

The Relative Role of Parents and Peers in the Psychosocial Adjustment of Low-Income,
African American Youth

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ABSTRACT

Charlene Chester: The Relative Role of Parents and Peers in the Psychosocial Adjustment of Low-Income, African American Youth
(Under the direction of Deborah J. Jones, Ph.D.)

A growing body of empirical evidence suggests that both parents and peers have unique and interactive effects on youth psychosocial adjustment; however, the generalizability of these findings to low-income, African American youth is questionable. This study aimed to replicate and extend this research by examining the relative contribution of parents and peers to internalizing and externalizing problems among 277 low-income, African American youth (7 – 15 years). Results demonstrated that both parenting and peer relations contributed to youth psychosocial adjustment, although the specific nature of the findings depended on the assessment and outcome examined. Clinical implications and directions for future research are discussed.

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CHAPTER I

INTRODUCTION

Research has considered for decades the influence of parents and peers on youth internalizing and externalizing behaviors (Biddle, Bank, & Marlin, 1980; Smith, Flay, Bell, & Weissberg, 2001). Until recently, theoretical and empirical work in this area has suggested that parents have a greater impact than peers when children are younger and that peers have a progressively greater impact as children age (Aseltine, 1995; Biddle, et. al., 1980). In contrast to this hypothesis, recent work with youth from primarily Caucasian, intact, middle-income families suggests that the family continues to play an important role into adolescence, with some evidence suggesting that the influence of family may actually increase as youth age (Duncan, Duncan & Hops, 1994). Accordingly, such work suggests that youth psychosocial adjustment is determined by an interplay of both peer and family influences and that studying the interaction of these two influences is necessary to advance our understanding of youth adjustment (Galambos, Barker, & Almeida, 2003). The purpose of the proposed project was to replicate and extend the work in this area by examining the main and interactive effects of parents and peers on internalizing and externalizing behaviors among low-income, African American youth.

Peers and Youth Internalizing and Externalizing Problems

The influence of peers on youth psychosocial adjustment has been well-documented in both theory and research (e.g., Barrera, Biglan, Ary, & Li, 2001; Paschell, Ringwalt, & Flewelling, 2003; Kung & Farrell, 2000). According to developmental theory, adolescence is

a period during which it is “normal” for children to establish increasing levels of autonomy as they attempt to distinguish themselves from their families and establish an independent sense of identity (Pavlidis & McCauley, 2001). As youth begin to assert such autonomy, social forces outside the family become increasingly important, most notably peers. Consistent with traditional developmental theory, research has focused more heavily on the influence of families during childhood and the influence of peers during adolescence.

Research on the influence of peers, which has occurred primarily with White youth, has focused both on peers as a risk and protective factor for youth psychosocial adjustment. A robust literature now documents the risks for youth who affiliate with deviant peer groups (e.g., Garnier & Stein, 2002; Kim, Hetherington, & Reiss, 1999; Paschell et al., 2003). For example, in their study of White youth, Mrug, Hoza, & Bukowski (2004) reported that children who associated with aggressive peers were at greater risk for both internalizing and externalizing problems. Other studies have examined the protective effects of peers (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995; Smith et al., 2001). For example, in their predominantly White (80%) sample, Lansford, Criss, Pettit, Dodge, & Bates (2003) reported that youth engaged in fewer antisocial behaviors when they defined their peer relationships as close and supportive.

The influence of peers on the psychosocial adjustment of African American youth has also been addressed. Similar to studies with White samples, research to date on African American youth suggests that positive peer relationships are a protective factor for children’s psychosocial adjustment (e.g., Smith, Flay, Bell, & Weissberg, 2001). In their predominately African American sample (79.8%), Bryant and Zimmerman (2002) reported youth perceptions of friends’ behaviors affected their own adaptive or maladaptive behaviors.

Youth who believed that their friends positively viewed academics were less likely to engage in externalizing problems. Alternatively, youth who believed that their friends viewed academics more negatively were more likely to engage in maladaptive behaviors. Other studies with African American samples highlight the role of deviant peer relationships as a risk factor (e.g., Ge, Brody, Conger, Simons, & Murry, 2002; Romer et al., 1994). In their study of African American youth, Ge et al. (2002) reported a significant association between youth affiliation with deviant peers and externalizing problems. These researchers suggest that more mature youth are more likely to affiliate with deviant peers and thus engage in externalizing problems.

Parents and Youth Internalizing and Externalizing Problems

Although developmental theory has long suggested that the influence of parents is replaced by peers as children progress into adolescence, growing theoretical accounts and empirical research suggest that the role of parents during adolescence has been underestimated (for a review, see Harris, 1998). Youth psychosocial adjustment has been linked to two dimensions of parenting, warmth/support and monitoring/control (Amato & Fowler, 2002; Barnes & Farrell, 1992; Murriss, Meester, & van de Berg, 2003). Warmth refers to the emotional quality of the interactions between a youth and the caregiver and includes, for instance, parental responsiveness to a child's needs, sensitivity to signals given by the child, shared expressions of positive emotions, and praise. Parents high on this characteristic are referred to as accepting and nurturing, whereas parents low on this aspect may be described as cold and rejecting (Maccoby, 1980). A warm and supportive parent-child relationship promotes a youth's sense of trust and efficacy, as well as positive, pro-social, and adaptive representation of the self (Pittman & Chase-Lansdale, 2001; Zhou,

Eisneberg, Losoya, Fabes, Reiser, Guthrie, Murphy, Cumberland, & Shepard, 2002) and, in turn, is associated with lower levels of internalizing (e.g., Barrera, Biglan, Ary, & Li, 2001; Pettit, Bates, & Dodge, 1997) and externalizing (e.g., Scaramella, Conger, & Simons, 1999) behaviors.

A second critical dimension of parenting behavior, monitoring/control, involves parental knowledge of youth activities, staying abreast of academic progress and peer relationships, and expecting conformity to family and community norms (Amato & Fowler, 2002). Parental monitoring/control increases the likelihood that youth are aware of parental expectations and norms and recognize that there will be consequences for failure to adhere to such expectations (Kung & Farrell, 2000). Additionally, parental monitoring/control decreases a youth's opportunities for involvement with deviant peers and associated externalizing problems (Barrera, et al., 2001; Dishion, Capaldi, Spracklen, & Li, 1995; Mounts, 2002; Richards, Miller, O'Donnell, Wasseman & Colder, 2004; Stice, Barrera, & Chassin, 1993), as well as internalizing problems (Formoso, Gonzales & Aiken, 2000; Pitmann & Chase-Lansdale, 2001).

Research has suggested that the optimal combination of parental behaviors includes a combination of both warmth/support and monitoring/control or "positive parenting" (Amato & Fowler, 2002; Barnes & Farrell, 1992; Lamborn, Mounts, Steinberg, & Dornbusch, 1991). The predominance of work to date on these positive parenting behaviors has focused on White, intact, middle-class families (e.g., Bogenschneider & Small, 1997; Fletcher & Jefferies, 1999; Steinberg, Elmen, & Mounts, 1989). However, a growing body of evidence suggests that positive parenting behaviors play a similarly important role in low-income,

African American families (e.g., Brody, Kim, Murry, & Brown, 2004; Jones, Forehand, Brody & Armistead, 2002; McCabe, Clark & Barnett, 1999).

