An Examination of Potential Moderators in the Relations Between Mothers' and Fathers' Parenting Practices and Children's Behavior

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AN EXAMINATION OF POTENTIAL MODERATORS IN THE RELATIONS BETWEEN MOTHERS’ AND FATHERS’ PARENTING PRACTICES AND CHILDREN’S BEHAVIOR

by

Michelle Rae Gryczkowski

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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ABSTRACT

AN EXAMINATION OF POTENTIAL MODERATORS IN THE RELATIONS BETWEEN MOTHERS’ AND FATHERS’ PARENTING PRACTICES AND CHILDREN’S BEHAVIOR

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Research suggests that ineffective parenting practices play a central role in the development of children’s antisocial behavior. However, there is a lack of studies that relate parenting practices to positive child outcomes, examine the role of fathers’ parenting in the socialization of children, and test for potential moderators. Thus, the current study aimed to address these limitations by examining the relations between mothers’ and fathers’ parenting practices and child externalizing and prosocial behavior, and to determine whether the child’s sex, age, or ethnicity moderate these relations. Participants included 131 couples with a child aged 6 to 17. Data were collected from both parents through questionnaires assessing parenting practices, parental depression, marital conflict, life changes, and child behavior. Dyadic Multilevel Modeling was used in order to account for the dependency of mothers’ and fathers’ scores. Results indicated that Positive Parenting and Corporal Punishment uniquely related to externalizing behavior. Additionally, maternal Positive Parenting related to fewer externalizing behaviors in Caucasian children but showed a trend toward greater externalizing behavior in African American children. Finally, Monitoring/Supervision appeared to function as a protective factor against externalizing behavior for African American but not Caucasian children or adolescents of either ethnicity. Regarding prosocial behavior, unique relations
emerged for Involvement and mothers’ Inconsistent Discipline and Corporal Punishment. Additionally, fathers’ Involvement was only associated with higher levels of prosocial behavior in younger and middle-aged children, and fathers’ Positive Parenting and Corporal Punishment related more strongly to prosocial behavior in girls. Moreover, Positive Parenting in both parents was associated with greater prosocial behavior in Caucasian children but fewer prosocial behaviors in African American children. Overall, these results indicate that the same parenting practices that are associated with child externalizing behaviors are also associated with prosocial behavior, and the relations differ depending on the characteristics of the parent and child. These findings may have important implications for parent-training programs and argue for expansion of current theoretical models of the relations between parenting and child outcomes.
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CHAPTER I

INTRODUCTION

Empirical support for the importance of parenting in relation to child outcomes dates as far back as 1957, when Sears, Maccoby, and Levin published the first large-scale, scientific study on childrearing. Their results provided evidence for significant effects of parenting on a variety of childhood domains, as well as an impetus for further study in this area. Since its publication, several theoretical and empirically supported models have been developed to explicate the factors that directly or indirectly influence children’s adjustment (e.g., Baumrind, 1971; Belsky, 1984; Hoffman, 1970; Patterson, 1982). One commonality these models share is their emphasis on socialization factors (i.e., modeling, reinforcement, parenting) as key contributors to children’s adjustment. For example, based on social learning theory, Patterson’s (1982, 1986; Patterson, Debaryshe, & Ramsay, 1989) coercion model demonstrates that inept parenting practices and coercive parent–child interactions in young childhood set the stage for the development of antisocial behaviors. More specifically, these children receive harsh and inconsistent discipline for disruptive behaviors and noncompliance, and these behaviors are reinforced by approval from family members or by interrupting aversive events that are occurring in their environment. In addition, their prosocial behaviors (e.g., cooperation, helping, sharing) are not properly or consistently reinforced. In effect, coercive, hostile interactional patterns are learned through modeling and reward, and prosocial values are not acquired. Aggression and ineffectual social behaviors carry over to middle childhood, leading to peer rejection and academic problems. These experiences, coupled with poor parental monitoring and supervision lead to involvement
with deviant peer groups and ultimately result in more severe antisocial behaviors and adolescent delinquency.

Such models have supplied researchers with a broad framework for viewing child behavior and have been integral in the development of prevention and intervention programs for at-risk and clinical youth populations. In fact, the Hanf model of parent training, which focuses on increasing parents’ positive engagement with children and decreasing hostile interactions through modeling effective parenting skills (e.g., praise and time-out), has given rise to several efficacious parent-training programs for the treatment of oppositional and defiant behaviors (McMahon & Forehand, 2003). Given that the relation between parenting and child behavior is now well established, efforts should be made to expand these models by broadening sample characteristics and including additional outcomes. For example, the majority of parenting research focuses solely on child behavior problems as outcomes and fails to include fathers. In addition, the child clinical literature often includes limited, homogeneous child samples (e.g., males only, single grades), which may limit the generalizability of the findings. More heterogeneous samples are needed in order to test for moderators. The current study aims to address these limitations.

Childhood Outcomes

The existing research on contextual and familial predictors of childhood outcomes focuses largely on maladjustment, leaving positive child outcomes relatively understudied. Externalizing behavior problems (e.g., noncompliance, aggression, hyperactivity; Brinkmeyer & Eyberg, 2003) represent the most common source of referrals to child mental health specialists (Patterson, Dishion, & Chamberlain, 1993). In
addition, oppositional behaviors in young childhood are likely to persist (Barkley, 1997; Olweus, 1979) and may lead to more severe problems in later childhood/adolescence, such as peer rejection, poor academic performance, and delinquency (Patterson, 1982, 1986; Patterson et al., 1989; Patterson, Reid, & Dishion, 1992; Reid, Patterson, & Snyder, 2002). Therefore, research on externalizing and antisocial behaviors is critically important. However, the relative lack of research focusing on the development of children’s (pro)social skills/behaviors is surprising—a lack of problem behaviors does not necessarily mean that positive behaviors are present, and the development of positive peer relationships, social competence, and prosocial skills (e.g., helping, sharing, giving, cooperation, responding to distress; Weir & Duveen, 1981) appear to be important for fostering later healthy psychosocial adjustment (Coie & Kupersmidt, 1983; Crick, 1996; Dodge, Coie, Pettit, & Price, 1990; Eisenberg, Fabes, & Spinrad, 2006; Ladd, Price, & Hart, 1990; Patterson et al., 1989; Rubin, Bukowski, & Parker, 1998; Vitaro, Tremblay, Gagnon, & Boivin, 1992). In fact, there is evidence to suggest that supplementing behavioral parent training with a child component that emphasizes the development of prosocial behaviors (e.g., Incredible Years, Webster-Stratton, 1992; Problem-Solving Skills Training, Kazdin, 2010) may improve the effectiveness of the treatment (Kazdin, 2010; Webster-Stratton & Reid, 2003). Given the interrelationships between externalizing and prosocial behavior (Koblinsky, Kuvalanka, & Randolph, 2006; Patterson et al., 1989) as well as their respective roles in later functioning across several domains, efforts to identify factors that predict both problematic and prosocial behaviors in children seem warranted.
To date, several demographic and contextual factors have consistently been shown to relate to child externalizing behavior. These include (but are not limited to) socioeconomic status (SES; Barry, Dunlap, Cotten, Lochman, & Wells, 2005; Dearing, McCartney, & Taylor, 2006), marital conflict/adjustment (Cummings & Davies, 1994, 2005; Grych & Fincham, 1990; Webster-Stratton & Hammond, 1990, 1999), maternal and paternal psychopathology (Connell & Goodman, 2002; Cummings & Davies, 1994), and recent negative life events (Webster-Stratton & Hammond, 1990). Parenting style (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Elmen, & Mounts, 1989) and practices (Frick, Christian, & Wootton, 1999; Patterson, 1982) are not only robust predictors of child externalizing behavior, but there is also evidence that they at least partially mediate the relations between each of the aforementioned predictors and child externalizing behavior (Buehler & Gerard, 2002; Burbach, Fox, & Nicholson, 2004; Conger et al., 1992; Fox, Platz, & Bentley, 1995; Kaczynski, Lindahl, Malik, & Laurenceau, 2006; McCoy, Frick, Loney, & Ellis, 1999; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993; Webster-Stratton & Hammond, 1988).

Although research focusing on contextual and demographic predictors of prosocial behavior is much less developed (McCoy, Cummings, & Davies, 2009), and in some areas less consistent, evidence exists demonstrating that parenting factors may also mediate the inverse relations between the following factors and prosocial behaviors or social relations: economic hardship (Bolger et al., 1995), marital conflict (McCoy et al., 2009) and maternal and paternal depression (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007). In addition, Lengua, Honorado, and Bush (2006) found parenting to mediate the relation between a cumulative risk variable encompassing nine demographic
and psychosocial risk factors (e.g., poverty, minority status, negative life events, parental depression) and children’s social competence. Collectively, these findings underscore the importance of focusing on parenting in studying a broad range of children’s psychosocial adjustment. In addition, because most studies have only found parenting to partially mediate the relations between sociodemographic and contextual/familial factors and child behavior, these variables likely have a direct influence on children’s behavior to some extent. Therefore, researchers should consider controlling for various demographic and contextual variables such as parental depression, marital conflict, and negative life events, when studying the relations between parenting and childhood outcomes.

Parenting

When discussing parenting, the distinction between parenting styles and parenting practices is important to make because they represent different constructs. Darling and Steinberg (1993) define parenting style as “a constellation of attitudes toward the child that are communicated to the child and that, taken together, create an emotional climate in which the parent’s behaviors are expressed” (p. 488). They posit that parenting styles have an indirect influence on child outcomes. In Baumrind’s (1967, 1971) seminal work, parents were categorized as having different parenting styles depending on their levels of warmth and control. Decades of studies drawing on Baumrind’s typologies have yielded invaluable results regarding the influences of specific configurations of parenting behaviors and attitudes on children’s behavioral, social, and academic functioning (Amato & Gilbreth, 1999; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg et al., 1989). More recent researchers, however, have emphasized the greater utility of parenting practices over parenting styles. Parenting practices encompass more specific
parenting behaviors thought to be directly related to child outcomes (Darling & Steinberg, 1993). Parenting practices have also been shown to be stronger predictors of children’s behavior than parenting styles (Carlo, McGinley, Hayes, Batenhorst, & Wilkinson, 2007) and lead to more focused, targeted parenting interventions (Michalcio & Solomon, 2002). In addition, it has been argued that configurations of multiple facets of parenting (such as the warmth and demandingness dimensions comprising Baumrind’s parenting style typology) make it difficult to determine exactly which aspects are most important and how they exert their influences (Darling & Steinberg, 1993; Grusec, Goodman, & Kuczynski, 2000; Yagmurlu & Sanson, 2009).

Few studies relating parenting to prosocial behaviors in children have examined parenting practices individually; instead, they focus largely on parenting styles that encompass parental warmth (see Eisenberg et al., 2006) and disciplinary methods that are comprised of a variety of disciplinary actions and intentions. For example, Krevans and Gibbs (1996) found inductive discipline (discipline that emphasizes the effect of one’s behavior on another), particularly verbalizations of disappointment, to be related to children’s prosocial skills through empathy. Power assertive discipline (physical force, loss of privileges or possessions, commands, threats), on the other hand, was negatively related to prosocial skills. Regarding more specific parenting behaviors, there is some, albeit limited, evidence that maternal and paternal positive parenting (reward, praise; McCoy et al., 2009), consistency (Romano, Tremblay, Boulerice, & Swisher, 2005) and parental monitoring (Elgar et al., 2007) are positively correlated with children’s prosocial behavior; and maternal hostility and punitive parenting (Romano et al., 2005) are negatively related to children’s prosocial behavior after controlling for a host of
demographic and contextual correlates (e.g., SES, maternal depression, family
dysfunction, neighborhood risk factors). More research on the relations between specific,
individual parenting practices and children’s prosocial behavior is needed.

In contrast to the research on prosocial behavior in children, recent studies
examining the relations between parenting and externalizing behavior have focused more
on parenting practices. According to Patterson’s (1982, 1986) coercive family process
model for the development of antisocial behavior, ineffective discipline and lack of
positive reinforcement for prosocial behaviors early on set the stage for increased
behavioral problems in addition to social and academic problems, ultimately leading to
delinquency. Several specific parenting practices have consistently been identified as
correlates or predictors of child behavior problems. Negative parenting practices, such as
poor monitoring/supervision and inconsistent and/or harsh discipline, are associated with
higher levels of externalizing behavior problems (Frick et al., 1999; Loeber & Dishion,
1983; Loeber & Stouthamer-Loeber, 1986; Patterson 1982; Patterson et al., 1989;
Shelton, Frick, & Wootton, 1996; Stormshak, Bierman, McMahon, Lengua, 2000) and
appear to be more predictive of behavior problems than positive parenting practices (e.g.,
reinforcement, praise, involvement, warmth; Brenner & Fox, 1998; Patterson et al., 1992;
Shelton et al., 1996). For example, Patterson and colleagues (1992) found ineffective
discipline and poor monitoring to account for approximately 16% of the variance in boys’
antisocial behavior, whereas positive parenting behaviors only accounted for around 3%.
Brenner and Fox (1998) evidenced similar unique variance estimates for parental harsh
discipline and warmth in relation to behavior problems in a community sample of young
children.
The findings regarding the relations between positive parenting practices and externalizing behavior remain largely unclear. For example, Loeber and Stouthamer-Loeber (1986) conducted a meta-analysis on predictors of adolescent delinquency and conduct problems and found low parental involvement to be one of the strongest predictors, even more so than parental criminality, absence, and discipline. Pardini, Fite, and Burke (2008) also found low parental involvement to predict future aggression in boys, and Frick et al. (1999) evidenced negative relations between maternal and paternal involvement and conduct problems in clinic-referred adolescents (but not younger children or preadolescents). Contrarily, Shelton and colleagues (1996) did not find parental involvement to differentiate between clinical and nonclinical subsets of children. With respect to other dimensions of positive parenting, such as positive reinforcement (e.g., praise, reward, affection), Pardini and colleagues evidenced higher levels of parent-reported aggression in boys whose mothers provided more positive reinforcement earlier on; however, no effect for parental positive reinforcement was found for teacher-reported aggression. Shelton et al. also failed to find significant effects of parental positivity/reinforcement on teacher-reported externalizing behavior, and Frick and colleagues failed to demonstrate unique relations between positive reinforcement and disruptive behavior disorder (DBD) diagnoses measured by a combination of parent, teacher, and child reports. Other researchers have evidenced negative relations between positive reinforcement and parent-reported externalizing behavior in community samples (Essau, Sasagawa, & Frick, 2006; Gryczkowski, Jordan, & Mercer, 2010).

