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## **The impact of father involvement and socioeconomic status on child behavior problems**

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# The impact of father involvement and socioeconomic status on child behavior problems

## Abstract

Research has indicated that child behavior is highly influenced by both the quantity and quality of father involvement. Despite the awareness of the important role father's play, many parenting studies fail to focus on the father-child relationship. Furthermore, lower income families are especially important to examine due to the increased risk of lower father involvement. Identifying sources of resilience in low-income communities is needed. Therefore, the purpose of this study is to examine the relationship between father involvement, socioeconomic status and child behavior outcomes. The data was derived from a sample of 52 parent-child dyads recruited from an urban Head Start program. The results indicated that lower father involvement and lower socioeconomic status resulted in increased child behavior problems such as emotionally reactivity. Less father involvement was also correlated with increased withdrawn child behavior. Understanding the relationship between father involvement, socioeconomic status and child behavior problems can be beneficial in reducing childhood inequalities.

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THE IMPACT OF FATHER INVOLVEMENT AND SOCIOECONOMIC STATUS  
ON CHILD BEHAVIOR PROBLEMS

By

Delaney Hansen

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**Abstract**

Research has indicated that child behavior is highly influenced by both the quantity and quality of father involvement. Despite the awareness of the important role father's play, many parenting studies fail to focus on the father-child relationship. Furthermore, lower income families are especially important to examine due to the increased risk of lower father involvement. Identifying sources of resilience in low-income communities is needed. Therefore, the purpose of this study is to examine the relationship between father involvement, socioeconomic status and child behavior outcomes. The data was derived from a sample of 52 parent-child dyads recruited from an urban Head Start program. The results indicated that lower father involvement and lower socioeconomic status resulted in increased child behavior problems such as emotionally reactivity. Less father involvement was also correlated with increased withdrawn child behavior. Understanding the relationship between father involvement, socioeconomic status and child behavior problems can be beneficial in reducing childhood inequalities.

## **The Impact Of Father Involvement And Socioeconomic Status on Child Behavior Problems**

It is not uncommon for preschool aged children to exhibit behavior problems such as attention deficits, defiant behavior, or anxiety problems. While these behaviors are considered typical in early years of development, some of these issues can persist into adolescence and adulthood (Cambell, 2000). It was found that in lower income populations, such as those attending Head Start preschools, externalizing behavior problems were experienced by 30% of parents (Qi & Kaise, 2003). These behaviors have been associated with varying negative outcomes such as peer rejection, poor academic performance, and delinquency (Hawkins, 2007). Therefore, understanding the circumstances in which these behaviors are expressed will aid in a greater likelihood of developing successful interventions.

The first three years of a child's life is marked by substantial brain development, making it a crucial time for parents to be involved (Harvard, 2007). Likewise, parental involvement research has indicated that both the quantity and quality of involvement should be accounted for when discussing child behavior problems (Marsiglio, 2006). Overall, having supportive and loving parents can reduce potential for social and emotional problems (Bornstein and Putnick, 2018).

Much of the current research on parental involvement seems to lack emphasis on the role fathers play in facilitating positive relationships with their children. Data from the 2020 U.S census bureau estimates that approximately 21% of children under the age of 18 live without their biological father residing in the same home (U.S Census, 2020), therefore father involvement should be taken into account when

predicting probable influences on child behavior problems. Research into this topic has indicated that fathers who do not reside with their children, or are not within close proximity to their child, are less likely to be involved in their child's life (Lerman, 2000; Cooksey, 1998). Evidence also suggests that father involvement can help mitigate the effects of child behavior problems, with higher quality father involvement being associated with lower levels of child internalizing and externalizing behaviors (Yoon, 2018; Leon, 2016). Research on the influence of residential status and overall involvement of fathers in their child's life is needed.

Another factor that may contribute to child behavior problems is socioeconomic status. Children who are raised in poverty are more likely to be exposed to adverse effects and socioeconomic stressors which can impact child development (Conger & Donnellan, 2007). This can have a greater effect on African American families. The 2020 U.S census bureau estimated that 19.5 percent of African Americans were in poverty versus 8.2 percent of White Americans (U.S Census Bureau, 2020). Research has shown that African American children who grow up in low income households exhibit higher rates of externalized behaviors versus their affluent counterparts (Randolph, Koblinsky, Beemer, Roberts, & Letiecq, 2000). Therefore, focusing on the impact of low income status on child outcomes is important for understanding the impact of this stressor.

Based on previous research, it is clear that there is a relationship between father involvement, socioeconomic status and child behavior problems. However, relatively fewer studies examine the impact of fathers. The goal of this study is to explore the relationship between child behavior problems and father involvement.

Socioeconomic status will also be analyzed to determine if a relationship is present between socioeconomic status, father involvement and child behavior. Overall, having a better understanding of these relationships will aid in developing prevention and intervention strategies and in reducing childhood inequalities.

### **Parental Involvement**

According to Jafrod (2015), there is no exact or concrete definition for parental involvement. Instead, parental involvement includes multiple domains to consider. With this in mind, a few variables can be taken into account when discussing its definition. Parental involvement can be viewed as the degree in which parents are involved in their child's education and their ability to assist their children with a variety of needs (Barge & Loges 2003; LaRocque et al., 2011). Research has indicated that parental involvement can have a major impact on child development (Cambell, 2002). Within the first three years of life, substantial brain development occurs, making it a crucial time for parents to be involved (Harvard, 2007).

Evidence from risk and resiliency research has indicated that there are multiple ways in which parents can impact child development. Parents can influence their children in both direct and indirect ways, which can result in having both positive and negative impacts on their behavior (Masten & Schaffer, 2006). Having supportive and loving parents can help aid in socioemotional development and can reduce potential for social and emotional problems when children are provided with quality time, are shown affection by the parents, and are given praise. (Bornstein & Putnick, 2018; Caspe, 2007).



### **Father Involvement**

Much of the current research examining child outcomes focuses on maternal involvement. There is a lack of father based research. Therefore, understanding the role fathers play in development is needed and can be beneficial in understanding child development. Father involvement can be defined in many ways including their direct interactions with their children, their accessibility to their children and the financial resources they provide for their children (Pleck & Masciadrelli, 2004; Marsiglio, 2006).

Variables that can affect father involvement include their financial stability, availability, and residency (Adamson, 2013; Castillo 2012; Cooksey, 1998). Likewise, factors that can increase a fathers involvement can include a positive parental relationship with the mother, involvement of the father's family, mother and fathers education and fathers work experience (Cooksey, 1998). Fathers who have a higher education and income are more likely to have a high quality relationship with their children (Adamson, 2013). Findings from Lerman (2000) indicate a positive correlation between father income and father involvement, while lack of financial support from the father could result in relationship tension with the mother and child, resulting in reduced involvement with the child (Mikaelson, 2008).

Although financial stability can be an indicator of father involvement, this is not an isolated variable. According to the 2020 U.S census bureau, approximately 21% of children under the age of 18 live without their biological father (U.S Census, 2020), with non-resident fathers being more likely to be unemployed (Castillo, 2012). In his study, Hawkins (2007) found no correlation between father financial support

and adolescence outcomes. Likewise, fathers who are financially responsible for their children may not be sufficient in promoting positive child outcomes (Adamson, 2013.) Instead, financial involvement, father residency and father availability should be accounted for when discussing father involvement.