Although there has been some suggestion that parental warmth may be a less critical parenting component than monitoring for low-income, African American families given the high risk areas in which many of these families live (Jarret, 1999), empirical work suggests otherwise. For example, low-income, African American children whose parents engaged in higher levels of warmth evidenced lower levels of internalizing problems than children whose parents engaged in lower levels of warmth (McCabe et al., 1999; Sagrestano, Holmbeck, Paikoff, & Fendrich, 2003). Similarly, Weis (2002) assessed maternal warmth in low-income African American children and their mothers who received public assistance. The results showed that parents who engaged in high levels of responsiveness, nurturance, and support, had children who evidenced the lowest levels of internalizing and externalizing problems. Furthermore, a comparison of poor, African American and White families, found that parental warmth clearly related to more positive child adjustment in both samples (Magnus, Cowen, Wyman, Fagen & Work, 1999).

Additional research has examined the combination of both warmth/support and monitoring/control and psychosocial adjustment among low-income, African American youth. Consistent with the research on White, middle class, intact families, African American youth whose parents engaged in more positive parenting behaviors (i.e., the combination of parental warmth/support and monitoring/control) evidenced lower levels of internalizing and externalizing problems than youth whose parents engaged in lower levels (Jones, et al., 2002; Forehand & Jones, 2002; Kim, Ge, Brody, Conger, & Gibbons, 2003; Pittman & Chase-Lansdale, 2001). For example, Brody and colleagues (2004) examined the association

between involved-supportive parenting (i.e., the combination of support, control, and communication), and youth psychosocial adjustment in their longitudinal study of single-parent African American families. Their findings revealed that higher levels of involved-supportive parenting promoted child competence and served as a buffer against internalizing and externalizing problems.

Parents, Peers, and Youth Internalizing and Externalizing Problems

Developmental theory broadly has shifted from an emphasis on main effects of various risk factors for youth maladjustment to an emphasis on the interaction of these risk factors (Harris, 1998). Such theoretical accounts suggest that both peers and parents shape youth behavior through overt learning, including modeling, social reinforcement, and punishment, as well as covert learning, through the transmission of attitudes and values (Wood, Read, Mitchell, & Brand, 2004). Consistent with this theoretical shift, as well as the growing literature highlighting that the role of parents is not replaced by peers during adolescence, greater research attention is being devoted to understanding the combined role of parents and peers on youth psychosocial adjustment (e.g., Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Engels, Dekovic, & Meeus, 2002).

The majority of studies that simultaneously examine peers, parents, and youth psychosocial outcomes have investigated how parenting influences youth selection of peers (Fulgini & Eccles, 1993) and subsequent youth adjustment (e.g., Chassin & Barrera 1993; Dielman, Butchart, & Shope, 1993; Dishion, Patterson, Stoolmiller, & Skinner, 1991). Parents may influence youth choice of peer group through several parenting strategies and, in turn, affect child psychosocial adjustment. For example, Fuligni & Eccles (1993) examined youth perceived parental control, parental monitoring and peer orientation in their low to mid

income White sample. Youth who perceived high levels of parental monitoring were less likely to be extremely oriented toward peers.

Similarly, Dishion, Patterson, Stoolmiller, and Skinner (1991) investigated the relation between parental monitoring, early youth involvement with antisocial peers, and youth experiences in school. The results from their study of 206 predominantly White (99%) families suggested that parenting behaviors along with antisocial peer group affiliation may be significantly related to youth involvement with peers who engage in maladaptive behaviors. They reported that parental monitoring and discipline practices (i.e., fair, effective, and consistent) were significant predictors of youth association with peers engaging in maladaptive behaviors. Even when controlling for current levels of youth maladaptive behaviors, poor parental monitoring remained a significant antecedent to later deviant peer involvement.

Barrera and colleagues (2001) examined the relation between positive parenting behavior, peer group affiliation, and youth internalizing and externalizing problems among 300 youth from predominantly Hispanic (78%) families. The researchers reported that parental monitoring was associated with less deviant peer group affiliation which, in turn, was associated with lower levels of internalizing and externalizing problems.

More recently, researchers have been interested in not only the extent to which parents influence the choice of peers and the opportunity to affiliate with deviant peers, but also how parenting behaviors may serve as a buffer for the impact of risky peer relationships as children progress into adolescence. Collins et al. (2000) assert that youth differ markedly in their receptiveness to peer influence and one of the most important contributing factors to the impact of peer relationships may be parenting and the quality of the parent-child

relationship. In particular, higher levels of positive parenting may buffer the impact of deviant peers on youth psychosocial adjustment and, alternatively, lower levels of positive parenting may exacerbate the impact of deviant peer relationships.

Consistent with the broader field of youth adjustment, most of the work on the interaction of parent and peer influences has focused on White youth. For example, Mounts and Steinberg (1995) examined whether youth perceptions of authoritative behavior, that is the combination of parental warmth/support and control, would moderate the relation between youth behavior and peers externalizing problems in their predominantly White (62%) sample. They reported that youth who categorized their parents as either being low or moderate in authoritativeness were influenced more by peers engaging high levels of externalizing problems and, thus, the youth themselves also displayed similar levels of externalizing problems. Conversely, those youth who characterized their parents as high in authoritativeness were less influenced by their friends' deviant behaviors. Thus, the researchers concluded that higher levels of authoritative parenting may serve as a buffer against deviant peer influence.

In their study of 556 freshman students (mean age = 19 years) attending a university orientation, Wood and colleagues (2004) examined parenting behaviors as a moderator of the association between peer influences and participants' alcohol use. Findings revealed main effects for both peers and parents on alcohol use. That is, both inadequate parenting (less involvement, less monitoring, less nurturance) and risky peers (more alcohol offers, peer drinking, acceptance of drinking) were associated with participant alcohol use. The authors also reported, however, that parenting buffered the influence of risky peers. That is, higher

levels of parental involvement were associated with a weaker association between peer influences and participant drinking.

Galambos, Barker, & Almeida (2003) examined the relative contribution of positive parenting behaviors (i.e., parental support and control) and deviant peer relationships to internalizing and externalizing problems in their longitudinal study of White youth (62 girls, 50 boys) from predominately intact, middle-income, dual-earner families among youth (6th to 9th grade). Consistent with previous work with White youth, their findings revealed an association between deviant peer relationships and youth externalizing and internalizing problems both cross-sectionally and longitudinally. Youth with more deviant peers evidenced higher levels of externalizing and internalizing problems at the first assessment, as well as a greater increase in these problem behaviors over time. However, while associating with deviant peers was a risk factor for psychosocial adjustment difficulties, the authors also found that parents still played a vital role in diminishing the effects of peers during this risky period of development. Children whose parents exercised more control over their child's behavior were less likely to evidence an increase in externalizing problems in the context of deviant peer relations than children whose parents exercised less control. The increasing association and manifestation of problem behaviors for youth who associated with deviant peers appeared to be buffered by parents who were actively involved in their child's life.

Peer relationships may also moderate the association between risky families and compromised parenting and youth psychosocial adjustment. For example, Criss, Pettit, Bates, Dodge, & Lap (2002) reported that positive peer relationships can serve as a protective factor for children in at-risk families. These researchers investigated the socialization factors involved in child development in their longitudinal study of 585 predominantly White,

middle class families. Higher levels of peer acceptance predicted lower levels of child externalizing problems. Furthermore, family adversity (e.g., ecological disadvantage, marital conflict, or harsh discipline) was significantly associated with child externalizing problems at low and medium levels of peer acceptance. The association between family adversity and child adjustment, however, was attenuated at high levels of peer acceptance. Specifically, there was no association between family adversity and child adjustment at high levels of peer acceptance, suggesting the peer relationships may buffer the impact of risky families.

