform policies. Few existing studies have examined the moderating effect of both formal and informal supports on the same study sample of single mothers.

CHAPTER II: REVIEW OF LITERATURE

Theoretical Framework

The current research study utilizes concepts from Hill's ABCX Family Stress theory (McCubbin & Patterson, 1983). Hill's ABCX Family Stress theory posits that protective factors can help families to survive stressors and maintain competent parenting. The theory defines "A" as life stressors that produce or have the potential of producing change in the family (e.g., economic hardship). Life stressors can lead to family crisis, the "X" variable. The "X" is the family crisis or inability of the family to successfully adapt to the family stressor (e.g., poor parental socialization). According to Family Stress theory, there are two types of factors/variables that can influence the family adaptation to the stressors. These are referred to as "B", the complex of internal and external resources available to the family (e.g., maternal education and social support); and "C", the shared family and/or parental cognition and perceptions (e.g., parenting attitudes and depressive symptoms). The current study examines economic hardship (A), maternal education and social support (B), parenting attitudes and depressive symptoms (C), and parental socialization (X) as components of Hill's ABCX Family Stress theory. Figure 1 displays the hypothesized relationships for variables that are examined in the current study.

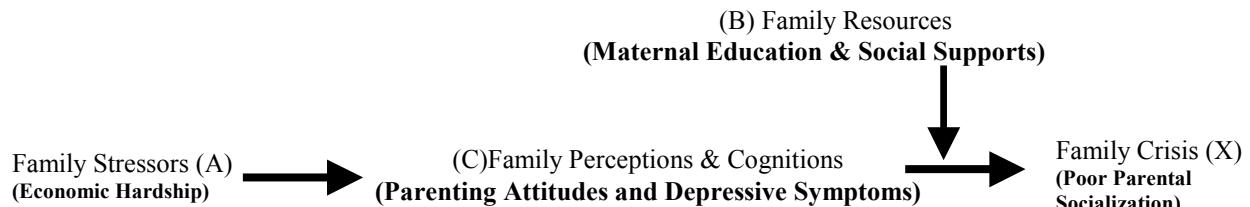


Figure 1. Conceptual Model of Hypothesized Relationships using Hill's ABCX Model of Family Stress

The hypothesized relationships are consistent with Hill's ABCX Family Stress theory (Hill, 1949). Family Stress theory posits that stressors (e.g., economic hardship) when accumulated could lead to family crises, including physical, emotional, or relational crises (i.e., poor parental socialization). Furthermore, Hill's ABCX Family Stress theory posits that family resources, such as maternal education above a high school level, informal/formal social supports, and parental cognitions and perceptions, such as parenting attitudes and depressive symptoms, can influence or protect against family crises by attenuating the impact of family stressors on family processes, such as parental socialization (Hill, 1949).

Conger and his colleagues used Hill's ABCX Model of Family Stress to study the impact of economic hardship on family processes (Conger et al., 1992; Conger et al., 1993; Conger, Conger, & Elder, 1997; Conger, Ge, Elder, Lorenz, & Simons, 1994). These studies are conceptually grounded in the Family Stress theory and have identified factors that mediate the relationship between economic hardship and family processes such as parenting. For example, Conger et al. (1992, 1994), utilizing samples of more than 200 White, married, middle class parents with adolescent children, showed that there were mediating factors in the relationship between economic hardship and parenting. Specifically, economic hardship was associated with parents' depressed moods and marital conflict, which, in turn, were related to disruptions in skillful parenting.

Similarly, the current study used Hill's ABCX Family Stress theory to examine the impact of economic hardship on parenting. However, unlike Conger et al., the current study examines the role of mediating factors as well as moderating factors on the relationship between economic hardship and parenting. The mediating role of two

factors, parenting attitudes and depressive symptoms, and the moderating role of two additional factors, maternal education and social supports, are examined in the current study.

The following sections provide a review of the literature on the key study variables: parental socialization, economic hardship, parenting attitudes, depressive symptoms, maternal education, and social support. The purpose of the current study is to examine the potential of parenting attitudes, depressive symptoms, maternal education and social support to attenuate and/or buffer the impact of economic hardship on single mothers' parenting. Thus, the primary emphasis of the literature review is on single mothers.

Parental Socialization

Parents help their children develop the skills, knowledge and behaviors to function in society through the process of parental socialization. Parents influence the development of their children through the socialization process in at least three ways: 1) as direct instructors of skills, rules, and strategies, 2) by providing indirect socialization in the course of day-to-day interactions with their children, and 3) by managing their children's experiences and social lives, thus providing and controlling opportunities for socialization (Maccoby & Martin, 1983). Parents need to utilize a variety of parenting skills/activities when interacting with their children and performing these three major activities of parental socialization.

Parental socialization encompasses literally hundreds of skills/behaviors that parents engage in either with or for their children. Often, researchers divide parenting skills and activities into categories of behavior. The current research study focuses on

three categories of skills/activities involved in the process of socialization: nurturance, discipline, and teaching/provision of stimulating materials.

The first skill/parenting behavior, nurturance, involves the expression of love, affection, and care. High nurturing behaviors include expressing warmth, being responsive to a child's needs, and being sensitive to changes in a child's behavior (Maccoby & Martin, 1983). Low nurturing behaviors include detachment, intrusiveness, and negative regard. The second parenting behavior, discipline, involves parents' responses to child behaviors that they consider appropriate or inappropriate, depending on the child's age and gender and on parental beliefs, upbringing, and culture (Maccoby & Martin, 1983). The third skill is teaching/provision of stimulating materials. Typically, teaching includes didactic strategies for conveying information or skills to the child, such as reading (Bee, 1992; Laosa, 1980). Provision of stimulating materials refers to parents' providing of cognitively and linguistically challenging materials to the child in the home (Maccoby & Martin, 1983). Teaching and provision of stimulating materials overlap. For example, some scholars categorize the number of books in the home, the number of children's books, and the number of magazine subscriptions as parental provision of materials rather than as teaching because they do not know whether parents actually use these materials to foster reading (Maccoby & Martin, 1983). Other items included here are toys and books for learning the alphabet and numbers, educational toys, musical instruments, push-pull toys, drawing materials, and the like. The extensiveness of material items in the home is associated with family income, which is not surprising, given that most are purchased.

It is important to note that research indicates that racial, ethnic, and cultural differences exist in how parents perform the skills and behaviors involved in the process of socialization. For example, research on disciplinary practices has shown that African American parents are more likely to spank as a means of discipline than Hispanic or White parents (Regalado, Sareen, Inkelas, Wissow, & Halfon, 2004). Moreover, studies have found that there is no significant difference across different socioeconomic statuses in the acceptance of spanking as a preferred discipline method among African American parents (Horn, Cheng, & Joseph, 2004), thereby indicating that spanking may be a culturally accepted form of discipline among African Americans. Also, Caughy and Franzini (2005) conducted a survey of 3,115 adults living in 13 racially and ethnically different neighborhoods in Texas. White and Latino respondents were asked to rate the effectiveness of 8 different discipline strategies (i.e., explain, ignore, slap hand, spank with hand, threaten, time out, withdraw privileges, and yell) for use with a child, 7 years of age. When compared to White respondents, Latino respondents considered yelling and threatening to be less effective than other forms of discipline, such as spanking. Thus, to gain a better understanding of parental socialization, it is important to examine parental socialization within the context of specific cultural/racial groups.

Economic Hardships and Parenting in Families Headed by Single Mothers

National statistics indicate that in the past three decades non-marital child bearing has increased dramatically among never married, single mothers. In 1970, 10.7% of all births in the United States occurred outside of marriage, whereas today over one-third of children are born to single mothers (United States Census Bureau, 2004). A large percentage of these single mothers are women who have never married, have lower levels

of education at or below a high school level, and experience significant economic hardships.

During the 1990's national statistics showed that single-parent families, particularly single-mother families, have higher poverty rates than married-couple families. In 1992, the poverty rate for single-mother families (46 percent) was nearly six times higher than the poverty rate for married-couple families with children (8 percent). The poverty rate for single-father families (22 percent) was nearly three times higher than the married-couple rate, but only half as high as the single-mother rate (United States Census Bureau, 1993). Single-mother families also had lower median income levels than two-parent families. In 1993, the median income level for a U.S. child in a two-parent family was about \$43,600 whereas the median income for a child in a single-mother family was about \$12,100 (Zill & Nord, 1994). Consequently, single mothers became the focus of a 1996 social policy intervention aimed at increasing their economic self-sufficiency and reducing their dependency on federal or local assistance.

The policy context for addressing the economic hardship of single mothers shifted as a result of the 1996 welfare reform legislation, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). The major component of welfare reform was Temporary Assistance for Needy Families (TANF), which dramatically changed federal policy on extended education and training options for welfare recipients. Previously, welfare recipients were able to receive cash assistance while participating in long-term training programs. TANF enforced a 60-month lifetime limit on welfare receipt in favor of a work-first approach. These changes to the welfare program have resulted in a decline in the percentage of welfare recipients pursuing long-term training programs,

postsecondary education, or degree programs and an increase in the percentage of single mothers on welfare seeking more immediate employment (Edin & Lein, 1997). As the number of single mothers leaving welfare for the world of work increased, concern began to rise about the ability of these women to adequately parent their children, while balancing work and family. Given that these single mothers tend to have less education and fewer job skills, it was likely that these women would earn low wages and experience significant economic hardships with negative consequences for the parenting of children.

Census (2000) data have shown that the concern for the economic welfare of single-mother families is warranted. Although welfare reform resulted in more single mothers going to work, an unintended side effect of welfare reform has been that working-poor families headed by single mothers have grown poorer. In 1995, working single mother families that were poor fell a total of \$5 billion below the poverty line, after government benefits were counted. In 1999, these families fell \$6.3 billion below the poverty line (Porter & Dupree, 2001). These Census data also show that in 1999, the incomes of working single-mother families that were poor fell below the poverty line by an average of \$1,505 for each person in these families. The per-person amount by which working single-mother families that were poor fell below the poverty line increased significantly between 1995 and 1999, and was larger in 1999 than at any other time in the 1993-1999 period (Porter & Dupree, 2001). Census data clearly indicate that single-mother families affected by welfare reform legislation are experiencing significant economic hardships.

Research studies have shown that economic hardships can adversely affect maternal parenting practices of single mothers (Ensminger, 1995; McLoyd, 1990;

McLoyd, Jayaratne, Ceballo & Borquez, 1994). For example, McLoyd et al. (1994), in a study with 241 single African American mothers and their seventh and eighth grade children, found that economic hardships eroded parenting skills. The results of the study indicated that unemployed mothers punished or disciplined their adolescent children more frequently with methods such as yelling, hitting, threatening to hit, threatening to send the child to live with someone else, and threatening to put the child out of the house than with other methods.

Other research studies have consistently found evidence that parents who experience economic loss transmit their distress to their children by becoming more rejecting (Brody & Flor, 1998; Conger et al., 1992; Conger et al., 1993; Elder, 1985; Lempers et al., 1989; McLoyd & Wilson, 1990). McLoyd and Wilson (1990) analyzed the impact of economic hardship on the parenting practices of 155 single mothers (55% African American, 40% White, 4% Asian American, and 1 percent Hispanic American) living in a small, Midwestern city. Eighty-one of the women were divorced or separated, 56 were never married, 13 were living with a partner, and four were widowed. The ages of their children ranged from 9 to 17 with a mean age of 14. The study found that economic hardship was related to more negative emotional states and to mothers' perceptions that their parenting roles are difficult. Mothers who found their roles more stressful were less nurturant.

In addition, Conger et al. (1992) showed that increased economic hardship was linked to decreased parental nurturance and increased inconsistent discipline in a sample of 205 parents of adolescent boys from White, middle class families in a Midwestern U.S. community. In a later study, financial difficulties were found to negatively impact

the emotions and behaviors of both mothers and fathers of adolescent girls from largely White communities in the rural Midwest (Conger et al., 1993). Specifically, economic hardships were linked to depressive moods and disrupted child rearing practices. Parents, who were experiencing financial distress, were less active in their daughters' lives and demonstrated more negative affect towards their children than their non-distressed peers.

It should be noted that in the research literature, measures used to describe economic hardship focus on household experiences and living conditions (e.g., food insufficiency, housing quality; Bauman, 1998; Danziger et al., 2000; Lerman, 2002; Mayer & Jencks, 1989). The primary interest is in assessing people's actual economic and material living conditions, and not how they come by these conditions (Bauman, 1998). The focus is on whether the material need itself has been met. Thus, the current study will attempt to measure the actual living conditions of the single mothers in the study sample.

Parenting Attitudes as a Mediator

Research indicates that parenting attitudes may play a critical role in parental socialization. Parenting attitudes include the perceptions, judgments, intentions, values, and stereotypes about child care (Goodnow & Collins, 1990; Sharabany et al., 2006). Attitudes towards parenting are influenced by a parent's current relationship with his or her child and personal experiences (Edwards & Holden, 1989). Some research suggests that child characteristics such as noncompliance and aggressiveness have been associated with negative parent-child relationships and parenting attitudes (Holden & Buck, 2002). However, child characteristics are less likely to influence parenting attitudes when the child is of preschool age. When the child is at a young age, parenting attitudes are most

likely to reflect perceptions that the parent developed through their personal experiences, such as early childhood experiences and stressful life events (McCurdy, 2005).

For example, research indicates that personal stressful life experiences are linked to negative parenting attitudes. McCurdy (2005) utilized a sample of 212 mothers with children 1 year of age. Eighty-three percent of the mothers were single and the ethnic distribution of the sample was 14.8% Caucasian, 24.1% Filipina, 25.9% Hawaiian, and 35.2% other. The study found that increased stress corresponded to punitive attitudes towards child rearing. Specifically, changes in maternal employment status, the occurrence of financial hardship during the infant's first year, and changes in the receipt of public assistance predicted feelings of distress, rigidity, unhappiness, and problems with children and self.

Other studies in the child maltreatment literature have shown that negative parenting attitudes, such as a disregard for a child's needs, displeasure in the parenting role, and the belief that one's children intentionally annoy you, strengthen the likelihood of poor parenting behaviors within single-mother families (Sachs, Pietrukowicz, & Hall, 1997; Whipple & Webster-Stratton, 1991). For example, Sachs et al. (1997) examined the parenting attitudes and behaviors of nine low-income single mothers with preschool-aged children. Five of the mothers were White, three were Black, and one was Hispanic/Native American. The researchers conducted a longitudinal study, over a one-year period. The mothers, who held unrealistic expectations for child behaviors, viewed their parenting responsibilities as overwhelming and perceived their children as unappreciative of their efforts to maintain the family unit, were most likely to use more punitive discipline

techniques, and directed aversive behaviors towards a single child as the scapegoat for parenting frustrations.

It is also important to note that research examining the efficacy of parent education programs for low income, single mothers often focuses on encouraging positive parenting attitudes as a means to improving parenting. For example, Wolfe and Hirsch (2003) examined the efficacy of a parent education program based on Re-evaluation Counseling. Eighteen Black, single mothers with children enrolled in Head Start participated in the study. Mothers were randomly assigned to treatment groups or equivalent, no-treatment comparison groups. Six members of the no-treatment group participated in the program two months later. Pretest, posttest, and follow-up instruments measured parenting attitudes and parenting practices. It was concluded that the program appears viable for improving parenting attitudes and the parenting behaviors of at risk single mothers. Unfortunately, the sample sizes used in most parenting education efficacy trials are relatively small samples and are not nationally representative of single mothers. The current study explores the role of parenting attitudes in mediating the relationship between economic hardship and parental socialization utilizing data from a nationally representative sample of single mothers with preschool age children that reside in cities with populations of 200,000 or more.

Depressive Symptoms as a Mediator

The research literature also reveals maternal depressive symptoms as another potential mediating factor linked to economic hardships and disrupted parenting practices. Numerous studies have indicated that maternal depressive symptoms play a significant role in the quality of mother-child interactions (Albright & Tamis-Lemonda,

2002, Crnic & Greenberg, 1987, McLoyd et al., 1994). Research has shown that high scores of maternal depression are linked to less sensitivity, affection, engagement and more rigidity in mothers, and less enjoyment and mutual communication in the mother-child interactions. Leadbeater and Linares (1992) examined factors predicting maternal depressive symptoms in a sample of 120 Black and Puerto Rican single adolescent mothers during the first three years postpartum. The results of the study indicated that increased economic hardships and stressful life events (e.g., unemployment for themselves, their mothers, or boyfriend) predicted increased levels of depressive symptoms. Patcher, Auinger, Palmer, and Weitzman (2006) examined data from 884 White, 538 Black, and 404 Latino families with children who were 6 to 9 years of age in the National Longitudinal Survey of Youth. Chronic poverty and economic hardships affected child behavioral problems indirectly through other variables, such as maternal depression and parenting practices. The effects of maternal depression were partially mediated through parenting in the White and Latino samples but were direct and unmediated through parenting practices in the Black sample. The findings of this study also highlight the importance of examining family factors, such as economic hardship, maternal depression, and parenting practices within the context of cultural/racial groups.