Overall, the issues of financial stability and residential status may hinder fathers from being an involved parent (Castillio, 2012). When fathers are not residing with a child, a noticeable decline can be seen in father involvement (Lerman, 2000). Lerman discusses father involvement as a continuum which ranges from no visitation to co-residence with a mother. A key finding discussed in the Lerman paper is that fathers in their late twenties and early thirties were more likely to spend time with at least one of their non-marital children. Likewise, it was documented fathers who are married to the child's mother were more likely to maintain a relationship with the child. A study conducted by Mikaelson (2008) asked mothers working with the Head Start program how involved the fathers were on a regular basis. The survey asked, “on a weekly basis, how often does the father show physical affection, tell the child he loves them, and tell the child how much he appreciates them?” It was determined that based on the fathers residency, the age difference of the child, and whether the father provided financial support predicted mothers' reporting lowers scores of father involvement. However, if a father lives in closer proximity to their child, they are more likely to be involved in their life (Cooksey, 1998)

Although father residency can affect father involvement, father availability can impact involvement as well. Availability can include variables such as work schedule and the time a father allocates to the child. The characteristics of a father's

workplace and employment can influence fathering behavior (Russell, 2004). Fathers with a non-standard work schedule may have direct and indirect negative impacts on father involvement (Pilarz, 2020), with father's working hours being negatively correlated with father involvement (Brown, 2012). Brown further discusses that fathers with nontraditional work schedules are less involved with their children. Keowon (2014) conducted a study in which home visits were made to families with children around the age of four. Both the mothers and fathers answered a questionnaire, and children were videotaped interacting with their parents. A follow up interview was conducted three years later, where parents were asked to fill out an additional questionnaire. Studying the difference between father involvement on working days versus non-working days found that fathers on non-working days were less accessible to their children compared to mothers. Keowon further discussed that fathers may feel less inclined to spend their day off with their children, instead opting to engage in activities more suited to their personal needs.

Other father involvement studies indicate that both the quantity and quality of father involvement should be accounted for when discussing father involvement (Marisiglio et al. 2000), meaning contact alone is not sufficient in promoting a positive father-child relationship (Adamson, 2013). Father attachment is an important aspect of father involvement. Building a connection with a father figure can be directly related to the quality of father involvement. As discussed in a study conducted by White and Gilbreth (2001), attachment to a paternal figure is based on both the quality and the quantity of the interaction. The study determined that child psychological adjustment was more closely predicted when based on the quality of

the stepfather-child relationship versus the noncustodial father-child relationship.

Overall, children must have the opportunity to build a connection with a father figure before they can be involved (White & Gilbreth, 2001).

A study examining the father-child attachment security within the first three years of life determined that parent responsibility at thirteen months of age was related to father involvement at three years of age (Brown, 2012). This longitudinal study followed father-child dyads, in which they were visited when the child was thirteen months of age, and three years of age. One hundred and fifteen children with their fathers were recruited in which variables such as father responsibility, fathers sensitivity and father-child attachment were analyzed. Children were likely to be securely attached with their father at the age of three when fathers were more sensitive and involved (Brown, 2012).

Interventions that are aimed at fostering a secure relationship between father and child may be beneficial in developing father-child attachment (Brown, 2018). A longitudinal study conducted by McFarland-Piazza utilized data collected from 117 fathers and their infants. Caregiving quality was analyzed when the infants were eight months old, and father-infant attachment was examined. Attachment was classified based on the Adult Attachment Interview (AAI). It was determined that fathers secure autonomous AAI classification was related to secure father-child attachment (McFarland-Piazza, 2012). Depending on the activities a father engaged in, such as caregiving or play activities, the impact of involvement may differ (Grossman, 2002). The Grossman (2012) longitudinal study found that an adolescent's attachment was associated with a father's play sensitivity .

Hyeon (2019) conducted a study to explore the relationship between parental psychological distress and fathers' involvement in childcare. Father involvement in childcare was measured by both quantity and quality, and psychological distress was measured using the Kessler- 6 item Psychological Distress Scale. It was determined that paternal stress can influence fathers quantity and quality of childcare involvement.

### **Policy Reform That Encourages Father Involvement**

An increase in policies within the United States have aimed at increasing the financial involvement of unmarried fathers toward their children. Having legal obligations to provide for one's child may help facilitate a relationship with the father. A study conducted by Mikealson (2008) concluded that while some of these efforts would increase father involvement from a financial perspective, they would occasionally decrease father engagement accessibility due to increased work or responsibilities outside of the home.

According to a 2006 study conducted by Huang (2006), child support enforcement policies may increase child support payments as well as visitation. However, Mikealson (2008) stated that child support policies may reduce fathers' willingness to spend time with their child because they feel forced to contribute . However, a father who is required to contribute may want increased visitation rights, which in turn, increases father-child contact (Mikealson, 2008). Given these conflicting perspectives, understanding the role financial involvement may have on child behavior is still needed.

Coley (2006) examined a sample of low income families, and determined that

marriage stability and healthy psychosocial functioning can be indicators of father involvement. Policy efforts targeted at involving fathers have been found most useful when it focuses on increasing a father's social capital, and encouraging a supportive family environment. Although these policies are intended to encourage father involvement, studies have found minimal correlations between father financial contributions and outcomes like child achievement (Hawkins, 2007).

Policies such as the Parents' Fair Share program aim to increase involvement of noncustodial fathers (MDCR, 2021). This program relies on partnering with local child support agencies to implement community-based organizations to help increase child support payments, parental involvement and employment. Similarly, the Deficit Reduction Act of 2005 included 150 million dollars which was aimed at promoting involvement in fathers, and healthy marriages (CommonWealth, 2006). Overall, policies have attempted to increase father involvement in multiple ways and these could have positive effects on children. However, more research is needed to explore the important role fathers may have.

### **Influence of Socioeconomic Status**

Socioeconomic status can be viewed in the context of access to social resources and rank in the social-economic hierarchy (Matthews, 2010). Indicators of socioeconomic status can include family income, parents occupation, and parental education (Conger & Donnellan, 2007) Variables such as household income and government aid can be important factors when discussing father involvement and child behavioral issues because they could impact one another.

Children raised in poverty are at a higher risk of adverse effects, with socioeconomic stressors having an impact on child development (Conger & Donnellan, 2007). According to the 2020 US. census bureau, approximately 19.5 percent of African American individuals were living in poverty versus 8.2 percent of White Americans (U.S Census Bureau, 2020). African American children growing up in low income households has been correlated with increased rates of externalized behaviors versus their affluent counterparts (Randolph et al., 2000). Socioeconomic status has also been found to be correlated with parental involvement. Roopnarine (2005) conducted a study which analyzed African American families in lower, middle and upper socioeconomic class. Overall, mothers were found to be more available than fathers regardless of socioeconomic status. One major finding was that fathers of daughters in upper socioeconomic families were more available versus fathers of sons.

Socioeconomic status can also have an indirect effect on child behavioral issues, especially when considering low income populations. In turn, families with more access to resources are able to allocate more resources to their children, and can have a positive impact on child outcomes. A study conducted by Shilan Luo (2021) examined the relationship between socioeconomic status and child behavioral outcomes. Socioeconomic status was based on a survey with questions pertaining to family income, parent occupation and parent education. It was determined that higher socioeconomic status indicated increased resources allocated to the child, which resulted in less internalizing and externalizing behaviors.

**Child Behavior Problems**

Child behavior problems include behaviors such as aggression, acts of defiance and disruptive actions towards others. These characteristics are defined as externalizing behaviors. Externalizing behaviors are defined as a child's outward behavior in which the environment is negatively impacted. (Cambell, 2002) While these can be a normal part of child development, it can become an issue when it persists over time (CDC, 2021). On the other hand, children may exhibit behavioral issues that may persist. Internalizing behaviors are exhibited as a range of emotional states including depressive disorders and anxiety disorders (Liu, 2011). Children exhibiting these behaviors are more prone to reduced interest in education and are more likely to have long term mental health issues (Liu, 2011).

Clinically significant levels of behavioral issues in preschool aged children are found in approximately 25% of children (Stephan & Miclea, 2010) with such behaviors being more prevalent in children from low income families (Qi & Kaise, 2003).