In their longitudinal study of 362 predominately White families (83%), Lansford et al. (2003) also demonstrated the moderating role of peers in the association between risky families and youth adjustment. Findings demonstrated that the association between parenting behaviors and youth externalizing problems was attenuated when high-quality friendships were involved regardless of the friend's level of antisocial behavior. The results also revealed a significant interaction between parental behavior, peer group affiliation and peer group antisocial behavior. Parental behavior was significantly and positively related to youth externalizing problems among those youth with low levels of affiliation to the peer group, particularly when the peer group was classified as highly antisocial. In conclusion it appears that friendship quality and peer group affiliation may serve as protective factors.

Interestingly, the findings of two studies which considered the relative role of parents and peers suggest that parents may be more important (Duncan et al., 1994; Formoso et al., 2000). In their study of multiethnic youth from intact, middle-income families, Formoso, Gonzales & Aiken (2000) found that peer affiliation did not appreciably impact youth problem behaviors over and above parental monitoring of youth behaviors. These researchers suggest that, when compared to peers, parents may play a more important role in

buffering the development of early youth psychosocial problems. Duncan and colleagues (1994) in their nearly homogeneous White (92.7%) sample examined the differential impact of parental and peer influence on youth externalizing problems. They concluded that not only are both family and peer factors predictive of maladaptive behavior, in this case alcohol consumption, but also that family influence may play a more influential role as a protective factor.

Parents, Peers, and Psychosocial Adjustment among African American Youth

Albeit an important contribution to the literature, the generalizability of the findings of the research to date on the relative contribution of positive parenting and peer relationships to the psychosocial adjustment of low-income, African American youth is limited. African American youth are disproportionately exposed to environments with psychosocial risk factors (McLoyd, 1997). Less than one-third (31 percent) of African American youth reside in two-parent households, compared with 52 percent of the population and African American women are more likely to be single parents (American Demographics, 2002). The stressors associated with single parent status and its associated socioeconomic disadvantages are linked with more compromised parenting behaviors and, in turn, increased psychosocial adjustment problems among children and youth in these environments (Guerra, Huesmann, Tolan, Acker, Eron, & Leonard, 1995; Jackson & Brooks-Gunn, 2000). Environments characterized by the presence of gangs (Gordon, Lahey, Kawai, Loeber, Stouthamer-Loeber, & Farrington, 2004), community violence (O'Donnell, Schwab-Stone, & Mueeed, 2002) drug use, drug dealing, and crime (Sherman & Weisburd, 1995) may not only be associated with youth adjustment problems, but may also be related to risky peer relations. In spite of

these risks, few studies have examined the relative contribution of parents and peers in this high risk sample.

Paschall, Ringwalt & Flewelling (2003) reported that peer affiliation was significantly related to youth externalizing problems in their study of African American youth. Specifically, youth association with peers engaging in externalizing problems was a significant predictor of youth's own externalizing problems. Although statistically significant, however, peer externalizing problems only accounted for two percent of the variance in youth externalizing problems and, importantly, was not a significant predictor when examined within the context of father present or father absent homes. Accordingly, the researchers concluded that peer group affiliation may not be as important as parental influence in determining externalizing behaviors.

In their study of low-income, African American youth, Klein and Forehand (2000) examined the parent-child relationship and parental monitoring as moderators of the association between sociodemographic risk factors and child functioning. Analyses revealed that parental monitoring moderated the association between sociodemographic risk and youth internalizing problems, such that children exposed to heightened risk whose mothers engaged in higher levels of monitoring behavior were less likely to evidence internalizing problems than children who were exposed to heightened risk, but their mothers engaged in less monitoring. This study, however, did not examine the interaction of parents and peers in particular.

Farrell and White (1998) examined the main and interactive effects of the parent-youth relationship and peer influences on youth drug use in their predominantly African American (90%) of 10th-grade children. They reported that a more positive parent-youth

relationship buffered the impact of affiliation with drug using peers on youth drug use. That is, youth who affiliated with drug using peers were less likely to use drugs themselves if they had a more positive relationship with their parent than if the relationship was less positive.

Kung and Farrell (2000) also examined the relative contribution of parents and peers to youth drug use, in a low-income, predominantly African American (90%) sample (age 12 to 14 years). Their cross-sectional study of 443 youth examined parental monitoring, peer pressure, and youth drug use. Analyses revealed that both parents and peers had a main effect on youth drug use. Youth whose parents engaged in lower levels of monitoring were more likely to engage in drug use. Similarly, youth who were exposed to higher levels of peer pressure were more likely to use drugs. Furthermore, poor parenting exacerbated the relation between peer pressure and youth drug use. Youth whose parents engaged in lower levels of parental monitoring and who were exposed to higher levels of peer pressure were most likely to engage in drug use.

As highlighted above, the few studies that have examined the relative contribution of both parents and peers to the psychosocial adjustment of African American youth have focused almost exclusively on externalizing problems in general or drug use in particular. African American youth are in fact overrepresented in the statistics regarding risk for externalizing problems (Sickmund, Sladky, & Kang, 2004), however, a growing body of literature suggests they are at risk for internalizing problems as well (Forehand, Jones, Brody, & Armistead, 2002; Jones, Forehand, & Neary, 2001; Kim et al., 2003).

Additionally, studies to date have focused on a relatively narrow age range (Kung and Farrell, 2000; Farrell & White, 1998), precluding the opportunity to examine age as a moderator of the relative contribution of parents and peers as children progress into

adolescence. Although both parents and peers may continue to be a significant correlate of adjustment as children progress into adolescence (e.g., Berndt, 1979; McCullum, 1994; Montemayor, 1982; Richards, Miller, O'Donnell, Wasserman, & Colder, 2004), the relative role during the transition to adolescence among low-income, African American children has yet to be examined.

Third, the research to date on the relative role of parents and peers among African American youth has failed to examine child gender as a moderator, in spite of including both boys and girls in their sample. Research from related literatures suggests that child gender moderates the outcomes between social and environmental contexts and child outcomes (e.g., Fulingni & Eccles, 1993; Leadbeater, Kuperminc, Blatt, & Hertzog, 1999). Girls and boys may differ in the nature of their peer orientation (Fulingni & Eccles, 1993), such that girls prefer to seek the advice of friends whereas boys were more likely to conform to peer pressure. Additionally, young girls may display, relative to boys, greater attachment to parents which may, in turn, serve as a greater protective factor against internalizing and externalizing behaviors in the context of risky peer relationships (Leadbeater et al., 1999).

Finally, the work to date with African American youth has been cross-sectional, precluding the opportunity to examine the directionality of findings. Future work in this area should examine the relative contribution of parents and peers among low-income, African American families both cross-sectionally and longitudinally. Importantly, the effectiveness of prevention and intervention efforts targeting psychosocial adjustment among low-income, African American youth residing in disadvantaged circumstances depends on a better understanding of the relative role of parents and peers both concurrently and longitudinally.