Overall, it appears that the relations between positive parenting on children’s behavior problems may be stronger in studies that include community samples and that
rely on parent reports of child behavior, particularly with respect to parental positivity/reinforcement. It is possible that parental positivity is beneficial for relatively well behaved children, but changes in monitoring and/or discipline techniques may be necessary in addition to positive parenting for children already demonstrating conduct problems. Another potential explanation for the inconsistencies in findings regarding positive parenting practices is that the strength or direction of the relations may depend on the sex of the parent or child. For example, Gryczkowski et al. (2010) found higher levels of maternal positivity/reinforcement to be related to fewer behavior problems for boys but not girls, and they failed to find unique relations for paternal positivity/reinforcement. In addition, they found parental involvement to be related to fewer behavior problems for fathers but not mothers, and the relation was only significant for boys. Finally, Frick and colleagues’ differential findings across age groups with respect to parental involvement suggest that the age of the child may play a role. Collectively, these results indicate a need for research examining the moderating effects of children’s age and sex in the relations between parenting and externalizing behavior. In addition, differential findings across parents provide an impetus for including fathers in research on child outcomes and analyzing their influences separately from those of mothers.

Father Inclusion

The need for additional research concerning the influence of fathers’ parenting on child outcomes has been emphasized by several researchers (Bentley & Fox, 1991; Cummings, Keller, & Davies, 2005; Janssens, & Dekovic, 1997; Knafo & Plomin, 2006; Phares, Fields, Kamboukos, & Lopez, 2005; Rothbaum & Weisz, 1994; Tiano & McNeil,
Inclusion of father data is important for several reasons: a) more than 70% of all children in the U.S. live with their biological father (Fields, 2003b), b) fathers are spending an increasing amount of time (both absolute and relative to mothers) engaged with their children (Pleck & Masciadrelli, 2004), c) fathers’ parenting has demonstrated unique relations with children and adolescents’ externalizing behaviors (Aldous & Mulligan, 2002; Gryczkowski et al., 2010) and social adjustment (NICHD, 2004) above that of mothers’, d) the pattern of parenting practices that predict children’s externalizing behavior may differ for mothers and fathers (Gryczkowski et al., 2010), and e) there is some evidence to suggest higher rates of positive child behavior changes in parent training outcome studies in which the child’s father participated in treatment (see Lundahl, Tollefson, Risser, & Lovejoy, 2008 for a meta-analysis). Thus, it appears that fathers’ parenting may be an important determinant of children’s psychosocial adjustment.

Although no known studies have directly tested the sex of the parent as a moderator in the relations between parenting and child outcomes, findings from studies analyzing mothers and fathers separately indicate that differential relations between maternal and paternal parenting and children’s behavior likely exist. Regarding externalizing behavior, some evidence suggests that a lack of paternal involvement may be more strongly associated with adolescent delinquency and aggression than a lack of maternal involvement (Harris, Furstenberg, & Marmer, 1998; Loeber & Stouthamer-Loeber, 1986). Additionally, Pleck and Masciadrelli (2004) reviewed the literature on father involvement and found that 10 of 14 studies found unique effects of paternal involvement after controlling for maternal involvement. Less is known regarding
dimensions of fathers’ parenting other than involvement; however, involvement may be the most important parenting construct in fathers with respect to children’s externalizing behavior, as Gryczkowski et al. (2010) examined several paternal parenting practices and only found unique relations for paternal involvement after controlling for other contextual correlates. Findings (or lack thereof) regarding paternal parenting practices other than involvement need further exploration and replication.

Although no known studies examined the role of parent sex with respect to specific parenting practices and children’s prosocial behavior, there is some evidence of differential relations with respect to broader parenting style and dimensions. For example, Hastings, McShane, Parker, and Ladha (2007) found that, whereas children’s turn-taking was predicted by authoritative parenting in both parents, only fathers’ authoritative parenting predicted children’s giving. Additionally, Volling and Belsky (1992) demonstrated that fathers’ affection and facilitative interactions with their children predicted later prosocial sibling interactions, whereas maternal intrusiveness and high control were predictive of sibling conflict. More research is needed to determine how mothers’ and fathers’ parenting differentially relates to children’s prosocial behavior, particularly with respect to parenting practices.

In summary, there is a relative lack of research concerning the influence of fathers’ parenting practices on children’s behavior. However, much of the research that has been conducted suggests that fathers play an important role in children’s adjustment beyond the mothers’ role, and the relations between certain parenting practices and child behaviors may differ for mother and fathers. These findings may have important implications for programs designed to prevent or reduce externalizing behaviors and
promote prosocial behaviors in children. In addition to parent factors, several child factors have been identified that may influence the relations between parenting practices and children’s behavior.

Child Factors as Moderators

Sex of the Child

The most commonly studied moderating variable of the relations between parenting and children’s behavior is the sex of the child, and studies examining these interactions reveal findings suggestive of differential relations between some parenting dimensions on boys’ and girls’ behavior. Regarding externalizing behavior, Rothbaum and Weisz’s (1994) meta-analysis revealed that a combination of several parenting variables was more strongly related to externalizing behaviors in boys than in girls. When broken down into individual parenting practices, stronger relations for boys have also been found with respect to paternal involvement and maternal positive parenting such that higher levels were associated with fewer externalizing behaviors (Carlson, 2006; Gryczkowski et al., 2010). However, Gryczkowski et al. found a lack of parental monitoring to be more strongly related to girls’ externalizing behavior and failed to find moderating effects of child sex with respect to inconsistent discipline. Therefore, a stronger relation between parenting and behavior problems in boys may only exist for some parenting practices and not others. Finally, with respect to corporal punishment, Deater-Deckard and Dodge (1997) analyzed data from the Child Development Project (CDP) and found higher correlations between harsh discipline and child externalizing behavior when the parent and child were of the same sex; however, Gershoff’s (2002) meta-analysis of 88 studies on the association between corporal punishment and
aggression in children of all ages (as young as 1 year) failed to replicate these findings. One potential explanation for these discrepant findings is that Gershoff included studies with more severe corporal punishment, which may be detrimental regardless of the sex of the child. Additionally, the CDP followed children from kindergarten to 3rd grade, whereas the studies in Gershoff’s meta-analysis included children of all ages, so age differences across studies may have also been a factor.

To date, no known studies have examined the moderating role of the sex of the child in the relation between parenting practices and children’s prosocial behavior; however, some studies have been conducted with respect to parenting styles and other dimensions of social behavior. For example, Baumrind (1971) demonstrated that different combinations of maternal and paternal responsiveness and demandingness were predictive of social responsibility (i.e., cooperation, friendliness) for boys and girls. More specifically, high responsiveness and demandingness were found to be related to social responsibility in adolescent boys, but adolescent girls evidenced greater social responsibility when their parents exercised little control. Mussen, Harris, Rutherford, and Keasey (1970) presented similar findings. Other researchers have failed to find differential relations between a variety of parenting dimensions (e.g., parental positive/negative feelings and discipline, support, control, parental sensitivity, parenting beliefs) and prosocial behavior for boys and girls (Janssens & Dekovic, 1997; Knafo & Plomin, 2006; NICHD, 2004). Thus, the moderating effect of child sex in the parenting – prosocial behavior link remains unclear. The differences in parenting variables across studies make it difficult to compare findings and may contribute to the lack of consistent
results. Studies examining more specific parenting behaviors and their potential interactions with the sex of the child may provide some clarification.

**Age of the Child**

There is also some evidence that the relations between parenting practices and children’s behavior may change as a function of the child’s age. For example, Frick et al. (1999) collected data from a clinical sample of boys aged 6 to 17 and found the average correlation across five parenting practices (involvement, praise, monitoring, inconsistent discipline, and corporal punishment) on diagnosis of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) to increase with age. However, when the unique relations for each parenting practice were examined separately, the trend was not supported for all parenting practices. Specifically, corporal punishment was found to be moderately related to DBD diagnosis in middle-aged children but weakly and insignificantly related in young children and adolescents. Gershoff (2002) confirmed Frick et al.’s results with respect to corporal punishment and child aggression: When the mean age of study participants was broken down into preschool (1–5), grade school (6–9), middle school (10–12), and high school (13–16), effect sizes were largest for the middle school group. Gershoff cites evidence supporting potential explanations for this finding, including increased severity of physical punishment in this age group due to higher parental expectations and frustration, in addition to cumulative effects of harsh punishment throughout childhood and into early adolescence. Moreover, the relation may not strengthen into adolescence due to the low frequency of corporal punishment and the increased influence of peer groups on behavior.
By contrast, Pardini et al. (2008) failed to support the age trends found in the two previously mentioned studies. In a longitudinal study with at-risk boys, these researchers found that when behavior was assessed through teacher report, physical punishment was related to increases in conduct problems at age 7 for Caucasian boys and from age 7–11 in African American boys. In addition, poor parental monitoring was related to increased conduct problems from age 9 to 13 (but was not related to conduct problems at ages 7 or 15). Pardini and colleagues also failed to find a moderating effect of age with respect to involvement, which again contrasts Frick and colleagues’ finding of stronger relations between parental involvement and conduct problems in adolescents. No known studies exist that examine age as a moderator of the relations between parenting and children’s prosocial behavior. However, one study including 1st–5th graders indicated that Authoritative parenting predicted teacher reports of prosocial behaviors for all grades but only predicted peer nominations of who is most helpful for 3rd and 5th graders (Janssens & Dekovic, 1997). These results suggest that the moderating effect of age may differ across informants and types of prosocial behavior measured.

Overall, although findings are mixed and limited, there exists some evidence that the age of the children in the sample may influence the relations between parenting practices and child behavior and that the nature of the relation may change depending on the parenting dimension measured. More research on the moderating role of age in these relations is warranted. In addition, Pardini and colleagues’ results revealed some differential age trends for African American and Caucasian children, indicating that ethnicity may interact with age in predicting child behavior. Indeed, there is growing evidence to suggest ethnic differences in how parenting relates to child outcomes.


*Ethnicity of the Child*

Examining the role that cultural factors play in the relation between parenting and child outcomes is important for several reasons. First, it has been projected that minority groups will make up more than half of the U.S. population by 2042 (U.S. Bureau of the Census, 2008), and thus, mental health professionals will likely see a rise in the number of minority clients who seek treatment. Second, most parenting theories are based on middle-class European American families (Cardona, Nicholson, & Fox, 2000; Eisenberg & Fabes, 1998; Parke, 1992), and thus, these models may not generalize to other cultural groups. Third, there is some evidence suggesting that the developmental pathways to children’s prosocial and antisocial behaviors may differ across racial/ethnic groups (Deater-Deckard, Dodge, Bates & Pettit, 1998; Knight, Kagan, & Buriel, 1982).

The majority of research concerning ethnic differences in the relations between parenting and children’s behavior has focused on corporal punishment and externalizing behaviors. Studies have indicated that African American parents view corporal punishment as more acceptable than other ethnic groups (McDade, 1995) and use it more frequently (Day, Peterson, & McCracken, 1998; Lansford, Deater-Deckard, Dodge, Bates, & Petit, 2004); however, findings suggest that after controlling for SES, harsh discipline may not have the same negative effects on African American children as it does on European American children, at least in community samples (Deater-Deckard et al., 1996; Lansford et al., 2004). It has been postulated that these findings may be due to differences in interpretations of corporal punishment across the two groups of children (Deater-Deckard & Dodge, 1997; Lansford et al., 2004) In at-risk samples of children, however, researchers have failed to find a moderating effect of ethnicity in the relation
between corporal punishment and externalizing behavior when prior levels of externalizing behaviors were controlled (Lau, Lirrownik, Newton, Black, & Everson, 2006; Pardini et al., 2008). Thus, it appears that ethnic differences in the relations between corporal punishment and child behavior problems exist in the general population, but corporal punishment may exacerbate existing behavioral problems regardless of ethnic background.

With respect to parenting practices other than corporal punishment, findings have been largely inconsistent, with some researchers finding no moderating effects of ethnicity across a wide range of parenting behaviors (e.g., poor monitoring, low involvement; Pardini et al., 2008) and others finding interactions between ethnicity and positive parenting practices (Lau et al., 2006) in predicting externalizing behaviors. Notably, Lau and colleagues found parental warmth to protect against future behavior problems in White children but exacerbate or fail to ameliorate existing behavior problems in Black children, indicating that parental warmth may not operate in the same way across ethnicities. In order to better understand how particular parenting behaviors relate to child outcomes in different ethnic and cultural groups, continued research in this area with representative samples is needed. There is some, albeit limited, literature to suggest cultural and ethnic differences in prosocial behaviors (see Eisenberg et al., 2006; Knight & Kagan, 1977); however, no known studies have examined the moderating effect of ethnicity in the relation between parenting and children’s prosocial behavior. Therefore, there is a strong need for research that includes a large enough subset of minority children and parents to adequately test for this potential moderation.
Overall, there is overwhelming evidence to suggest that the relations between parenting practices and child behavior differ depending on the characteristics of the child; however, the exact nature of these moderations is unclear due to inconsistent and limited findings. Discrepancies across studies could be due to a number of factors, including differences in the variables included in the models (e.g., controls), measurement of the variables of interest, sample characteristics, and respondents (mother, father, teacher, peers). Although efforts should be made to improve upon the methods of previous studies, there is also a need for simple replications to increase the confidence in conclusions drawn from studies. In addition, past research can be improved upon by collecting data and performing exploratory analyses that may lead to new models and theories or expansion of existing supported theories. The identification of moderators is one way to move toward this goal. Cultural moderators are of particular importance, as America is becoming increasingly more diverse, and assuming that the effects of parenting are generalizable to other cultural groups may be doing a disservice to those groups. It is not uncommon for researchers to report that certain ethnic groups were dropped from analyses due to insufficient subsample sizes for examining ethnic differences in outcomes. Increased efforts should be made to include adequate numbers of minority participants to carry out such analyses, as this information is crucial for understanding the needs of minority populations.