Maternal Education as a Potential Buffer

Research is also clear that maternal education is yet another important factor influencing parental socialization in both single-parent and couple-parent families (Bee et al., 1982; Brody & Flor, 1998; Crnic & Greenberg, 1990; A. Jackson, 1992; A. Jackson et al., 1998; McLoyd et al., 1994). For example, Bee et al. (1982) in a study with 193 mothers and their children 3 to 4 years of age (93% married, 85% Caucasian, and 44%

with high school education or less) found that within the low education subsample of mothers, maternal education was positively related to mother-child interactions, child IQ, and language development. In another study, A. Jackson (1992) examined a sample of 156 African American children ages 6 to 9 years old living in single-mother families in a rural, low-income community. Maternal education was negatively linked to no nonsense parenting and lower quality mother-child relationships.

Studies have also shown that higher levels of maternal education have been associated with higher quality home learning environments and mother-child interactions (Laosa, 1980; Richman, Miller, & LeVine, 1992; Stevenson & Baker, 1987). Laosa (1980) studied a sample of 43 Mexican American, married mothers, in which 67% of the mothers were unemployed. Findings indicated that a mother's educational attainment was related to her teaching style with her preschool-age children. Specifically, a higher level of education was related to more positive parent-child interactions, including maternal verbal reinforcement, inquiry, modeling strategies, and reading to her children. Richman et al. (1992) examined variations in mother-child interactions by maternal schooling in a sample of 72 Mexican, married mothers and their infants. Mothers and children were observed when children were 5 and 10 months of age. The study indicated that maternal responsiveness during infancy, particularly in the verbal mode, is influenced by maternal educational attainment.

A. Jackson et al. (1998) found that even in the presence of low maternal well-being (i.e., depression), mothers with an education above a high school level exhibited improved parental socialization as reflected in their disciplinary practices. In a study that included a sample of 150 single African American mothers, some of whom were

employed after having previously received welfare benefits, mothers with an education beyond a high school level were less likely to use physical punishment despite high levels of depression. Lower levels of maternal education were associated with harsher disciplinary practices and poorer mother-child interactions.

Social Support as a Potential Buffer

Social support also surfaces in the literature as having the potential to buffer against the impact of economic hardships in single-mother families. Henly et al. (2005) assessed social support in a sample of 632 former and current welfare recipients. To be eligible, women had to be single mothers with children, U.S. citizens, between the ages of 18 and 54, and either White or African American. The sample was 56% African American and 44% White. Thirty-seven percent were married or cohabiting, and 28% lived in an extended family household. The majority had children 5 years of age or under. The analyses found that social support is important for the everyday survival of low-income families. Specifically, social supports serve single mothers primarily as a coping function. Social supports (e.g., child care, small money loans) were found to be unrelated to job quality and earnings, but reduced the likelihood of experiencing significant economic hardships.

A review of the social and behavioral sciences literature reveals two major approaches that quantitative research studies use to measure social support. The two major approaches are measures of 1) the content of received supports and 2) subjective perception of support received (Turner & Turner, 1999). There is a range in the content of the received supports from which low-income, single-mother families might benefit. For example, single mothers can benefit from instrumental (e.g., child care,

transportation) and financial (e.g., monetary gifts and loans) social supports (Thoits, 1995). Furthermore, instrumental and financial social supports may derive from formal and informal sources. Social support coming from sources such as governmental programs is referred to as formal support. On the other side, informal support is social support derived from sources such as family members, friends, or partners available to the single mother.

Lyons et al. (2005) examined the role of informal and formal social support among families receiving child welfare services. The sample was comprised of 826 single mothers and their children. The ethnic and racial proportions of the mothers in the sample were African American (56%), Caucasian (39%), Hispanic (3%), and other (2%). The mothers' median age was 32. Many of the mothers had never been married (49%). Over half (55%) of the mothers had not graduated from high school, and only 18% had attended college or vocational school. Nearly one-third (32%) of the mothers were employed full-time, but almost as many (31%) had not been employed full-time for over 2 years, and another 13% had never been employed full-time. The average age of children in the household was between 5 –to 10 years old. The study's findings suggest that increasing informal support may reduce the amount of financial strain (e.g., difficulty paying rent, utilities, food, or clothing) and depression that parents experience as well as improve their positive parenting (e.g., praising their child, having fun with their child, encouraging their child to read). Also, the study measured the number of formal support services that mothers participated in and found that as the number of formal supports increased the number of informal supports received decreased.

Furthermore, the review of the research literature uncovered noteworthy limitations in the two major approaches to quantitatively measuring social support (i.e., measures of received support and perceived support). Measures of received support are limited because receiving support is not only a function of its availability, but also of the receiver's level of hardship (Cutrona, 1986). Individuals who receive more support may be in greater need than those who receive less, resulting in an unexpected negative relationship between support receipt and hardships experienced. The second approach to studying social support, a measurement of perceived social support, is limited because it measures perceived existence of a social support source from which the individual may draw in times of need, regardless of whether this source has been utilized (Thoits, 1995). Thus, measures of perceived social support are limited because they confound the actual availability of social resources with the perceptual inaccuracies of the perceiver (Dunkel-Shetter & Bennett, 1990). Therefore, it is important to consider how social support is measured when interpreting the results of research studies.

Summary

In summary, parental socialization is the process by which parents influence the development of their children. Economic hardships have been found to adversely affect the parental socialization behaviors of single mothers (Ensminger, 1995; McLoyd, 1990; McLoyd et al., 1994). Some research studies indicate that maternal depression and parenting attitudes may mediate the relationship between economic hardships and parental socialization (Leadbeater & Linares, 1992; McCurdy, 2005). On the other hand, there is some research evidence suggesting that economic hardships may directly impact the parenting of single mothers in low-income, African American female-headed

households (Patchen et al., 2006). The current study assessed whether economic hardship directly or indirectly impacts the parenting of single mothers, utilizing a nationally representative sample of African American single mothers.

Moreover, research suggests that two factors, maternal education and social support, may moderate the relationship between economic hardships and parental socialization. Maternal education above a high school level may weaken the negative impact of economic hardship on parental socialization, particularly in single mother families. Maternal education above a high school level is associated with enrichments to maternal skills and personal resources (e.g., improved vocabulary, organization/management skills) which improve the child's home learning environment and mother-child interactions (Bee, 1992; Richman et al., 1992). Few studies have investigated the role of different forms of education in promoting positive outcomes of parental socialization. This study explored the role of maternal education, which includes technical trade school, some college, and four-year college levels, in moderating the impact of economic hardship on single mothers' parenting of their preschool children.

Social support was also indicated in the literature as having a potential to impact the parental socialization behaviors of single mothers experiencing economic hardship. Research studies indicate that social supports are associated with more positive parental socialization (e.g., nurturing behaviors). However, few research studies have examined the ability of both formal and informal supports to moderate the impact of financial hardships on the parenting of single mothers affected by welfare reform. The current study explored the role of formal and informal supports that provide instrumental and/or financial resources in moderating the impact of economic hardship on parenting.

The study utilized data from a nationally representative sample of African American, single mothers from the Fragile Families and Child Well-Being dataset. The Fragile Families and Child Well-Being dataset was designed to address questions related to the long-term consequences of new welfare regulations for parents and children. As stated earlier, the 1996 welfare reform legislation PRWORA implemented new policies for addressing the financial needs of single mothers. Welfare reform policies resulted in an increased number of single mothers leaving welfare for the world of work. Since single mothers tend to have less education and fewer personal resources and skills, it was likely that these women would earn low wages and experience significant economic hardships with negative consequences for the parenting of children. The current study analyzed the potential of two factors, maternal education and social supports, to buffer the impact of economic hardship on parenting among single mothers. The study also examined two factors, parenting attitudes and maternal depressive symptoms, for their potential mediating role in the relationship between economic hardship and parenting. The findings of the current study are relevant to the development of programmatic and policy interventions for single mothers, particularly African American mothers impacted by welfare reform legislation. The study also generated suggestions for future research directions in this area.

Purpose of the Study

To address gaps in the existing literature, the current study adopts Hill's ABCX Family Stress theory to examine two potential mediating factors (parenting attitudes and depressive symptoms) and two potential protective factors (maternal education and social support) that may influence or moderate the impact of economic hardship on the parental

socialization behaviors of single mothers. The current study explored the role of internal personal resources (such as maternal education), external resources (such as social supports), and parental cognition and perceptions (such as parenting attitudes and depressive symptoms) in attenuating or reducing the impact of family stressors, such as economic hardship on family processes (i.e., parental socialization behaviors) in single-mother families affected by current welfare reform policies. Such an approach can provide valuable information about the protective strategies that policymakers, researchers, and family life specialists might employ to help low-income, single mothers provide adequate parenting for their children.

Specifically, the current study had three major goals. The first major goal was to examine whether or not parenting attitudes and maternal depressive symptoms mediate the relationship between economic hardship and parental socialization in this nationally representative sample of African American, single mothers impacted by welfare reform legislation. The second goal was to assess whether specific levels of maternal education (i.e., less than high school, high school/GED/technical or trade school, some college or more) moderate the relationship between economic hardship and parental socialization. The third major goal was to examine whether instrumental and financial social supports from formal and informal sources moderate the relationship between economic hardship and parental socialization in this sample. The current study asks the following questions:

1. Is there a relationship between economic hardship and parental socialization practices in this nationally representative sample of single mothers of preschool children?

2. Is the relationship between economic hardship and parental socialization mediated by maternal depressive symptoms?
3. Do parenting attitudes mediate the link between economic hardship and parental socialization?
4. To what extent does maternal education moderate the relationship between economic hardship and single mothers' parental socialization?
5. To what extent do social supports moderate the relationship between economic hardship and single mothers' parental socialization?

The current research study was unique in its attempt to 1) investigate the mediating role of parenting attitudes and maternal depressive symptoms in a sample of African American, single mothers and 2) examine the moderating effects of different types/levels of maternal educational attainment on the relationship between economic hardships and parental socialization. Since current welfare reform programs emphasize work-first strategies and job training, the current research study considers whether policymakers are overlooking an important opportunity to improve the parenting behaviors of single mother families by expanding educational opportunities for welfare recipients. Furthermore, the current research study is unique in its attempt to investigate the potential moderating effects of formal and informal sources of social supports utilizing a nationally representative sample of African American, single mothers affected by welfare reform.

Operational Definition of Variables

The following operational definitions are based on the literature review and available variables in the Fragile Families and Child Well-being dataset.

Main Study Variables

Economic Hardship: Economic hardship was measured by items indicating physical and material necessity experienced within the household (Bauman, 1998; Danziger et al., 2000; Lerman, 2002; Mayer & Jencks, 1989). Examples of questions to be used are: *Did you go hungry? Did you get evicted for not paying rent/mortgage? and Did your gas/electric/oil get shut-off or withheld?*

Parental Socialization: Parental socialization was measured as parent-child interaction and parental discipline (Maccoby & Martin, 1983).

Parent-child Interaction: Parent-child interaction was a measure of two parental socialization skills: nurturance (e.g., hugging and kissing child and putting child to bed); and teaching/provision of stimulating materials (e.g., reading stories to child and playing peek-a-boo).

Parental Discipline: Parental discipline was the frequency with which the mother spanked her children within the past month. Parental discipline involves parents' responses to child behaviors that they consider appropriate or inappropriate.

Parenting Attitudes: Parenting attitudes was described as parent perceptions and cognitions towards parenting (Goodnow & Collins, 1990; Sharabany et al., 2006). The current study measures negative parenting attitudes, such as parents' feelings of being trapped by their parenting responsibilities and being tired, worn out, or exhausted from raising a family.

Depressive Symptoms: Depressive symptoms in the Fragile Families and Child Well-being dataset include feelings of anhedonia or dysphoria/depression (i.e., feeling tired, trouble sleeping, troubling concentrating, feeling worthless, and thinking about death).

Maternal Education: Maternal education is measured at three levels of education: 1) less than high school, 2) high school/GED/trade or technical school, and 3) some college/junior college or more.

Informal Social Support: Informal supports are financial and instrumental supports from family members, friends, or partners available to the single mother.

Financial supports include, for example, money loans and cosigning for a loan.

Instrumental supports include, for example, child-care assistance and a place to stay.

Formal Social Support: Formal supports identified in the Fragile Families and Child Well-Being dataset include receipt of support from two sources aimed at improving parenting: Healthy Start and Head Start/Early Head Start.

Control Variables

Number of Adults in the Household: This variable refers to the number of individuals over the age of 18 living within the home.

Research has shown that the number of adults in the household can have positive and negative impacts on the parenting of single mothers. For example, research shows that having additional adults in the house can provide regular and consistent child care assistance (Brown-Lyons, Robertson, & Layzer, 2001). However, when another adult, such as grandmother, provides regular child care the boundary between caregiving and parenting can get blurred, resulting in conflict between the mother and the other adult and the single mother's parenting role may be usurped (Knox, London, & Scott, 2003). This is even more likely when they live in the same household.

Mother's Age: The mother's age in years.

Research indicates that younger single mothers, who began childrearing in their adolescent years, often experience greater economic hardships than families headed by older single mothers (Wertheimer & Moore, 1998). Studies have linked young maternal age to low parenting knowledge and negative parenting attitudes (Reis, 1988).

Number of Children in the Household: This variable is defined as the number of children under the age of 18 years living in the household.

The number of children in the household has been linked to poor parenting outcomes (Mash & Johnston, 1990; Morgan, Robinson, & Aldridge, 2002). Multiple numbers of children within a family can exhaust parenting resources, particularly within single-parent families (McLanahan & Adams, 1987).

Hypotheses

The present study examined the relationship between economic hardship and parental socialization. The current study also assessed whether or not the relationship between economic hardship and parental socialization was mediated by parenting attitudes and depressive symptoms. In addition, the present study examined the potential buffering effect of various levels of maternal education and social supports on the relationship between economic hardship and parental socialization. Based on theory and previous research, the following hypotheses were tested. Hypothesis 1 tests the direct relationship between economic hardship and parental socialization. Hypotheses 2 and 3 test the moderating effects of maternal education and social supports, respectively, on the direct relationship between economic hardship and parental socialization. Hypotheses 4 and 5 test the mediating effects of parenting attitudes and depressive symptoms, respectively, on the relationship between economic hardship and parental socialization.

Hypotheses 6 and 7 test the moderating effects of maternal education and social supports, respectively, on the indirect (mediated) relationship between economic hardship and parental socialization.

Hypothesis for the Direct Relation between Economic Hardship and Parenting

H1: There is a direct relationship between economic hardship and parental socialization. Specifically,

H1a. Higher levels of economic hardship will be associated with less frequent positive parent-child interactions (nurturance and teaching/provision of stimulating materials).

H1b. Higher levels of economic hardship will be associated with harsher discipline (more frequent spanking).

Hypotheses for the Moderation Effects of Maternal Education and Social Support on the Direct Relationship between Economic Hardship and Parenting

H2: Levels of maternal education will moderate the relationship between economic hardship and parental socialization. Specifically:

H2a. Higher levels of maternal education will weaken the relationship between economic hardship and less frequent positive parent-child interactions.

H2b. Higher levels of maternal education will weaken the relationship between economic hardship and harsh discipline.

H3: Social support will moderate the relationship between economic hardship and parental socialization. Specifically:

H3a. At higher levels of informal and formal social supports, the relationship between economic hardship and less frequent positive parent-child interactions will weaken.

H3b. At higher levels of informal and formal social supports, the relationship between economic hardship and the frequency of spanking will weaken.