The Proposed Study

The purpose of the current study was to replicate and extend the literature in this area by examining the relative contribution of parents and peers to both internalizing and externalizing adjustment problems among low-income, African American youth. Although there is evidence in the literature to suggest that peers may buffer the impact of negative families and parents may do the same for negative peer group relationship quality on youth psychosocial outcomes, it is important to not only understand these mechanisms but also to understand how these two influential groups operate jointly to impact youth outcomes. Furthermore, this study built upon the literature to date by identifying and studying one of the underrepresented populations in the literature, African Americans, and by investigating both externalizing and internalizing problems. Additionally, the moderating role of youth gender and age was examined. These associations were examined both cross-sectionally and across assessments.

Hypotheses

This study addressed the following hypotheses:

1. Positive parenting would be associated with youth internalizing and externalizing behaviors. Youth whose mothers engaged in higher levels of positive parenting would experience lower levels of both internalizing and externalizing behaviors when compared to youth whose mothers engaged in lower levels of positive parenting.
2. Youth internalizing and externalizing behaviors would be associated with peer group relationship quality. Youth who reported more positive peer relationships would manifest lower levels of internalizing and externalizing problems.

3. The main effects of both parenting and peers on youth internalizing and externalizing problems would be qualified by the interaction of the two variables. That is, positive parenting would buffer the impact of poor peer relations, while positive peer relations would buffer the impact of poor parenting.
4. Gender would moderate the main effects of parents and peers on youth internalizing and externalizing problems, as well as the interaction of parents and peers. Positive parenting would attenuate the effects of poor peer relationships more so for girls than boys. This was an exploratory hypothesis due to limited power.
5. Age would moderate the main effects of parents and peers on youth internalizing and externalizing problems, as well as the interaction of parents and peers. As the youth matures, positive parenting would continue to be a significant predictor of youth psychosocial adjustment, but the magnitude of the main and interactive effects would be weaker. This was an exploratory hypothesis due to limited power.

CHAPTER II

METHOD

Participants

A community sample of 277 African American single parent families headed by single mothers from metropolitan and nonmetropolitan counties in the southeastern United States participated in this study. To ensure that a viable African American community existed in the county only those in which 25% or more of the population was African American were sampled. Demographic characteristics of the participating families are included in Table 1.

Development of Measures

Of particular concern was the availability of instruments to measure the constructs of interest as most measures of family functioning and child adjustment were developed for use with and standardized on Caucasian, middle-class families. African American focus groups comprised of community members in the counties were formed to address this issue. The focus groups comprised a total of 60 people who were representative of the population studied.

The relevance of constructs proposed for investigation along with the possibility that the measure would yield information relevant to the constructs was discussed by the focus groups. The groups reviewed each item on the scales and suggested wording changes and removal of items that were either unclear to them or irrelevant to families in their communities. A confirmatory factor analysis was performed to ensure that each scale was

comprised of a coherent set of items for this study population when items or the response scale for items were changed or if the measure had not been utilized with similar samples. Items were retained if they loaded at .40 or above. An alpha coefficient for each measure was also computed.

Procedure

Recruitment of families was conducted through community agencies (e.g. schools) and leaders. The inclusion criterion, being an African American family with a child 7 to 15 years old, was supplied to each community contact. Those contacts in turn gave research staff members the names of families to approach and staff members contacted the families. Each community contact gave the research staff member the names of families who expressed interest in participation, and the staff member contacted the families.

Two data-collection sessions, each of which lasted between 1 and 2 hours, were scheduled at each assessment. The mother completed informed consent forms, and the mother and child completed an interview focusing on demographic information during the first session. The study variables, (e.g. depression) were assessed during the second session which occurred between two days to two weeks following the first interview in order to assess the psychosocial functioning for the mother and child, including the child problem behaviors. The duration of each interview was approximately 2 hours for mothers and 1 hour for children and was conducted privately between the mother and child and a researcher, with no other family members present or able to overhear the conversation.

All materials were administered verbally to the participants in each interview. Furthermore, cue cards were utilized for both the mother and child during the second interview. These cue cards contained descriptors (e.g., “not true,” “sometimes true,” and

“often true”), their corresponding numeric values (e.g., 0, 1, or 2), and pictorial representations of the descriptors (e.g. thermometers with various portions shaded). Families were compensated \$50 for their participation in each data-collection session.

Approximately 12 to 15 months later, mothers were contacted and invited to participate with their children in a second assessment, which was identical to the first assessment.

Measures

Demographic information. Mothers completed a demographic measure that provided information about themselves (e.g. education and employment), their children (e.g. age and gender), and their families (e.g. income) (see Appendix 1).

Positive Parenting. Two aspects of parenting, the proposed independent variable in the current study were assessed via mother report: monitoring and maternal warmth and support.

The Monitoring and Control Questionnaire (MCQ) was used to assess the extent to which a mother monitored child behavior (Kotchick, Forehand, Brody, Armistead, Morse, Simon & Clark, 1997) (see Appendix 2). The MCQ assesses parents’ perceptions of their knowledge about various aspects of their children’s lives and is based on monitoring measures used by Patterson and Stouthamer-Loeber (1984) and by Steinberg, Lamborn, Dornbusch, and Darling (1992). Items are rated on a 4– point Likert scale ranging from 1 (never) to 4 (always). Sample items include, “How often do you know about where [target child] is and what s/he is doing when away from home?” “How often do you know about [target child’s] use of alcohol?” and “How often do you know about what his or her grades are?” Scores can range from 17 to 68, with higher scores indicating higher levels of maternal

monitoring. For the present sample, a factor analysis revealed that all 17 items loaded at .40 and above and the alpha coefficient was .91.

The short form of the Interaction Behavior Questionnaire (IBQ; Prinz, Foster, Kent, & O’Leary, 1979) (see Appendix 3) was used to assess warmth and support in the mother-child relationship. This form consists of the 20 items that have the highest phi coefficients and the highest item-to-total correlations among the 75 items in the original IBQ and correlates .96 with the longer version. The items, which are endorsed as *true* or *false*, include “You enjoy spending time with your child” and “You think you and your child get along well with each other.” Adequate internal consistency and discriminant validity have been reported (Prinz et al., 1979; Robin & Weiss 1980). A confirmatory factor analysis indicated that 14 of the 20 items loaded on a single construct at .40 or above; consequently only these 14 items were included in the measure for data analysis. The alpha coefficient for these 14 items was .85. Scores can range from 0 to 14, with higher scores indicating more warmth and support in the mother-child relationship.

In order to form the positive parenting construct, the two parenting measures (monitoring and warmth/support) were standardized and averaged.

Child peer relationships. This instrument was developed for use in a previous study conducted by Gene Brody (1997 unpublished measure) (see Appendix 4) therefore, it was subjected to exploratory factor analysis. The number of factors was determined by examining the eigen values and the scree plots. Four factors emerged but the best factor solution appeared to be a one factor solution. As a result, all items were retained and a one factor solution was used. The resulting alpha coefficient was .76. Items are rated on a 5–point Likert scale ranging from 1 (definitely not true) to 5 (very true). Sample items include,

“Your friend trusts your judgment”, “Your friend makes you feel good about our ideas”, and “Your friend tells you you’re good at things.”

Child psychosocial adjustment. Two domains of child psychosocial adjustment, the proposed dependent variables, were assessed: Child-reported internalizing and externalizing problems.