Summary and Proposed Study

The role of parenting in relation to child behavior has been studied empirically for several decades, resulting in a large literature base from which to draw conclusions and support theories. In spite of the progress made in identifying predictors of child
behavior/adjustment, several areas remain in need of further research. First, the majority of studies focus on children’s maladjustment, particularly externalizing behavior problems, resulting in a relative lack of research on positive child outcomes, such as prosocial behavior. Next, informants of parenting and child behaviors in research studies are overwhelmingly mothers, and when father-reported data are included, it is often combined with data from the mothers. Therefore, relatively little is known about the role that fathers play in child behavior, and even less is known about how mothers’ and fathers’ parenting differentially relates to childhood outcomes. In line with the need to examine the function that the sex of the parent plays in the parenting – child behavior link, identifying moderating roles of child characteristics is also important. Thus far, the findings related to moderating variables in the relations between parenting practices and children’s externalizing and prosocial behaviors indicate that the sex, age, and ethnicity of the child are all factors that may have some impact on the relations between parenting and child behavior problems, at least with respect to some parenting behaviors (e.g., involvement, monitoring, corporal punishment), though results are mixed. The need for additional research testing moderators of psychosocial outcomes has been highlighted by other researchers as well (e.g., Eisenberg, 2006; Kazdin, 1997). Finally, the child development literature includes few studies that measure individual parenting practices relative to those measuring broader parenting dimensions, which makes it difficult to ascertain which particular parenting behaviors are most strongly predictive of children’s prosocial behaviors. Therefore, additional research is needed to identify specific parenting practices that relate to children’s prosocial behavior, explicate the roles that
fathers’ parenting practices play in predicting behavior problems and prosocial behavior in children, and further examine potential moderators in these relations.

The current study aimed to help broaden theoretical models of parenting and address inconsistencies in previous findings by collecting data from both mothers and fathers of boys and girls across a wide age range and of different ethnicities in order to adequately examine differences in the patterns of mothers’ and fathers’ parenting practices that relate to children’s externalizing and prosocial behaviors and to examine the roles that the sex, age, and ethnicity of the child play in these relations. Addressing these gaps in the literature has important implications. For example, if certain child or parent factors influence the relations between parenting practices and child outcomes, then prevention and intervention programs could be better tailored to individual patients based on the presence of such factors, serving to increase both efficiency and effectiveness (Frick & O’Brien, 1994). The current study also aimed to replicate the researcher’s previous findings that the unique relations between mothers’ and fathers’ parenting practices and externalizing behavior differ across parents, that paternal involvement is only related to lower levels of externalizing behavior in boys, and that maternal inconsistent discipline is only related to higher levels of externalizing behavior in boys (Gryczkowski, 2008).

Hypotheses

1). Both maternal and paternal parenting practices would explain incremental variance in children’s externalizing and prosocial behavior beyond demographic/contextual/familial covariates.
2). Mothers’ and fathers’ parenting practices would significantly correlate with children’s externalizing and prosocial behavior. More specifically, involvement and positivity/reinforcement would negatively relate to externalizing behavior and positively relate to prosocial behavior, and poor monitoring/supervision, inconsistent discipline, and corporal punishment would positively relate to externalizing behavior and negatively relate to prosocial behavior.

3) After controlling for significant demographic/contextual/familial correlates, the pattern of parenting practices that uniquely relates to children’s externalizing behavior would differ for mothers and fathers. More specifically, maternal involvement and positive parenting would relate to fewer externalizing behaviors, and maternal poor monitoring, inconsistent discipline, and corporal punishment would relate to greater levels of externalizing behavior. For fathers, only involvement would contribute unique variance to externalizing behavior, with higher levels of paternal involvement relating to lower levels of externalizing behavior.

4) After controlling for significant demographic/contextual/familial correlates, sex, age, and ethnicity of the child would moderate the relations between mothers’ and fathers’ parenting practices and externalizing behavior. Specifically, lower paternal involvement and higher maternal inconsistent discipline would more strongly relate to externalizing behavior in boys, involvement and poor monitoring would more strongly relate to externalizing behavior in older children, and corporal punishment would relate to greater externalizing behavior in Caucasian but not African American children.
5) After controlling for significant demographic/contextual/familial correlates, higher levels of parental involvement and positive reinforcement would relate to greater prosocial behaviors, and corporal punishment would relate to fewer prosocial behaviors.

Research Question

Due to the lack of previous research regarding moderators in the relations between parenting practices and child prosocial behavior, exploratory analyses were conducted, and thus, no directional hypotheses were made. The analyses aimed to address the following general research question: Do the relations between mothers’ and fathers’ parenting practices and child prosocial behavior change as a function of the sex, age, or ethnicity of the child?
CHAPTER II

METHOD

Participants

The necessary sample size for this study, which was a minimum of 130 couples, was determined using power analyses estimating incremental $R^2$ based on effect size estimates from a prior similar study (Gryczkowski et al., 2010). These estimates predicted power > .80 for all analyses (4 covariates, 6 main effects, and 5 interaction terms) when $\alpha = .05$ (Borenstein, Rothstein, & Cohen, 2001). To meet inclusion criteria, the couples were required to be the primary caregivers of the target child (i.e., child resides with them most days of the week) aged 6–17, cohabiting for the past year, and at least 18 years of age. The parents were not required to be married or be the biological parents of the target child. Couples of all ethnic backgrounds were invited to participate; however, data were only included from Caucasian and African American families due to the inclusion of ethnicity as a moderator in the analyses. In addition, to reduce error, only families in which both parents and the child were of the same ethnicity were included. The target proportion of African American families was roughly one-third of the sample. Because the target number of Caucasian families was met first, recruitment efforts were limited to African American families toward the end of the collection phase. An additional 15 participants were recruited but excluded for the following reasons: unable to reach for phone verification ($n = 3$), response sets across measures (responding with “always” for every question, even on reverse-scored items; $n = 1$), inconsistent reports of child demographics across parents ($n = 1$), failure of parents to report on the same child
(n = 1), statistical outliers (beyond 3 SDs from the mean) across several measures (n = 2), failure to reside together for at least one year (n = 1), and multiethnic families (n = 6).

The final sample included 131 mother–father dyads with a child aged 6 to 17. Of these, 47 (35.9%) were recruited through an online Human Subjects Recruitment Pool (Experimetrix) at The University of Southern Mississippi and were from the Southeastern United States. The remaining 84 couples were recruited through various community and campus sources, including schools, YMCAs, Girl/Boy Scouts, online bulletin posts, churches, youth sports teams, and personal referrals from participants. Of the couples not recruited through Experimetrix, 41 (31.3%) were from the Southeast, 38 (29.0%) were from Midwest, and 5 (3.8%) were “other” or unknown. The couples were predominantly upper-middle SES \[ M = 45.42, \text{SD} = 9.80, \text{Mdn} = 46 \text{ on scale from 8 (lowest SES) to 66 (highest SES)} \], as measured by Hollingshead’s (1975) four-factor index of social class, which is calculated based on the education and occupation of each parent. Examples of occupations corresponding to this SES level include teachers, small to medium sized business owners, managers, counselors, and technicians. Additionally, the median combined family income range was $45,000 to $74,999. The majority of the parents were the biological parents of the target child (88.5% of mothers, 77.1% of fathers). Parents reported a mean age of 40.54 years (\text{SD} = 7.35, \text{range} 24 \text{ to} 64) \text{ for mothers and} 42.62 \text{ years (SD = 7.79, \text{range} 23 \text{ to} 64)} \text{ for fathers. The target children were predominantly Caucasian (70.2%), had a mean age of 11.58 years (SD = 3.47), and 50.4% were male. Furthermore, 97.7% lived with the couple seven days per week and 11.5% of the children}
were currently receiving or had previously received treatment for behavior problems.

Tables 1 and 2 provide breakdowns of parent and child characteristics.

Table 1

_Demographic Frequencies by Ethnicity_

| Characteristic |  
|----------------|----------------|
|                | _n (%)_ Caucasian$^a$ | _n (%)_ African American$^b$ |
| **Child Sex**  |                |                          |
| Male           | 51 (55.4)      | 15 (38.5)                |
| Female         | 41 (44.6)      | 24 (61.5)                |
| **Child Age**  |                |                          |
| 6              | 9 (9.8)        | 3 (7.7)                  |
| 7              | 9 (9.8)        | 2 (5.1)                  |
| 8              | 8 (8.7)        | 0 (0.0)                  |
| 9              | 7 (7.6)        | 3 (7.7)                  |
| 10             | 11 (12.0)      | 5 (12.8)                 |
| 11             | 1 (1.1)        | 4 (10.3)                 |
| 12             | 9 (9.8)        | 1 (2.6)                  |
| 13             | 4 (4.3)        | 6 (15.4)                 |
| 14             | 9 (9.8)        | 6 (15.4)                 |
| 15             | 8 (8.7)        | 3 (7.7)                  |
| 16             | 12 (13.0)      | 5 (12.8)                 |
| 17             | 5 (5.4)        | 1 (2.6)                  |
Table 1 (continued).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%) Caucasian&lt;sup&gt;a&lt;/sup&gt;</th>
<th>n (%) African American&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>II</td>
<td>4 (4.3)</td>
<td>3 (7.7)</td>
</tr>
<tr>
<td>III</td>
<td>20 (21.7)</td>
<td>12 (30.8)</td>
</tr>
<tr>
<td>IV</td>
<td>47 (51.1)</td>
<td>22 (56.4)</td>
</tr>
<tr>
<td>V</td>
<td>21 (22.8)</td>
<td>2 (5.1)</td>
</tr>
</tbody>
</table>

Note. SES = Socioeconomic Status. Level I represents lower class and Level V represents upper class.

<sup>a</sup> n = 92. <sup>b</sup> n = 39.

Table 2

*Mothers’ and Fathers’ Parental Status Frequencies by Ethnicity*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%) Caucasian&lt;sup&gt;a&lt;/sup&gt;</th>
<th>n (%) African American&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers</td>
<td>Fathers</td>
</tr>
<tr>
<td>Relationship to child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological parent</td>
<td>81 (88.0)</td>
<td>74 (80.4)</td>
</tr>
<tr>
<td>Legal guardian</td>
<td>1 (1.1)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Stepparent</td>
<td>6 (6.5)</td>
<td>9 (9.8)</td>
</tr>
<tr>
<td>Adoptive parent</td>
<td>3 (3.3)</td>
<td>4 (4.3)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (1.1)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Unknown</td>
<td>0 (0.0)</td>
<td>3 (3.3)</td>
</tr>
</tbody>
</table>

<sup>a</sup> n = 92. <sup>b</sup> n = 39.
Measures

Control Variables

*Demographic form.* Parents were asked to provide information about themselves and the target child. Parental information gathered included age, sex, race, marital status, relationship to the target child, educational background, occupation, and combined family income. Information gathered about the child included age, sex, race, treatment history, and disability status. Household information included the number of children and the number of additional caretakers (e.g., grandparents; see Appendix A).

*Center for Epidemiological Studies – Depression Scale* (CES–D Scale; Radloff, 1977). The CES–D Scale is a 20-item self-report measure designed to assess depressive symptomatology among adults in the general population. Items are rated on a 4-point Likert scale ranging from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). Internal consistencies for the current sample were $\alpha = .83$ for mothers and $\alpha = .85$ for fathers. The author reports good internal consistency ($\alpha = .85$ to .90) and adequate test-retest reliability and construct validity (Radloff, 1977).

*O’Leary-Porter Scale* (OPS; Porter & O’Leary, 1980). The OPS is a 10-item self-report measure designed to assess the frequency of marital conflict that occurs in front of a target child. Items are rated on a 5-point Likert scale ranging from 0 (*very often*) to 4 (*never*). The authors report good internal consistency ($\alpha = .86$) and test-retest reliability ($r = .96$; Porter & O’Leary, 1980). Internal consistencies for the current sample were $\alpha = .82$ and $\alpha = .76$ for mothers and fathers, respectively.

*Recent Life Changes Questionnaire.* The Recent Life Changes questionnaire was adapted from the Life Changes questionnaire used in the Fast Track Project—a multisite
study on prevention of antisocial behavior in children (Conduct Problems Prevention Research Group, 1999). It is designed to assess parents’ reports of whether specific life events (e.g., loss of job, pregnancy) have occurred in the past year (yes or no) and how positively or negatively each endorsed event impacted the family from -2 (Strong Negative) to +2 (Strong Positive). Informants also had the opportunity to add an event that was not included in the measure and provide an impact rating for that event.

Negative impact scores were summed to create an overall Negative Life Changes score for each parent separately. Higher scores represented a lower overall negative impact rating for recent events. No psychometric information is available for this specific scale; however, similar measures (e.g., Life Experiences Survey; Sarason, Johnson, & Siegel, 1978) have been shown to be related to child externalizing behavior (Webster-Stratton & Hammond, 1990).