The setting in which children start to exhibit behavioral issues is an important indicator of persistent long term problems (Achenbach, 2011). As children start to enter preschool, they experience a new set of stimulants which can be helpful in assessing externalizing behaviors (Achenbach, 2011). This shift in environment can result in setting specific behavioral issues emerging (Achenbah, 2011). Although some of these externalized behaviors are viewed as normative for this age (Cambell, 2000), some children may not outgrow these issues, which can result in behavioral



problems such as asocial behavior, rejection by peers and increased likelihood to engage in risky behavior persisting through adolescence (Fanti & Henrich, 2010).

These early indications of behavioral issues can be important in predicting negative outcomes later in life (Hawkins, 2007). Therefore, it is important to understand how such behaviors can have lasting effects on these children.

### **Father Involvement and Child Behavior Problems**

Previous research has indicated that being securely attached to a father figure can promote a healthy father-child relationship (Grossman, 2002). With this in mind, father involvement can have significant impacts on child behavior problems. A longitudinal study conducted by Susan Yoon (2018) focused on understanding the relationship between father involvement and externalizing behaviors in adolescents at risk of physical abuse. Both quantity and quality of father involvement was taken into account when analyzing the data. The data was utilized from Longitudinal Studies of Abuse Child Neglect (LONGSCAN), and consisted of face-to-face interviews from caregivers and children who were 4, 6, 8, 12, 14, 16 and 18 years of age. Yoon found that the quality of father involvement was associated with internalizing and externalizing behaviors in adolescents. For example, children with higher quality father involvement had lower levels of internalizing and externalizing behavior.

Both the behavior of the child and the attitude of the father can have an impact on involvement. Flouri (2012) concluded that there were bidirectional associations between nonresident father involvement and child behavior. Through this longitudinal study it was determined that continuity of father involvement over time, and the

child's temperament impacted father involvement. Flouri states that the data may be explained by the idea that “non resident fathers find interacting with pleasant infants easier, and mothers are more likely to facilitate nonresident father involvement with difficult children” (Flouri, 2012).

In order to relate father involvement to child behavior outcomes, a sample of 333 children between the ages of six and thirteen were assessed on the externalizing scale of the Child and Adolescent Needs and Strengths (CANS). Father involvement was then analyzed through interviews from children via welfare workers, as well as analyzing case files. The study suggested that father involvement can be beneficial in reducing child externalizing behaviors (Leon, 2016).

Hakwins (2007) deduced that active fathering was negatively correlated with child externalizing behaviors through a longitudinal study he conducted. These externalizing issues are associated with lower levels of father contact, emotional closeness, and shared activities. In addition, child internalizing behavior is associated with lower levels of father contact and shared activities.

A study conducted by Jamel Slaughter discussed the effects of father involvement and paternal incarceration on child externalizing and internalizing behaviors on children. The data was based on a sample of completed interviews from 2652 fathers, 3515 mothers and 3377 children. The study utilized the Child Behavior Checklist (CBCL) which focused on externalizing and internalizing behaviors such as aggression, rule-breaking, withdrawal, depression and anxiety. It was found that fathers with greater father involvement and higher socioeconomic

status had children with lower internalizing and externalizing behaviors (Slaughter, 2019).

### **Father Involvement and Childhood Achievement**

Father involvement has also been associated with positive child outcomes. Studies have shown that father involvement has been positively correlated with the academic achievements of adolescence including higher test scores in math, english, social studies, and science (Hawkins, 2007). Variables such as active fathering, internalizing versus externalizing issues, and child academic success were analyzed (Hawkins, 2007). Data was collected from the National Longitudinal Study of Adolescent Health, and the sample included 20,475 adolescents with their parental figures. It was determined that active fathering was positively associated with adolescence grades.

A study conducted by Aurora Jackson and Richard Steins examined the relationship between low wage maternal employment, parenting behaviors and childhood academic achievements. The parenting behavior variable was analyzed through the intensity of nonresident father relationship with the child, the quality of the mother and nonresident father relationship, and parenting behaviors in the home environment. The sample included 188 single mothers with preschool aged children who either currently received welfare, or had received welfare in the past. Data was collected through interviews from the mothers, and at-home visits with the child present. It was concluded that the more time the nonresident father spent with the child resulted in more adequate parenting within the home environment and in turn resulted in better childhood outcomes in elementary school. Overall, these

interactions resulted in increased academic achievement within the children, regardless of parents socioeconomic status or education level. (Jackson & Steins, 2005).

A qualitative based study explored how academically successful children perceived their noncustodial fathers' involvement. Involvement was accounted for based on encouragement, help with homework, offering advice etc. The research indicated that although fathers were not involved directly, they still stayed in contact with their children indirectly. It was concluded that “physical absence of the father does not mean that he is not important, but rather that various factors may hinder his involvement with his children” (Abraham, 2018). Although this study will not look at academic outcomes, these studies highlight the positive influence of father involvement on child outcomes overall.

### **Conclusion**

Overall, although research on the influence of father involvement on child outcomes is needed, existing previous literature has found that father involvement has a strong relationship with child behavior. Other factors, such as socioeconomic status, are potential predictors of father involvement and child outcomes. There is an established relationship between the quality and quantity of father involvement and child internalizing and externalizing behaviors. Factors such as poverty may also be an important indicator of child behavioral issues in preschool aged children. Studying these relationships in low income African American families can be beneficial in understanding the role father involvement and socioeconomic has in predicting child behavior problems.

### **Goals of the Current Study**

The goals of the current study is to examine the relationship between child behavior problems, father involvement and socioeconomic status. It is hypothesized that lower father involvement and lower socioeconomic status would result in increased child behavior problems.

### **Methods**

#### **Participants**

The participants consisted of 52 parent-child dyads, with the parents and children being enrolled at urban Head Start preschool centers in Detroit, Michigan. Participants were part of a larger longitudinal study which examined the effectiveness of a health intervention program, but the data for this study utilized baseline data collected before randomization to intervention was completed. Eligibility for the larger study entailed the following: a) children had to be enrolled at a Detroit Head Start preschool during the time of recruitment, b) children had to be between the age of 3 years 0 months to 5 years 11 months, d) children were over-recruited for a high body mass index (BMI) status being at or above the 85th percentile, e) participants had to be the primary caregiver, and whom the child primarily lived with, f) participants had to be fluent in both written and verbal English and g) minimal safety hazards within the participants home to allow the study team to conduct home visits. Although the majority of participants were African American, no participants were turned away if otherwise eligible.

Ninety-five percent of the participants were Black or African American, and the caregiver age ranged from 21 to 66 years of age, with the mean age being 30.6 years ( $SD = 7.91$ ). The children were on average 3.75 years of age ( $SD = .56$ ), and over half of the

children were female (55%). Within the parent-child dyads, 91.1% were mother-child dyads, with the others consisting of father-child, aunt-child and grandparent child pairs. The annual household income reported ranged from under \$5,000 to \$49,000, with the majority of participants reporting an annual income of \$14,999. 38.5% of participants reported an average household income of less than \$5,000, 21.2% reported between \$5,000 and \$9,999, and 19.2% reported between \$10,000 and \$14,000.

## **Measures**

### ***Demographic Questionnaire***

A demographic survey was utilized to measure participant characteristics. The survey included questions about sex, ethnicity, age, information about family structure and adults living in the home, child ethnicity and child age.

### ***Socioeconomic status***

Socioeconomic status variables were collected using the demographic questionnaire. Participants were asked to indicate annual household income based on preset categories. Categories included: 1 = < \$5000, 2 = \$5000 - \$9999, 3 = \$10,000 – \$14,999, 4 = \$15,000 - \$19,999; 5 = \$20,000 - \$29,999, 6 = \$30,000 - \$49,999. This measure was part of the demographic questionnaire and included information on their annual household income, parent education, and parent employment.