Figure 2 shows the hypothesized relationships for hypotheses 1-3 tested in this study

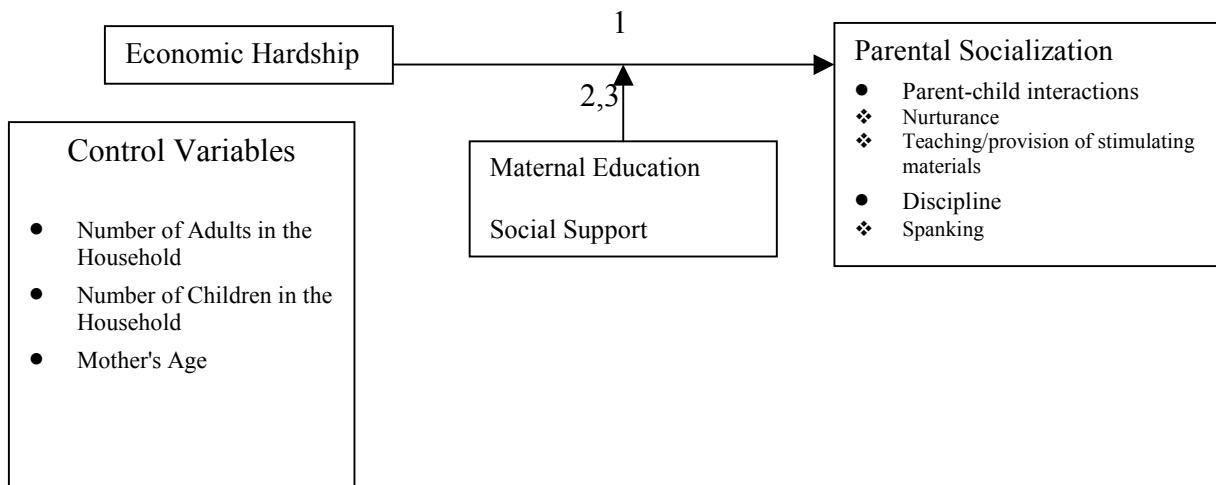


Figure 2. Hypothesized model testing the direct relation between economic hardship and parental socialization and the moderation effects of maternal education and social support on this relationship

Hypotheses for Mediating Effects of Parenting Attitudes and Maternal Depressive Symptoms

H4: The relationship between economic hardship and parental socialization will decrease when controlling for parenting attitudes. Specifically:

H4a. When controlling for parenting attitudes, the relationship between economic hardship and less frequent positive parent-child interactions will decrease.

H4b. When controlling for parenting attitudes, the relationship between economic hardship and more frequent spanking will decrease.

H5: The relationship between economic hardship and parental socialization will decrease when controlling for depressive symptoms. Specifically:

H5a. When controlling for depressive symptoms, the relationship between economic hardship and less frequent positive parent-child interactions will decrease.

H5b. When controlling for depressive symptoms, the relationship between economic hardship and more frequent spanking will decrease.

Hypotheses for the Moderation Effects of Maternal Education and Social Support on the Indirect Relationship between Economic Hardship and Parenting

H6: The indirect relationship between economic hardship and parental socialization will be moderated by maternal education. Specifically:

H6a. Higher levels of maternal education will weaken the indirect relationship between economic hardship and less frequent positive parent-child interactions.

H6b. Higher levels of maternal education will weaken the indirect relationship between economic hardship and the frequency of spanking.

H7: The indirect relationship between economic hardship and parental socialization will be moderated by social support. Specifically:

H7a. At higher levels of formal and informal social supports, the indirect relationship between economic hardship and less frequent positive parent-child interactions will weaken.

H7b. At higher levels of formal and informal social supports, the indirect relationship between economic hardship and the frequency of spanking will decrease.

Figure 3 shows the hypothesized relationships in hypotheses 4-7 between the variables tested in this study

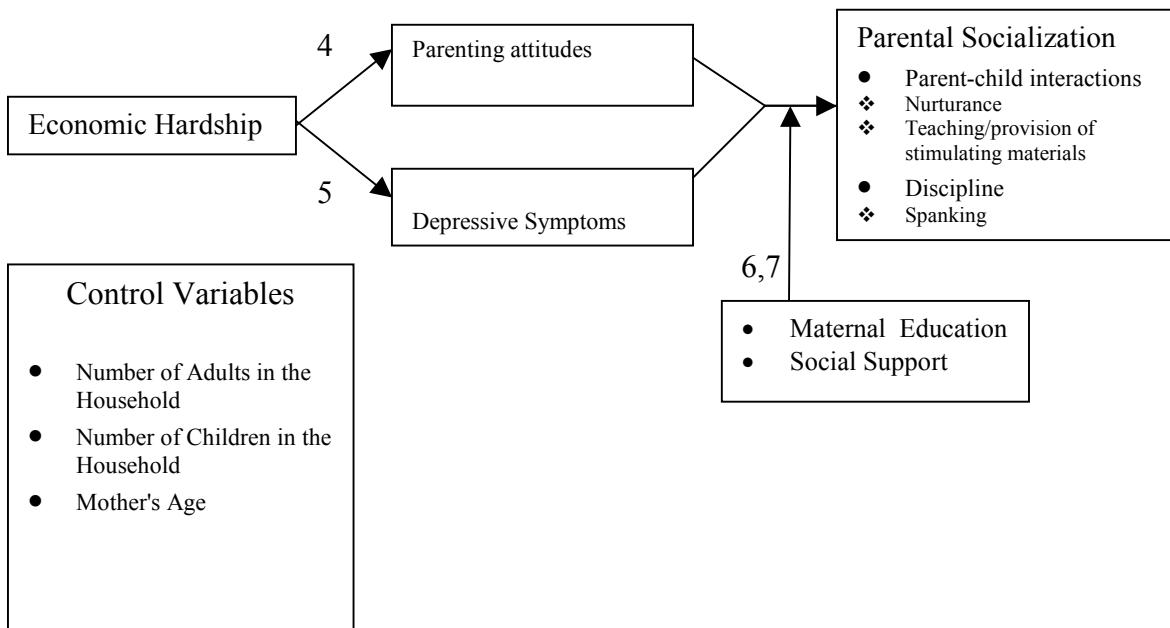


Figure 3. Hypothesized model testing the indirect relation between economic hardship and parental socialization and the effects of maternal education and social support moderation in this relationship

CHAPTER III: METHODOLOGY

Demographics of the Sample

The current study used secondary data. The source of data was the Fragile Families and Child Well-being dataset, a nationally representative sample of nonmarital births in U.S. cities of 200,000 or more. The baseline data were collected from a sample of 4,898 families in 20 U.S. cities between February 1998 and September 2000. The cities included: Austin, TX; Birmingham, AL; Boston, MA; Chicago, IL; Corpus Christi, TX; Detroit, MI; Indianapolis, IN; Jacksonville, FL; Nashville, TN; New York, NY; Newark, NJ; Norfolk, VA; Oakland, CA; Philadelphia, PA; Pittsburgh, PA; Richmond, VA; Santa Ana, CA; San Antonio, TX; San Jose, CA; and Toledo, OH). At baseline, mothers had just given birth. The current study used data from the one-year, follow up interview conducted between 1999 and 2002, when birth children were 12 to 18 months. The larger sample from the follow up interview consisted of 2,659 single mothers. The race/ethnicity distribution of this larger one-year sample was the following: 8% White non-Hispanic, 69% Black non-Hispanic (African American), 19% Hispanic, and 4% Other.

The current study used a sample of 678 African American, single mothers from the subsample of 2,659 mothers from the one-year, follow up interview. The study mothers were not only unmarried, but were also not cohabiting with their baby's father or a current partner at the time of the follow up interview. These 678 African American mothers represented about 37% of the Black non-Hispanic single mothers in the one-year follow up subsample. The description of the study sample appears in the Results section.

The advantage of using secondary data from this subsample of single mothers is that the Fragile Families and Child Well-Being dataset was designed to address questions related to the long-term consequences of new welfare regulations for parents and children (Reichman, Teitler, Garfinkel, & McLanahan, 2002). Other researchers have used this dataset to study families impacted by TANF policies (Berger, McDaniel, & Paxon, 2005; Reichman, Teitler, & Curtis, 2005). Additional advantages are that: 1) these data are cost effective and 2) time is saved collecting and coding data. Data from the public use dataset that had already been coded and cleaned, and from which participant identifiers had been removed, were used in this study. Thus, the Institutional Review Board (IRB) at the University of Maryland, College Park determined that this research did not constitute research on human subjects and approved proceeding without further review of the IRB (See Appendix A).

Measures

All measures were taken from or recoded from items on The Fragile Families Survey, which had been coded and entered into the Fragile Families and Child Well-Being dataset by the original study investigators. The following is a description of the items used in the current study; reported alphas are for the subsample of 678 mothers drawn for the proposed study. A full listing of the items drawn for use in the current study appears in Appendix B.

Demographic Background. Demographic items addressed such factors as: maternal age (in years), maternal age at first birth (in years), number of children under 18 years old in the home, number of adults in the home (including the mother), and sex of

the target child (boy, girl). These measures were taken from items in the Fragile Families and Child Well-Being dataset.

Economic Hardship. Economic hardship was operationalized using 12 items.

Specific items were, *In the past 12 months:* 1) *Did you receive free food/meals?* 2) *Did your children go hungry?* 3) *Did you go hungry?* 4) *Did you not pay full amount of rent/mortgage?* 5) *Did you get evicted for not paying rent/mortgage?* 6) *Did you not pay full gas/oil/electric bill?* 7) *Did your gas/electric/oil get shut-off or withheld?* 8) *Did your telephone service get disconnected for nonpayment?* 9) *Did you borrow money from family/friends to pay bills?* 10) *Did you move in with people because of financial problems?* 11) *Did you stay in place not meant for regular housing?* and 12) *Did anyone in house need medical treatment but couldn't go because of cost?* Responses were scored yes=1 and no=0. The sum of the scores for the twelve responses was used as a measure of economic hardship. The total possible score could range from 0 to 12. Higher sums indicated more economic hardship. The alpha for this measure is .68.

Parental Socialization. Parental socialization was operationalized as parent-child interaction and discipline.

Parent-child Interaction. The parent-child interaction scale contained items that measured two of the three parental socialization skills used in this study: nurturance and teaching/provision of stimulating materials. Nurturance was measured with 5 questions. Specific items were *Number of days per week mom* 1) *tells stories to child*, 2) *plays inside with toys such as blocks or Legos with child*, 3) *takes child to visit relatives*, 4) *hugs or shows physical affection to child*, and 5) *puts child to sleep*. The Cronbach's alpha for the five-item nurturance measure is .44. Teaching/provision of stimulating

materials was measured with 3 questions. The specific questions were *Number of days per week mom* 1) *plays games like peek-a-boo or gotcha with child*, 2) *sings songs or nursery rhymes to child*, and 3) *reads stories to child*. The Cronbach's alpha for the 3-item measure is .61. For each measure, the sum of the total number of days mom interacts with child in the various ways described was used as a measure for parent-child interactions. The total possible score could range from 0-35 for the nurturance measure and from 0-21 for the teaching/provision of stimulating materials measure. Higher sums indicated more positive parent-child interactions.

Parental Discipline. Parental discipline involves parents' responses to child behaviors that they consider appropriate or inappropriate. Two questions were used to measure parental discipline. The first question was, *Have you spanked child in the past month?* Responses were scored yes=1 and no=0. The respondents that responded no=0 were skipped on the second question. The second question was, *How often did you spank child in past month?* Responses were scored on a 4-point scale: 0=skipped, 1=once or twice, 2=a few/past month, 3=a few/week, and 4=everyday. Higher scores indicated more frequent spanking.

Parenting attitudes. Parenting attitudes was operationalized using 4 items from the Fragile Families Survey that were derived from the Child Development Supplement of the Panel Study of Income Dynamics (Hofferth, Davis-Kean, Davis, & Finkelstein, 1999). The four items were: 1) *Being a parent is harder than I thought it would be*; 2) *I feel trapped by my responsibilities as a parent*; 3) *I find taking care of my child(ren) is much more work than pleasure*; and 4) *I often feel tired, worn out, or exhausted from raising a family*. The responses were scored on a 4-point scale where 4 = strongly agree,

3 = somewhat agree, 2 = somewhat disagree, and 1 = strongly disagree. The responses were reversed coded in the current study. The reverse coded responses were scored on a 4-point scale where 1 = strongly agree, 2 = somewhat agree, 3 = somewhat disagree, and 4 = strongly disagree. The sum of the scores for the responses to the four items was used as a measure of parenting attitudes. The possible range of scores was 4-16. Lower scores reflected more negative parenting attitudes. Higher scores reflect less negative parenting attitudes. The alpha for this measure is .68.

Depressive Symptoms. Depression was measured using 7 items derived from the *Composite International Diagnostic Interview-Short Form* (CIDI-SF; Kessler et al., 1998). The CIDI is a standardized instrument used to assess mental disorders intended for use in cross-cultural and epidemiological research. First, participants were asked two questions to assess if they have experienced feelings of anhedonia or experienced dysphoria/depression within the past year, and if those feelings lasted more than two weeks. The two questions asked were: 1) *During the past 12 months, have you ever been depressed/sad/blue for 2 weeks in a row?* and 2) *During those 2 weeks, did you lose interest in hobbies/work/other activities?* Responses were scored yes=1 and no=0. If symptoms are denied or one of the two questions was denied, the participant received an overall score of 0. If participants affirmed symptoms of anhedonia and depression, they were asked questions about: 1) *feeling tired*, 2) *trouble sleeping*, 3) *troubling concentrating*, 4) *feeling worthless*, and 5) *thinking about death*. The response to each symptom was given a score of 0 if the symptom was denied and a score of 1 if the symptom was affirmed. The participants that affirmed the symptoms of anhedonia and depression were given an overall score that is the sum of positive responses to the five

symptoms. The possible scores ranged from 0-5. Overall scores of 3 or more are in the clinical range. The alpha for these five items is .93.

Maternal Education. Maternal education was operationalized as five levels/types of education: 1) less than high school, 2) regular high school/GED, 3) technical/trade school, 4) some college/junior college, and 5) college (4yr)/graduate/professional school. The maternal education variable is derived from the following question in The Fragile Families Survey baseline dataset: *What is the highest grade or year of regular school that you have completed?* The responses were assigned the following values: 1=no formal schooling, 2=8th grade or less, 3=some high school, 4=high school diploma, 5=GED, 6=some college or 2-year degree, 7=technical or trade school, 8=bachelor's degree, and 9=graduate or professional school. The current study converted the nine categorical responses into three new categories. The categories 1 through 3 (no formal schooling, 8th grade or less, some high school) were recoded into "1=less than high school". The categories 4, 5, and 7 (high school diploma, GED and technical/trade school) were recoded into "2=regular high school/GED/technical or trade school." Categories 6, 8, and 9 (some college or 2-year degree, bachelor's degree, and graduate or professional school) were recoded into "3= some college or more". The three categories were then dummy coded. In the dummy coding, 2 dummy variables EDDUM1 and EDDUM2 were created (see Table 1). EDUM1=1 when maternal education is "2=regular high school/GED/technical or trade school". EDDUM1=0 when maternal education is "1=less than high school" and "3=some college or more". EDDUM2=1 when maternal education is "3=some college or more". EDDUM2=0 when maternal education is "1=less than high school" and "2=regular high school/GED/ technical or trade school". Note that "less than

"high school" is the reference category in the dummy coding. Therefore, EDDUM1 and EDDUM =0 when maternal education is "1=less than high school".

Table 1.

Dummy Coded Variables for Maternal Education with Less than High School as the Reference Group

MATERNAL EDUCATION	Group	Code EDDUM1	Code EDDUM2
Less than high school	1	0	0
Regular high school/GED/technical or trade school	2	1	0
Some college or more	3	0	1

Social Support. Social Support was operationalized as informal and formal support.

Informal Social Support. Informal social support contains items that measure two types of informal supports: instrumental and financial. Informal support is measured with six items. The instrumental support items are: 1) *Could you count on someone to provide a place to live in the next year?* 2) *Could you count on someone to help w/emergency child care?* and 3) *Could you count on someone to loan \$200 in the next year?* Responses are 1=yes, 0=no. The scores for the responses were summed. The scores ranged from 0-3. The scores of 0 and 1 were recoded as "0=low instrumental support". Scores with the value of 2-3 were recoded as "1=high instrumental support". The two categories were converted into 1 dummy variable, ISDUM1 (see Table 2). ISDUM1=1 when the response is "1=high instrumental support". ISDUM1=0 if the response is "0=low instrumental support".

Table 2.

Dummy Coded Variable for Instrumental Support with Low Instrumental Support as the Reference Group

INFORMAL SUPPORT	Group	Code ISDUM1
Low Instrumental Support	1	0
High Instrumental Support	2	1

The financial support items were: 4) *Could you count on someone to loan \$1000 in the next year?* 5) *Could you count on someone to co-sign for a loan for \$1000?* and 6) *Could you count on someone to co-sign for a loan for \$5000?* Responses are 1=yes, 0=no. Responses are 1=yes, 0=no. The scores for the responses were summed. The scores ranged from 1-3. The scores with the value of 1 were recoded as “0=low financial support”. Scores with the value of 2-3 were recoded as “1=high financial support”. The two categories were converted into 1 dummy variable ISDUM2 (see Table 3). ISDUM2=1 when the response is “1=high financial support”. ISDUM2=0 if the response is “0=low financial support”.

Table 3.