**Independent Variables**

*Alabama Parenting Questionnaire – Parent Report (APQ; Frick, 1991; Shelton et al., 1996).* The parent-report version of the APQ is a 42-item questionnaire used to assess parenting practices and consists of the following subscales: Involvement, Positive Parenting, Poor Monitoring/Supervision, Inconsistent Discipline, Corporal Punishment. Items are rated on a 5-point Likert scale ranging from 1 (never) to 5 (always), reflecting the frequency with which the parent engages in each parenting behavior. Internal consistencies observed in the current study for the subscales were as follows: Involvement ($\alpha = .74$ for mothers and $\alpha = .86$ for fathers), Positive Parenting ($\alpha = .74$ for mothers and $\alpha = .81$ for fathers), Poor Monitoring/Supervision ($\alpha = .67$ for mothers and $\alpha = .79$ for fathers), Inconsistent Discipline ($\alpha = .77$ for mothers and $\alpha = .60$ fathers), and
Corporal Punishment ($\alpha = .47$ for both mothers and fathers). Shelton and colleagues (1996) reported the following internal consistencies for their volunteer sample: Involvement ($\alpha = .80$), Positive Parenting ($\alpha = .85$), Poor Monitoring/Supervision ($\alpha = .75$), Inconsistent Discipline ($\alpha = .74$), and Corporal Punishment ($\alpha = .49$). (Note: the Corporal Punishment subscale is comprised of three items, one of each asking about spanking, slapping, and hitting the child with an object when they have done something wrong.) They also reported good test-retest reliability and adequate convergent validity. Items comprising each subscale were summed separately for mother and father reports.

**Criterion Variables**

*Child Behavior Checklist/6–18* – (CBCL/6–18; Achenbach & Rescorla, 2001). The CBCL is a 113-item broadband parent-report measure of psychopathology designed to assess internalizing and externalizing behaviors in children. Items are rated on a 3-point Likert scale 0 (*not true*) to 2 (*very/often true*). Gender- and age-based T-scores on the Rule Breaking and Aggression subscales were calculated separately for mothers and fathers and were used to create the Externalizing variable (as explained in the Results section). Internal consistencies for mothers and fathers, respectively, were as follows: Rule Breaking ($\alpha = .69$ and $\alpha = .66$) and Aggression ($\alpha = .84$ and $\alpha = .82$). The authors report internal consistencies of ($\alpha = .85$) for the Rule Breaking scale and ($\alpha = .94$) for the Aggression scale, high test-retest reliability ($r = .92$), and good criterion-related and construct validity (Achenbach & Rescorla, 2001).

*Social Skills Rating System – Parent Form, Elementary Level and Secondary Level* (SSRS; Gresham & Elliot, 1990). The SSRS is a measure designed to assess social behaviors in children and adolescents. It includes a Social Skills scale and a Problem
Behaviors scale. Only the Social Skills scale was used in this study. The parent report scale is comprised of 38 (Elementary Form, Grades K–6) or 40 (Secondary Form, Grades 7–12) items rated on a 3-point Likert scale ranging from 0 (never) to 2 (very often) that emphasize prosocial behaviors (e.g., sharing, helping, initiating relationships, requesting help, using manners). The Social Skills Total Scale is comprised of four subscales: Cooperation, Assertion, Responsibility, and Self-Control. Gender-based Standard Scores based on the norms for that child’s grade level (Elementary or Secondary) were computed separately for mother and fathers for each subscale; subscales were then used to create a Prosocial Skills variable for each parent (as explained in the Results section). Internal consistencies for the subscales for mothers and fathers, respectively, were Cooperation, $\alpha = .82$ and $\alpha = .79$; Assertion, $\alpha = .72$ and $\alpha = .74$; Responsibility, $\alpha = .66$ and $\alpha = .73$; Self Control, $\alpha = .70$ and $\alpha = .74$. The internal consistencies reported by the authors for each subscale for parent-report Elementary and Secondary forms ranged from $\alpha = .65$ to $\alpha = .80$. Adequate criterion-related and construct validity were also reported (Gresham & Elliot, 1990).

Procedure

Following approval by the Institutional Review Board (see Appendix B), parent recruitment was carried out through online recruitment of undergraduates (Experimetrix), posting or disseminating flyers (see Appendix C) at various community locations or on email list serves, or disseminating packets to parents at community events. Students participating in Experimetrix met with the researcher or a research assistant and were trained and tested on the recruitment protocol. During this session, the researcher/assistant explained the policy that falsifying data in psychological experiments
is considered academic dishonesty and would be reported as such by the researcher. Students were informed of the possible repercussions associated with academic dishonesty, from failure to earn credit for the experiment to expulsion from the university. They were then required to sign a form indicating that they read and understood this policy (see Appendix D). All students were trained with respect to parent recruitment (students who themselves met the inclusion criteria were allowed to participate directly), instructions for parents completing the forms, return procedures, and criteria for receiving credit. They were also supplied with a copy of these instructions, which included the researcher’s contact information. Prior to receiving research packets, students were given a brief quiz (see Appendix E) and were retrained on any items they answered incorrectly. Parents who agreed to participate received a packet including a detailed instruction sheet with researcher and supervisor contact information, a consent form (see Appendix F), and two copies of each of the following (one for the mother, one for the father): a demographic form, paper and pencil measures assessing parenting practices, personal adjustment, marital conflict, recent life experiences, and target child behavior. Parents were instructed to choose one target child, then independently complete each parent form/measure in the packet with regard to only that child (i.e., the target child was the same child for both the mother and father). Both parents were required to provide informed consent, participate, and complete all forms. The couples were instructed to return the packets to the student who recruited them or to the researcher.

Couples recruited by undergraduate students who were signed up for Experimetrix credit were required to pass a telephone verification procedure in which one of the parents was required to provide the child’s date of birth, a description of the types
of forms that were completed, and one additional question chosen at random (parent or spouse’s age, highest level of education, or occupation). All three questions were required to be answered satisfactorily in order for that couple’s data to be included in the study. No parents who were contacted for verification provided incorrect responses; however, three couples were unable to be contacted for verification, and thus, their data were not included in the study. Couples participating directly were not required to further verify the accuracy of the data.

Access to the data was restricted to the researcher and research assistants. Incentive for students who recruited couples or participated directly included course credit or extra credit in psychology courses. Initially, all couples were given the opportunity to be entered into a drawing for one of (2) $50 gift certificates to Walmart. Only couples who returned completed packets were entered in the drawing, which took place after data collection was completed. However, due to difficulty obtaining the minimum number of completed packets necessary to carry out the proposed analyses, incentive for couples recruited through non-Experimetrix locations was changed to a $15 Walmart gift card for each couple who completed the study. Sixty-four couples were included in the gift card drawing and 67 couples were offered a $15 gift card. Of those offered a gift card, 45 couples returned the address form and received compensation.
CHAPTER III
RESULTS

Preliminary Analyses

Means and standard deviations of each parenting practice subscale for mothers and fathers are displayed in Table 3, and zero-order correlations between mothers’ and fathers’ reports of their own parenting practices and their child’s Externalizing and Prosocial Behavior are displayed in Table 4. In addition, zero-order correlations between covariates and parenting practice subscales and child outcomes (Externalizing and Prosocial Behavior) are shown in Table 5. Covariates and parenting practice subscales that were significantly correlated with the dependent variables varied across parents and outcomes. Regarding parenting practices, all correlations were significant and in the predicted direction, with the exception of maternal Positive Parenting for both outcomes and both maternal and paternal Poor Monitoring/Supervision in relation to Externalizing Behavior. Using $t$-tests, no significant differences in levels of Externalizing or Prosocial Table 3

*Means and Standard Deviations for Parenting Practice Subscales*

<table>
<thead>
<tr>
<th>Parenting Practices</th>
<th>Mothers</th>
<th>Fathers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Involvement*</td>
<td>40.44</td>
<td>4.53</td>
</tr>
<tr>
<td>Positive Parenting*</td>
<td>24.79</td>
<td>3.21</td>
</tr>
<tr>
<td>Poor Monitor/Supervision*</td>
<td>15.25</td>
<td>4.59</td>
</tr>
<tr>
<td>Inconsistent Discipline</td>
<td>12.93</td>
<td>3.76</td>
</tr>
<tr>
<td>Corporal Punishment</td>
<td>4.89</td>
<td>1.95</td>
</tr>
</tbody>
</table>

* $t$-tests indicate a significant mean difference across parents with $p < .05$. 
Behavior across recruitment methods (Experimetrix vs. non Experimetrix), incentive types (drawing for $50 gift card or compensation with $15 gift card), or geographic locations were found. Additionally, there were no ethnic differences in the percentages of Caucasian and African American couples who were offered either incentive ($\chi^2 = 3.32, p > .05$).

Table 4

Zero-order Correlations between Mothers’ and Fathers’ Reports of Parenting Practices, Externalizing, and Prosocial Behavior

<table>
<thead>
<tr>
<th>Subscale</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parenting Practices</td>
<td></td>
</tr>
<tr>
<td>Involvement</td>
<td>.27***</td>
</tr>
<tr>
<td>Positive Parenting</td>
<td>.35***</td>
</tr>
<tr>
<td>Poor Monitoring/Supervision</td>
<td>.65***</td>
</tr>
<tr>
<td>Inconsistent Discipline</td>
<td>.38***</td>
</tr>
<tr>
<td>Corporal Punishment</td>
<td>.78***</td>
</tr>
<tr>
<td>Externalizing Behavior</td>
<td>.85***</td>
</tr>
<tr>
<td>Rule Breaking</td>
<td>.65***</td>
</tr>
<tr>
<td>Aggression</td>
<td>.63***</td>
</tr>
<tr>
<td>Prosocial Behavior</td>
<td>.74***</td>
</tr>
<tr>
<td>Cooperation</td>
<td>.61***</td>
</tr>
<tr>
<td>Assertion</td>
<td>.66***</td>
</tr>
<tr>
<td>Responsibility</td>
<td>.64***</td>
</tr>
<tr>
<td>Self-Control</td>
<td>.56***</td>
</tr>
</tbody>
</table>

***$p < .001$. 
Table 5

Zero-order Correlations between Covariates and Parenting Practices and Child Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Externalizing</th>
<th>Prosocial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Hollingshead</td>
<td>-.12</td>
<td>-.23**</td>
</tr>
<tr>
<td>Negative Life Changes</td>
<td>-.26**</td>
<td>-.19*</td>
</tr>
<tr>
<td>CES–D(a)</td>
<td>.33***</td>
<td>.30***</td>
</tr>
<tr>
<td>OPS(b)</td>
<td>-.18*</td>
<td>-.25**</td>
</tr>
<tr>
<td>Child Sex</td>
<td>.11</td>
<td>.03</td>
</tr>
<tr>
<td>Child Age</td>
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<td>-.13</td>
</tr>
<tr>
<td>Child Ethnicity</td>
<td>.03</td>
<td>-.07</td>
</tr>
<tr>
<td>Involvement</td>
<td>-.25**</td>
<td>-.35***</td>
</tr>
<tr>
<td>Positive Parenting</td>
<td>-.13</td>
<td>-.27**</td>
</tr>
<tr>
<td>Poor Monitoring/Supervision</td>
<td>.13</td>
<td>.11</td>
</tr>
<tr>
<td>Inconsistent Discipline</td>
<td>.37***</td>
<td>.24**</td>
</tr>
<tr>
<td>Corporal Punishment</td>
<td>.36***</td>
<td>.26**</td>
</tr>
</tbody>
</table>

*Note: Mothers’ reports of parental variables are correlated with mothers’ reports of DVs, fathers’ reports of parental variables are correlated with fathers’ reports of DVs.*

a,b Higher scores on these measures indicate lower levels of each construct.

*p ≤ .05, **p < .01, ***p < .001.
Data Analytic Model

In order to test study hypotheses, dyadic multivariate multilevel models were fit to the data. This analytic approach was used because mothers’ and fathers’ reports were included as separate indicators of Externalizing and Prosocial Behavior in the same analyses (see Sayer and Klute, 2005). For the Externalizing analyses, the Level 1 model, in which the criterion scores are treated as the repeated measure, characterized each observed Externalizing score as consisting of a true score and measurement error for each parent. For model identification, multiple scores per parent were needed, and thus, the Rule Breaking and Aggression subscale scores were used as separate indicators of the latent constructs of interest (each parent’s report of Externalizing Behavior; Kishton & Widaman, 1994). This process yielded a total of four scores per child (two Externalizing scores per parent—one for each subscale; see Barnett, Marshall, Raudenbush, & Brennan, 1993, for more detail). The Prosocial analyses mirrored the above; however, the Level 1 data contained four Prosocial subscale scores (Cooperation, Assertion, Responsibility, and Self-Control subscales) per parent, yielding a total of 8 scores per child. The covariance between mothers’ and fathers’ true scores was estimated for each model.