Externalizing Problems. Child-reported externalizing problems were examined using the Aggressive behavior and Delinquent behavior subscales of the Youth Self-Report form of the Child Behavior Checklist (CBCL; Achenbach, 1991) (see Appendix 5). The Aggressive behavior subscale items, which are endorsed on a three point scale: 0 (not true), 1 (sometimes true), or 2 (often true), include, “You are mean to others”, “You destroy or mess up other people’s things,” and “You disobey at school.” This subscale, selected because it assesses the types of externalizing problems typically displayed by children in the age range included in this study, has acceptable reliability and validity data (Achenbach, 1991). However, it has not been standardized with children as young as some of those included in this investigation. Thus, a factor analysis was conducted on the scale. Nineteen items of the Aggression subscale loaded at .40 or greater and were retained. The alpha coefficient for this subscale with the current sample was .87. Scores could range from 0 to 38 with high scores indicating higher levels of externalizing problems.

The Delinquent behavior subscale of the Youth Self-Report form of the Child Behavior Checklist (CBCL; Achenbach, 1991) was also used (see Appendix 6). The Delinquent behavior subscale items, which are endorsed on a three point scale: 0 (not true), 1 (sometimes true), or 2 (often true), include, “I don’t feel guilty after doing something I shouldn’t”, “I hang around with kids who get into trouble,” and “I lie or cheat.” Eleven items

of the Delinquent behavior subscale loaded at .40 or greater and were retained. Scores could range from 0 to 26 with high scores indicating higher levels of externalizing problems.

Scores on the Aggression and Delinquent behavior scales were standardized and averaged to form an externalizing construct.

Internalizing Problems. Depressive symptoms, one domain of child internalizing problems, were examined using the child-report on the Child Depression Inventory (CDI; Kovacs, 1981) (see Appendix 6). The CDI consists of 27 items rated on a 3-point scale. Fitzpatrick (1993) reported adequate reliability and validity data with samples similar to this study's and standardization data are available for children and youth ranging from 7 to 17 years old. The alpha coefficient for the current sample was .76. Scores can range from 0 to 81, with higher scores indicating greater symptomatology. A mean score of 9 (SD = 7) has been reported across various samples (e.g Fitzpatrick, 1993).

CHAPTER III

RESULTS

Preliminary Analyses.

Examination of the distribution of variance of the study variables revealed no potential outliers. Associations among the demographic variables examined and the outcomes of interest were examined, as well as the proposed associations among the major study variables (see Tables 2 and 3). As demonstrated in Table 2, only one significant correlation emerged between the demographic variables and the outcome variables. Mother's age was significantly and negatively related to youth-reported internalizing problems at Assessment 1 ($r = -.17, p < .01$) and 2 ($r = -.13, p < .01$). Therefore, mother's age was statistically controlled in the analyses in which youth-reported internalizing problems served as the outcome variable.

Next, the correlations of the proposed independent and moderator variables, mother-reported positive parenting and youth-reported peer relationship quality, and dependent variable, either youth-reported internalizing or externalizing problems, were examined cross-sectionally at each assessment (see Tables 2 and 3). Noteworthy of mention, at Assessment 1, mother-reported positive parenting ($r = -.30, p < .001$) and youth-reported peer relationship quality ($r = -.16, p < .05$) were both significantly and negatively correlated with youth externalizing problems. Youth who had better relationships with parents and peers evidenced fewer externalizing problems. These variables were also significantly and negatively correlated with internalizing problems ($r = -.26, p < .001$ and $r = -.23, p < .001$,

respectively). Youth who had better relationships with parents and peers evidenced fewer internalizing problems as well.

At Assessment 2, youth-reported peer relationship quality was significantly and negatively correlated with both youth-reported internalizing ($r = -.18, p < .01$) and externalizing ($r = -.19, p < .01$) problems; however, mother-reported positive parenting was only associated with youth-reported internalizing problems ($r = -.19, p < .01$). Youth who had better relationships with peers evidenced both fewer internalizing and externalizing problems, while a better relationship with parents was associated with only fewer internalizing problems.

Longitudinal examination of the association between the independent variables at Assessment 1 and the outcome variables at Assessment 2 are shown in Table 4. First, mother-reported positive parenting at Assessment 1 was negatively correlated with youth-reported internalizing behavior at Assessment 2 ($r = -.18, p < .01$). No significant relationship for externalizing problems was obtained for these variables ($r = -.10, n.s.$). Second, youth-reported peer relationship quality at Assessment 1 was negatively correlated with youth internalizing problems ($r = -.20, p < .01$) and externalizing problems ($r = -.18, p < .05$) at Assessment 2. Notably, the magnitudes of these correlations were small; however, the direction of the effects suggests that greater positive parenting and peer relationship quality were associated with lower levels of psychosocial adjustment difficulties for youth one year later.

An examination of these associations longitudinally also revealed that the outcomes of interest were correlated at Assessments 1 and 2 (see Table 4a and 4b). That is, youth-reported internalizing problems at Assessment 1 and 2 were positively correlated ($r = .34$,

$p < .01$). However, the magnitude of the correlation is small to moderate, suggesting that the level of internalizing problems does increase across assessments, which is consistent with the increasing age of the sample. Similarly, youth-reported externalizing problems at Assessment 1 and 2 are also correlated ($r = .28, p < .01$); again, however, the correlation is considered small, suggesting that the youth externalizing problems increase over time as well.

Finally, although this is a community sample, responses were examined for clinical significance. A relatively small number of the participants (7%) at Assessment 1 (14 males and 6 females) and at Assessment 2 (9 males and 9 females) had scores on the CDI in the clinical range reflective of clinical depression (raw score above 19). Furthermore, a relative higher percent of the sample had scores reflective of mild depression. Fourteen percent of the sample at both Assessment 1 (18 males and 21 females) and at Assessment 2 (22 males and 14 females) had scores reflective of mild depression. For externalizing problems, 4% of the sample (4 males and 8 females) had scores above the clinical cutoff (T score above 70) at Assessment 1 and 5% (4 males and 9 females) at Assessment 2.

Primary Analyses.

Correlation analyses were followed by regression analyses to test the proposed models. When internalizing problems was the outcome of interest, maternal age was entered in Block 1; the main effects of positive parenting and peer relationship quality were entered in Block 2; all two-way interactions were entered in Block 3; and all three-way interactions were entered in Block 4. The same order of entry was repeated when externalizing problems was examined, with the exception of maternal age. Continuous variables were centered prior to creating interaction terms.

First, it was predicted that mother-reported positive parenting would be associated with youth-reported internalizing and externalizing problems. That is, it was expected that youth whose mothers engaged in higher levels of positive parenting would experience lower levels of both internalizing and externalizing problems when compared to youth whose mothers engaged in lower levels of positive parenting. As demonstrated in Tables 5 and 6, mother-reported positive parenting was associated with both youth-reported internalizing, $\beta = -0.22, p < .01$, and externalizing, $\beta = -0.28, p < .01$, problems at Assessment 1. At Assessment 2, mother-reported positive parenting was associated with lower levels of youth internalizing, $\beta = -.18, p < .01$, but not externalizing, $\beta = .16, n.s.$, problems (see Tables 6 and 7).