Dummy Coded Variable for Financial Support with Low Financial Support as the Reference Group

INFORMAL SUPPORT	Group	Code ISDUM2
Low Financial Support	1	0
High Financial Support	2	1

Formal Social Support. The formal social support scale measured mothers' participation in government support programs that focus on improving parental socialization outcomes. Formal social support was operationalized with two items: 1) *Since child's birth, have you received help from-Head Start/Early Head Start?* and 2)

Since child's birth, have you received help from-Visiting nurse/Healthy start? Responses were 1=yes and 0=no. The responses to the two items were summed. The scores ranged from 0-2. The scores of 1 and 2 were recoded as “1=participation in Head Start or Healthy Start”. Scores with the value of 0 were recoded as “0=no participation in Head Start or Healthy Start”. The two categories were converted into 1 dummy variable FSDUM1 (See Table 4). FSDUM1=1 when the response is “1=participation in Head Start or Healthy Start”. FSDUM1=0 if the response is “0=no participation in Head Start or Healthy Start”.

Table 4.
Dummy Coded Variable for Formal Support with No Participation in Head Start and/or Healthy Start as the Reference Group

FORMAL SUPPORT	Group	Code FSDUM1
No participation in Head Start and/or Healthy Start	1	0
Participation in Head Start and/or Healthy Start	2	1

Procedure

As previously stated, the current study used a subsample of one-year follow up data from the second wave of The Fragile Families and Child Well-Being Study. The study was conducted on nearly 5,000 children born in the U.S. between 1998 and 2000. The study consisted of interviews with both mothers and fathers at the time of the child's birth and again when the focal child was one and three years old. The study was conducted as a joint effort by the Princeton University's Center for Research on Child Well-Being and The National Center for Children and Families (Bendheim-Thoman Center for Research on Child Well-Being, 2005).

Cities were stratified into environments according to the generosity of welfare benefits, strength of the local labor market, and degree of child support enforcement. In each year of the study, parent interviews collected information on relationships, parenting behavior, demographic characteristics, attitudes, health, program participation, and neighborhood characteristics. Baseline interviews were conducted between February 1998 and September 2000. The one-year follow up data interviews were conducted between June 1999 and March 2002. At baseline, mothers signed informed consents and were interviewed in the maternity wards of 75 hospitals. The one-year follow-up interview was designed to be conducted by telephone using a Computer-assisted Telephone Instrument (Bendheim-Thoman Center for Research on Child Well-Being, 2005).

The study was designed to over-sample unmarried births, while selecting a smaller sample of married births for comparison. The current study specifically used data collected from unmarried mothers' interviews conducted at the one-year follow up. All mothers who completed baseline interviews and remained eligible were contacted for the one-year follow up 12 to 18 months after completing the initial interview. It should be noted that mothers were considered eligible if their child would live with at least one parent after birth (mothers giving up their children to adoption were ineligible). All one-year interviews were first attempted by telephone. However, 16 percent of mothers could not be contacted by telephone. Field interviewers were assigned to the 16 percent of mothers not reached by phone. Mothers contacted by field interviewers were given a \$50 incentive payment. Mothers interviewed by phone were given \$30 incentive payments. To ensure confidentiality, identification code numbers have been assigned to each

completed interview. Data files, with no identifying information except the identification code numbers, were created for input into the SPSS-PC data analysis program and provided for public access on the web at <http://fragilefamilies.princeton.edu/public.asp> (Bendheim-Thoman Center for Research on Child Well-Being, 2005). A separate SPSS-PC data file was been created for the subsample of 678 mothers to be used in the current study. Approval for this study was obtained from the University of Maryland Institutional Review Board (IRB). As stated earlier, the IRB determined that there were no human subjects in the data to be analyzed for this study since coded data with no identifying information were used.

Data Analysis Plan

All statistical procedures were conducted using SPSS-PC software. Descriptive statistics, including means, standard deviations, and percentages, were generated to summarize the demographic characteristics of all mothers in the sample. Cronbach's coefficient alphas were computed on the final subsample to examine the internal consistency of the economic hardship, parental socialization, parenting attitudes, depressive symptoms, and social support measures. Means and standard deviations were calculated for all maternal measures, as appropriate. Bivariate and linear regression analyses were conducted to examine the relationships among the variables and to test hypotheses. Correlational analyses were used to examine bivariate relationships between demographic variables and study variables and the study variables were correlated with each other. Three demographic variables (i.e., number of adults in the household, number of children in the household, and mother's age) that are conceptually and significantly correlated with the study variables were included in the analyses as control variables.

Testing of Study Hypotheses

Correlational analyses were first used to determine whether there were significant direct relationships between economic hardship and the three outcomes of parental socialization (hypothesized relationships in Figure 2; Hypotheses 1-3). Linear regression analyses were also used to explore whether maternal education or social supports moderated the relationships between economic hardship and the parenting variables. Interaction terms were used in these models for economic hardship x maternal education or economic hardship x social supports, as appropriate.

Linear regression analyses were then used to explore the relationships between economic hardship and the mediating variables, parenting attitudes and depressive symptoms. The hypothesized model in Figure 3 was tested using hierarchical linear regression analyses. With hierarchical linear regression analysis procedures, the study variables could be entered into the regression model according to the importance of the variables as revealed in the literature and/or theory. Moreover, this analytic procedure allowed for the proportion of variance accounted for by the independent and mediating variables (i.e., R^2) to be partitioned incrementally, noting the increment in the proportion of variance accounted for by each independent or mediating variable (or by a set of independent or mediating variables) at the point at which it was entered into the regression analysis (Pedhazur, 1997). The regression coefficients were then obtained to assess the direction and the magnitude of the independent or mediating variable selected by the hierarchical linear regression. Finally, the fit of the hierarchical linear regression model was assessed by looking for the combination of results including: R^2 , standard

error of estimate, the significance and the magnitude of each predictor, the power and the sample size of the model, and the pattern of the predictors.

Using Figure 3 as a guide, hierarchical regression analyses were used to generate three separate regression equations in which economic hardship predicts the parental socialization outcomes/variables: nurturance in the first equation, teaching/provision of materials in the second, and discipline in the third equation (Note: Discipline is a nominal variable, thus requiring logistical regression analysis). When economic hardship did not significantly predict the three parental socialization variables, simple regression analyses were conducted to assess the prediction of hypothesized mediating variables, depressive symptoms and parenting attitudes from economic hardship.

Next, parenting attitudes and depressive symptoms were entered separately into three separate regression equations in which each hypothesized mediating variable predicted the three parental socialization outcomes (nurturance, teaching/provision of materials, and discipline). The data analyses indicated that depressive symptoms was not a significant predictor of the three outcomes of parental socialization. Therefore, no further analyses were conducted with depressive symptoms in models. However, parenting attitudes was found to be a significant predictor of the three parental socialization outcomes.

Therefore, the moderating effects of maternal education and social support on the relationship between parenting attitudes and parental socialization were also examined using hierarchical regression analyses. Prior to entering the hypothesized mediating variable (i.e., parenting attitudes) into the regression analyses, the parenting attitude variable was centered (i.e., put in deviation score form so that the mean is zero) as

recommended by Aiken and West (1991). Centering the parenting attitudes variable consisted of taking the raw scores for the variable and subtracting the respective mean from each score, thus yielding a centered score. This process produced a zero value on the variable's continuous scales that greatly lessened multicollinearity with higher order, interaction terms that were entered to test the hypothesized moderating relationships (e.g., XZ; see equation 1 below) due to scaling (Aiken & West, 1991). Furthermore, if the first order, study variable (e.g., X and Z; see equation 1 below) were not centered, the interaction term XZ would be highly correlated with the variables of which it was comprised. When used in regression analyses, the interaction term can produce large standard errors for the regression coefficients of the lower order terms. However, the standard error of the interaction term will not be affected (Aiken & West, 1991). Next, the interaction terms (i.e., parenting attitudes x maternal education, and parenting attitudes x social support) were computed. The regression with an interaction equation is found below:

$$Q = b_1X + b_2Z + b_3XZ + b_0$$

It should be noted that maternal education and social support are categorical variables. There are three levels/types of maternal education: 1) less than high school, 2) high school/GED/ technical trade, and 3) some college or more. As noted earlier, maternal education was converted into two dummy coded variables with less than high school used as a reference category. Also, each of the three constructs of social supports (i.e., informal financial support, informal instrumental support, and formal support) was dummy coded. There are two levels of informal financial support: low financial support and high financial support. Informal financial support was converted into one dummy

code with low financial support as a reference category. Informal instrumental support was dummy coded in the same manner. Similarly, formal support has two categories: 1) participation in Head Start and/or Healthy Start and 2) no participation in Head Start and/or Healthy Start. Formal support was converted into one dummy code with no participation in Head Start and/or Healthy Start as the reference category. Dummy variable coding is the most frequently utilized procedure in the literature for representing categorical variables in regression equations. This analysis allowed for an assessment of whether or not each level/type of maternal education or social support buffers the impact of depressive symptoms and parenting attitudes on the three outcomes of parental socialization (i.e., nurturance, teaching/provision of stimulating materials, and discipline; Aiken & West, 1991).

Three separate hierarchical regression analyses were performed to test the potential buffering effects of maternal education on the relationship between parenting attitudes and the three parental socialization outcomes. The following steps were performed for each hierarchical regression analysis. In the first step of the hierarchical regression analysis, the demographic control variables that were significantly and/or theoretically associated with the predictor and outcome variables were entered. In step two, the two dummy variables for maternal education were entered. Entering the two dummy variables in step two, allowed for a comparison of the mean or the probability of the parental socialization scores for the three levels of maternal education and was equivalent to a one-way ANOVA (Aiken & West, 1991). In step 3 the variable parenting attitudes was entered into the model. To test for moderation effects, the interaction terms,

parenting attitudes x high school/GED/trade or technical and parenting attitudes x some college or more were entered in the last step of the regression.

The three separate hierarchical regression analyses were performed a second time to test the potential buffering effects of maternal education on the relationship between parenting attitudes and the three parental socialization outcomes. The steps performed for each hierarchical regression analysis were the same for steps one and three. However, steps two and the last step were different. In step two, one dummy variable for maternal education (some college/Jr. college or more) was entered. Entering the one dummy variable in step two, allowed for a comparison of the mean or the probability of the parental socialization scores for the two levels of maternal education (less than high school/high school/GED/trade or technical and some college or Jr. college or more) (Aiken & West, 1991). In step 3 the variable parenting attitudes was entered into the model. In the last step to test for moderation effect, the interaction term parenting attitudes x some college or more was entered in the regressions.

Separate hierarchical regression analyses to test the potential buffering effects of three types of social support (informal instrumental, informal financial, and formal support) on each of the parental socialization outcomes were performed. In the first step of the hierarchical regression analyses, the demographic control variables that were significantly and/or theoretically associated with the predictor and outcome variables were entered. In step two, the social support dummy variable (i.e., high informal instrumental support, high informal financial support, participation in Head Start and Healthy Start) was entered. In step two, the mean or probabilities for the high levels of informal support or the participation in the formal support and the low levels of informal

support or the nonparticipation in formal support groups are compared. Low levels of informal support or the nonparticipation in formal support group are the reference categories in the regression analysis. In step three, parenting attitudes was entered. Then, the moderation effect was tested by entering the interaction term parenting attitudes x high social support to each regression equation. Finally, once significant interactions were obtained, each interaction was plotted to better understand its meaning as recommended by Aiken and West (1991).

CHAPTER IV: RESULTS

Sample Description

The current sample consisted of 678 African American, single mothers with children between 12 to 18 months of age. These mothers were not living with the target child's father or a partner. Table 5 presents the demographic characteristics of the sample. These data include means and standard deviations for mother's age, mother's age at first birth, the number of children in the home, and the number of adults living in the home. Also, the frequencies and percentages for child's sex and maternal education are provided.

As displayed in Table 5, the age of the mothers in the current study ranged from 18 to 43 years with a mean age of 24.38 years old. Mothers were between the ages of 13-41 years old at the time of their first birth of a child, with a mean age of 20.35 years of age. Mothers reported having an average of three children and two adults (including themselves) living in the household. Fifty-four percent of the children are boys and 46 percent are girls. Approximately, 36% of the mothers in the sample have received less than a high school education; 40.6 percent of the single mothers have completed high school, a GED, or technical/trade school (37.2 percent completed high school or a GED; and 3.4% percent have technical trade training). Also, 23.7% of the mothers have obtained some college education or more; the specific breakdown for this overall percentage is: 19.7% have some college education and 4% attended college or graduate school.

Table 5.

Demographic Characteristics of the Sample (N=678)

Demographic Characteristic	Single Mothers (N=678)	Range
	<i>M (SD)</i>	
Mother's Age (years)	24.38 (5.635)	18-43
Mother's Age at First Birth (years)	20.35 (4.213)	13-41
Number of Children in the Household	2.51 (1.504)	1-9
Adults in Home	1.76 (.992)	1-6
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Child's Sex		n (%)
Male		365 (53.8%)
Female		313 (46.2%)
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Maternal Education		
Less than High School		242 (35.7%)
High School/GED/Technical Trade		275 (40.6%)
Some College/Jr. College/College/Grad School		161 (23.7%)
<hr/>		

Reliability of Study Measures

Cronbach's coefficient alphas were computed to examine the internal consistency of study measures (refer to Table 6). These reliability coefficients were also reported in the Measures section and are largely within an acceptable range. Dummy variables with dichotomous values of 0 and 1 were used in the analyses for the study variables, maternal education and social support and discipline consisted of 1 item; therefore, Cronbach's coefficient alphas are not reported for these four study variables.

Table 6.

Sample Statistics and Coefficient Alphas for Study Measures. N=678

Measure	Number of Items	Sample Range	Mean	Standard Deviation	Coefficient Alpha
Economic Hardship	12	0-9	1.4	1.7	.68
Depression (CIDI-SF)	5	0-5	.7	1.5	.93
Parenting Attitudes	4	4-16	10.8	2.8	.68
Measure		Number of Items		Sample Range	
Social Support				Frequencies	
Informal Support					
Instrumental		3		0-1	
High				561	
Low				117	
Financial		3		0-1	
High				289	
Low				389	
Formal Support		2		0-1	
Participation				127	
Non-participation				551	
Maternal Education					
Less than High school		1		0-1	
High school/GED /trade school		1		0-1	
Some college or more		1		0-1	
				242	
				275	
				161	
Measure	Number of Items	Sample Range	Mean	Standard Deviation	Coefficient Alpha
Parental Socialization					
Nurturance		5		4-7	
Teaching		3		0-7	
Discipline		1		0-4	
				5.3	
				.9	
				1.6	
				1.1	
				.44	
				.61	

Scores on Study Measures

Table 6 also presents means and standard deviations for mothers' scores on the economic hardship, depressive symptoms, parenting attitudes, maternal education, and parental socialization measures. The 12-item economic hardship measure assessed physical and material necessity experienced within the mother's household. The mean score of 1.4 for the economic hardship measure indicated that, on average, study participants experienced one form of economic hardship within the last year.

The CIDI-SF measured mothers' depressive symptomology, with lower scores indicating lower levels of depressive symptoms, and study participants with scores of 3 or above indicating that one is clinically significant for depressive symptomology (Kessler et al., 1998). The mean score on the CIDI-SF was .7. On average, mothers in the study sample are not reporting depressive symptomology in the clinical range. The percentage of mothers with a score of 3 or above was 11.7%.

The 4-items assessed the mothers' parenting attitudes, specifically negative parenting attitudes. Lower scores indicated more negative attitudes towards parenting. Higher scores indicated less negative parenting attitudes. The mothers in the study sample had a mean score of 10.8 on the parenting attitudes measure. Dividing the mean score by the total number of items revealed that overall, mothers "somewhat disagreed" with statements expressing parenting attitudes, such as "I feel trapped by my responsibilities as a parent" ($M=2.7$).

Mothers were also asked questions about levels of perceived and received social supports. Informal social supports (i.e., instrumental and financial) and formal social supports were measured. Scores with a value of one indicated high levels of informal

support. Scores of 0 indicated low levels of informal support. Study participants had a mean score of .8 for informal, instrumental support and .4 for informal, financial support. Formal supports measured mothers' participation in Head Start and Healthy Start government programs. The study participants had an overall mean score of .2, indicating low participation in these programs.

Bivariate Relationships Between Variables

Table 7 presents a correlation matrix of the relationships between all of the study variables. Economic hardship was significantly, positively correlated with maternal depressive symptoms ($r=-.287, p<.01$), the number of children in the household ($r=.10, p<.01$), and mothers having completed less than a high school level of education ($r=.10, p<.01$). Economic hardship was significantly, negatively correlated with parenting attitudes ($r=-.155, p<.01$). Lower scores of parenting attitudes indicated more negative parenting attitudes; therefore, higher scores of economic hardship were associated with more negative parenting attitudes. Economic hardship was also significantly, negatively associated with mothers obtaining high school/GED/trade or technical school education ($r=-.109, p<.01$), informal instrumental support ($r=-.221, p<.01$) and informal financial support ($r=-.188, p<.01$). Higher scores of depressive symptoms, as measured by the CIDI-FS, were significantly correlated to more negative parenting attitudes ($r=-.140, p<.01$). Depressive symptoms were significantly, positively

Table 7.