The Level 1 models are presented in the following:

\[ Y_{ij} = (M)_{ij} (\beta_{mj} + e_{mj}) + (F)_{ij} (\beta_{fj} + e_{fj}) \]

where \( Y_{ij} \) is the Externalizing/Prosocial score \( i \) in family \( j \); \( M \) and \( F \) are dummy variables equal to one if the score is from a mother or father (only \( M \) or \( F \) can be equal to 1 for any score); \( \beta_{mj} \) and \( \beta_{fj} \) are the true Externalizing/Prosocial scores from mothers and fathers, respectively; and \( e_{mj} \) and \( e_{fj} \) are measurement error for mothers and fathers. In the Level 2
models, the true Externalizing/Prosocial scores for mothers and fathers, which vary across families, were predicted by mothers’ or fathers’ SES, depression, marital conflict, and parenting practices (i.e., Involvement, Positive Parenting, Poor Supervision/Monitoring, Inconsistent Discipline, Corporal Punishment). In addition, the Level 2 model contained interaction terms for these predictors with child sex (0 = boy, 1 = girl), age, and ethnicity (0 = Caucasian, 1 = African American). Level 2 model effects are characterized by the following equation:

\[ \beta_{mj} = \gamma_{10} + \gamma_{11} \text{(mother-reported predictor)} + \gamma_{12} \text{(predictor * moderator)} + u_{1j} \]

\[ \beta_{fj} = \gamma_{20} + \gamma_{21} \text{(father-reported predictor)} + \gamma_{22} \text{(predictor * moderator)} + u_{2j} \]

where \( \gamma_{10} \) and \( \gamma_{20} \) are the Level 2 intercepts, which represent the average of Externalizing/Prosocial values reported by each parent when the values of the predictors are zero; \( \gamma_{11} \) and \( \gamma_{21} \) are regression coefficients that describe the independent relation of the predictor to Externalizing/Prosocial Behavior; \( \gamma_{12} \) and \( \gamma_{22} \) are regression coefficients that capture the interaction between the predictor and child demographic variable; and \( u_{1j} \) and \( u_{2j} \) are residuals. To determine means and variances for each parent’s reports of Externalizing and Prosocial Behavior, baseline models with no Level 2 predictors were fit.

Externalizing

For the Externalizing model, mean maternal and paternal reports of Externalizing Behavior were nearly identical (T = 53.79 and 53.65, respectively). Notably, children in the current sample, on average, were not reported to have significant behavior problems. The baseline variances of mothers’ and fathers’ estimated true externalizing scores were \( u_{1j} = 18.01 \) and \( u_{2j} = 14.11 \), respectively. In order to calculate effect sizes, a second model
was fit that included Level 2 covariates that were significantly correlated with Externalizing Behavior for at least one parent (SES and maternal and paternal Depression, Marital Conflict, and Negative Life Changes), as well as the sex, age, and ethnicity of the child. Comparison of the residual variances of mothers’ ($u_{ij} = 14.52$) and fathers’ ($u_{ij} = 10.34$) Externalizing scores with the variances in the baseline model indicates that these control variables explained 19.38% and 27.0% of the variance in mothers’ and fathers’ reports of Externalizing Behavior, respectively. Parenting practice subscales were then added to the model; consideration of the Externalizing residual variances for mothers ($u_{ij} = 11.08$) and fathers ($u_{ij} = 7.91$) indicates that the parenting variables explained an additional 19.1% of the variance in mothers’ and 16.94% in fathers’ reports of child Externalizing Behavior beyond the variance explained by the model covariates. Finally, interaction terms (parenting practice subscales x child demographic factors) were added to the model. In the interest of parsimony, nonsignificant interactions were deleted until all remaining interactions were significant. Consideration of the final residual variances for mothers ($u_{ij} = 10.07$) and fathers ($u_{ij} = 6.87$) indicates that these terms explained an additional 5.61% and 7.37% of the variance in mothers’ and fathers’ Externalizing Behavior, respectively. The final model is displayed in Table 6. Post-hoc probes of interaction effects were conducted to examine the simple slopes in the multilevel models (Preacher, Curran, & Bauer, 2006).

Results from the final model indicated that the covariates were no longer significantly related to maternal reports of Externalizing Behavior after the parenting practices and interactions were included; however, fathers’ reports of Negative Life
Table 6

*Multilevel Analysis Predicting Child Externalizing Behavior*

<table>
<thead>
<tr>
<th>Fixed Effect</th>
<th>Mothers Coefficient</th>
<th>SE</th>
<th>Fathers Coefficient</th>
<th>SE</th>
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<td>.03</td>
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<td>.07</td>
<td>-.01</td>
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<td>-.64*</td>
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<td>-.28*</td>
<td>.13</td>
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<td>by Child Ethnicity</td>
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<td>Poor Monitoring/Supervision</td>
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<td>.01</td>
<td>.10</td>
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<td>by Child Age</td>
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<td>-.04*</td>
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<td>by Child Ethnicity</td>
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<td>.17</td>
<td>.28*</td>
<td>.13</td>
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<td>-.03</td>
<td>.11</td>
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<td>.22</td>
<td>.51*</td>
<td>.20</td>
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</tbody>
</table>

*Note.* Male = 0, Female = 1; Caucasian = 0, African American = 1. The mean age ($M = 11.58$ years) and ± 1 $SD$ (3.47) were used to plot age interactions. Coefficients are unstandardized.

<sup>a</sup> Higher scores on these measures indicate lower levels of each construct.

† $p < .10$, * $p < .05$, ** $p < .01$. 

$M$ mean, $SD$ standard deviation.
Changes remained significantly related to their reports of Externalizing Behavior ($\gamma = -0.64, p = .016$). Regarding individual parenting practices, the unique relations between Involvement and Externalizing Behavior were not significant for mothers or fathers. Positive Parenting was significant for both mothers ($\gamma = -0.37, p = .033$) and fathers ($\gamma = -0.28, p = .033$), and the relation for mothers was moderated by child ethnicity ($\gamma = 0.57, p = .016$). Examinations of the graph of the interaction and simple slopes indicated that higher levels of maternal Positive Parenting were significantly related to lower levels of Externalizing Behavior for Caucasian children only (see Figure 1), and there was a nonsignificant trend in the opposite direction for African American children.

![Figure 1](Plot of the Maternal Positive Parenting x Ethnicity Interaction. *$p < .05$, **$p < .01$, ***$p < .001$.]

Regarding negative parenting practices, the unique relations between Poor Monitoring/Supervision and Externalizing Behavior were not significant for mothers or fathers; however, significant interactions emerged between Poor Monitoring/Supervision...
and ethnicity for both parents ($\gamma = .36$, $p = .039$ for mothers; $\gamma = .28$, $p = .032$ for fathers), such that the simple slopes were positive and significant for African American children only (see Figures 2 and 3). The Poor Monitoring/Supervision x age interaction was also significant for fathers ($\gamma = -.04$, $p = .022$). Tests of simple slopes indicated that paternal

Figure 2. Plot of the Maternal Poor Monitoring/Supervision x Child Ethnicity Interaction. *$p < .05$, **$p < .01$, ***$p < .001$.

Poor Monitoring/Supervision was significantly and negatively related to Externalizing Behavior in older children. The direction of the relationship for younger children was in the opposite direction; however, the simple slope for this group and the middle-aged group were nonsignificant (see Figure 4). Maternal Inconsistent Discipline was marginally related to Externalizing Behavior ($\gamma = .19$, $p = .081$); however, the relation between paternal Inconsistent Discipline and Externalizing Behavior was not significant. Finally, Corporal Punishment was uniquely related to Externalizing Behavior for both
Figure 3. Plot of the Paternal Poor Monitoring/Supervision x Child Ethnicity Interaction. $*p < .05, **p < .01, ***p < .001$.

Figure 4. Plot of the Paternal Poor Monitoring/Supervision x Child Age Interaction. $*p < .05, **p < .01, ***p < .001$. 
mothers ($\gamma = .49, p = .031$) and fathers ($\gamma = .51, p = .011$), and no significant interactions emerged.

Prosocial

Results from the empty Prosocial model revealed comparable mean maternal and paternal reports of Prosocial Behavior (M = 102.6 and 99.67, respectively). Variances of mothers’ and fathers’ estimated true Prosocial scores were $u_{ij} = 128.22$ and $u_{2j} = 175.53$, respectively. In order to estimate the proportion of variance in Prosocial Behavior that was explained by demographic/contextual covariates, a model was fit including only Level 2 covariates that were significantly correlated with Prosocial Behavior (i.e. Depression and Negative Life Changes for each parent), as well as child demographic factors. Comparison of the residual variances of mothers’ ($u_{ij} = 88.48$) and fathers’ ($u_{2j} = 138.13$) Prosocial scores with the variances in the baseline model indicates that these variables explained 30.99% and 21.3% of the variance in mothers’ and fathers’ reports of Prosocial Behavior, respectively. Parenting practice subscales were then added to the model; consideration of Prosocial residual variances for mothers ($u_{ij} = 70.49$) and fathers ($u_{2j} = 101.71$) indicates that the parenting variables explained an additional 15.23% and 20.78% of the variance in mothers’ and fathers’ reports of child Prosocial Behavior, respectively, beyond the variance explained by the model covariates. Finally, the parenting practice x child demographics interaction terms were added to the model. Again, to create the most parsimonious model, nonsignificant interactions were removed from the model until only significant interactions remained. Consideration of the final residual variances for mothers ($u_{ij} = 66.47$) and fathers ($u_{2j} = 82.40$) indicates that the
interaction terms explained an additional 3.14% and 11.0% of the variance in mothers’ and fathers’ reports of Prosocial Behavior, respectively. The final model is displayed in Table 7. Again, post-hoc probes of interaction effects were conducted to examine the simple slopes in the multilevel models (Preacher et al., 2006).

Results from the final model indicate that maternal and paternal depression and mothers’ reports of Negative Life Changes remained significant. Regarding individual parenting practices, the unique relations between both maternal ($\gamma = .51, p = .054$) and paternal ($\gamma = .55, p = .025$) Involvement and Prosocial Behavior were positive and significant. In addition, the paternal Involvement x child age interaction was significant ($\gamma = -.12, p = .007$): higher levels of paternal Involvement were associated with higher levels of Prosocial behavior for younger and middle-aged children but not older children (see Figure 5). Positive Parenting was not uniquely related to Prosocial Behavior for mothers or fathers; however, a significant Positive Parenting x child sex interaction emerged for fathers ($\gamma = -2.72, p = .016$). More specifically, fathers’ Positive Parenting toward girls but not boys was related to higher levels of Prosocial skills (see Figure 6). Significant Positive Parenting x child ethnicity interactions emerged for both parents ($\gamma = -1.34, p = .023$ for mothers; $\gamma = -1.26, p = .026$ for fathers), indicating that greater levels of Positive Parenting were associated with more Prosocial Behaviors for Caucasian children and fewer prosocial behaviors for African American children The simple slopes were not significant for either ethnic group (see Figures 7 and 8).

Regarding negative parenting practices, the unique relations for maternal and paternal Poor Monitoring/Supervision and were not significant, and the unique relations for Inconsistent Discipline ($\gamma = -.58, p = .031$) and Corporal Punishment ($\gamma = -1.10,$
Table 7  
*Multilevel Analysis Predicting Child Prosocial Behavior*

<table>
<thead>
<tr>
<th>Fixed Effect</th>
<th>Coefficient</th>
<th>SE</th>
<th>Coefficient</th>
<th>SE</th>
</tr>
</thead>
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<td>99.01</td>
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</tr>
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<td>-.52**</td>
<td>.16</td>
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<tr>
<td>Negative Life Changes&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>.62</td>
<td>1.26</td>
<td>.81</td>
</tr>
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<td>-1.67</td>
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<td>.15</td>
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<td>.04</td>
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<td>Positive Parenting</td>
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<td>.45</td>
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<td>by Child Sex</td>
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<td>-.62&lt;sup&gt;†&lt;/sup&gt;</td>
<td>.33</td>
</tr>
<tr>
<td>Corporal Punishment</td>
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<td>-.23</td>
<td>.87</td>
</tr>
<tr>
<td>by Child Sex</td>
<td></td>
<td></td>
<td>-2.72*</td>
<td>1.08</td>
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</table>

*Note.* Male = 0, Female = 1; Caucasian = 0, African American = 1. The mean age ($M = 11.58$ years) and ± 1 $SD (3.47)$ were used to plot age interactions. Coefficients are unstandardized.

<sup>a</sup> Higher scores indicate lower levels of negative life changes.

<sup>†</sup>$p < .10$, *$p \leq .05$, **$p < .01$.
Figure 5. Plot of the Paternal Involvement x Child Age Interaction. 
*p < .05, **p < .01, ***p < .001.

Figure 6. Plot of the Paternal Positive Parenting x Child Sex Interaction. 
*p < .05, **p < .01, ***p < .001.
Figure 7. Plot of the Maternal Positive Parenting x Child Ethnicity Interaction. *p < .05, **p < .01, ***p < .001.

$p = .042$) were only significant for mothers. However, a significant interaction emerged between paternal Corporal Punishment and child sex ($\gamma = -2.72, p = .013$). Examination of the graph and simple slopes indicated a significant negative relation for females (see Figure 9).
**Figure 8.** Plot of the Paternal Positive Parenting x Child Ethnicity Interaction.

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

**Figure 9.** Plot of the Paternal Corporal Punishment x Child Sex Interaction.

* $p < .05$, ** $p < .01$, *** $p < .001$. 
CHAPTER IV
DISCUSSION

There is strong empirical support for the influence of parenting on children’s behavior. The majority of this research has focused on mothers’ parenting styles and, more recently, parenting practices and how they relate to externalizing behavior problems in children. Less is known about the influence of fathers’ parenting practices, the influence of parenting practices on prosocial behaviors, and moderators of the parenting – child behavior link. Therefore, the present results represent an initial step in identifying parenting practices in mothers and fathers that relate to children’s externalizing and prosocial behavior, as well as child characteristics that may impact these relations. It is important to note that although the focus of the current paper is on the influences that parenting may have on children’s behavior, and the majority of the interpretations are based on theoretical models that emphasize the causal role of parenting, there is evidence of bi-directionality in this relation (Pardini et al., 2008). Directional relations could not be tested in the current study due to the cross-sectional design, though explanations offered for some of the findings incorporate the idea of child – parent influence where plausible.