### ***Father Involvement***

Participants completed a self-report survey of father involvement. This assessment of father involvement was based on three items relating to different aspects of father involvement. Since the majority of respondents were mothers, this self-report assessment of father involvement was primarily maternal reports. Therefore, these

measurements reflect maternal perceptions of father involvement. The included questions focused on fathers financial contributions to the child, the amount of time spent with the child since birth, and if he resided with the child. The first question is, “Does the child’s biological father contribute financially towards the cost of taking care of the child”: (*no*) coded as 0 and (*yes*) coded as 1. The second question is, “ Since the child’s birth, how involved has the father been in his/her life?”: (*not involved any of the time*) coded as 0, (*involved very little*) coded as 1, (*involved off and on*) coded as 2, (*involved most of the time*) coded as 3, and (*always involved*) coded as 4. The third question is, “Does the child's biological father live in the same household as the child?”: (*no*) coded as 0 and (*yes*) coded as 1. Responses to individual questions were examined in further analyses.

### ***Child Behavior Problems***

**Child Behavior Checklist.** Parents were asked to complete the Child Behavior Checklist (CBCL) for children aged 1.5 to 5 years old (Achenbach & Rescorla, 2000). The CBCL is a 100-item scale measuring emotional and behavior problems in preschool children. Parents are asked to rate the frequency of their child’s behavior in the last 2-months using a 3-point scale: (*not true*) coded as 0, (*somewhat or sometimes true*) coded as 1, or (*very or often true*) coded as 2. A total of six subscales are derived from these ratings: aggressive behaviors, anxious/depressed behaviors, destructive behaviors, sleep problems, somatic problems and withdrawn behaviors. Scores on this scale range from 30-100, with higher scores indicating more behavioral problems. TThe CBCL has good internal consistency ( $\alpha = .96$ ; Achenbach & Rescorla, 2000) and inter-rater reliability between raters such as mother and father reports are about .79.

### ***Observation-rating Measure of Child Behavior Problems***

Child disruptive behaviors were assessed using a video recorded caregiver-child interaction observation during the baseline data collection in the participants' homes. The caregiver-child interaction took place over a 12-minute time period, including three different interactions. There was an approximately 4-minute snack time interaction. The snack was followed by approximately 6 minutes of free play where the dyad was provided with toys to play with during this portion of the interaction (a standard set of novel developmentally appropriate toys). Finally, the interaction ended with a 2-minute "clean up" period where the mother and child were instructed to put away the toys. The video data was used to rate a series of child disruptive behaviors by trained research assistants.

The coding manual for child behavior was developed for the larger study from which this study is drawn (Buthman, 2022). The coding system that was developed was derived and adapted from The Disruptive Behavior Diagnostic Observation Schedule (DBDOS; Wakschlag et al., 2002). The videotaped interactions of caregivers and their child were used to score child behavior, with coding being done by trained coders. Coders trained on the coding systems were assigned to view one interaction segment (snack, free-play, or cleanup) per participant. Each child behavior was rated for the given task. Seven child behavior scales were utilized in the current study to examine disruptive child behavior. *Intensity/predominance of negative affect* measures both the strength and predominance of a child's angry/irritable affect (Buthman, 20220). *Defiance* measures an active refusal to comply with an adult's directive. *Passive noncompliance* measures the passive refusal and/or ignoring of a caregivers directive. *Predominance of noncompliance* measures the pervasiveness of passive noncompliance and defiant child behavior.



*Destructiveness* measures the degree to which the child exhibits physical aggression.

Each of the seven child behavior scales were scored on a 4-point rating scale, with higher scores indicating a higher prevalence or intensity of the given behavior (1= none, 4= high). These scales were combined to create an average disruptive behavior score.

Children with higher scores displayed higher scores of disruptive behavior, while lower scores would indicate lower levels of disruptive behavior. The average disruptive behavior composite during the snack interval ( $\alpha = .82$ ), play interval ( $\alpha = .75$ ), and clean up interval ( $\alpha = .86$ ) all demonstrated acceptable internal consistency (Buthman, 2022). Since the nine child behavior codes demonstrated acceptable internal consistency in all three contexts, an overall disruptive behavior composite was utilized.

A full description of the training process for the video coding can be found in the Buthman (2022) manuscript. The video coding team consisted of two graduate students, with training for the nine codes involving behavioral examples, discussion and viewing the videotapes. Training involved initial group sessions, and progressed to coding alone. Training continued until both the coder and investigator established an acceptable interrater reliability. In order to establish reliability with the graduate coders, the investigator double-coded five sessions for each interval (snack, free-play, clean up). Intraclass coefficients (ICC: single) were calculated to examine reliability with the graduate coder. Interrater reliability was assessed on the observational scores. As can be noted in Buthman (2022), intraclass correlations (ICC) were acceptable for all child behavior categories.

**Procedure**

This study utilized baseline data that was collected from a larger, randomized clinical study which examined the effectiveness of a nutrition and activity intervention program for preschool children. Participants were recruited from urban Head Start preschool programs in Detroit, Michigan.

***Recruitment***

Preschool children were identified by Head Start nutrition coordinators at each location. These children were sent home a flier detailing the study information and a plan to be contacted by project coordinators. The potential participants that received the fliers were then instructed to inform their Head Start coordinator if they did not want to be contacted by research personnel. Those who did not reach out to their Head Start coordinator as well as met the eligibility criteria were contacted via phone by the project manager or research assistant. The recruitment phone call gave potential participants information about the larger study. Baseline appointments were then scheduled with caregivers that were interested in participating. Informed consent and other study measures were collected during the baseline appointment. Fifty percent of eligible families agreed to participate and completed the baseline assessment from which the current study data come.

***Data Collection Procedures***

Data collection took place in participant's homes. This was facilitated by one graduate student research assistant (RA) and one undergraduate student RA. Home visits lasted approximately two and a half hours. During the baseline visit, RAs would complete the informed consent process, which involved the caregiver giving consent for

themselves as well as their child's participation in the larger study. In addition to the survey measures used in the current study, a 12-minute video was recorded of the caregiver-child dyads participating in snack time (4-minutes), play time (6-minutes), and clean-up (2-minutes). Parents were compensated \$30 after the visit for their time and efforts.

### **Video Procedures**

The current study used the baseline video files for assessing child behavior problems. As previously stated, a 12 minute video was recorded of parent-child interactions which included a snack time, play time, and clean-up time. The first interaction (snack time) took approximately four minutes in which the caregiver and child were presented a healthy snack to eat, including grapes and apples. After snack time, the caregiver and child were instructed to engage in six minutes of play with the provided toys. The toys were a standard set of developmentally appropriate toys. The final interaction was a two minute "clean-up" task in which the caregiver and child were instructed to put the toys away. Caregivers and their children were given standards instructions at the start of the interaction paradigm which included:

"Now we'd like to videotape you and your child eating a snack and playing together with some of the toys that we brought along. Please feel free to play and interact with your child as you normally would. Go ahead and have a seat behind the toys and facing us. If possible, please try to keep your child around this area and these toys for the next 12 minutes. You will start by enjoying a snack together. Once you are done, or after 4 minutes (whichever comes first), we'll let you know that it is time to stop eating and begin playing with the toys we brought. At that time, we will provide you with the basket of toys. After another 5-6 minutes, we'll let you know that there's about 2 more minutes left and then you and your child can clean up the toys by putting them back in the bucket. One of us will make sure the camera is working, and the other will just be setting side organizing paperwork. Ready to begin?"

Examiners allowed 10 minutes to elapse before giving the final instruction:

“Okay, there are about 2 minutes left. Please stop playing with the toys and begin to put them back in the basket.”

### **Data Analysis**

SPSS 27.0 was used to analyze the data in the current study. Descriptive statistics, and correlational data were run between study variables. Data analyses included an examination of the mean, standard deviation, range, and frequency of the variables. Bivariate correlations were also run between variables such as father involvement, socioeconomic status, observed child behavior, and CBCL data.