Bivariate Relationships Between Study Variables (N=678)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Predictors															
1. Economic Hardship	----														
2. Depressive Symptoms	.287**	----													
3. Parenting Attitudes	-.155**	-.140**	----												
4. Number of Adults in Household	-.021	.090*	-.020	----											
5. Mother's Age	.050	-.009	.096*	-.247**	----										
6. Number of Children in the Household	.100**	.007	-.117**	-.018	.238**	----									
7. Less than High School	.130**	.023	-.166**	.023	-.198**	.173**	----								
8. High School/GED/Trade or Technical	-.109**	-.055	.119**	-.032	.036	-.046	----	----							
9. Some College or More	-.021	.038	.049	.010	.182**	-.142**	-.416**	----							
10. Informal Support: Instrumental	-.221**	-.141**	.101**	.046	-.021	-.155**	-.149**	.059	.099**	----					
11. Informal Support: Financial	-.188**	-.093*	.156**	.024	-.043	-.121**	-.175**	.102**	.080*	.346**	----				
12. Formal Support: Participation in Head Start/Healthy Start	.064	.069	-.067	-.032	.051	-.006	.013	-.042	.034	.059	-.047	----			
Outcomes															
13. Nurturance	-.030	-.019	.102**	-.031	-.092*	-.031	.012	-.054	.049	.114**	.127**	.007	----		
14. Teaching/provision of stimulating materials	.018	.026	.157**	-.058	-.008	-.054	-.073	-.058	.149**	.115**	.154**	.020	.546**	----	
15. Discipline: Spanking	.059	.043	-.087*	.018	-.019	-.062	.013	-.009	-.004	.029	-.007	-.069	-.040	-.093*	----

Note: Correlations for dichotomous variables are point-biserial correlations

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

related to numbers of adults in the household ($r=.09, p<.05$) and significantly, negatively related to informal instrumental ($r=-.141, p<.01$) and financial support ($r=-.093, p<.05$). Parenting attitudes were significantly, negatively associated with age of mothers ($r=-.096, p<.05$; younger mothers had more negative attitudes), numbers of children in the household ($r=-.117, p<.01$; mothers with larger numbers of children had more negative attitudes), and mothers having obtained less than a high school level of education ($r=-.166, p<.01$; mothers with less than high school had more negative attitudes), and spanking ($r=-.087, p<.05$; mothers with less negative attitudes report more spanking). Parenting attitudes were significantly, positively related to nurturance ($r=.102, p<.01$) and teaching/provision of stimulating materials ($r=.157, p<.01$), informal instrumental ($r=.101, p<.01$) and financial support ($r=.156, p<.01$). Number of adults in the household was negatively correlated with mother's age($r=-.247, p<.01$). Mother's age is positively associated with the number of children in the household ($r=.238, p<.01$) and negatively associated with mothers obtaining less than a high school education ($r=-.198, p<.01$) and nurturance ($r=-.092, p<.05$). Number of children in the household is significantly, positively correlated with mothers obtaining less than a high school level of education ($r=.173, p<.01$) and significantly, negatively correlated with mothers obtaining some college or more ($r=-.142, p<.01$) and to mothers' perceived levels of informal instrumental ($r=-.155, p<.01$) and financial ($r= -.121, p<.01$) support. Less than a high school education was negatively correlated with mothers' perceived levels of informal instrumental support ($r=-.149, p<.01$) and financial support ($r=-1.75, p<.01$). High school/GED/trade or technical school attainment was positively correlated with mothers' perceptions of financial support ($r=.102, p<.01$). Attainment of some college or more was

positively correlated to informal instrument support ($r=.099, p<.01$), financial support ($r=.080, p<.05$), and teaching/provision of stimulating materials behaviors ($r=.149, p<.01$). Informal instrumental support was positively associated to financial support ($r=.346, p<.05$), nurturance ($r=.114, p<.01$), and teaching/provision of stimulating materials ($r=.115, p<.01$). Informal financial support was positively correlated with nurturance ($r=.127, p<.01$) and teaching/provision of stimulating materials ($r=.154, p<.01$). Nurturance was positively related to teaching/provision of stimulating materials($r=.546, p<.01$). Teaching/provision of stimulating materials was negatively correlated with spanking ($r=-.093, p<.05$).

Test of Major Hypotheses: Regression Models

Table 8 summarizes the research questions, major hypotheses, analysis strategies, and results. Table 8 is followed by a detailed report of the results for the tests of the major hypotheses.

Table 8:

Summary of Study Hypotheses and Data Analyses

Hypotheses	Analyses	Results/Findings
<p>H1: There is a direct relationship between economic hardship and parental socialization. Specifically:</p> <p>H1a. Higher levels of economic hardship will be associated with less frequent positive parent-child interactions (nurturance and teaching/provision of stimulating materials).</p> <p>H1b. Higher levels of economic hardship will be associated with harsher discipline (more frequent spanking).</p>	<p>Bivariate analyses indicated that economic hardship was not directly related to the three constructs of parental socialization, nurturance, teaching/provision of stimulating materials, and spanking.</p> <p>Hierarchical linear regression was performed to analyze the prediction of parental socialization constructs, nurturance, teaching/provision of stimulating materials and spanking*, from economic hardship.</p>	<p>The hypothesis was not supported.</p> <p>Economic hardship was not a significant predictor of the parental socialization outcomes.</p>
<p>H2: Levels of maternal education will moderate the relationship between economic hardship and parental socialization. Specifically:</p> <p>H2a. Higher levels of maternal education will weaken the relationship between economic hardship and less frequent positive parent-child interactions.</p> <p>H2b. Higher levels of maternal education will weaken the relationship between economic hardship and harsh discipline.</p>	<p>Three separate hierarchical regression models examined the potential moderation effects of the two levels of maternal education (i.e., high school/GED/trade or technical school and some college or more) for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking*).</p>	<p>The hypothesis was not supported.</p> <p>No significant predictors were indicated.</p>
<p>H3: Social support will moderate the relationship between economic hardship and parental socialization. Specifically:</p> <p>H3a. As informal and formal social supports increase, the relationship between economic hardship and less frequent positive parent-child interactions will weaken.</p> <p>H3b. As informal and formal social supports increase, the relationship between economic hardship and the frequency of spanking will weaken.</p>	<p>Three separate hierarchical regression models examined the potential moderation effects of social support for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking*).</p>	<p>The hypothesis was not supported.</p> <p>No significant predictors were indicated.</p>
<p>H: The relationship between economic hardship and parental socialization will decrease when controlling for parenting attitudes. Specifically:</p> <p>H4a. When controlling for parenting attitudes, the relationship between economic hardship and less frequent positive parent-child interactions will decrease.</p> <p>H4b. When controlling for parenting attitudes, the relationship between economic hardship and more frequent spanking will decrease.</p>	<p>Bivariate and regression analyses indicated that economic hardship was not directly related to the three constructs of parental socialization. Thus, hierarchical linear regression analyses were conducted to determine the prediction of parenting attitudes from economic hardship.</p> <p>Hierarchical linear regression was performed to analyze the prediction of parental socialization constructs, nurturance and teaching/provision of stimulating materials, from parenting attitudes. Since the discipline variable is</p>	<p>The hypothesis was partially supported.</p> <p>The linear regression model examining the prediction of parenting attitudes from economic hardship indicated that the overall model was significant and explains 5% of the variance in parenting attitudes ($B=-.237$, $R^2=.052$, $p<.001$).</p> <p>Parenting attitudes was a significant predictor of the parental socialization outcomes.</p>

	categorical, logistical regression was performed to assess the prediction of the parental socialization outcome, discipline, from parenting attitudes.	
H5: The relationship between economic hardship and parental socialization will decrease when controlling for depressive symptoms. Specifically: H5a. When controlling for depressive symptoms, the relationship between economic hardship and less frequent positive parent-child interactions will decrease. H5b. When controlling for depressive symptoms, the relationship between economic hardship and more frequent spanking will decrease.	Bivariate and regression analyses indicated that economic hardship was not directly related to the three constructs of parental socialization. Thus, hierarchical linear regression analyses were conducted to determine the prediction of depressive symptoms from economic hardship. Hierarchical linear regression was performed to analyze the prediction of parental socialization (i.e., nurturance, teaching/provision of stimulating materials and spanking*) from depressive symptoms.	The hypothesis was not supported. The results of the linear regression model examining the prediction of depressive symptoms from economic hardship indicated that the overall model was significant and explains 9% of the variance in depressive symptoms ($B=.252$, $R^2=.092$, $p<.001$). Depressive symptoms was not significant predictor of the parental socialization outcomes.
H6: The indirect relationship between economic hardship and parental socialization will be moderated by maternal education. Specifically: H6a. Higher levels of maternal education will weaken the indirect relationship between economic hardship and less frequent positive parent-child interactions. H6b. Higher levels of maternal education will weaken the indirect relationship between economic hardship and the frequency of spanking.	Three separate hierarchical regression models examined the potential moderation effects of the two levels of maternal education (i.e., high school/GED/trade or technical school and some college or more) for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking*).	The hypothesis was partially supported. The hypothesis that maternal education (i.e., some college/Jr. college or more) buffers the indirect relationship between economic hardship and parental socialization was supported only for the parental socialization outcome, teaching/provision of stimulating materials. The overall model was significant and explains 5.9% of the variance in maternal teaching/provision of stimulating materials behaviors ($B=.120$, $R^2=.059$, $p<.001$).
H7: The indirect relationship between economic hardship and parental socialization will be moderated by social support. Specifically: H7a. As formal and informal social supports increase, the indirect relationship between economic hardship and less frequent positive parent-child interactions will weaken. H7b. As formal and informal social supports increase, the indirect relationship between economic hardship and the frequency of spanking will decrease.	Three separate hierarchical regression models examined the potential moderation effects of social support for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking*).	The hypothesis was partially supported. The hypothesis that social support (i.e., informal instrumental social support) has the potential to moderate the indirect relationship between economic hardship and parental socialization was supported for the parental socialization construct, spanking ($B=-.222$, $R^2=.02$, $p<.05$).

* Logistic regression is used in the assessment of the parental socialization outcome, discipline (i.e., spanking).

Results of the Tests of the Major Hypotheses

One of the major purposes of this study was to analyze whether the relationship between economic hardship and parental socialization was direct or indirect. Bivariate analyses indicated that economic hardship was not directly related to the three constructs of parental socialization, nurturance, teaching/provision of stimulating materials, and spanking. Additionally, three separate hierarchical linear regression analyses were performed to analyze the prediction of the parental socialization constructs, nurturance and teaching/provision of stimulating materials, from economic hardship (H1; refer to Table 9). Number of adults in the household, mother's age, and number of children in the household were selected as control variables because they had been conceptually or empirically linked to parental socialization in the literature (e.g., Brown-Lyons, Robertson, & Layzer, 2001; Morgan et al., 2002; Wertheimer & Moore, 1998). Economic hardship was not a significant predictor of parental socialization (See Table 9). These findings indicate that Hypothesis 1 was not supported.

Table 9.

Parental Socialization Outcomes Regressed on Economic Hardship

Predictor	Nurturance (N=678)				Teaching/Provision of Stimulating Materials (N=678)				Discipline (N=678)		
	B	SE	β	p	B	SE	β	p	B	SE	p
Economic hardship	-.015	-.026	-.026	.502	.020	.035	.022	.562	.062	.057	.277
$R^2=.012$				$R^2=.007$				$R^2=.008$			

Note. B = unstandardized regression coefficient; SE = standard error of B; β = standardized regression coefficient.

Controls in this analysis include number of adults in the household, mother's age, and number of children in the household. Logistic regression was performed to analyze the prediction of discipline.

An additional purpose of the study was to determine the potential of maternal educational attainment and social support to moderate the direct relationship between

economic hardship and parental socialization outcomes. Hierarchical linear regression analyses were used to examine the moderation effects of maternal education at two levels (H2). Three separate hierarchical regression models examined the potential moderation effects of the two levels of maternal education (i.e., high school/GED/trade or technical school and some college or more) for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking). The study variables were entered in the following order: block 1 was demographic control variables, block 2 was the dummy variables for high school/GED/trade or technical school and some college or more attainment, block 3 was economic hardship, and block 4 was the interaction terms, economic hardship x high school/GED/trade or technical school attainment, and economic hardship x some college or more attainment. There was no evidence of maternal education moderating the relationship between economic hardship and the parental socialization outcomes (See Table 10). Hypothesis 2 was not supported.

Table 10.

Parental Socialization Outcomes Regressed on Economic Hardship x High School/GED/Trade or Technical and Economic Hardship x Some College or More

Predictor	<u>Nurturance</u> (N=678)				<u>Teaching/Provision of Stimulating Materials</u> (N=678)				<u>Discipline</u> (N=678)			
	B	SE	β	p	B	SE	β	p	B	SE	β	p
Economic hardship x High school/ GED/ trade or technical school attainment	-.06	.050	-.044	.21	-.042	.079	-.023	.593	-.002	.128	.230	
Economic hardship x Some college or more	-.03	.060	-.002	.61	.008	.095	.011	.933	.137	.114	.985	
$R^2=.020$				$R^2=.03$				$R^2=.008$				

Note. B = unstandardized regression coefficient; SE = standard error of B; β = standardized regression coefficient.
 Controls in this analysis include number of adults in the household, mother's age, and number of children in the household. Logistic regression was performed to analyze the prediction of discipline.

Next, the hypothesis (H3) that social support has the potential to moderate the direct relationship between economic hardship and parental socialization was tested. Hierarchical linear regression analyses were used to examine the interaction effects of the moderating variables. Three separate hierarchical regression models examined the potential moderation effects of the levels of social support (i.e., informal instrumental support, informal financial support, and formal support) for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking). The study variables were entered in the following order: block 1 was demographic control variables, block 2 was the dummy variables for high levels of participation in the social support, block 3 was economic hardship, and block 4 was the interaction terms, economic hardship x social support. There was no evidence of social support moderating the relationship between economic hardship and the parental socialization outcomes (See Table 11).

Table 11.

Parental Socialization Outcomes Regressed on Economic Hardship x Social Support

Predictor	Nurturance (N=678)				Teaching/Provision of Stimulating Materials (N=678)				Discipline (N=678)		
	B	SE	β	p	B	SE	β	p	B	SE	p
Economic hardship x Informal instrumental support	-.083	.044	.025	.063	-.097	.071	.037	.169	-.023	.118	.846
	$R^2 = .035$				$R^2 = .027$				$R^2 = .011$		
Economic hardship x Informal financial support	-.036	.048	.051	.447	-.121	.075	.038	.108	.325	.119	.060
	$R^2 = .032$				$R^2 = .031$				$R^2 = .020$		
Economic hardship x Formal support	.049	.054	.032	.373	.059	.087	.022	.495	.137	.137	.318
	$R^2 = .013$				$R^2 = .008$				$R^2 = .010$		

Note. B = unstandardized regression coefficient; SE = standard error of B; β = standardized regression coefficient.

Controls in this analysis include number of adults in the household, mother's age, and number of children in the household. Logistic regression was performed to analyze the prediction of discipline.

However, it is important to note that the bivariate analyses indicated that economic hardship was significantly related to maternal parenting attitudes and depressive symptoms. Hierarchical linear regression analyses were conducted to determine the prediction of parenting attitudes (H4) and depressive symptoms (H5) from economic hardship (See Tables 12, 13). The control variables, (i.e., number of adults in the household, mother's age, and number of children in the household) were entered.

Table 12 presents the results of the linear regression model examining the prediction of parenting attitudes from economic hardship. The overall model was significant and

Table 12.

Parenting Attitudes Regressed on Economic Hardship (N=678)

Parameter	B	SE	β	t	p
Intercept	10.058	.560		17.958	.000
Economic Hardship	-.237 **	.060	-.148	-3.921	.000
Number of Adults in the Household	.024	.108	.009	.224	.823
Mother's age	.068 **	.020	.138	3.456	.001
Number of Children in the Household	-.248**	.072	-.135	-3.466	.001

Note. B = unstandardized regression coefficient; SE = standard error of B. β = standardized regression coefficient.

$R^2 = .052$

** $p < .001$

explains 5% of the variance in parenting attitudes ($R^2=.052, p<.001$). Mother's age and number of children in the household were also indicated as significant predictors of parenting attitudes. Table 14 presents the results of the linear regression model examining the prediction of depressive symptoms from economic hardship. The overall model was significant and explains 9% of the variance in depressive symptoms ($R^2=.092, p<.001$).

Table 13.

Depressive Symptoms Regressed on Economic Hardship (N=678)

Parameter	B	SE	β	t	p
Intercept	.091	.297		.307	.759
Economic Hardship	.252**	.032	.291	7.879	.000
Number of Adults in the Household	.147*	.057	.097	2.560	.011
Mother's age	.002	.010	.006	.153	.879
Number of Children in the Household	-.021	.038	-.021	-.563	.574

Note. B = unstandardized regression coefficient; SE = standard error of, β = standardized regression coefficient.