As predicted in the first hypothesis, the findings from the current study indicate that both mothers’ and fathers’ parenting practices make unique contributions in the prediction of children’s behavior beyond demographic/contextual factors. These findings indicate that the same collection of parenting behaviors that have reliably been shown to be predictive of children’s deviant behaviors in studies including mostly mothers also appear to be relevant with fathers and with respect to children’s positive social behaviors. Regarding individual parenting practices, hypothesis 2 predicted that involvement,
positivity/reinforcement, poor monitoring/supervision, inconsistent discipline and corporal punishment would significantly correlate with child externalizing and prosocial behavior (in opposite directions). This was generally supported, with a few exceptions: maternal positive reinforcement was not related to either outcome, and neither parent’s monitoring was related to externalizing behavior. Interestingly, though, for each bivariate relation that was not significant, there existed a significant interaction between that parenting practice and at least one of the child factors (sex, age, and ethnicity) that better explained the nature of that relationship. In addition, when each individual parenting practice was examined while controlling for the other parenting practices for that parent, not all of the relations remained significant. Unique relations and interactions are outlined below for each outcome separately.

Parenting Practices – Externalizing Behavior

Hypothesis 3 predicted that the parenting practices that uniquely relate to externalizing behavior would differ across parents; however, this was not the case, as positive reinforcement and corporal punishment emerged as the only parenting practices that were uniquely related to externalizing behavior for both parents. The finding that maternal positive reinforcement is associated with lower levels of externalizing behavior, even after related demographic/contextual factors and other parenting practices are taken into account, is consistent with Gryczkowski et al.’s (2010) findings of unique relations between maternal positivity and externalizing behavior; however, the findings with paternal positive reinforcement across these two studies are inconsistent. In the current study, higher levels of paternal positivity were uniquely related to lower levels of externalizing behavior, whereas Gryczkowski et al. failed to find a unique relation with
paternal positivity. Although the current study failed to replicate Gryczkowski et al.’s results, the findings are consistent with recent findings from a longitudinal study in which a community sample of kindergarteners were followed for three years. Results supported a model whereby paternal drinking problems caused greater marital conflict, which led to lower levels of paternal positive parenting, which in turn predicted greater levels of externalizing behavior in children both directly and indirectly though decreases in the children’s emotional security (Schacht, Cummings, & Davies, 2009). Therefore, there is accumulating evidence that parental displays of positivity may relate to fewer behavior problems in children without severe levels of such behavior.

Also contrary to prediction, maternal involvement was only marginally related to externalizing behavior, and paternal involvement was unrelated. The lack of significant findings with respect to maternal involvement and externalizing behavior has been demonstrated in previous studies (e.g., Barry, Dunlap, Lochman, & Wells, 2009; Gryczkowski et al., 2010; Shelton et al., 1996). In addition, although Stormshak and colleagues (2000) found a significant relation between warm involvement and externalizing behavior in a large sample of kindergarteners, the magnitude of the relation was small. These results are in contrast to Loeber and Stouthamer-Loeber’s (1986) meta-analytic findings suggesting a relatively strong effect for parental involvement in relation to antisocial behavior; however, studies included in the meta-analysis typically relied on adolescent reports of their parents’ involvement, as opposed to parental reports. Therefore, children’s perception of parents’ level of involvement, regardless of the accuracy, may be a better predictor of their behavior problems. Additionally, the studies included in the meta-analysis typically measured more severe conduct problems that were
measured by records of delinquent acts. Thus, their meta-analysis may have captured a
more severe child population and/or a less involved parent population. In sum, there are a
number of studies that present findings suggesting that parental involvement may not
protect against the development of behavior problems or that parents’ involvement may
not decrease in response to their children’s oppositional or aggressive behavior. It may be
that parents are similarly involved with children with behavior problems as compared to
those without because they elicit parental involvement. For example, parents of children
who display disruptive behaviors at school may be more likely to attend parent – teacher
conferences, question their child about their day at school, volunteer to be a chaperone
for school activities, and spend more time assisting their child with homework, in their
efforts to resolve the behavior problems. This line of reasoning is congruent with
evidence of bi-directional influences between parents and children (Elgar, McGrath,
Waschbusch, Stewardt, & Curtis, 2004; Pardini et al., 2008).

The lack of findings in the current study with respect to fathers’ involvement with
boys was particularly unexpected. As outlined in Hypothesis 4, it was predicted that
lower paternal involvement would relate more strongly to externalizing behavior in boys
than girls. Several studies have demonstrated effects of paternal involvement on boys’
behavior problems (Aldous & Mulligan, 2002; Carlson, 2006; Gryczkowski et al., 2010;
Harris et al., 1998; Loeber & Stouthamer-Loeber, 1986). In addition, sample
characteristics and methodology between the current study and Gryczkowski et al. (2010)
were similar. It is unclear why the present study did not replicate these findings.
Hypothesis 4 predicted a number of other specific moderations (i.e., maternal inconsistent
x sex, involvement x age, poor monitoring x age, corporal punishment x ethnicity), none
of which were supported. The overall lack of replication of previous findings highlights the importance of replication. It is possible that the current or previous interactions found were spurious, particularly given the number of moderations tested in the author’s present and previous study. Additionally, the two predicted age moderations with respect to involvement and monitoring were largely based off of studies including at-risk or clinical samples of boys (i.e., Frick et al., 1999; Pardini et al., 2008); thus, the severity of behavioral problems and/or the sex of the child may also interact with age in these specific parenting – externalizing relations. However, testing 3-way interactions was beyond the scope of the study due to insufficient power and the likely range restriction when breaking down into small segments and specific combinations of variables, particularly in a community sample.

The failure of the current study to support the hypothesized ethnic differences in the relation between corporal punishment and externalizing behavior warrants further mention, as ethnic differences in the parenting practices and/or styles that appear to be most beneficial for children are well documented (Baumrind, 1993; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; McDade, 1995; Steinberg, Mounts, Lamborn, & Dornbusch, 1991), and previous research with community samples supports the notion corporal punishment is not related to increased behavior problems in African American children (Deater-Deckard et al., 1996; Lansford et al., 2004). Upon examination of methodological differences across studies that found and failed to find ethnic differences in the effect of harsh discipline on externalizing behavior, it appears evident that the way in which externalizing behaviors were measured may have impacted the results. For example, two groups of researchers (Deater-Deckard et al. 1996, 1998; Pardini et al.,
2008) examined these relations separately for teacher-reported and parent-reported data, and tests of ethnic differences in the impact of corporal punishment on child behavior were only found in analyses using teacher reports. Similar studies utilizing observation of child behavior may begin to help clarify these inconsistent findings. It is also possible that the current sample of African American families were of higher SES than those in previous studies due to being dual-parent households, which may have affected the results.

Although ethnic differences in the parenting – externalizing behavior link were not found with respect to corporal punishment, ethnicity did moderate the relations with respect to other parenting practices. For example, positive reinforcement was only significantly and negatively related to externalizing behavior in Caucasian children. No significant relation was found for African American children; however, it is important to note that the direction of the relation was positive, indicating that externalizing behaviors were somewhat greater when parents displayed positivity toward their child. These results are consistent with Lau and colleagues’ (2006) findings indicating that warmer parenting of African American children may exacerbate existing behavior problems in younger children. Differential findings across ethnicities with respect to positive parenting must be interpreted with caution, as evidence suggests that they may be reflective of cultural differences in values, definitions, and contingencies, for example, in the expression of warmth and positivity toward their children. Jackson-Newsom, Buchanan, and McDonald (2008) compared the perceptions of maternal warmth and discipline across European and African American adolescents and found some important differences. Adolescents perceived similar levels of warmth across ethnicities despite the
fact that African American mothers employed harsher discipline and European American mothers displayed more negative affect during discipline. Therefore, parenting dimensions that have traditionally been associated with externalizing behavior for Caucasian children may not show the same effects in African American children due to differences in their expectations, perceptions, and interpretations of, and associations with such parenting behaviors. This argument has been made by several other researchers in light of findings that “no-nonsense” parenting (i.e., high degree of control, including physical restraint, coupled with warmth/affection; Brody & Flor, 1998) and Authoritarian parenting have been shown to be more adaptive in African American children, whereas Authoritative parenting tends to be associated with more favorable outcomes in European American children (Baumrind, 1993; Dornbusch et al., 1987; Steinberg et al., 1991).

Ethnic differences were also found in the current study with respect to both maternal and paternal monitoring. Parental monitoring appeared to be a protective factor for African American children; however, no relation was found for Caucasian children. The latter finding is inconsistent with predictions, theory, and previous findings (Loeber & Stouthamer-Loeber, 1986; Patterson, 1982, 1986). It is possible that in samples of children not prone to externalizing behavior, parental monitoring becomes less important. In addition, the mean levels of Poor Monitoring/Supervision were low in the current study, indicating that failure to monitor children’s activities, whereabouts, etc. was a low base rate behavior among parents. The relation with respect to African American children is consistent with theory and past research; however, it is unclear why an ethnic difference existed. To determine whether mean differences in SES or corporal punishment levels across ethnic groups could have contributed to this finding, post-hoc
$t$-tests were conducted. Analyses revealed no mean differences; therefore, the African American children in this study were not likely to have lived in more economically disadvantaged areas where exposure to violence and antisocial peer behavior are more likely. Additionally, ethnic differences in the frequency of poor monitoring could not explain the findings. As postulated with respect to ethnic differences in the corporal punishment – child externalizing link, it is possible that the perception or interpretation of parental monitoring differs across children of ethnic groups. For example, given that high levels of restrictiveness/control are more typical of African American parents (Brody & Flor, 1998; Park & Bauer, 2002), it would follow that African American children expect this from their parents or value it more so than Caucasian children, and thus, parental efforts to monitor their children’s activities may be more effective in reducing behavior problems in African American than Caucasian children. The finding of ethnic differences in the relations between parental monitoring and child externalizing behavior needs replication.

There was also a moderating effect of child age in relation to paternal monitoring with poorer parental monitoring being associated with lower levels of behavior problems in adolescents, which was opposite of the predicted direction. A positive but nonsignificant trend in the expected direction was found for younger children. Given the cross-sectional nature of the study, the findings with respect to adolescents should not be interpreted as poorer monitoring causing decreases in behavior problems. It is most likely that parents of adolescents without behavior problems do not feel the need to monitor their whereabouts and activities to a high degree. In addition, adolescents without behavior problems are less likely to associate with delinquent peer groups, and thus, their
parents are likely more trusting when they are with their friends. No other known studies have examined parental monitoring in a community sample of adolescent boys and girls, thus these results need replication.

Consistent with previous research, higher levels of corporal punishment and inconsistent discipline were associated with greater child behavior problems, and lower levels of corporal punishment were associated with fewer behavior problems (Barry et al., 2009; Brenner & Fox, 1998; Deur & Parke, 1970; Frick et al., 1999; Gryczkowski et al., 2010; Loeber & Dishion, 1983; Patterson, 1986; Patterson et al., 1989; Patterson, Reid, & Dishion 1992; Shelton et al., 1996; Snyder, Cramer, Afrank, & Patterson, 2005). Corporal punishment evidenced the strongest unique relation with externalizing behavior for both parents; however, the unique relations with inconsistent discipline were nonsignificant. One thing that is important to note is that several prior studies combined several ineffective disciplinary strategies that included both inconsistency and harshness, and therefore, how each one uniquely relates to child behavior problems has been understudied. Again, it is plausible that the relation with inconsistent discipline is no longer significant when the relation with corporal punishment is taken into account, particularly given the relative strength of its unique relation with behavior problems in comparison to other parenting behaviors. Consistent with this reasoning, Stormshak et al. (2000) failed to find unique relations between inconsistent discipline and externalizing behaviors in at-risk 1st graders when harsh punishment was simultaneously examined. In addition, Gryczkowski et al. (2010) found maternal inconsistent discipline to be uniquely related to externalizing behavior in a similar sample; however, corporal punishment was not included in their study. Therefore, the lack of corporal punishment as a method of
discipline may be of utmost importance in relation to children’s behavior problems, and in those parents who do not utilize corporal punishment, the consistency of their discipline becomes more important. It is also possible that consistency and harshness of discipline interact in predicting behavior problems such that harsh discipline is more harmful if applied inconsistently. More research is needed to test interactions between specific parenting practices.

Although relations between controls and externalizing behavior were not a focus of the study, it deserves mention that all control variables that were significantly related to externalizing behavior were no longer significant when parenting practices were added to the model, with the exception of fathers’ reports of recent negative life changes. Thus, it is possible that parenting practices mediated the relations between sociodemographic and contextual variables and externalizing behavior, which would be consistent with previous research and further highlight the importance of parenting in relation to child behavior problems.

In summary, nearly all parenting practices measured were correlated with externalizing behavior for each parent and relations were in the predicted directions. When unique relations of parenting practices and moderating effects of child characteristics were examined, study hypotheses were largely unsupported. For example, unique relations were only found for positivity/reinforcement and corporal punishment, and these findings were consistent across parents. Thus, these two parenting behaviors may be of particular importance in relation to behavior problems in community samples of children and adolescents. Other parenting practices uniquely related to externalizing behavior but only for one subset of the sample (e.g., adolescents, African American
children). Although no differential relations were found for boys and girls with respect to externalizing behaviors, there is theoretical reason to believe that girls are negatively influenced by ineffective parenting in other ways. Thus, it is important to examine multiple outcomes in relation to mothers’ and fathers’ parenting.

Parenting Practices – Prosocial Behavior

The fifth hypothesis predicted that maternal and paternal involvement and positivity/reinforcement would relate to children’s prosocial behavior. The results supported this hypothesis, and again, the nature of the relations differed depending on the sex of the parent and the characteristics of the child. For example, maternal involvement was related to higher levels of prosocial behavior across children of all demographic groups tested as moderators, whereas paternal involvement was unrelated to adolescents’ prosocial behavior. As posited by Frick et al. (1999), parents who display some level of involvement during their child’s teenage years may have adolescents who are more securely attached, thus enhancing internalization of parents’ prosocial values, in turn increasing their prosocial behavior. Since children tend to be more attached to their mothers (Lewis & Lamb, 2003; likely due to higher levels of involvement), then it would follow that low paternal involvement with adolescents (relative to younger children and to mothers’ involvement) might result in the adolescents being less influenced by their fathers’ prosocial values.