## **Results**

### **Descriptive Analyses**

#### ***Observed Child Behavior Problems***

Table 1 highlights the descriptive statistics for the videotaped interactions of the caregivers with their child. The table shows the items mean and standard deviation of the exhibited behavior during each video segment (snack, play, and clean-up). From the sample of parent child dyads, it was found that children exhibited the highest mean score for disruptive behavior during clean up, compared to the other sections. Paired sample t-tests showed that clean-up behavior was significantly higher than the snack behavior ( $t(45) = -4.64, p < .001$ ) and significantly higher than play behavior ( $t(45) = -7.04, p < .001$ ). Snack time child disruptive behavior was also significantly greater than the play behavior ( $t(45) = -2.93, p < .01$ ).

**Table 1***Descriptive Statistics for Observed Child Behavior Problems*

<i>Observed Behavior</i>	<i>Mean (S.D.)</i>
Snack Disruptive Behavior	1.90 (.53) Range= 1.11-3.22
Play Disruptive Behavior	1.70 (.47) Range= 1.00-3.00
Average Clean-Up Disruptive Behavior	2.38 (.65) Range= 1.56-3.78
Average Disruptive Behavior Overall	1.99 (.44) Range= 1.33-3.07

***Father Involvement***

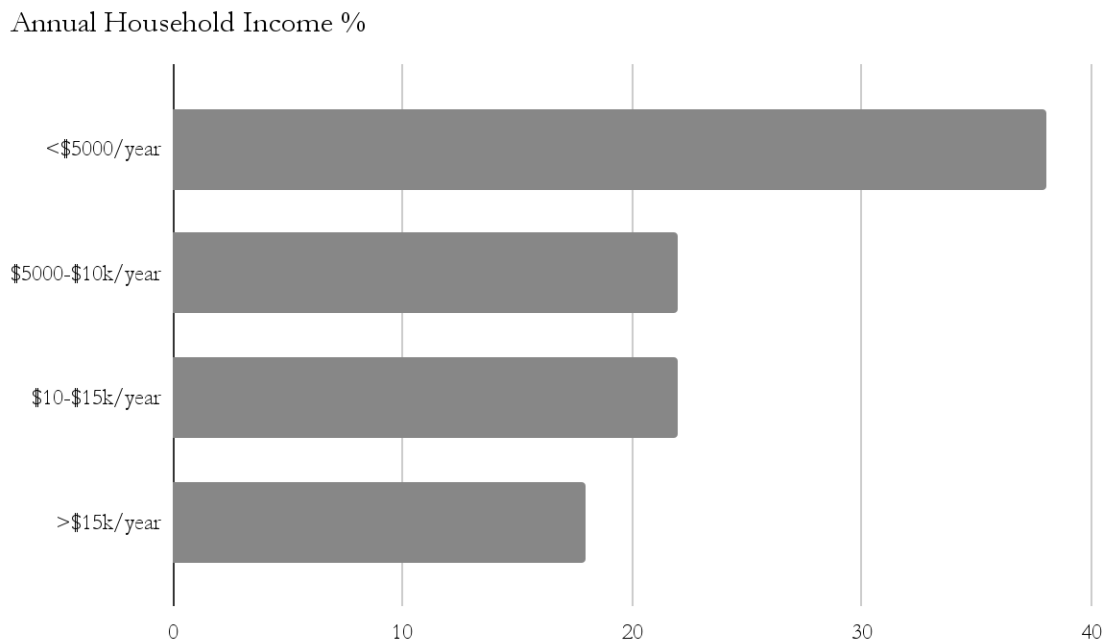
Descriptive statistics pertaining to father involvement can be found in Table 2. Overall, father financial involvement was relatively low, with mothers reporting that only 30% of fathers provided financial support to their children. Likewise, only 40% of fathers resided with their biological children. Father “involvement since birth” was scaled from a 1 (not involved) to a 5 (always involved), and had a mean score of 1.96 (SD 1.33), indicating that fathers had a lower involvement score.

**Table 2***Descriptive Statistics for Father Involvement*

Does the child's biological father live in the same household as the child?	Yes: 40% No: 60%
Since the child's birth, how involved has the biological father been involved in his/her life?	M=1.96 S.D.=1.33 Range=1.00-5.00
Does the biological father contribute financially towards the cost of taking care of the child?	Yes: 30% No: 70%

***Socioeconomic Status***

As seen in Figure 1, the majority of families within the current study earned less than \$5,000 per year (38%), with 82% of families making less than \$15,000. Within the sample about 60% of parents had a high school diploma or less, and 30% of parents were unemployed.

**Figure 1**

***Child Behavior Checklist***

Table 3 shows the descriptive statistics of the CBCL subscale. This includes the mean, standard deviation and range.

**Table 3**

*Descriptive Statistics for the Subscales of the CBCL*

<b>Child Behavior Subscale Scores</b>	<b>Mean (S.D.)</b>
<b><i>Withdrawn Behavior Subscale Score</i></b>	M=2.71 (2.03) Range= 0.00-10.00
<b><i>Emotionally Reactive Subscale Score</i></b>	M=1.84 (2.05) Range= 0.00-9.00
<b><i>Somatic Complaints Subscale Score</i></b>	M=2.76 SD=2.27 Range= 0.00-8.00
<b><i>Anxiety Problems Subscale</i></b>	M=4.56 SD=2.74 Range= 0.00-12.00
<b><i>Attention Problems Subscale Score</i></b>	M=11.51 SD=6.21 Range= 4.00-35.00



### Correlation Analyses

Table 4 displays the bivariate correlational data between socioeconomic status, father involvement, the child behavior checklist subscales, and observed child behavior. The subscales include somatic complaints, emotionally reactive, withdrawn behavior, anxiety problems, and attention problems. The main goal within this study was to determine if there was a relationship between father involvement and child behavior problems. Therefore, Table 5 reflects these findings. As can be seen in table 5, father financial involvement was significantly correlated with somatic problems ( $p < .05$ ), indicating that as father financial involvement scores decreased, it was associated with higher child somatic complaints. Father involvement since birth was significantly correlated with child withdrawn behavior ( $p < .05$ ). This indicates that as father involvement increased, child withdrawn behavior decreased ( $p < .05$ ). Additionally, annual household income was significantly negatively correlated with emotionally reactive behavior ( $p < .05$ ). As income increased, reports of child emotionally reactive behavior decreased.

Finally, father involvement data was compared with observed child behavior, however no significant correlations were found. Similarly, socioeconomic status variables were not correlated with observed child behaviors.

An examination between child behavior variables was also conducted. Collectively, all the CBCL variables were significantly positively correlated with one another ( $p < .01$ ), indicating that as one behavior increased, the other variable would increase as well. However, caregiver reports of behavior on the CBCL did not

significantly correlate with the observer rated disrupted behavior score, as can be noted in Table 4.

**Table 4**

*Bivariate Correlations between Study Variables*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Employment <sup>a</sup>	1											
2. Education <sup>b</sup>	-.21	1										
3. Household Income	-.47**	.33*	1									
4. Father Involvement	-.40	-.26	-.09	1								
5. Father <sup>c</sup> Finance	.22	.13	-.06	.73**	1							
6. Father Residence <sup>d</sup>	.08	.03	.14	.52**	.53**	1						
7. Observed Disruptive Behavior	-.08	.05	-.01	-.05	.98	.13	1					
8. Somatic Complaints (CBCL)	-.09	.25	.02	-.10	-.33*	-.26	-.03	1				
9. Withdrawn (CBCL)	.02	-.07	-.17	-.32*	-.10	-.07	.02	.46**	1			
10. Emotionally Reactive (CBCL)	-.08	-.12	-.35*	-.18	-.24	-.28	.19	.46**	.42**	1		
11. Anxiety Problems (CBCL)	-.03	.09	.048	-.27	-.13	-.04	-.004	.57**	.85**	.31*	1	
12. Attention Problems (CBCL)	-.11	.002	-.11	-.14	-.09	-.07	-.04	.60**	.68**	.64**	.68**	1

\*p < .05, \*\*p < .01; a 1=full-time, 2=part-time, 3=unemployed; b 1=high school, 2=college; c 1=help financially; d 1=resides with child

### **Discussion**

The results show that the data partially supported the hypothesis that father involvement and socioeconomic status would be related to child behavior problems. Socioeconomic variables, such as annual household income, were negatively related to child emotionally reactive behavior. This indicates that lower household income was related to increased child emotionally reactive behavior as indicated by the CBCL. This aligns with previous research which determined that lower socioeconomic status was correlated with increased child externalizing and internalizing behavior (Slaughter, 2019).