$R^2 = 0.092$

* $p < .05$, ** $p < .001$

Furthermore, bivariate analyses indicated that parenting attitudes was significantly related to three constructs of parental socialization, nurturance, teaching/provision of stimulating materials, and spanking (H4). Given that economic hardship was a significant predictor of parenting attitudes, and parenting attitudes was significantly correlated with mothers' nurturance, teaching/provision of stimulating materials, and spanking of their children, the results indicate that economic hardship is indirectly related to parental socialization in this sample of African American, single mothers.

Hierarchical linear regression was performed to analyze the prediction of parental socialization constructs, nurturance and teaching/provision of stimulating materials, from parenting attitudes. Since the discipline variable is categorical, logistical regression was performed to assess the prediction of the parental socialization outcome, discipline, from parenting attitudes. In step 1, the control variables (i.e., number of adults

in the household, mother's age, and number of children in the household) were entered.

Table 14 shows that parenting attitudes is a significant predictor of parental socialization. As expected, the regression analyses revealed a significant relationship between parenting attitudes and nurturing behaviors ($B=.041, p<.05$). The expected significant relationships were also found for parenting attitudes and teaching/provision of stimulating materials behaviors ($B=.089, p<.001$), and spanking ($B=-.073, p<.05$).

Table 14.

Parental Socialization Outcomes Regressed on Parenting Attitudes

Predictor	Nurturance (N=678)				Teaching/Provision of Stimulating Materials (N=678)				Discipline (N=678)		
	B	SE	β	p	B	SE	B	p	B	SE	p
Parenting attitudes	.041	.014	.114	.003	.089	.022	.156	.000	-.073	.037	.050
$R^2=.024$				$R^2=.03$				$R^2=.012$			

Note. B = unstandardized regression coefficient; SE = standard error of B; β = standardized regression coefficient. Controls in this analysis include number of adults in the household, mother's age, and number of children in the household. Logistic regression was performed to analyze the prediction of discipline.

However, regarding Hypothesis 5 the bivariate analyses revealed that maternal depressive symptoms was not associated with the parental socialization constructs/outcomes (See Table 7). In addition, three separate hierarchical linear regressions were performed to analyze the prediction of parental socialization constructs nurturance, teaching/provision of stimulating materials, and discipline. Note, logistic regression was performed to analyze the prediction of discipline (i.e., spanking behaviors) from depressive symptoms. Depressive symptoms was not a significant predictor of the parental socialization outcomes (See Table 15). Hypothesis 5 was not supported.

Table 15.

Parental Socialization Outcomes Regressed on Depressive Symptoms

Predictor	Nurturance (N=678)				Teaching/Provision of Stimulating Materials (N=678)				Discipline (N=678)		
	B	SE	β	P	B	SE	β	p	B	SE	p
Depressive Symptoms	-.010	.026	-.015	.693	.033	.041	.032	.413	.066	.067	.323
$R^2=.012$				$R^2=.007$				$R^2=.010$			

Note. B = unstandardized regression coefficient; SE = standard error of B; β = standardized regression coefficient.
 Controls in this analysis include number of adults in the household, mother's age, and number of children in the household. Logistic regression was performed to analyze the prediction of discipline.

Additional purposes of the study were to determine the potential of maternal educational attainment and social support to moderate the indirect relationship between economic hardship and parental socialization outcomes (H6 and H7, respectively). Hierarchical linear regression analyses were used to examine the main and interaction effects of the moderating variables.

Three separate hierarchical regression models examined the potential moderation effects of the two levels of maternal education (i.e., high school/GED/trade or technical school and some college or more) for the three parental socialization outcomes (i.e., nurturance, teaching/provision of stimulating materials, and spanking). The study variables were entered in the following order: block 1 was demographic control variables, block 2 was the dummy variables for high school/GED/trade or technical school and some college or more attainment, block 3 was parenting attitudes, and block 4 was the interaction terms, parenting attitudes x high school/GED/trade or technical school attainment, and parenting attitudes x some college or more attainment. There was no evidence of high school/GED/ trade or technical school attainment moderating the relationship between parenting attitudes and the parental socialization outcomes. The

interaction term between parenting attitudes and high school/GED/trade or technical school attainment was not significant.

However, the hypothesis (H6) that maternal education buffers the indirect relationship between economic hardship and parental socialization was supported only for the parental socialization outcome, teaching/provision of stimulating materials. No other buffering effects for maternal education were found for the parental socialization outcomes, nurturance and discipline. Table 16 presents the results of the hierarchical regression model examining the interaction effect for mothers' teaching/provision of stimulating materials. The overall model was significant and explains 5.9% of the variance in maternal teaching/provision of stimulating materials ($R^2=.059, p<.001$).

Table 16.

*Summary (1) of Hierarchical Analysis for Variables Predicting
Teaching/Provision of Stimulating Materials Behaviors: Attainment of Some College
or More as Moderator (N=678)*

Variables	B	SE	β
Step 1			
Number of Adults in Household	-.111	.062	-.070
Mother's Age	-.019	.012	-.069
Number of Children in the Household	-.002	.043	-.002
Step 2			
High school/GED/technical or trade	.001	.141	.000
Some College or More	.612***	.168	.148
Step 3			
Parenting Attitudes	.071**	.034	.124
Step 4			
Parenting Attitudes x High school/GED/technical or trade	-.010	.048	-.011
Parenting Attitudes x Some College or More	.120*	.061	.089

Note. B = unstandardized regression coefficient; SE standard error of B

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

As recommended by Aiken and West (1991) post hoc probing of the significant interaction was performed. The significant interaction term (parenting attitudes x some college or more) was plotted to gain a deeper understanding of this interaction. A graphic display of this interaction as related to teaching/provision of stimulating materials is illustrated in Figure 4. Since the maternal education variable is categorical, the values of

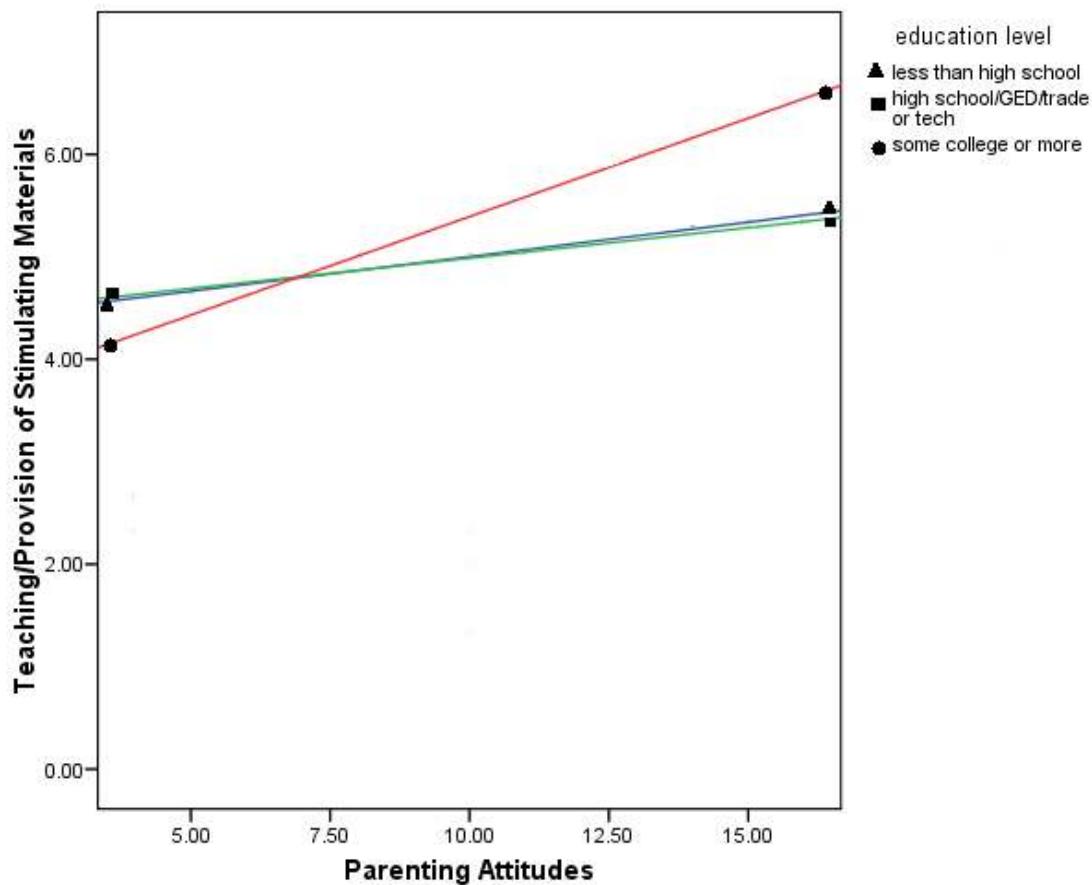


Figure 4. Depiction of moderation effect of maternal educational attainment of some college or more on the relationship between parenting attitudes and teaching/provision of stimulating materials.

the dummy variable that correspond to the different groups of maternal education were used to plot the interaction between parenting attitudes and maternal education (Aiken & West, 1991).

The regression lines for the three categories (i.e., less than high school, high school/GED/trade or technical school, some college/Jr. college or more) of maternal education were plotted. It is important to note that Figure 4 is illustrating the magnitude and direction of the slopes for the three categories of maternal education. Maternal education level, less than high school, is the reference category. In Figure 4, the slope of each regression line represents a change in parenting attitudes. As illustrated in Figure 4, there is no significant difference in the magnitude and direction between the slope of the regression lines for less than high school and high school/GED/trade or technical school. Specifically, for mothers with high school/GED/trade or technical school one (1) point change in parenting attitudes is associated with a .061 increase in maternal teaching/provision of stimulating materials. Figure 4 also illustrates a significant difference in the magnitude and direction between the slope of the regression lines for less than high school and some college/Jr. college or more. Specifically, for mothers with some college/Jr. college or more a one (1) point change in parenting attitudes is associated with a .191 increase in the teaching/provision of stimulating materials. The association between parenting attitudes and teaching/provision of stimulating materials is stronger for mothers with some college or more education than for those with less than a high school education or for those with high school/GED/trade education.

Since the hierarchical regression analyses and Figure 4 demonstrated that less than high school and high school/GED/technical or trade are not significantly different,

the two groups, less than high school and high school/GED/technical or trade, were combined and were used as the reference group in the hierarchical regression analyses and the analyses were performed again. The findings are provided in Table 17 and Figure 5. Maternal education moderated the relation of parenting attitudes to mothers' teaching/provision of stimulating materials. The new overall model is significant and explains 5.9% of the variance in maternal teaching/provision of stimulating materials ($R^2=.059$, $p<.001$).

Table 17.

*Summary (2) of Hierarchical Analysis for Variables Predicting
Teaching/Provision of Stimulating Materials: Attainment of Some College or More
as Moderator (N=678)*

Variables	B	SE	B
Step1			
Number of Adults in Household	-.111	.062	-.070
Mother's Age	-.019	.012	-.068
Number of Children in the Household	-.003	.042	-.002
Step 2			
Some College or More	.552***	.145	.148
Step 3			
Parenting Attitudes	.066**	.024	.115
Step 4			
Parenting Attitudes x Some College or More	.126*	.056	.093

Note. B = unstandardized regression coefficient; SE standard error of B

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

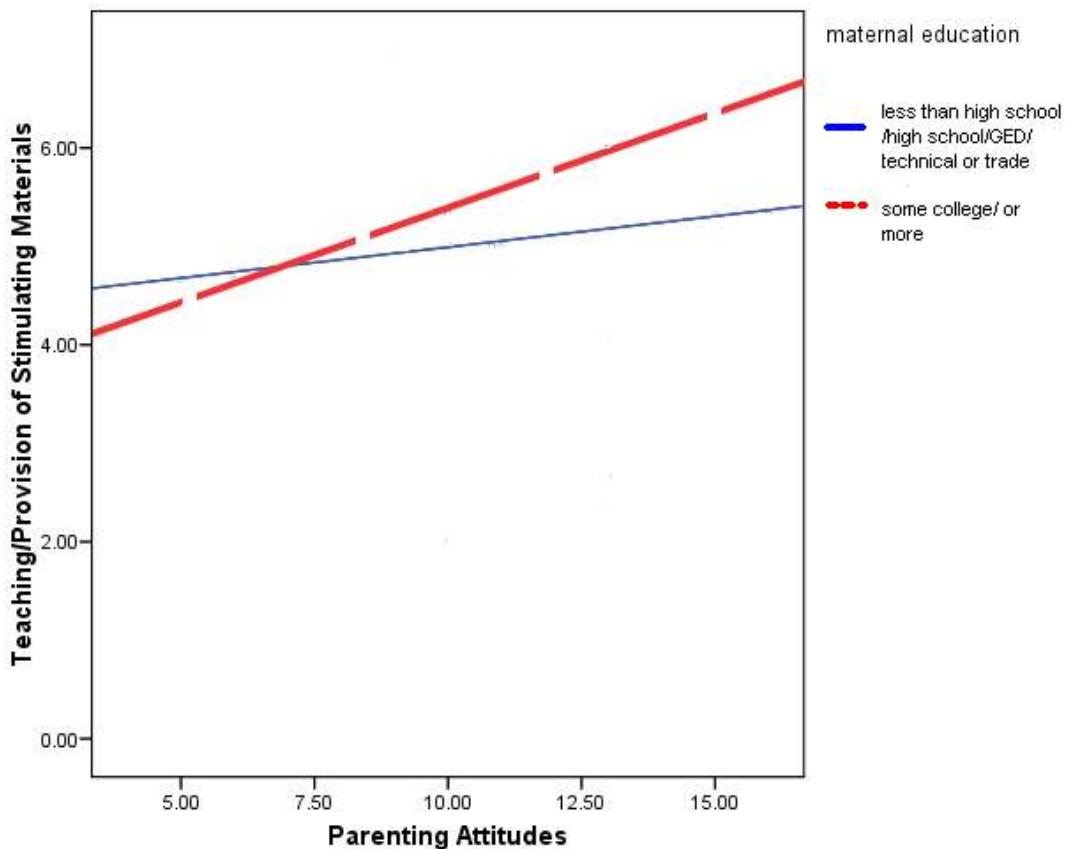


Figure 5. Depiction of moderation effect for two groupings of maternal education

Next, the hypothesis (H7) that social support has the potential to moderate the indirect relationship between economic hardship and parental socialization was tested. The hypothesis that informal instrumental social support has the potential to moderate the indirect relationship between economic hardship and parental socialization was supported for the parental socialization construct, spanking. Moderating effects were not found for nurturance and teaching/provision of stimulating materials. Specifically, for low levels of instrumental support, mothers with more positive parenting attitudes had a higher probability of spanking their children. In contrast, for mothers with high levels of instrumental social support, more positive parenting attitudes are associated with a lower probability of maternal spanking behaviors ($R^2=.02, p<.05$). Table 18 presents the results

of the hierarchical regression model examining the moderation effect for maternal spanking.

Table 18.

Summary of Hierarchical Analysis for Variables Predicting Spanking: Informal Instrumental Social Support as Moderator (N=678)

Variables	B	SE
Step 1		
Number of Adults in Household	.086	.105
Mother's Age	.006	.020
Number of Children in the Household	-.144	.077
Step 2		
Parenting Attitudes	.112	.096
Step 3		
Instrumental Social Support	.136	.290
Step 4		
Parenting Attitudes x Instrumental Support	-.222*	.104

Note. B = unstandardized regression coefficient; SE standard error of B Logistic regression is used in the analyses.

* $p < .05$

$R^2 = .02, p < .05$

Post hoc probing of the significant interaction was not performed. The significant interaction term (parenting attitudes x informal instrumental support) was not plotted because a plot of this interaction on an interval scale would not be meaningful (Aiken & West, 1991). As previously stated logistic regression was utilized to examine the prediction of punitive disciplinary practice, spanking, from parenting attitudes, as well as the potential moderating effect of informal, instrumental social support on the relationship between parenting attitudes and discipline (i.e., spanking). A graphic display of this interaction is not meaningful for a logistical scale that measures probability.

The hypothesis (H7) that informal financial social support has the potential to moderate the indirect relationship between economic hardship and parental socialization

was not supported. Contrary to the study hypotheses, moderating effects for financial support were not found for any of the parental socialization outcomes. In addition, the hypothesis (H7) that formal social support from Head Start and Healthy Start programs has the potential to moderate the indirect relationship between economic hardship and parental socialization was not supported. Contrary to the study hypotheses, moderating effects for financial support were not found for any of the parental socialization outcomes (See Table 19).

Table 19.