Next, it was predicted that youth-reported peer relationship quality would be associated with youth internalizing and externalizing problems. It was predicted that youth who reported more positive peer relationships would manifest lower levels of internalizing and externalizing problems. As demonstrated in Tables 5 and 6, youth-reported peer relationship quality was associated with both youth-reported internalizing, $\beta = -0.22, p < .01$, and externalizing, $\beta = -0.16, p < .01$, problems at Assessment 1 and it was associated both internalizing, $\beta = -0.17, p < .01$, and externalizing, $\beta = -0.20, p < .01$, problems at Assessment 2. Thus, those youth with higher quality peer relationships evidenced fewer maladaptive behaviors.

Third, it was hypothesized that mother-reported positive parenting and youth-reported peer relationship quality would interact. As demonstrated in Table 5 and 6, at Assessment 1, this hypothesis was not supported for internalizing, $\beta = .27, n.s.$, or externalizing, $\beta = -.14, n.s$ problems. However, at Assessment 2, evidence to support this

hypothesis was found for externalizing problems, $\beta = -1.00, p < .01$, but not for internalizing problems, $\beta = .04, n.s.$

Fourth, it was predicted that gender would moderate the associations of positive parenting, peer relationship quality, and positive parenting x peer relationship quality with youth internalizing and externalizing problems. As illustrated in Table 5, this hypothesis was not supported for internalizing problems at Assessment 1: Positive parenting x gender, $\beta = .02, n.s.$; Peer relationship quality x gender, $\beta = -.51, n.s.$; Positive Parenting x peer relationship quality x gender, $\beta = 1.21, n.s.$. The predicted interactions with child gender were also non-significant at Assessment 2: Positive parenting x gender, $\beta = -.40, n.s.$; peer relationship quality x gender, $\beta = -.03, n.s.$; positive parenting x quality of peer relationship x gender, $\beta = .03, n.s.$, (see Table 7). For externalizing behaviors at Assessment 1, however, there was a significant effect for positive parenting x gender, $\beta = -.89, p < .05$, but not for peer relationship quality x gender, $\beta = .19, n.s.$, or the 3-way interaction of positive parenting x peer relationship quality x gender, $\beta = -.45, ns$ (see Table 5). At Assessment 2 no support for this hypothesis was found for positive parenting x gender, $\beta = -.21, n.s.$, nor the interaction between positive parenting x peer relationship quality x gender $\beta = -.94, n.s.$, however significant findings were achieved for peer relationship quality x gender, $\beta = -.60, p < .01$ (see Table 8).

The final hypothesis stated that age would moderate the association of mother-reported positive parenting and youth-reported peer relationship quality, and the interaction of parents x peers, on both outcomes. Again, as demonstrated in Table 5 for Assessment 1, this hypothesis was not supported for the interaction between age x positive parenting, $\beta = -.84, n.s.$, age x peer relationship quality, $\beta = -.31, n.s.$, nor the 3-way interaction of age x

positive parenting x peer relationships quality $\beta = -1.11$, *n.s.*, for internalizing problems. Significant results were reported for effects of positive parenting x age, $\beta = -.96$, $p < .05$, and peer relationship quality x age, $\beta = .86$, $p < .05$, on externalizing problems but not for the interaction between positive parenting x peer relationship quality x age, $\beta = -2.40$, *n.s.*, at Assessment 1 (see Table 6). Significant findings were achieved for peer relationship quality x age, $\beta = -1.02$, $p < .05$, for internalizing problems at Assessment 2 (see Table 7). However, no support was found for the interaction between age x positive parenting, $\beta = -.70$, *n.s.*, nor the 3-way interaction of age x positive parenting x peer relationship quality, $\beta = 1.58$, *n.s.*, for the same outcome variable (see Table 7). Furthermore, no significant effects were found at Assessment 2 for positive parenting x age, $\beta = -.03$, *n.s.*, peer relationship quality x age, $\beta = .23$, *n.s.*, nor the interaction between positive parenting x peer relationship quality x age, $\beta = -1.96$, *n.s.*, for externalizing problems (see Table 8). It should be mentioned that the last two hypotheses were exploratory due to limited power.

Significant interactions were explicated in accordance with the recommendations of Aiken and West (1991) using the web-based calculator designed for explicating significant interactions using hierarchical regression analyses (Preacher, Curran, & Bauer, 2004). First, explication of the 2-way interaction of peer relationship x age at Assessment 1 was explicated revealing that neither slope was statistically significant from 0 ($t = -0.75$, *n.s.* low peer relationship quality (PRQ); $t = -0.07$, *n.s.* high PRQ). Accordingly, cross-tabs were conducted in order to further examine the pattern of findings, revealing that very few youth were in the low peer relationship quality and younger age category ($n = 7$) and the majority of youth clustered in the high quality peer relationship and older age category ($n = 161$), perhaps yielding a spurious interaction between the two variables. Furthermore, exploration

of these interactions using both two standard deviations and three standard deviations above and below the mean also revealed that neither slope was significant. Therefore, this interaction will not be discussed further.

Explication of the second significant interaction, positive parenting x age at Assessment 1 again revealed that neither slope was statistically significant from 0 ($t = 1.36$, *n.s.* low positive parenting (PP); $t = 0.26$, *n.s.* high PP). Again, cross-tab analysis revealed that the majority of youth clustered in the high positive parenting and older youth group ($n = 192$) while very few were in the category of low positive parenting and younger youth ($n = 6$), again potentially yielding spurious interaction term. Again, exploration of these interactions using both two standard deviations and three standard deviations above and below the mean also revealed that neither slope was significant.

The final significant interaction for externalizing behavior was positive parenting x gender at Assessment 1, which explication again revealed that neither slope was significantly different from 0 ($t = 1.65$, *n.s.* low PP; $t = 0.94$, *n.s.* high PP). Similar to the prior interactions, cross-tab analyses revealed similar biased groupings; and interaction explication using two and three standard deviations above and below the mean also yielded not significant findings. Accordingly the interaction will not be discussed further.

At Assessment 2 only one interaction was significantly correlated with youth internalizing behavior: peer relationship quality x youth age; again, explication revealed that neither slope was different from 0 ($t = -0.11$, *n.s.* low PRQ; $t = -0.86$, *n.s.* high PRQ). Cross-tab analyses were again conducted to examine the findings. Consistent with previous results, the majority of youth were grouped in the high peer relationship quality, older youth group ($n = 169$) for internalizing behaviors. Furthermore, exploration of these interactions using both

two standard deviations and three standard deviations above and below the mean also revealed that neither slope was significant.

Explication of the interaction peer relationship quality x youth gender at Assessment 2 for externalizing problems again revealed that neither slope was statistically significant from 0 ($t = 1.23, n.s.$ low PRQ; $t = 0.57, n.s.$ high PRQ). The preponderance of youth were grouped in the high peer relationship quality group ($n = 205$) and re-examination of the interaction using both two standard deviations and three standard deviations above and below the mean was unsuccessful. Therefore, these interactions will not be discussed further.

Finally, externalizing behavior was related to positive parenting x quality of peer relationship. Explication of the interaction (see Figure 1) revealed that those youth who manifested the most externalizing problems were those who experienced low levels of positive parenting, but reported higher quality peer relationships ($t = -2.76, p < .01$). In contrast those manifesting the least amount of externalizing problems reported high levels of positive parenting and high peer relationship quality ($t = -2.71, p < .01$). Additionally, cross-tabs were run to confirm that each cell had a relatively equal representation of participants.