Since increased financial burdens can place stress on the family, further research into socioeconomic stress may help in understanding what can cause children to exhibit behavior problems. Additionally, other socioeconomic factors, such as education and employment had no significant correlation with child behavior problems. One potential explanation to these findings may be that education and employment are not sufficient in promoting or deterring child behavior problems. Overall, other SES factors should be considered when discussing child behavior problems.

Results show that as father financial involvement decreased, there was an increase in child somatic complaints on the CBCL. Since the majority of the sample was low income, an increase of somatic complaints could indicate a lack of financial support to assist the child with medical complaints. One possible explanation for this correlation is that mothers who do not have adequate access to financial resources are thus unable to seek medical attention for the child. If the father is unable to provide financially, this could potentially result in increased somatic complaints. Further research into the directionality of these variables or potential mediating variables would be beneficial in

understanding causality. General father involvement from birth was significantly related to child withdrawn behavior. The more involved the father was, the fewer withdrawn behaviors were reported on the CBCL. This is consistent with past literature and supports the hypothesis of this study.

The current study did not find any significant relationships between father involvement variables and the observed disruptive behavior measure. This was unexpected. It is possible that the behaviors that were displayed during the 12 minute video interaction were not indicative of the child's typical behavior. Indeed the observed behavior ratings did not significantly correlate with the parent report of behavior on the CBCL. While it is possible that this type of behavior displayed during the video segment is not related to father involvement, it could also indicate that other behaviors were more likely to be associated with father involvement. Likewise, there was no significant correlation between father residence and child behavior variables. Future research should further examine observed child behavior data to determine if other observed behaviors relate to father involvement. Relationships between CBCL variables were also examined. All CBCL variables are positively correlated with each other. This suggests that if a child is expressing behavioral problems, then it may not be limited to one subscale. Additionally, father involvement variables were all significantly related to each other. This indicates that if a father resides with their child, a positive correlation can be seen between financial involvement, and the time they have spent with their child since birth. This relationship signifies that fathers who are involved in one aspect of a child's life are more likely to be involved in other areas of their life.

Previous research has indicated that father residence can impact child behavior (Lerman, 2000), however non-biological fathers figures who have quality relationships with their step-children have been known to reduce child behavior problems (White & Gilbreth, 2001). Since this study did not account for other father figures who may be residing with the child, further research into other non-biological father figures may indicate if having other parent support mitigates the effects of having an absent biological father.

Father involvement has been related with long term impacts on a child's life (Yoon, 2018). Children who do not have a father figure are more at risk to engage in risky behaviors into adolescence (Fanti & Henrich, 2010). Likewise, children who do not have a present father are more likely to be rejected by their peers, exhibit asocial behavior, and experience persistent behavior problems into adulthood (Fanti & Henrich, 2010). Only 40% of the sample had a biological father residing with their children, indicating that this population is more at risk to experience some of these adverse effects. However, no significant correlations were found between father residency and child behavior problems, previous research has indicated a correlation between these variables. Understanding the relationship between father residency and child behavior problems may help mitigate some of the effects of having a father that does not reside with the child full time.

### **Limitations of the Current Study**

Although this study had several strengths by examining father involvement in an understudied population, there are also limitations that should be noted. One of the main limitations of this study is that it is a correlational study, which cannot determine

directionality or causality of the given results. Therefore, findings indicate correlation not causation and interpretation of the meaning of the results should be done with caution.

Further studies pertaining to father involvement and child behavior problems should be conducted to determine the directionality of these variables. Another limitation is that the study only consisted of 52 parent-child dyads. The small sample size makes it more difficult to find significant relationships particularly when effects are small. Conducting longitudinal studies with larger sample sizes may aid in the understanding of the relationship between father involvement, socioeconomic status and child behavior problems more fully.

Another limitation of this study was that all demographic and father involvement data was self-reported by caregivers that were primarily mothers. This method may leave room for potential bias, which could potentially skew results. Including fathers in future studies would add valuable information to the literature on this topic.

## **Conclusion**

There are several implications from previous literature and the current study that can be gathered. In order to reduce childhood inequalities amongst African American children, father involvement and socioeconomic status should be considered. Research has indicated that father involvement and socioeconomic status are important variables to understand when discussing child behavior problems in low income communities.

African American families seem to disproportionately experience the impact of socioeconomic stressors, which can impact child development, making this a crucial topic to research. Likewise, children who grow up in poverty are more likely to be exposed to socioeconomic stressors, which can impact their behavior both directly and

indirectly. African American families are disproportionately at risk due to income status, which can result in increased stress placed on the family and the child. Understanding the role fathers play in mitigating the effects of child behavior problems can be beneficial in preventing inequalities amongst children.

Therefore, several implications of the study can be gathered from the current study including the importance of studying the role a biological father plays in the development of their child. Overall, focusing on these variables may offer insight into possible interventions to aid parents and children in fostering positive, and productive relationships.

### References

- Abraham, C. (2018). *How are nonresident african american fathers involved in their children's academic success?*(Order No. AAI10618476). Available from APA PsycInfo®. (1987916641; 2017-54451-206).  
<http://ezproxy.emich.edu/login?url=https://www.proquest.com/dissertations-theses/how-are-nonresident-african-american-fathers/docview/1987916641/se-2?accountid=10650>
- Achenbach, T. M. (2011). Commentary: Definitely more than measurement error: But how should we understand and deal with informant discrepancies? *Journal of Clinical Child and Adolescent Psychology*, 40(1), 80-86.  
doi:10.1080/1574416.2011.533416
- Adamsons K. 2013; A longitudinal investigation of mothers' and fathers' initial fathering identities and later father-child relationship quality. *Fathering*. 11:118–137. DOI: 10.3149/fth.1102.118
- Amato, P. R. (2001). Children of divorce in the 1990s: An update of the Amato and Keith (1991) meta-analysis. *Journal of Family Psychology*, 15, 355–370.  
<http://dx.doi.org/10.1037/0893-3200.15.3.355>
- Anaya, L. Y. (2019). Interparental conflict as a context for early child-parent attachment relationships. <https://doi.org/info:doi/>



Barling, J. (1986). Fathers' work experiences, the father–child relationship and children's behaviour. *Journal of Occupational Behaviour*, 7(1), 61-66.

<http://dx.doi.org/10.1002/job.4030070108>

Bell, R. Q., & Chapman, M. (1986). Child effects in studies using experimental or brief longitudinal approaches to socialization. *Developmental Psychology*, 22(5), 595–603. <https://doi.org/10.1037/0012-1649.22.5.595>

Bowlby, J. (1982). *Attachment and loss: Attachment* (Vol. 1, 2nd ed.). New York: Basic Books.

Bornstein MH, Putnick DL (2018) Parent-adolescent relationships in global perspective.