Parental Socialization Outcomes Regressed on Parenting Attitudes x Social Support

Predictor	<u>Nurturance</u> (N=678)				<u>Teaching/Provision of Stimulating Materials</u> (N=678)				<u>Discipline</u> (N=678)			
	B	SE	β	p	B	SE	β	P	B	SE	p	
Parenting attitudes x Informal financial support	-.033	.035	-.082	.340	-.055	.054	-.086	.314	-.071	.049	.150	
	$R^2 = .041$				$R^2 = .052$				$R^2 = .016$			
Parenting attitudes x Formal support	-.067	.051	-.051	.187	.074	.081	.035	.358	-.098	.551	.331	
	$R^2 = .027$				$R^2 = .032$				$R^2 = .014$			

Note. B = unstandardized regression coefficient; SE = standard error of B; β = standardized regression coefficient.
 Controls in this analysis include number of adults in the household, mother's age, and number of children in the household. Logistic regression was performed to analyze the prediction of discipline.

CHAPTER V: DISCUSSION

The current study utilized Hill's ABCX Family Stress Theory to examine factors with the potential to mediate and moderate the relationship between economic hardship and parental socialization outcomes. Previous research literature has documented that economic hardship is negatively associated with parenting (Conger et al., 1992; Elder, 1985; Lempers, Clark-Lempers, & Simon, 1989). Yet, few studies have focused exclusively on African American single mothers with infant children who have been impacted by 1996 welfare reform legislation. In addition, to further expand extant research, this study included only single mothers who were not cohabiting with their child's father or a partner, and considered maternal educational attainment at various levels other than comparing less than high school to high school and beyond.

This study focused on four factors (i.e., parenting attitudes, maternal depressive symptoms, maternal educational attainment, and social support) that may influence the relationship between economic hardship and parental socialization outcomes (i.e., parent-child interactions such as nurturance and teaching/provision of materials; and disciplinary practices such as spanking). Specifically, the current study explored whether the relationship between economic hardship and socialization was direct or indirect. The study examined whether there were moderating effects of maternal educational attainment and social supports on the relationship between economic hardship and parenting; and whether parenting attitudes and depressive symptoms mediate the relationship between economic hardship and parental socialization. Maternal educational attainment was defined at three levels of education: 1) less than high school, 2) high school/GED/trade or technical school, and 3) some college or more. Social supports were

categorized as informal and formal. Informal supports assessed were instrumental and financial supports from family members, friends, or partners available to the single mother. Formal supports referred to the receipt of support from government programs aimed at improving parenting: Healthy Start and Head Start/Early Head Start.

Parenting attitudes and depressive symptoms were expected to mediate the relationship between economic hardship and parenting. Maternal educational attainment and social supports were expected to moderate the indirect relationship between economic hardship and parental socialization. The findings from the current study may have important implications for family practitioners seeking to create culturally sensitive prevention and intervention programs for low-income single mothers and their families. The results are also expected to have implications for researchers and policymakers.

Hill's ABCX Family Stress Theory and the Study Findings

Hill's ABCX Family Stress theory was an appropriate framework for the current research study. Family stress theory posits that acute or chronic stressors (A Factor), when accumulated, lead to family crises, including relational crises. Examples of such family crises resulting from family stressors are episodes of neglectful, un-nurturing parenting or abusive, harsh disciplinary practices. However, their impact can be influenced or buffered by factors that help families to competently parent despite contextual stressors. These factors include personal and external resources (B Factor) and cognitions and perceptions (C Factor). Personal and external resources include skills and educational attributes that the individual can employ, as well as, informal and formal social supports available to the family. Cognitions and perceptions (C Factor) include the range in cognitions between hope and positive attitudes vs. depression and negative

attitudes. These complex factors relate together with ongoing contextual stressors, such as economic hardship, to predict family crises, such as poor parental socialization.

Results of this research revealed that African American, single mothers might experience the ongoing contextual stressor, economic hardship. Complex factors, such as parenting attitudes, depressive symptoms, maternal educational attainment, and social support relate together with economic hardship in various ways to predict parental socialization in African American, single mothers with infant children. Mothers in this study who experienced increased economic hardships had higher levels of depressive symptoms and more negative parenting attitudes. Specifically, negative parenting attitudes predicted poor parental socialization outcomes for the mothers.

However, the protective factors, maternal education and informal instrumental supports may strengthen the likelihood of a single mother's provision of adequate parental socialization. Findings from this study, consistent with Hill's ABCX Family Stress theory, indicated that for African American, single mothers with high levels of maternal education, as their parenting attitudes become less negative, these mothers are more likely to engage in positive parent child interactions with their young children. In addition, for mothers with high levels of informal social supports, as parenting attitudes become less negative, mothers are less likely to engage in punitive disciplinary practices.

It is also important to note that the current study did not support the Hill's ABCX Family Stress theoretical proposition that stressors have a direct impact on family functions, such as parenting. The study found no evidence that the contextual stressor, economic hardship, was directly associated with the parental socialization of the single mothers in the sample. However, the results of the current study indicate that economic

hardship may indirectly impact parental socialization through its impact on parenting attitudes. The results are consistent with previous research showing that the relationship between economic hardship and parenting is a mediated or indirect relationship (Conger et al., 1992, 1994). However, previous studies have found both direct and indirect relationships between economic hardship and parenting. It is noteworthy that previous studies, in which both direct and indirect associations between economic hardship and parenting have been found, measured non-normative economic stressors, such as loss of employment or income, on parental socialization. The current study measured the impact of the sum/accumulation of normative economic stressors, such as being unable to pay the phone bill and rent, on parenting. The current study is indicating that accumulated normative stressors may not directly impact parental socialization, but indirectly impact the parental socialization of single mothers through its impact on mother's parenting attitudes. Furthermore, the current study found that normative economic stressors directly impact parenting attitudes. The current findings provide insight into the challenges, strategies, and support needs of African American, single mothers impacted by welfare reform legislation.

Very few existing studies have examined the ability of maternal education and social support to buffer the relationship between economic hardship and parental socialization by looking at specific levels or types of education beyond the high school level and informal and formal social supports. The current findings, which are consistent with Hill's ABCX Family Stress, expand the existing research literature and guide future investigation of challenges, strategies, and support needs of African American single mothers. A discussion of the results of tests of the hypothesized relationships follows.

Economic Hardship as a Predictor of Parental Socialization Outcomes and Potential Moderators of This Relationship

It was hypothesized that economic hardships would both directly and indirectly predict parental socialization. Higher levels of total economic hardship were expected to be a significant predictor of negative parent-child interactions (i.e., less nurturance and teaching/provision of stimulating materials) and harsher discipline (i.e., more frequent spanking). Contrary to the study hypotheses, economic hardship was not directly related to the parental socialization outcomes. The hypotheses predicting that maternal educational attainment and social supports would moderate this relationship were not supported; none of the interaction terms in models including maternal education or social supports as moderators of this relationship were significant. These results support previous research studies that suggest that other factors such as maternal depressive symptoms and parenting attitudes may be pathways through which economic hardship (indirectly) impacts parenting behaviors (Conger et al., 1992; Conger et al., 1993; Conger et al., 1994; Conger et al., 1997). The current study found evidence to suggest that higher levels of economic hardship significantly predict higher totals of maternal depressive symptoms and more negative parenting attitudes. Findings indicating that depressive symptoms and parenting attitudes predict parental socialization would further support research suggesting that economic hardship indirectly impacts parenting through processes such as depressive symptoms and negative parenting attitudes. These mediational relationships were also examined in the current study.

Parenting Attitudes as a Potential Mediator

The hypothesis that the relationship between economic hardship and parental socialization would decrease when controlling for parenting attitudes was partially supported. The findings of the study indicated no significant relationship between economic hardship and parental socialization. However, economic hardship was found to predict parenting attitudes, and parenting attitudes were found to be a significant predictor of the parental socialization outcomes--parent-child interactions (i.e., nurturance, teaching/provision of materials) and discipline (i.e., spanking). These findings indicate that economic hardship indirectly impacts the parenting of the mothers in the study by negatively impacting parenting attitudes which, in turn, are related to less positive parent-child interactions and more frequent spanking. Descriptive statistics revealed a mean score indicating that on average mothers reported that they "somewhat disagreed" with statements expressing parenting attitudes, such as "I feel trapped by my responsibilities as a parent" and "I find taking care of my child(ren) is much more work than pleasure." These findings are consistent with previous research on low-income single mothers, indicating that increased financial hardships predict negative parenting attitudes that are linked to negative parent-child interactions and punitive disciplinary practices, such as spanking (McCurdy, 2005; Sachs, Pietrukowicz & Hall, 1997; Whipple & Webster-Stratton, 1991).

Depressive Symptoms as a Potential Mediator

The current study posited that the relationship between economic hardship and parental socialization would decrease when controlling for depressive symptoms. This hypothesis was not supported. Depressive symptoms were not significantly associated

with parental socialization outcomes in the study sample. This finding is consistent with some research suggesting that the relationship between depression and parental socialization may not be causal. Lovejoy, Graczyk, and Neuman (2000) posed that a third variable, such as parenting affect/attitudes, may be causally related to both maternal depression and parental socialization.

Most extant research has been guided by the assumption that the parenting difficulties of depressed women are directly related to the symptoms of the disorder or are correlates of features associated with the disorder. Lovejoy et al. (2000) suggests that this depressive symptom-based approach to understanding the parenting difficulties of depressed women is problematic. The approach does not take into account that parenting difficulties may not be specific to depression and may reflect general psychological distress (e.g., negative parenting affect/attitudes) rather than depression. Lovejoy et al. (2000) posed that as an alternative to the depressive symptom-based approach, it would be helpful to conceptualize the parenting difficulties of depressed parents as correlates of disturbances in parenting affect/attitudes. Parenting affect/attitudes can be used to describe individual differences in the general population as well as in populations experiencing psychological difficulties. This allows predictions regarding parenting behavior to extend across a range of mood disturbances that vary in severity.

In nonclinical samples, negative parenting affect/attitudes scores are correlated positively with hostile/coercive behavior and are inversely correlated with supportive/engaged interactions with children; positive parenting affect/attitude scores are associated with supportive interactions. It should be noted that the current study utilized a nonclinical sample; 81% of the mothers included in the sample reported no

symptoms of depression. Only 5% of the mothers fell within the clinical range for depression.

The current study expands the literature on maternal depressive symptoms and parental socialization by focusing on an important, under-investigated population of low-income, African American single mothers with infants and toddlers. The single mothers in the current study are representative of mothers with less acute symptoms in community populations. The majority of research on maternal depressive symptoms focuses on clinical samples of parents who exhibit severe disorders (Downey & Coyne, 1990; Hammes, Shih, & Brennan, 2004). Moreover, a majority of existing studies on this topic have been conducted with smaller samples of White mothers and their families (e.g., Cohn, Matias, Tronick, Connell, & Lyons-Ruth, 1986; Essex, Klein, Miech, & Smider, 2001; Teti et al., 1995; Wright et al., 2000) or similarly small, racially mixed samples (e.g., Pachter et al., 2006; Petterson & Albers, 2001). This study presented the opportunity to examine these relationships using a within-group, non-comparative approach with a nationally representative sample of African American single mothers. In this community sample of single mothers without partners, it could be that parenting difficulties are not only related to other psychological distress as suggested by Lovejoy et al., but also to daily life stressors (e.g., coping with poverty, adjusting to welfare reform, and managing a family without help from a partner).

Moderating Role of Maternal Education in the Indirect Relationship

Between Economic Hardship and Parental Socialization

A major goal of this study was to identify factors that might buffer African American, single mothers from the indirect negative effects of economic hardship on

their parenting. One variable that was examined as a potential moderator was maternal educational attainment. Over 75% of the mothers in the study sample attained a high school level of education or less. The levels of education received by mothers in this study are consistent with other studies of low-income, single mothers (e.g., Bee et al., 1982; Brody & Flor, 1998; Crnic & Greenberg, 1990; A. Jackson, 1992; A. Jackson et al., 1998; McLoyd et al., 1994). It was hypothesized that maternal education would buffer the indirect relationship between economic hardship and parental socialization. Three educational attainment levels (i.e., less than high school, high school/GED/trade or technical, some college/JR. college or more) were examined separately for the three constructs of parental socialization. These analyses were only conducted using models with parenting attitudes, as the mediational hypotheses for depressive symptoms were not supported.

For mothers with maternal educational attainment at the some college/Jr. college or more level, the relationship between parenting attitudes and teaching/provision of stimulating materials was stronger than for mothers with less than high school/high school/GED/ trade or technical school education. That is, when mothers have some college or more as their parenting attitudes become less negative the total number of days per week mothers played games like peek-a-boo or gotcha with child, sang songs or nursery rhymes to their child, and read stories to their child increased significantly. These findings are consistent with existing studies that have shown that higher levels of maternal education have been associated with higher quality home learning environments and mother-child interactions (Laosa, 1980; Richman, Miller, & LeVine, 1992; Stevenson & Baker, 1987).

The current study expands the literature on maternal education and parental socialization. Other studies analyzing the impact of maternal education focus on three levels of maternal education (i.e., below a high school level, at the high school level, and beyond the high school level) on parental socialization (A. Jackson, 1992, 1993; A. Jackson et al., 1998). The current study explored the role of maternal educational attainment at the levels: less than high school, high school/GED, technical trade, some college/junior college, and college/graduate school. Extant research is somewhat unclear on the potential of specific levels of education beyond high school to impact the parental socialization of low-income, single mothers. Performing the regression analyses provided a clearer understanding of each specified levels of maternal education's potential to influence the parental socialization of single mothers.

The regression analyses revealed that for mothers with lower levels of educational attainment (less than high school, high school/GED, and technical or trade school) as parenting attitudes increased, the parental socialization outcome, teaching/provision of stimulating materials did not significantly increase; nor were these lower levels of education significantly associated with any of the three parental socialization outcomes in the bivariate analyses. These findings suggest that African American single mothers in low-income populations are more likely to engage in more cognitively stimulating and teaching activities with their children if provided with increased levels of education at the college/Jr. college level. Increased levels of education at the college/Jr. college level may have benefits beyond what is provided in high school/technical or trade programs. Mothers with an attainment of some college or more may have developed skills that are not only beneficial for workforce participation, but

also enrich their parent-child interactions within the family. Furthermore, mothers with an attainment of some college/Jr. college or more and their children may function within social contexts that differ from the social context of mothers with lower levels of educational attainment. The social context of mothers with some college education or more may have greater access to social resources/capital, such as financial supports, than mothers with lower educational levels.

Moderating Role of Social Support

Another major goal of the study was to examine the moderating potential of different types of social support in the indirect relationship (i.e., the parenting attitudes mediated relationship) between economic hardship and parental socialization. Three types of social supports--informal instrumental, informal financial, and formal--were examined. Informal instrumental supports were a measure of in-kind assistance that mothers perceived as available to them (e.g., child care assistance and a place to stay). As a reminder, informal financial supports referred to mothers' perceptions of having someone to loan them or cosign for a loan for certain amounts of money. Formal support was a measure of mother's participation in Head Start and/or Healthy Start programs; less than one-fifth participated in these programs.

Contrary to study hypotheses, informal financial supports and formal supports were not found to moderate the indirect relationship between economic hardship and any of the three parental socialization constructs. These findings contradict literature which suggests that monetary assistance and participation in government assistance programs have benefits for low-income families (Henlyet al., 2005), but are consistent with social capital literature that suggests that the utilization and function of financial

supports/capital is more beneficial to family processes than the receipt or perception of financial supports (Coleman, 1988). For example, if families are able to utilize financial supports to achieve specific goals that would substantially limit economic hardships, this utilization of financial supports may buffer the indirect relationship between economic hardship and parental socialization. Also, formal supports were not found to protect against the impact of parenting attitudes on parental socialization. These results are in line with social support literature that suggests that the research utility of measures of received support are limited because receiving support is not only a function of the availability of social support, but also of the receiver's level of hardship (Cutrona, 1986). In other words, mothers who receive support from government programs such as Head Start/Early Head Start and Healthy Start may be in more need than those who are not participating or have chosen not to participate in the programs.

As predicted, the results of the current study did reveal that informal instrumental supports significantly buffer the indirect relationship between economic hardship and parental socialization. Specifically, for mothers with high levels of instrumental supports as parenting attitudes became less negative the probability that mothers will use the punitive disciplinary practice of spanking decreased.

The findings were consistent with extant research that reports that social supports (e.g., child care) serve single mothers primarily as a coping function (Henly et al., 2005). For example, child care might provide respite to low income, single mothers without partners when faced with parenting under stressful life circumstances. Such respite, in turn, might improve mother's parenting attitudes (i.e., they feel less trapped or worn out by parenting), and in turn reduce mother's parenting stress and lessen her reliance on

spanking or other punitive forms of discipline. Conversely, mothers with low levels of instrumental social support may have an over reliance on punitive disciplinary practices, such as spanking. The current study revealed that for mothers with low levels of instrumental supports, as parenting attitudes became less negative, the probability that mothers will use the punitive disciplinary practice of spanking increased.