The associations between parental displays of positivity and prosocial behavior were also dependent on child characteristics. For example, fathers’ positive parenting was related to greater levels of positive social behavior in girls but not boys. These findings are interesting in light of Gryczkowski et al.’s (2010) finding that maternal positive
parenting practices were only related to externalizing behavior in boys. Thus, it is possible that boys tend to respond to a lack of positivity from their opposite-sex caretaker with acting out behaviors, whereas girls respond with a lack of prosocial behavior. These findings underscore the importance of studying additional paternal parenting practices other than involvement, as well as child outcomes other than externalizing behavior. More specifically, there is theoretical and empirical support for greater benefits of fathers’ involvement for sons than daughters, particularly with respect to externalizing behavior (Aldous & Mulligan, 2002; Carlson, 2006; Gryczkowski et al., 2010). The current findings, however, suggest that fathers’ parenting, specifically their displays of affection and praise, may impact girls in other ways, namely their positive social behaviors. Thus, although girls may not be negatively affected by lower levels of paternal involvement, it may be particularly important for fathers to display positivity toward their daughters when they are engaged with them.

Finally, although the relations between positive parenting and prosocial behavior were not significantly different from zero for Caucasian or African American children (i.e., nonsignificant simple slopes), the significant positive parenting x ethnicity interaction warrants mention due to the clear trends that emerged. Specifically, Caucasian mothers who were more positive in their parenting tended to have children who displayed more prosocial behavior, and the opposite was true for African American mothers—their children displayed less prosocial behavior when they were more positive and affectionate. As previously mentioned, such findings are likely due to ethnic differences in the ways in which positivity are displayed, perceived, and interpreted, and thus, they should not be interpreted as parental positivity being unimportant for African American children.
Regarding negative parenting practices, significant unique relations with prosocial behavior were only predicted *a priori* for corporal punishment. However, all three subscales were included in the model due to the exploratory nature of the study. Parental monitoring was not uniquely related to prosocial behavior, and no moderations with child factors were found. Although extremely limited, there is some previous data to suggest that parental monitoring is related to children’s prosocial behavior. For example, in a large-scale longitudinal study of Canadian children aged 8–13 years, Elgar et al. (2007) found higher levels of parental monitoring to be predictive of greater prosocial behaviors two years later. In the present sample, few parents reported themselves to be poor monitors, which may have contributed to the lack of findings with respect to this parenting behavior.

With respect to discipline, mothers who were inconsistent in their discipline tended to have children with less prosocial behavior, and this relation was marginally significant for fathers. The only other known study to examine unique relations between parental consistency and children’s prosocial behavior utilized hierarchical linear modeling to determine individual, family, and neighborhood level variables that were related to prosocial and aggressive behavior. Their results demonstrated significant relations at the family level for consistency of discipline. That is, prosocial behavior was lower in children whose mothers were less consistent in their discipline in general (across all children in the family; Romano et al., 2005). These findings indicate that parental consistency in discipline may be associated with more positive social behaviors in children.
The harshness of parents’ discipline was also related to prosocial behavior. More specifically, both maternal and paternal corporal punishment were related to fewer prosocial behaviors in children; however, the relation with fathers was only significant for girls. The findings with mothers are consistent with Romano et al.’s (2005) findings with respect to punitive parenting and maternal hostility. They are also consistent with findings that power-assertive discipline, which includes corporal punishment, is negatively related to children’s prosocial behavior. In accordance with social learning theory, one would expect that parental modeling of power assertion, hostility, or solving problems through physical means would increase the likelihood that children would engage in such behavior during interpersonal interactions. It has also been postulated that such disciplinary behaviors reduce prosocial behaviors in children by eliciting adherence to rules or compliance with commands rather than internalization of prosocial values (Hoffman, 1970; Staub, 1979). It is also important to note that ethnicity did not moderate this relation in the current study, suggesting that corporal punishment may have deleterious effects on children’s prosocial behavior across cultures. More research on the effects of harsh discipline is needed with other minority groups. Moreover, the finding that fathers’ corporal punishment was only significant for girls provides further evidence that fathers’ parenting may affect boys and girls differently, thus underscoring the importance of testing the sex of the child as a moderator in parent – child relations, as well as including multiple outcomes.

In conclusion, the results of the prosocial model indicate that positive and negative parenting practices are related to children’s prosocial behavior. Unique relations were found with all parenting practices for at least a subset of children, with the
exception of parental monitoring. Regarding moderations, paternal positive reinforcement and corporal punishment were only significant for girls, paternal involvement was unrelated to prosocial behavior in adolescents, and again, positive parenting in both parents related to prosocial behavior in opposite directions for Caucasian and African American children. Finally, it appears that parental depression and recent stressful events may influence children’s prosocial behavior even after accounting for the relations with parenting, indicating that these parent variables may also be of particular importance in relation to prosocial behavior. More research clarifying the interrelations between contextual and parental variables and prosocial behavior is needed.

Summary

This is the first known study to systematically examine both mothers’ and fathers’ parenting practices and how they differentially relate to positive and negative behaviors in children. The inclusion of mothers and fathers and both prosocial and externalizing outcomes in relation to the same children allowed for general comparisons to be made across parents and across outcomes with fewer confounding factors than if all were examined separately with children from different families. Overall, the findings from the current study indicate that both mothers’ and fathers’ parenting practices contribute a sizeable proportion of the variance in child behavior beyond other related contextual and parental variables, and the relative influences of both parents were fairly similar. Where the main differences were found was not with respect to which parenting practices in mothers and fathers were related to child outcomes overall, but rather, in how they interacted with child factors, underscoring the importance of testing moderating variables in these relations. These findings begin to fill the gaps on the research with respect to
fathers’ parenting, the examination of specific parenting practices in relation to children’s prosocial behavior, and the testing of moderations in the parenting – child behavior link. In addition, interaction effects may help to explain inconsistencies across previous studies, particularly with respect to positive parenting and externalizing behavior. Finally, the fact that these relations were found in a community sample suggests that utilizing positive parenting practices and limiting the use of negative parenting practices may be important for all children, even those without social or behavioral problems. However, it is important to note that the high externalizing and low prosocial scores were still normative for the majority of children.

One strength of the current study was the heterogeneity of the sample in that it included mothers and fathers of Caucasian and African American boys and girls across a wide age range. The sample sizes in each group were large enough to adequately examine differences in the parenting – child behavior relation across the sexes, ages, and ethnicities included in the study. Several moderations were found; however, a few deserve particular mention due to their potential implications. First, in light of well known findings that fathers are more involved with boys, the findings that paternal positive reinforcement and corporal punishment were only significantly related to girls’ prosocial behavior is important for two reasons: First, even though girls tend to spend relatively little time interacting with their fathers (as compared to boys and relative to time spent with mothers (Harris & Morgan, 1991; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001), the ways in which they have learned to interact with others may be significantly influenced by the ways in which their fathers interact with them. In other words, the quality of fathers’ interactions with girls may be more important than the
frequency. Second, the fact that stronger relations for fathers’ parenting of their daughters were only found in the prosocial model suggests that the influence that fathers’ parenting has on girls may vary greatly from the influence that it has on boys. Given that boys tend to exhibit more externalizing behaviors, whereas girls tend to display greater levels of prosocial and internalizing behaviors (Knafo & Plomin, 2006; Mash & Barkley, 2003; Romano et al., 2005), social and emotional responses to fathers’ negative parenting or lack of positive parenting may be more characteristic of girls. Again, this highlights the need for additional research with respect to fathers’ influences on several areas of girls’ well-being.

Another important theme that emerged across both outcomes was ethnic differences in how parenting practices related to children’s behavior, particularly with respect to positive reinforcement. For both models, ethnicity interacted with parental positivity such that higher levels of reinforcement in African American parents were related to greater externalizing behaviors and fewer prosocial behaviors. These findings were opposite those for Caucasian children. It is likely the case that the notion of parental warmth or positivity differs across ethnicities and not that these parenting behaviors are unimportant or harmful for African American children. Indeed, there is a great deal of evidence to suggest that the types of parenting that are most effective vary across cultures. For example, parenting in African American populations frequently includes aspects of racial socialization, such as teaching African American history (with emphasis on accomplishments), modeling appropriate language with respect to racial issues (e.g., avoidance of stereotypes), role-playing regarding situations in which race may be more likely to influence others’ perceptions or behavior (e.g., neutral stance and respect when
speaking with police), and exposure to various cultural experiences (e.g., African American historical sites, television shows in which African Americans are cast in a positive light; Coard, Wallace, Stevenson, & Brotman, 2004). These culturally-specific teachings are an important part of African American parenting and children’s racial identity development, and adapting empirically-supported parenting interventions to incorporate such teachings may decrease attrition rates and improve treatment outcomes in African American families (Coard et al., 2004; see Steiker et al., 2008 for discussion of cultural adaptations in intervention programs for minority youth). Therefore, future research should focus on adapting parenting measures and treatments to incorporate culturally relevant parenting practices. Creating more culturally appropriate measures of parenting practices may be an important next step in efforts to increase cultural awareness and sensitivity. In addition, more research is needed to examine the role of ethnicity as a moderator of treatment effects for empirically supported parenting-training programs to determine their effectiveness with minority populations.

Another finding worth highlighting is that corporal punishment seemed to play a large role in both externalizing and prosocial behaviors in children. Therefore, the inclusion of this parenting practice in the models may have left little unique variance to be explained by the other parenting practices. Additionally, consideration of the low mean level of corporal punishment endorsed by parents in the present study and in similar studies (e.g., Pardini et al., 2008) could lead to the hypothesis that including this variable in large models may detract from the findings with parenting practices that are more common, and thus potentially more important with respect to the general population. However, the inclusion of a wide variety of parenting practices in the study seemed
warranted due to the exploratory nature of the study, particularly with respect to fathers’ parenting and prosocial behavior. However, as findings are replicated, the models can be trimmed down and made more parsimonious. Future researchers may consider examining corporal punishment separately from other parenting practices, at least in community samples. Additionally, future research could examine potential interactions between corporal punishment and other parenting practices in predicting child behavior. For example, corporal punishment that is applied consistently may differ in its effects from corporal punishment that is inconsistent. This would differ from studying parenting styles, as only specific parenting behaviors would be included, as opposed to broader dimensions of parenting, such as attitudes. Finally, it is also important to mention the overall lack of findings with respect to parental monitoring in the current study. One potential explanation is that parental monitoring may not be as necessary, at least to the same extent, for children without significant behavioral problems. Thus, this particular parenting practice may be less relevant for community samples. Ethnic differences in the effects of parental monitoring need further research.

Limitations and Future Directions

The findings in the current study must be considered in light of several limitations. One major limitation of the current study is its reliance on parent report, particularly given the differential findings with respect to the same children when parent and teacher reports are used. Additionally, the reliabilities for some of the scales were relatively low, which could have influenced the results. The current findings should be replicated using multiple informants and observation. The cross-sectional and correlational natures of the study are also limitations, as directional interpretations cannot
be made. The results of the current study provide impetus for future longitudinal studies
on parenting and childhood outcomes that include fathers and multiple outcomes. Future
research should continue to identify mediators and moderators and build theoretical
models on how all of these factors interrelate. For example, it is possible that prosocial
behavior acts as a partial mediator in the relations between parenting and externalizing
behavior, as the current study demonstrates that parenting practices are related to
prosocial behavior, and there is evidence to suggest that more positive social behavior is
predictive of lower levels of externalizing behaviors (Bernat, August, Hektner, &
Bloomquist, 2007; Brotman et al., 2005; Webster-Stratton et al., 2001). This finding
would provide further arguments for the inclusion of a social skills component in
treatment programs for externalizing behavior problems, or even as preventative
measures through schools. Finally, because the current study only included two-parent
households, the participants were generally from the middle to upper-middle social class,
and thus, the findings may not generalize to single-parent, lower SES households. Along
this line, a large proportion of African American families are of lower SES and are
headed by a single parent (Fields, 2003a, November). Thus, interpretations regarding
ethnic differences must be made with caution, as the current study may not have
adequately represented this minority group in terms of the variables measured. Finally,
biracial/multiracial families were not included in the study, and thus, findings may not
generalize to families of more than one ethnic background.

Future studies should continue to examine a) the influences of fathers’ parenting
on child outcomes and expand the variables of interest to include parenting practices
other than involvement, b) the relations between specific parenting practices and child
outcomes other than externalizing behavior, c) potential moderating variables in these relations, and d) potential interactions between parenting practices in explaining child behavior. Finally, researchers should begin to move away from examining descriptive differences across ethnic groups using existing measures of parenting, which may not adequately capture key components of multicultural parenting, and instead focus efforts on increasing the depth of knowledge regarding ethnic differences in parenting so more substantive comparisons can be made and applied to parenting interventions.

Overall, the findings of the present study indicate that mothers’ and fathers’ parenting are importantly related to children’s behavior, even in community samples of children. However, the specific parenting practices and how they relate to children’s behavior may differ across outcomes, parents, and subgroups of children (e.g., community vs. clinical samples, boys vs. girls, adolescents vs. younger children, majority vs. minority groups). Thus, the parenting practices that have traditionally been associated with positive/negative outcomes for some children may not be beneficial/harmful for all children. Findings specific to fathers, daughters, and African American children, particularly those with prosocial behavior, argue for expanded models that incorporate these demographic groups and multiple outcomes in relations to parenting and children’s adjustment. They further underscore the importance of testing for moderators of the parenting – child outcome relation.
# APPENDIX A

## DEMOGRAPHIC FORM

**MARKING INSTRUCTIONS**
- Use a No. 2 pencil only.

**DEMOGRAPHIC QUESTIONNAIRE**

- This form asks questions about you, the target child, and your family. *Separate* forms must be filled out by each parent (please do not discuss answers). Both parents must complete the form for the *same child*.