In addition to cross-sectional analyses at Assessments 1 and 2, regression analyses were run using Assessment 1 positive parenting and peer relationship quality to predict Assessment 2 internalizing and externalizing problems, controlling for Assessment 1 internalizing and externalizing problems, respectively (see Tables 9 and 10). These analyses were run to determine whether Assessment 1 variables or their interaction predicted change in the outcome variables. Once again, demographic variables were entered in Block 1, as well as the respective outcome variable at Assessment 1. The main effects of positive parenting and peer relationship quality were entered in Block 2. All two-way interactions

were entered in Block 3 and all three-way interactions were entered in Block 4. No significant main effects or interactions emerged for either internalizing or externalizing problems.

CHAPTER IV

DISCUSSION

This study examined the relative contribution of parents and peers to both internalizing and externalizing adjustment problems among low-income, African American youth. Hypotheses were examined cross-sectionally at two assessments, separated by approximately 12 months. Additionally, change in internalizing and externalizing problems over time were examined by controlling for internalizing and externalizing behaviors respectively at Assessment 1. Findings partially supported the proposed hypotheses regarding the main effects of positive parenting and peer relationship quality, but depended on the assessment period examined. At Assessment 1, both higher levels of positive parenting and better peer relationship quality were associated with youth internalizing and externalizing problems. At Assessment 2, although both higher levels of positive parenting and higher peer relationship quality were associated with youth internalizing problems, only peer relationship quality was associated with externalizing problems. The proposed analyses examining change in internalizing and externalizing problems by controlling for Assessment 1 in analyses predicting change were not supported. Hypotheses regarding the interaction of parents and peers were partially supported as well. Higher levels of positive parenting buffered the association between poor peer relationship quality on youth externalizing problems at Assessment 2, but not Assessment 1. Additionally, positive parenting did not buffer the association between poor peer relationship quality and internalizing problems at Assessment 1, or at Assessment 2. Furthermore, although some evidence suggested that age

and gender moderated the links between the major study variables and internalizing and externalizing problems, explication of the interactions revealed that these findings were likely accounted for by unequal distributions of youth across groups.

As hypothesized, positive parenting was associated with both youth internalizing problems at Assessment 1 and 2. Youth whose mothers engaged in higher levels of positive parenting experienced lower levels of internalizing problems at each assessment when compared to youth whose mothers engaged in lower levels of positive parenting. These findings are consistent with prior research with European American families. (e.g. Ardel & Day, 2002; Burbach & Borduin, 1986; Gelfand & Teti, 1990; Zhou et. al., 2002). That is, parenting characterized by lower levels of warmth, support, and inadequate monitoring may undermine the youth's sense of self-efficacy and may hinder trust within parental relationships (Pittman & Chase-Lansdale, 2001). Thus, parents who engage in lower levels of this dimension may have created a less stable and secure environment for their children which perhaps impeding feelings of confidence and impact internalizing symptomology (Ge, et al., 1994). Furthermore, positive parenting may also contribute to the youth's feelings of self-worth (Burge & Hammen, 1991; Downey & Coyne, 1990), self-reliance and overall psychological well-being (Steinberg, et al., 1992) which may subsequently impact the manifestation of internalizing problems.

As predicted, peer relationship quality was associated with youth internalizing and externalizing problems at Assessment 1 and Assessment 2. Youth who reported less positive peer relationships manifested higher levels of both internalizing and externalizing problems. Consistent with previous research (e.g. Mounts & Steinberg, 1995) youth with less positive peer relationships have less positive outcomes than youth with more positive peer

relationships. Youth may rely on peers for emotional support and advice. This relationship quality may be the result of several factors which may include advances in cognitive development, a youth's emerging autonomy from the family, and a greater ease in discussing certain issues (e.g. dating) amongst the peer group (Laible, Carlo & Raffaelli, 2000).

Positive parenting was also associated with youth externalizing problems, but only at Assessment 1. According to Fuligni & Eccles (1993) early adolescence marks a period of significant change in a child's relationships with both parents and peers. Children have increased unsupervised contact with peers and may place greater importance on their opinions and advice (Brown, 1990). Although beyond the scope of this study, one possibility is that these children are associating with peers who engage in maladaptive behavior and they in turn manifest externalizing problems. As a child matures it may become increasingly challenging to monitor his or her activities. Dishion & McMahon (1998) suggest one of the dimensions of positive parenting, parental monitoring, may not be as effective for older children and youth as this is the period during which there may be an increase in extra-familial activities such as an increase in peer group affiliation. Therefore, new and increased skills in the area of communication and effective listening may be warranted to promote effective monitoring. These skills may facilitate the parent to be kept abreast with the whereabouts and activities of the youth. Additionally, Dumas & Wahler (1983) suggest that the role of parental monitoring may be challenged in socioeconomically disadvantaged single parent homes in particular. Low income and single parents may through necessity shift their attention increasingly from monitoring the youth to securing resources for the family. Thus, as this component of positive parenting becomes more distal the youth may have more access to engage in maladaptive behaviors.

While a main effect for positive parenting was not found for externalizing problems at Assessment 2, the interaction between positive parenting and peer relationship quality for this outcome at the same assessment was significant. However, contrary to the proposed hypothesis positive parenting and peer relationship quality did not provide a buffering effect for each other against adolescent externalizing behaviors. Positive parenting continues to have a unique influence on externalizing problems apart from the influence of peer quality relationships. An adaptive family environment may promote better youth adjustment (e.g. Gauze, et al. 1996). One possibility is that the effects of parental investment in the well being of youth may serve to counteract peer influence (e.g. Warr, 1993). The values transmitted by persistent positive parenting may serve as a protective factor against youth problem behaviors (Simons-Morton, Chen, Abroms, & Haynie, 2004) regardless of the peer context (Herrenkohl et al., 2003). Furthermore, positive familial influence may be more salient to a maturing youth than even that of a close friend (Jaccard, Blanton & Dodge, 2005). Perhaps, the consistent provision of monitoring and support, the components of positive parenting, facilitates the internalization of positive psychosocial behaviors which has a greater impact upon maladaptive behaviors. Furthermore, it may be that, temporally, parental influence is longstanding compared to that of peers and thus have had a longer time to influence youth behavior (Biddle et al., 1980). Moreover, youth may utilize the parent-child relationship for validation, security and support and it may serve as a protective barrier.

In this sample high quality friendships did not provide a buffering effect against low positive parenting. In fact, those adolescents with low positive parenting and high quality peer relationships manifested the most externalizing behaviors. Perhaps these relationships may involve maladaptive behaviors. Researchers have suggested that if such youth are

investing in relationships with peers who are engaging in relatively high levels of externalizing behaviors, then these children will be at even greater risk for such behaviors themselves (Aseltine & Gore, 2000; Hussong, 2000; Nezlek, Pilkington, & Bilbro, 1994).

Importantly, the obtained interaction must be interpreted cautiously because it was not replicated at Assessment 1. Although the interaction at Assessment 2 may have been obtained by chance, potential methodological explanations should also be considered. First, the peer relationship quality questionnaire was not implemented until midway through Assessment 1, yielding a reduced sample size at Assessment 1 ($N = 227$) in comparison to Assessment 2 ($N = 244$) to test the proposed hypotheses.