Instrumental social supports were not found to buffer the relationship between parenting attitudes and the other two parental socialization outcomes, nurturance and teaching/provision of stimulating materials. These findings may be indicating that for low income mothers of young children instrumental social supports, such as having someone to provide child care, is not an important factor impacting whether mothers nurture (e.g., kiss their children) or teach/provide stimulating materials for their infant child. Whether or not mothers have the benefit of the respite or coping function provided by instrumental social supports does not have an impact on the relationship between parenting attitudes and the parental socialization outcomes, nurturance and teaching/provision of stimulating materials.

The current study expands the existing literature on social supports by examining the effects of various types of social support on the indirect relationship between economic hardship and parental socialization. The findings of the current study are consistent with the findings of previous research indicating that support may operate in a stressor-specific manner and that the type of support, which is most effective may be dependent on the needs created by the stressor (Cohen & McKay, 1984). For example, certain types of stressors create a need for emotional support whereas others increase the need for instrumental support. Still other stressors create needs in both areas. In an earlier

study, single mothers reported that the types of supportive behaviors they found helpful differed depending on the type of problem faced (Cohen & McKay, 1984). For instance, single mothers were more likely to cite instrumental supports as helpful when they faced financial and child-centered problems, such as childcare, than when they confronted personal-emotional problems.

Furthermore research findings, such as Lyons et al.'s (2005) findings with a sample of welfare mothers (56% Black), suggests that increasing informal support may reduce the amount of financial strain (e.g., difficulty paying rent, utilities, food, or clothing) and depression that parents experience as well as improve their positive parenting (e.g., praising their child, having fun with their child, encouraging their child to read). Thus, informal social support might be one of those other factors that is more important to understand than depressive symptoms in terms of how it operates in this parenting context (i.e., in the relationship between economic hardship and parental socialization).

Study Limitations

Although the current study expands existing literature and explores factors that may influence and buffer the impact of economic hardship on the parenting of African American, single mothers, the research has several limitations. First, this study used secondary data analyses which challenged the researcher to locate data items that are shaped according to current research needs. Second, the data were cross-sectional in nature, which does not allow for causal relations to be inferred. Another limitation in the current study is selection bias. Data for single mothers who decided to participate in this longitudinal study, and who in addition decided to pursue education beyond high

school are being analyzed. These single mothers may share characteristics, such as motivation, that may weaken the relationship between economic hardship and parental socialization. Particularly, the education decision selection bias must be considered in interpreting the analyses for the moderating effect of maternal education in the relationship between economic hardship and parental socialization. These data are also self-reported data. Observations of mothers' parental socialization by trained investigators or objective evidence of their economic hardship or educational attainment are not available. Therefore, there are some threats to internal validity.

Further threats to internal validity relate to the instrumentation used to measure aspects of parental socialization. Although current findings confirm many of the hypotheses and contribute to the literature on African American parenting, the question remains as to whether the measures of parenting are valid for low-income, African American single-mother families. Constructs that take environmental contexts into account, such as living in a violent neighborhood, may be more appropriate for measuring positive parenting in some African American families (Brody et al., 1999). One likely methodological limitation of the study was the measurement of parental interactions. The alphas for these measures were low to moderate--.44 for nurturance, .61 for teaching/provision of stimulating materials, and .68 for parenting attitudes. In addition the measurement for parenting attitudes is limited in that it measures negative parenting attitudes and does not measure positive parenting attitudes. Consequently, the results of the study should be interpreted with caution. Suggestions for future studies include increasing the number and nature of items measuring parenting practices and attitudes.

Therefore, it may not be accurate to generalize findings to all low-income African American single mothers.

Moreover, these data are nationally representative of single mothers in U.S. cities of 200,000 or more who were affected by welfare reform, but do not include mothers in larger or smaller cities, rural areas, or who were not directly affected by welfare reform. In addition, the sample did not include single mothers who were living with the child's father or cohabiting with another partner. The reasons for mothers' single status was also not known (e.g., were they never or ever married, separated, divorced, widowed?), and only African American mothers were included in the sample. This will further limit the generalizability of the study.

Despite these limitations, this study holds promise for advancing the knowledge base on the effects of economic hardship on single mothers' parental socialization behaviors and ways to support these families. Furthermore, the study advances the understanding of the relation between economic hardship and parental socialization. First, the study examined the relations of these variables within Hill's ABCX Family Stress theory with an understudied population--African American, single mothers. Second, the study added to the evidence showing that economic hardship was not directly associated with parental socialization, but that economic hardship indirectly impacts parenting in a pathway through parenting attitudes. Third, there was evidence that attaining some college or more may moderate the association between parenting attitudes and mother's teaching/provision of stimulating materials. Furthermore, the study provided evidence that instrumental supports buffer the impact of parenting attitudes on the punitive

disciplinary practice of spanking. Directions for future research to address these limitations are discussed after presenting practice and policy implications of this research.

Implications for Family Practitioners and Policymakers

The results of the current study have implications for family practitioners and policymakers. The study revealed that African American, single mothers may experience economic hardships that are linked to depressive symptomology and negative parenting attitudes. When working with single mothers mental health workers, counselors, therapists, psychologists, and other family practitioners should explore the impact of contextual factors related to economics that may be impacting the psychological, mental, and emotional health of the client, and work collaboratively with caseworkers and social workers to connect single mothers with services and programs to address and minimize their economic hardships.

The findings of the current study also highlighted that low-income, African American single mothers express negative parenting attitudes that can have dire consequences on their interactions with their toddlers. Specifically, increased economic hardships lead to negative parenting attitudes that lead to less nurturing, less cognitively stimulating interactions and more punitive disciplinary practices, such as spanking. In fact, more than one-third of the African American, single mothers participating in the study reported having spanked their infant child at least once or twice in the past month. These findings indicate the importance of parent education aimed at improving the parenting attitudes of single mothers. Parent educators need to expand the disciplinary practices available to African American, single mothers and equip these single mothers with a variety of disciplinary tools that can be incorporated into the socialization of their

children. African American, single mothers should be provided with knowledge about alternatives to spanking, such as implementation of positive reinforcements, natural and logical consequences, and time outs, that when used consistently can be effective in the socialization of infants and toddlers.

The data analyses identified two factors with the potential to buffer the negative impact of economic hardships and parenting attitudes on parent-child interactions and mothers' disciplinary practices. The results of the study provided a clearer understanding of whether different types of maternal education above the high school level impact the relationship between economic hardship and parental socialization. The research findings indicated that different types of education (i.e., technical or trade school, junior college, 4-yr college) differ in their ability to impact the indirect relationship between of economic hardship on the parenting of African American single mothers. These findings are relevant to the development of educational programs for mothers at risk of inadequately socializing their children (i.e., single mothers transitioning from welfare dependence). Single mothers with increased levels of maternal education at the college/Jr. college level or more have been indicated to engage in teaching activities with their children, as their attitudes towards parenting become less negative.

Current welfare reform programs emphasize technical, trade, and job training programs and work-first strategies resulting in an increase in the percentage of welfare recipients seeking more immediate employment and a decline in the percentage pursuing postsecondary education or degree programs. Therefore, the work-first policy approach of TANF may limit single mothers' opportunities to improve their skills through education. Because research has clearly shown that maternal education benefits children,

policymakers should continue to consider and develop ways to expand educational options for single mothers beyond technical, trade, and job training programs. The findings of the study indicated that technical or trade programs, may not protect against the impact of hardships that single mothers experience as they interact with their children. Continued and expanded funding for educational grants and scholarships aimed at assisting single mothers to attain educational skills that will make them more competitive in the workforce are needed. Along with an expansion of educational attainment opportunities for single mothers, caseworkers and social workers should be encouraged to present postsecondary education at the college level as a viable option for African American, single mothers. College education programs often require longer time commitments than job training programs. Single mothers may require dependable and consistent transportation and child care services to support the pursuit of college level education. Case managers and social workers can assist single mothers in identifying and developing social services and networks to aid them in their educational endeavors.

Consequently, social support policy and programmatic intervention with specific goals to meet the practical needs of single-mother families are detrimental to single mothers and their children that are living within the current political context of welfare reform. The analyses of the current study indicated that social supports might differ in their ability to buffer the impact of economic hardship on parental socialization. The findings indicated that instrumental social supports (i.e., child care, providing a place to stay, and small money loans) protect against the negative impacts of economic hardship and negative parenting attitudes on the disciplinary practices of African American, single mothers of infants. These findings provide valuable information to family practitioners

to employ in the development of prevention programs for single mothers aimed at weakening the relation between negative parenting attitudes and punitive disciplinary practices.

Recommendations for Future Research

Future studies should seek to replicate the present findings utilizing path analysis procedures. The current study examined the potential of parenting attitudes to mediate the relationship between economic hardship and parental socialization. The current study found that there was no direct relationship between economic hardship and parental socialization. Therefore, there was no direct relationship between economic hardship and parental socialization for parenting attitudes to mediate. Rather, the current study found evidence that economic hardships may indirectly impact parental socialization on a path through its impact on parenting attitudes. The study should also be replicated with longitudinal data to investigate the long-term effects of maternal education and social support on the impact of economic hardship on parental socialization. Such longitudinal studies would also allow one to explore the causal nature of the relationships such as parenting attitudes or economic hardship at infancy versus parenting at preschool age and whether over time as parents' life circumstances change (e.g., increased educational attainment), whether the effects vary. Future research should further assess the potential of specific types of college educational programs to buffer the impact of economic hardships on single mother families. For example, future studies could examine whether mothers' attainment of some college or junior college have differential benefits for single mother families. Furthermore, studies should examine the impacts of economic hardship on the parenting of single mothers from other marginalized populations (e.g., low

income, Latina single mothers) and explore these relationships in samples that include a wider demographic range of single mothers.

Additionally, research is needed to better understand the role of depressive symptoms in parenting and the relationship between economic hardship and parenting, if any, among samples of low income, African American mothers. The role of depression in the economic hardship-parental socialization relationship was not evident in the current study; other factors might mask these effects (e.g., maternal optimism, maternal confidence or self-efficacy in parenting, father/partner involvement, child's birth order, number of siblings, and child sex).

Finally, there is a need for more studies that examine the validity of parenting measures for use with African American families (McGroder, 2000). As noted, the alphas in this study were low to moderate for the parenting measures (i.e., .44 to .68). Future studies should further explore whether existing measures accurately tap the parenting practices and attitudes of low-income mothers of various racial/cultural groups.

Conclusion

This study utilized Hill's ABCX Family Stress theory to examine the potential of maternal educational attainment and social support to buffer the relationship between economic hardship and parental socialization in a sample of African American, single mothers with infant children. The data analyses revealed that economic hardship is a significant predictor of maternal depressive symptoms and parenting attitudes. Depressive symptoms were not found to predict parental socialization. However, parenting attitudes was a significant predictor of parental socialization. Thus, the hypothesis was partially supported that economic hardship is indirectly related to parental

socialization outcomes. Consistent with the hypothesis that the indirect relationship between economic hardship and parental socialization would be moderated by maternal education, higher levels of maternal education (i.e., some college or more) weakened the association between parenting attitudes and parent-child interactions (i.e., teaching/provision of materials). Moreover, instrumental social supports buffered the indirect relationship between economic hardship and parental socialization by weakening the impact of parenting attitudes on spanking behaviors of mothers of infants. Current findings underscore the need for family practitioners to develop strategies for reducing economic hardships experienced by African American, single mothers of infant children. Such interventions might decrease negative parenting attitudes and increase the number of positive mother-child interactions and decrease the punitive disciplinary practices within single-mother families.

APPENDICES

Appendix A: Human Subjects Approval Form



UNIVERSITY OF
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INSTITUTIONAL REVIEW BOARD

2100 Blair Lee Building
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Notice: IRB Review Is Not Required Because Research Does Not Involve Human Subjects

Date: October 5, 2006

To: Suzanne Randolph, Ph.D.
Kimberly Van Putten-Gardner
Department of Family Studies

From: Roslyn Edson, M.S. 
IRB Manager
University of Maryland, College Park

Re: IRB Application #06-0471
Title of Research Project: *The Role of Maternal Education,
Parenting Attitudes, and Depression in the Relationship between
Economic Hardship and Parental Socialization in Single-Mother,
African American Families*

Type of Application: Initial

The above-referenced Institutional Review Board (IRB) initial application does not include any activities that meet the Federal definition of research involving human subjects. Specifically, the analysis of data that does not contain individually identifiable information is not research involving human subjects. Individually identifiable data are data for which the identity of the subject is or may readily be ascertained by the investigator or associated with the information. Since the data do not contain individually identifiable information, the application does not need to be reviewed by the IRB under the requirements of the U. S. Department of Health and Human Services (HHS) regulations at 45 CFR Part 46 and the University's Federal Wide Assurance. Therefore, the application was not reviewed under exempt, expedited or full Board review procedures. However, if you plan to modify your research to include any of the following activities, you are required to submit an IRB application and obtain prior IRB approval: obtaining data through intervention or interaction with human subjects; obtaining identifiable private information about living individuals; or analyzing identifiable private information about living individuals.

Please contact the IRB Office at 301-405-0678 if you have any IRB-related questions or concerns. Please refer to the above-cited IRB application number in any future communications with our office regarding this research.

Appendix B: Listing of Items Included as Study Measures from The Fragile Families Survey

Economic Hardship

In the past 12 months, did you receive free food meals?

Yes

No

In the past 12 months, did your child go hungry?

Yes

No

In the past 12 months, did you go hungry?

Yes

No

In the past 12 months, did you not pay full amount of rent/mortgage?

Yes

No

In the past 12 months, did you get evicted for not paying rent/mortgage?

Yes

No

In the past 12 months, did you not pay gas/oil/electric bill?

Yes

No

In the past 12 months, did your gas/electric/oil get shut-off?

Yes

No

In the past 12 months, did your telephone service get disconnected for nonpayment?

Yes

No

In the past 12 months, did you borrow money from family/friends to pay bills?

Yes

No

In the past 12 months, did you move in with people because of financial problems?

Yes

No

In the past 12 months, did you stay in a place not meant for regular housing?

Yes

No

In the past 12 months, did anyone in house need med but couldn't go because of cost?

Yes

No

Parent-Child Interactions (*= "Nurturance" items; all others are items for "Teaching/provision of stimulating materials")

Days/week mom plays games like peek-a-boo or gotcha with child

Days/week mom sings songs or nursery rhymes to child

Days/week mom reads stories to child

*# Days/week mom plays inside w/toys blocks or Legos w/child

- *# Days/week mom takes child to visit relatives
 - *# Days/week mom hugs or shows physical affection to child
 - *# Days/week mom put child to bed
 - *# Days/week mom tells stories to child
-

Parental Discipline (Spanking)

Spanked Child in the Past Month

Yes

No

How often did you spank child in past month?

once or twice

a few/past month

a few/week

everyday

Parenting Attitudes

How much do you agree/disagree:

Being a parent is harder than I thought.

Strongly Agree

Agree

Disagree

Strongly Disagree

Feel trapped by parental responsibilities.

Strongly Agree

Agree

Disagree

Strongly Disagree

Taking care of children more work than pleasure.

Strongly Agree

Agree

Disagree

Strongly Disagree

Often feel tired and worn out from raising family.

Strongly Agree

Agree

Disagree

Strongly Disagree

Depressive Symptoms

During past 12 mons, have you ever been depressed/sad/blue for 2+ wks in row?

Yes

No

During those 2 wks, did you feel more tired and low on energy than usual?

Yes

No

During those 2 wks did you have more trouble falling asleep than usual?

Yes

No

During those 2 wks, did you have more trouble concentrating than usual?

Yes

No

During those 2 wks, did you feel no good/down on yourself?

Yes

No

During those 2 wks, did you think a lot about death?

Yes

No

Maternal Education

What is the highest grade/years of school that you have completed?

2 <8grd

3 SomeHS

4 HS dip

5 GED

6 S coll

7 TechTr

8 BA/BS

9 Grad

Total

Social Support

Formal

Since child's birth, have you received help from-Head Start/Early Head Start?

Yes

No

Since child's birth, have you received help from-Visiting nurse/Healthy Start?

Yes

No

Instrumental Support

Could you count on someone to provide a place to live in the next year?

Yes

No

Could you count on someone to help w/emergency child care?

Yes

No

Could you count on someone to loan \$200 in the next year?

Yes

No

Financial

Could you count on someone to loan \$1000 in the next year?

Yes

No

Could you count on someone to co-sign for a loan for \$1000?

Yes

No

Could you count on someone to co-sign for a loan for \$5000?

Yes

No

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