### Child Information

<table>
<thead>
<tr>
<th>Child's Sex:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child's Ethnicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian (White)</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Hispanic American</td>
</tr>
<tr>
<td>Asian American</td>
</tr>
<tr>
<td>Native American</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child's first and last initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

| Has this child ever received help (from a counselor, therapist, or psychologist) due to behavior problems? |
|---|---|
| Yes | No |

| If "Yes", when? |
|---|---|
| From: Month/Year |
| To: Month/Year |

<table>
<thead>
<tr>
<th>Does your child have any disabilities?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If &quot;Yes&quot;, please specify:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How many days per week does this child live with you (as opposed to other parents or family members)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>zero</td>
</tr>
</tbody>
</table>

### Parent Information

<table>
<thead>
<tr>
<th>Ethnicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>White American</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Hispanic American</td>
</tr>
<tr>
<td>Asian American</td>
</tr>
<tr>
<td>Native American</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married for the first time</td>
</tr>
<tr>
<td>Divorced and remarried</td>
</tr>
<tr>
<td>Single, living with partner</td>
</tr>
<tr>
<td>Divorced and living with partner</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Have you been living with your spouse/partner for at least 2 years?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you the child's:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Parent</td>
</tr>
<tr>
<td>Legal Guardian</td>
</tr>
<tr>
<td>Stepparent</td>
</tr>
<tr>
<td>Adopted Parent</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

*If you are NOT the child's biological parent, how long have you been involved in parenting this child?*
How many children live in your household (include all children 18 or younger)?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. More than 6 (please specify) ____________

Of these children, how many are boys?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. More than 6 (please specify) ____________

How many are girls?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. More than 6 (please specify) ____________

Are there any persons other than yourself and your partner residing in the home (including older siblings of the target child) who regularly assist with the care of this child?  

1. Yes
2. No

If yes, please write a number on the line next to each description indicating how many of this type of family member are residing in the home and assist with the care of the target child (i.e., if there are 2 aunts of the child who live in the home and assist with the care of this child, write "2" on the line next to "aunt.")

1. Grandmother
2. Grandfather
3. Aunt
4. Uncle
5. Cousin
6. Older sibling
7. Family friend
8. Other (Please specify) ____________

**Education:** What is the highest grade level you completed in school?

1. 6th grade or less
2. Junior high school (7th, 8th, 9th grade)
3. Some high school (10th, 11th grade)
4. High school graduate or equivalent
5. Some college (at least 1 year) or specialized training
6. Standard college or university graduate
7. Graduate professional degree (Master’s, Doctorate)

**Occupation:** Please provide your job title or position, NOT just the name of your employer. For example, if you are a teacher at Lee High School, please state "high school teacher". If you are retired, please state your prior occupation. If you do not work outside the home, state "unemployed". ____________

**Income:** What is the total annual income of your household? (Combine the income of all the people living in your home.)

1. $0 -- $4,999
2. $5,000 -- $9,999
3. $10,000 -- $14,999
4. $15,000 -- $24,999
5. $25,000 -- $34,999
6. $35,000 -- $49,999
7. $50,000 -- $74,999
8. $75,000 -- $99,999
9. $100,000 and above
APPENDIX B

IRB APPROVAL FORM

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 28111301
PROJECT TITLE: An Examination of Potential Moderators in the Relations Between Mothers' and Fathers' Parenting Practices and Children's Behavior
PROPOSED PROJECT DATES: 11/01/08 to 11/01/09
PROJECT TYPE: New Project
PRINCIPAL INVESTIGATORS: Michelle Gryczkowski
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Psychology
FUNDING AGENCY: N/A
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 11/17/08 to 11/16/09

Lawrence A. Hosman, Ph.D.
HSPRC Chair

Date: 11-18-08
Are you the parent of a child aged 6 to 17?
If so, you may qualify to participate in a study on parenting and children’s behavior!

**Participants must meet the following criteria:**
- Couples that are primary caretakers of a child aged 6-17
- Living with your spouse/partner and target child for at least 1 year
- Target child must spend majority of the time in your household (as opposed to other parents, family members, etc.)
- Both parents must be willing to participate and sign a consent form
- Both parents must be 18 years or older

*If you do not meet these criteria but know a couple who does, please provide them with the contact information below*
*Parents of children with and without social and/or behavioral problems are equally encouraged to participate*

**Participation:** Parents will be asked to complete a series of questionnaires about their parenting, their child’s behavior, and some additional child and family characteristics

**Benefits:**
- Assist with research that may aid in the identification of risk and protective factors of children’s social and behavioral problems
- Entry into a drawing for two $50 gift certificates to Wal-Mart

For further information and to receive a research packet, contact Michelle Gryczkowski at (601) 307-4557 or mgrycz@yahoo.com
Dear Parents,

I am currently pursuing a doctoral degree in clinical psychology at the University of Southern Mississippi. One of the requirements of this degree is the completion of a doctoral dissertation (research project), and I am seeking couples who are willing to participate in my study. The purpose of this study is to separately examine mothers’ and fathers’ parenting practices and how they relate to children’s prosocial and problem behaviors. The study will also examine how different child factors (i.e., sex, age, ethnicity) influence these relationships. The results from this study will help provide a better understanding of factors that may influence children’s behavior. Therefore, the results may aid in the identification of children at risk for social and behavioral problems, as well as inform prevention and intervention efforts. We are interested in a wide range of child behaviors, so parents of children with and without behavioral and/or social problems are equally encouraged to participate. Each couple who participates will receive a $15 Walmart gift card.

To be able to participate, the following requirements must be met:

- Be a heterosexual (male-female) couple and the primary caretakers of a child aged 6-17 (you do not have to be married nor be the biological parents)
- Have been living with your spouse/partner and with the target child for at least 1 year
- The target child must spend the majority of the time living in your household (as opposed to with other parents, family members, etc.)
- Both parents must be 18 years or older and be willing to participate and sign a consent form

The study will consist of each parent completing questionnaires asking about demographic information, parenting, life stress, personal adjustment, marital/relationship conflict, and the target child’s behavior and routines. In efforts to ensure confidentiality, no names will be provided on any of the forms that are returned in the research packet other than signatures on a consent form which will be separated from the packet upon receipt. The study will require approximately 45-60 minutes of your time (per parent). If you are interested in participating, please email or call at mgrycz@yahoo.com or (601) 307-4557 to receive a research packet through the mail. A stamped, addressed return envelope will be included in the packet. I will need to know the grade of the child you will be reporting on, as there are different packets for grades K-6 and 7-12.

If you do not meet the study’s requirements but know of any couples who do, please pass this letter or the contact information on to them and have them contact me directly. I greatly appreciate your time and assistance.

Sincerely,

Michelle Gryczkowski, M.A.
Graduate Student

DEPARTMENT OF PSYCHOLOGY
Box 5025 • Hattiesburg • 39406-5025
Phone (601) 266-4597 • Fax (601) 266-5580
WWW.USM.EDU

Hattiesburg • Long Beach • Ocean Springs • Biloxi • John C. Stennis Space Center
APPENDIX D

ACADEMIC DISHONESTY SIGNATURE FORM

I certify that the data returned in this research packet will be obtained according to the instructions outlined by the researcher or research assistant and will not be falsified in any way. By signing this form I am stating that I understand that falsification of data is considered academic dishonesty and will be punished according to university regulations. This may include failure to earn points for the project, failure of the course for which credit is being sought, and/or referral to the Dean of Students for possible disciplinary action.

__________________________________________
Print Name

__________________________________________  _______________________
Signature                                Date

__________________________________________  _______________________
Signature of researcher                   Date
APPENDIX E

QUIZ

Circle T (true) or F (false)

1. T or F: If the couple who completes the packet does not meet the inclusion criteria for participation in the study, I will not receive credit

2. T or F: The research packet can be completed by any 2 people who care for the child

3. T or F: The same couple can complete 2 research packets as long as they fill them out about 2 different children

4. T or F: The child must live with the couple the majority of the time

5. T or F: If I cannot find a couple to complete the packet, I do not need to return the packet

6. T or F: If any part of the packet is incomplete (failure of either parent to complete all items or sign the consent form), I will not receive credit

7. T or F: If one parent does not wish to participate, the other parent can complete the forms for that parent

Fill in the blank

1. The packet must be returned to Rm _____ within _____ week(s)

2. I will be penalized _____ points for every packet that is not returned within __ week(s)

3. The target child must be between the ages of ____ and ____ years of age

4. If the couple or I have questions, who can I/we call? _______________
APPENDIX F

INFORMED CONSENT FORMS

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT titled:
An Examination of Potential Moderators in the Relations between Mothers’ 
and Fathers’ Parenting Practices and Children’s Behavior

Purpose: The purpose of this study is to separately examine mothers’ and fathers’ parenting practices and how they relate to children’s prosocial and problem behaviors. The study will also examine how child factors (i.e., sex, age, ethnicity) influence these relationships. We are interested in a wide range of child behaviors, so parents of children with and without behavior and/or social problems are equally encouraged to participate.

Description of Study: Couples who meet the eligibility requirements (are the primary caretakers of a child aged 6-17, have been living together and with the target child for at least one year, and are 18 years of age or older) will be asked to complete a series of questionnaires related to parenting, marital conflict, psychological functioning, recent stressful life events, and the target child’s behavior. The parents do not need to be married or be the biological parents of the target child, but the child must spend the majority of the time in the couples’ household (as opposed to with other parents, family members, etc.) The questionnaires must be filled out separately by both the mother and father (for the same child), and will take approximately 45-60 min to complete. Parents recruited through USM students are also agreeing, by signing this form, to provide their name and phone number and be contacted by phone approximately 1 week after completing the packets to verify their participation.

Benefits: The results from this study will help provide a better understanding of factors that may influence children’s behavior. Therefore, the results may aid in the identification of children at risk for social and behavioral problems, as well as inform prevention and intervention efforts. Each couple who participates will have the opportunity to enter a drawing for one of two $50 Wal-Mart gift certificates.

Risks: There are no anticipated risks associated with participation in this study, except that some parents may find it distressing to report on their personal or marital adjustment and their children’s behaviors. Participation in this project is completely voluntary, and subjects may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Your data may be excluded from the study if all items are not completed. If you have concerns about your own or your child’s mood or behavior and would like to seek mental health services, the following agencies offer evaluation and treatment services in the Hattiesburg area: USM Psychology clinic, 601-266-0868; Pine Grove, 601-288-2275; Pine Belt Mental Healthcare Resources, 601-382-1111. For referral information outside of the Hattiesburg area, contact Dr. Sam Jordan, Department of Psychology, The
Informed Consent - Researcher Copy

University of Southern Mississippi, 118 College Dr. #5025, Hattiesburg, MS 39406-5025; phone (601) 266-4587; fax (601) 266-5580; email sara.jordan@usm.edu.

Confidentiality: All efforts will be made to protect participants’ privacy and to maintain the confidentiality of the data acquired through this project. Individual participants will be identified by name to assist in proper data collection procedures; computerized data will be maintained numerically with no identifying information. Access to data obtained during this study will be restricted to researchers.

Subject’s Assurance: Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and subjects may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Michelle R. Grzegowski (601) at 307-4557 or Dr. Sara Jordan at (601) 266-4587. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820. A copy of this form will be given to the participant.

Signatures: In conformance with the federal guidelines, the signature of the subject or parent or guardian must appear on all written consent documents. Both parents must sign this form. The University also requires that the date and the signature of the person explaining the study to the subject appear on the consent form.

<table>
<thead>
<tr>
<th>Parent Telephone (to verify participation)</th>
<th>Best time to call</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Mother (print)</td>
<td>Name of Father (print)</td>
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<tr>
<td>Signature of Mother</td>
<td>Date</td>
</tr>
<tr>
<td>Signature of Father</td>
<td>Date</td>
</tr>
<tr>
<td>Primary Investigator</td>
<td>Date</td>
</tr>
</tbody>
</table>

Please print name of USM student receiving Experimetrix Credit

Page 2 of 2
The University of Southern Mississippi

Authorization to Participate in Research Project Titled:
An Examination of Potential Moderators in the Relations between Mothers’ and Fathers’ Parenting Practices and Children’s Behavior

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Benefits: The results from this study will help provide a better understanding of factors that may influence children’s behavior. Therefore, the results may aid in the identification of children at risk for social and behavioral problems, as well as inform prevention and intervention efforts. Each couple who participates will receive a $15 gift certificate upon return of completed research packet.

Risks: There are no anticipated risks associated with participation in this study, except that some parents may find it distressing to report on their personal or marital adjustment and their children’s behaviors. Participation in this project is completely voluntary, and subjects may withdraw from the study at any time without penalty, prejudice, or loss of benefits. Your data may be excluded from the study if all items are not completed. If you have concerns about your own or your child’s mood or behavior and would like to seek mental health services, the following agencies offer evaluation and treatment services in the Hattiesburg area: USM Psychology Clinic, 601-266-4588; Pine Grove, 601-288-2273; Pine Belt Mental Healthcare Resources, 601-582-1111. For referral information outside of the Hattiesburg area, contact Dr. Sara Jordan, Department of Psychology, The University of Southern Mississippi, 118 College Dr. #5025, Hattiesburg, MS 39406-5025; phone (601) 266-4587; fax (601) 266-5580; email sara.jordan@usm.edu.
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Signatures: In conformance with the federal guidelines, the signature of the subject or parent or guardian must appear on all written consent documents. Both parents must sign this form. The University also requires that the date and the signature of the person explaining the study to the subject appear on the consent form.

Signature of Mother ________________________________ Date ________________

Signature of Father ________________________________ Date ________________

Primary Investigator ________________________________ Date ________________
REFERENCES


Hollingshead, A. B. (1975). *Four-factor index of social status*. Unpublished manuscript, Yale University, New Haven, CT.