In: Lansford JE, Banati P (eds) Handbook of adolescent development research and its impact on global policy. Oxford University Press, Oxford, pp 107–129

Boring, J. L., Sandler, I. N., Tein, J., Horan, J. J., & Vélez, C. E. (2015). Children of divorce—coping with divorce: A randomized control trial of an online prevention program for youth experiencing parental divorce. *Journal of Consulting and Clinical Psychology*, 83(5), 999-1005.

doi:<http://dx.doi.org/10.1037/a0039567>

Brown GL, Mangelsdorf SC, Shigeto A, Wong MS. Associations between father involvement and father-child attachment security: Variations based on timing and type of involvement. *J Fam Psychol*. 2018 Dec;32(8):1015-1024. doi: 10.1037/fam0000472. Epub 2018 Oct 8. PMID: 30299135.

Brown GL, Mangelsdorf SC, Neff C. Father involvement, paternal sensitivity, and father-child attachment security in the first 3 years. *J Fam Psychol*. 2012

Jun;26(3):421-30. doi: 10.1037/a0027836. Epub 2012 Apr 2. PMID: 22468691; PMCID: PMC4422500.

Bureau, U. S. C. (2022, March 25). *Percentage and number of children living with two parents has dropped since 1968*. Census.gov. Retrieved April 13, 2022, from [https://www.census.gov/library/stories/2021/04/number-of-children-living-only-with-their-mothers-has-doubled-in-past-50-years.html#:~:text=In%201968%2C%20approximately%202.0%20million,approximately%203.0%20million%20\(4%25\)](https://www.census.gov/library/stories/2021/04/number-of-children-living-only-with-their-mothers-has-doubled-in-past-50-years.html#:~:text=In%201968%2C%20approximately%202.0%20million,approximately%203.0%20million%20(4%25))

Bureau, U. S. C. (2022, March 1). *Income and poverty in the United States: 2020*. Census.gov. Retrieved April 15, 2022, from <https://www.census.gov/library/publications/2021/demo/p60-273.html>

Buthman, A. (2022). Parenting, neighborhood characteristics and disruptive child behavior in low-income African American families. *Master's Theses and Doctoral Dissertations*.

Cabrera NJ. Father involvement, father-child relationship, and attachment in the early years. *Attach Hum Dev*. 2020 Feb;22(1):134-138. doi: 10.1080/14616734.2019.1589070. Epub 2019 Apr 10. PMID: 30968742.

Cabrera, N. J., Tamis-LeMonda, C. S., Bradley, R. H., Hofferth, S., & Lamb, M. E. (2000). Fatherhood in the twenty-first century. *Child Development*, 71, 127-136.

Castillo, J. T., Welch, G. W., & Sarver, C. M. (2012). Walking a high beam: The balance between employment stability, workplace flexibility, and nonresident

father involvement. *American Journal of Men's Health*, 6(2), 120-131.

doi:<http://dx.doi.org/10.1177/15579883114176>

Campbell, S. B., Shaw, D. S., & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment.

*Development and Psychopathology*, 12, 467-488.

doi:10.1017/S0954579400003114

Centers for Disease Control and Prevention. (2022, April 11). *Behavior or conduct problems in children*. Centers for Disease Control and Prevention. Retrieved April 15, 2022, from

<https://www.cdc.gov/childrensmentalhealth/behavior.html>

Child Trends (2007). Responsible fatherhood spotlight. Gaithersburg, MD: National Responsible Fatherhood Clearinghouse.

Choi, J. (2010). *Father-involvement and child behavior and cognitive development in poor and near-poor african american single-mother families* (Order No.

AAI3364090). Available from APA PsycInfo®. (622205309; 2010-99011-174).

<http://ezproxy.emich.edu/login?url=https://www.proquest.com/dissertations-theses/father-involvement-child-behavior-cognitive/docview/622205309/se-2?accountid=10650>

Choi. (2018). Longitudinal relationships between unmarried fathers' involvement and their children's behavior problems: Using latent growth modeling. *Children and Youth Services Review*., 91, 424-430.

<https://doi.org/10.1016/j.childyouth.2018.06.035>

- Coley, R. L., Carrano, J., & Lewin-Bizan, S. (2011). Unpacking links between fathers' antisocial behaviors and children's behavior problems: Direct, indirect, and interactive effects. *Journal of Abnormal Child Psychology*, *39*(6), 791-804. <http://dx.doi.org/10.1007/s10802-011-9496-4>
- Cooksey, E. C., & Craig, P. H. (1998). Parenting from a distance: The effects of parental characteristics on contact between nonresidential fathers and their children. *Demography*, *35*(2), 187-200.
- Conger, R. D., & Donnellan, M. B. (2007). An interactionist perspective on the socioeconomic context of human development. *Annual Review of Psychology*, *58*, 175–199.
- Cui, J., Mistur, E. J., Wei, C., Lansford, J. E., Putnick, D. L., & Bornstein, M. H. (2018). Multilevel factors affecting early socioemotional development in humans. *Behavioral Ecology and Sociobiology*, *72*, 20. <http://dx.doi.org/10.1007/s00265-018-2580-9>
- Doherty, W. J., Erickson, M. F., & LaRossa, R. (2006). An intervention to increase father involvement and skills with infants during the transition to parenthood. *Journal of Family Psychology*, *20*, 438–447. <http://dx.doi.org/10.1037/0893-3200.20.3.438>
- Flouri. (2012). Fathers' involvement and preschool children's behavior in stable single-mother families. *Children and Youth Services Review*, *34*(7), 1237–1242. <https://doi.org/10.1016/j.childyouth.2012.02.020>

- Fanti, K. A., & Henrich, C. C. (2010). Trajectories of pure and co-occurring internalizing and externalizing problems from age 2 to age 12: Findings from the national institute of child health and human development study of early child care. *Developmental Psychology*, 46(5), 1159-1175. doi:10.1037/a002065
- Grossmann, K., Grossmann, K. E., Fremmer-Bombik, E., Kindler, H., Scheuerer-Englisch, H., & Zimmermann, P. (2002). The uniqueness of the child–father attachment relationship: Fathers’ sensitive and challenging play as a pivotal variable in a 16-year longitudinal study. *Social Development*, 11, 301–331. <http://dx.doi.org/10.1111/1467-9507.00202>
- Hawkins, A. J., Bradford, K. P., Palkovitz, R., Christiansen, S. L., Day, R. D., & Call, V. R. A. (2002). The Inventory of Father Involvement: A Pilot Study of a New Measure of Father Involvement. *The Journal of Men’s Studies*, 10(2), 183–196. <https://doi.org/10.3149/jms.1002.183>
- Huang, Y. (2017). *An evaluation of the head start parent, family, and community engagement (PFCE) framework on the perception of a father's role and the father's involvement facts with the head start programs* (Order No. 10268184). Available from ProQuest Dissertations & Theses Global; Publicly Available Content Database. (1916572509).  
<http://ezproxy.emich.edu/login?url=https://www.proquest.com/dissertations-theses/evaluation-head-start-parent-family-community/docview/1916572509/se->

- Jackson, A. P., & Scheines, R. (2005). Single Mothers' Self-Efficacy, Parenting in the Home Environment, and Children's Development in a Two-Wave Study. *Social Work Research, 29*(1), 7–20. <http://www.jstor.org/stable/42659576>
- Julien O Teitler, Father involvement, child health and maternal health behavior, *Children and Youth Services Review, Volume 23, Issues 4–5, 2001, Pages 403-425, ISSN 0190-7409, [https://doi.org/10.1016/S0190-7409\(01\)00137-2](https://doi.org/10.1016/S0190-7409(01)00137-2)*.
- Keown, L. J., & Palmer, M. (2014). Comparisons between paternal and maternal involvement with sons: Early to middle childhood. *Early Child Development and Care, 184*, 99 –117. <http://dx.doi.org/10.1080/03004430.2013.773510>
- LaRocque, M., Kleiman, I. and Darling, S. M. (2011) 'Parental involvement: the missing link in school achievement', *Preventing School Failure: Alternative Education for Children and Youth, 55*(3), pp115-122.
- Leon, S. C., Jhe Bai, G., & Fuller, A. K. (2016). Father involvement in child welfare: Associations with changes in externalizing behavior. *Child Abuse & Neglect, 55*, 73-80. <http://dx.doi.org/10.1016/j.chiabu.2016.04.003>
- Lerman, R., & Sorensen, E. (2000). Father involvement with their nonmarital children: Patterns, determinants, and effects on their earnings. *Marriage and Family Review, 29*(2-3), 137-158.
- Liu, J. (2004). Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing, 17*(3), 93-103. <http://dx.doi.org/10.1111/j.1744-6171.2004.tb00003.x>

- Luo, S., Liu, Y., & Zhang, D. (2019). Socioeconomic status and young children's problem behaviours – mediating effects of parenting style and psychological suzhi. *Early Child Development and Care*, <http://dx.doi.org/10.1080/03004430.2019.1608196>
- Marsiglio, W., Amato, P., Day, R. D., & Lamb, M. E. (2000). Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and the Family*, 62(4), 1173–1191. <https://doi.org/10.1111/j.1741-3737.2000.01173.x>
- Marsiglio, W. (2006). *Stepdads: Stories of Love, Hope, and Repair*. Lanham, MD: Rowman & Littlefield
- Masten, A. S., & Shaffer, A. (2006). How families matter in child development: Reflections from research on risk and resilience. In A. Clarke-Stewart, & J. Dunn (Eds.), *Families count: Effects on child and adolescent development; families count: Effects on child and adolescent development* (pp. 5-25, Chapter x, 389 Pages). Cambridge University Press, New York, NY. <http://dx.doi.org/10.1017/CBO9780511616259.002>
- Matthews, K. A., & Gallo, L. C. (2010). Psychological perspectives on pathways linking socioeconomic status and physical health. *Annual Review of Psychology*, 62(1), 501–530.
- McFarland-Piazza, L., Hazen, N., Jacobvitz, D., & Boyd-Soisson, E. (2012). The development of father–child attachment: Associations between adult attachment representations, recollections of childhood experiences and caregiving. *Early*

*Child Development and Care*, 182(6), 701-721.

<http://dx.doi.org/10.1080/03004430.2011.573071>

Mikelson, K. S. (2010). *Predicting low-income fathers' involvement and the effect of state-level public policies on fathers' involvement with their young children* (Order No. AAI3391125). Available from APA PsycInfo®. (759137445; 2010-99150-154).

Minke, K. M., & Anderson, K. J. (2005). Family-school collaboration and positive behavior support. *Journal of Positive Behavior Interventions*, 7(3), 181-185.  
<http://dx.doi.org/10.1177/10983007050070030701>

MINTON, C., & PASLEY, K. (1996). Fathers' Parenting Role Identity and Father Involvement: A Comparison of Nondivorced and Divorced, Nonresident Fathers. *Journal of Family Issues*, 17(1), 26-45.  
<https://doi.org/10.1177/019251396017001003>

Moore, L. M. (2016). *Parental involvement at head start with an emphasis on hindrances to fathers' involvement* (Order No. 10110759). Available from Education Database; ProQuest Dissertations & Theses Global: Social Sciences; Publicly Available Content Database. (1797412164).  
<http://ezproxy.emich.edu/login?url=https://www.proquest.com/dissertations-theses/parental-involvement-at-head-start-with-emphasis/docview/1797412164/se-2>

Pilarz, A. R., Cuesta, L., & Drazen, Y. (2020). Nonstandard work schedules and father involvement among resident and nonresident fathers. *Journal of*



*Marriage and Family*, 82(2), 587-604.

doi:<http://dx.doi.org/10.1111/jomf.12627>

Pleck, J. H., & Hofferth, S. L. (2008). Mother Involvement as an Influence on Father Involvement with Early Adolescents. *Fathering*, 6(3), 267–286.

<https://doi.org/10.3149/fth.0603.267>

Porumbu, D., & Necşoi, D. V. (2013). Relationship between parental involvement/attitude and children's school achievements. *Procedia-Social and Behavioral Sciences*, 76, 706-710.

Qi, C. H., & Kaiser, A. P. (2003). Behavior problems of preschool children from low-income families: Review of the literature. *Topics in Early Childhood Special Education*, 23, 188- 216. doi:10.1177/02711214030230040201

Pleck, J.H., & Masciadrelli, B.P. (2004). Paternal involvement by U.S. residential fathers: Levels, sources and consequences. In M.E. Lamb (Ed.), *The Role of the Father in Child Development, 4th Edition* (pp. 222–271). Hoboken, NJ: Wiley.

Pruitt, T. R. (2013). *Identifying types of parental involvement that most effectively support academic achievement* (Order No. AAI3519097). Available from APA

PsycInfo®. (1413441240; 2013-99110-477).

<http://ezproxy.emich.edu/login?url=https://www.proquest.com/dissertations-theses/identifying-types-parental-involvement-that-most/docview/1413441240/se-2?accountid=10650>.

- Ramseur-Fischer, D. (2019). *Parental-involvement strategies: A study of parental involvement strategies with black students from low-socioeconomic-status backgrounds* (Order No. AAI13426887). Available from APA PsycInfo®. (2265917763; 2019-41126-268).  
<http://ezproxy.emich.edu/login?url=https://www.proquest.com/dissertations-theses/parental-involvement-strategies-study-with-black/docview/2265917763/se-2?accountid=10650>
- Randolph, S. M., Koblinsky, S. A., Beemer, M. A., Roberts, D. D., & Letiecq, B. L. (2000). Behavior problems of african american boys and girls attending head start programs in violent neighborhoods. *Early Education and Development*. Special Issue: Mental Health and Head Start, 11(3), 339-356.  
doi:10.1207/s15566935eed1103\_7
- Roopnarine, J. L., Fouts, H. N., Lamb, M. E., & Lewis-Elligan, T. (2005). Mothers' and fathers' behaviors toward their 3- to 4-month-old infants in lower, middle, and upper socioeconomic african american families. *Developmental Psychology*, 41(5), 723-732. <http://dx.doi.org/10.1037/0012-1649.41.5.723>
- Russell, G., & Hwang, C. P. (2004). The impact of workplace practices on father involvement. In M. E. Lamb (Ed.), *The role of the father in child development* (4th ed., pp. 476–503). New York, NY: Wiley.
- Sarkadi, A., Kristiansson, R., Oberklaid, F., & Bremberg, S. (2008). Fathers' involvement and children's developmental outcomes: A systematic review of

longitudinal studies. *Acta Paediatrica*, 97, 153–158.

<http://dx.doi.org/10.1111/j.1651-2227.2007.00572.x>

Slaughter, J., Davis, J. B., & Nagoshi, C. (2019). Effects of paternal incarceration on father involvement on child behavior outcomes at middle childhood. *Journal of Child and Family Studies*, 28(10), 2891-2900.

<http://dx.doi.org/10.1007/s10826-019-01468-8>

Ştefan, C. A., & Miclea, M. (2010). Prevention programmes targeting emotional and social development in preschoolers: Current status and future directions. *Early Child Development and Care*, 180(8), 1103-1128.

*The Science of Early Childhood Development*. Center on the Developing Child, Harvard University (2007)

University of Florida. (n.d.). *Being an involved father: What does it mean?- university of Florida*. Retrieved April 15, 2022, from <https://ufdcimages.uflib.ufl.edu/IR/00/00/33/64/00001/HE14100.pdf>

Wakschlag, L., Leventhal, B., Danis, B., Keenan, K., Hill, C., Egger, H., & Carter, A. (2002). The Disruptive Behavior Diagnostic Observation Schedule (DB-DOS). (Version 1.2). Un- published manual, Chicago: University of Chicago.

Williams, S. K. (2003). *Paternal attachment and involvement: Relationships to children's behavior* (Order No. AAI3081458). Available from APA PsycInfo®. (620261727; 2003-95016-206).