As reported positive parenting was associated with internalizing problems at both Assessment 1 and Assessment 2, however, it was only associated with externalizing problems at Assessment 1. As a child matures the parents may have continued influence upon internalizing problems (e.g. Demaray, Malecki, Davidon, Hodgson & Rebus, 2005) however, the impact of positive parenting on externalizing problems may change. As children enter adolescence, the parent-child relationship may adjust to accommodate the developmental needs of the child. Perhaps this is the age when the association with peers become more relevant. Children may have increased unsupervised contact with peers and may place, relative to their parents, greater importance on peer approval and advice (Brown, 1990). Thus, peers may take on an increasingly influential role in the lives of the youth as they may achieve more autonomy and satisfy the developmental needs that parent relationships may not facilitate. Over time, there may be an increased likelihood that a youth will avoid one aspect of positive parenting, parental attempts to monitor his or her behaviors, and will seek out settings where there is an absence of adult authority figures who they

legitimize (Stoolmiller, 1994). Furthermore, there may be several barriers which may negatively impact the influence positive parenting on youth externalizing problems over time such as life stress (Simons & Johnson, 1996), poverty and unemployment (McLoyd, 1990), psychosocial issues (Oyserman, Bybee, Mowbray, & MacFarlane, 2002) and parents own adjustment status, such as depression, substance abuse, and parents own personal experiences of one aspect of positive parenting, monitoring, as a child may affect their own motivation to monitor (Dishion & McMahon, 1998).

The findings of the current study must be interpreted in the context of the study's limitations. First, the sample size for testing the 3-way interactions of positive parenting x peer relationship quality x gender or age may have increased the likelihood of a Type II error, making it more challenging to find significant results. Furthermore, while several significant interactions were explicated, only one, the interaction between peer relationship quality and positive parenting, was significant. Although several interactions with age and gender did emerge as statistically significant, explication of the interaction revealed that the differences in the slopes of the lines was not meaningfully different. Future research with larger sample sizes may provide the opportunity to examine the proposed interactions further. Additionally, this study focused on the influence of parents and peers on youth internalizing and externalizing problems, however, Parke & Ladd (1992) suggests that research on parent and peer associations to youth behaviors should consider bidirectional effects. Accordingly, future work should consider how youth internalizing and externalizing problems may also influence the quality of their relationships and how parenting and peers relationships may influence one another. Also, youth who may manifest externalizing problems may have peers who engage in similar activities (Mounts & Steinberg, 1995). Therefore, assessing not

only the quality of peer relationship, but also the activities that characterize this relationship may be helpful in understanding the behaviors that the youth and peers engage in. To support this suggestion, it may be helpful to use a procedure in which youth and a best friend participate in the research study. Finally, the findings should not be generalized beyond relatively low-income African American families.

In spite of its limitations, the study also has several strengths. First, this study focused on African American youth, a relatively understudied group in the family or peer literature. Second, this study examined the main and interactive contributions of parents and peers to youth adjustment. A growing body of literature with European American youth suggests that parents continue to have an effect into adolescence, but perhaps the effect occurs in combination with peers. The current findings highlight the importance of considering the interactive roles of parents and peers with African American youth as well. Third, this study examined both internalizing and externalizing problems in this relatively understudied population. Research suggests that African American children, while they are overrepresented in the statistics regarding risk for externalizing behaviors (Sickmund, Sladky, & Kang, 2004), are at risk for internalizing problems (Forehand, Jones, Brody, & Armistead, 2002; Jones, Forehand, & Neary, 2001; Kim et al., 2003) as well. Furthermore, both youth gender and age were examined as potential moderators of youth maladaptive behavior. Research suggests that child gender may moderate the outcomes between social and environmental contexts and child outcomes (e.g. Leadbeater, et al., 1999) and although it appears that both parents and peers contribute to youth adjustment studies to date have focused on a relatively narrow age range (e.g. Kung and Farrell, 2000).

In summary, the findings of this study have the potential to inform both prevention and intervention programs. Several programs are targeted towards parenting (e.g. Positive Parenting Program, Sanders, 1999), others toward promoting child or youth adaptive functioning (e.g. Coping Cat, Kendall, 1990; Youth Coping with Depression, Clarke, Lewinsohn, & Hops, 2001;) and both parent and child relationships and child psychosocial functioning (e.g. FRIENDS, Barrett, Lowry-Webster, & Turner, 2000;) and yet others take a family based approach (e.g. Multisystem Treatment programs, Henggler, Schoenwald, Borduin, Rowland, Cunningham, 1998). Incorporating the understanding that both parents and peers affect youth adjustment into programs which target youth psychosocial functioning may better address maladaptive behaviors. In particular the findings may assist in the development or improvement of programs which target African Americans.

Table 1

Participant Demographics

	Mean (SD) or
Families receiving public assistance	97%
Mother Characteristics	
Mother's age	33.92 years (5.83)
Education	
Less than H.S.	42%
H.S. graduate	38%
Some college or vocational training	20%
Marital status	22% married
Child Characteristics	
Child's age	11.40 years
Child's gender	50% female
Family Characteristics	
Average income	\$3,800
Employment	
At least 32 hours per week	43%
Less than 32 hours per week	19%
Unemployed	38%

Table 2

Assessment 1 Means and Correlations among Demographic and Major Study Variables

	Descriptive Statistics		Correlations							
	Mean	Std. Deviation	1	2	3	4	5	6	7	
1. Child gender	-	-	-							
2. Child age in years	11.34	1.82	0.03	-						
3. Mother age in years	34.00	6.25	-0.05	0.31**	-					
4. Monthly income	1009.53	805.19	-0.02	.056	-0.067	-				
5. Peer relationship quality ^a	48.90	6.50	0.06	0.10	0.03	.06	-			
6. Positive Parenting ^b	1.65	0.30	0.01	-0.07	0.11	-0.03	0.02	-		
7. Externalizing ^c	0.00	1.69	0.01	0.03	-0.09	.05	-0.16*	-0.30**	-	
8. Internalizing ^d	7.61	6.38	-0.03	-0.09	-0.17**	.06	-0.23**	-0.26**	0.41**	

a. Best Friend Questionnaire

b. Sum of standardized scores for Interaction Behavior Questionnaire and Monitoring and Control Questionnaire

c. Child Behavior Checklist, sum of standardized scores for Aggressive Behavior and Delinquency subscales

d. Child Depression Inventory

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

Table 3

Assessment 2 Means and Correlations among Demographics and Major Study Variables

	Descriptive Statistics		Correlations							
	Mean	Std. Deviation	1	2	3	4	5	6	7	
1. Child gender	-	-	-							
2. Child age	12.34	1.82	0.03	-						
3. Mother age in years	35.09	6.39	-0.04	0.30**	-					
4. Monthly income	1100.41	634.92	-.08	-.08	-.22**	-				
5. Peer relationship quality ^a	47.28	5.67	0.14*	0.01	0.04	-.15*	-			
6. Positive Parenting ^b	1.77	0.39	-0.02	-0.11	0.09	.01	-0.01	-		
7. Externalizing ^c	0.00	1.78	-0.01	-0.09	-0.02	-0.06	-0.19**	-0.02	-	
8. Internalizing ^d	7.90	6.42	0.04	0.09	-0.13*	-.03	-0.18**	-0.19**	0.30**	

a. Best Friend Questionnaire

b. Sum of standardized scores for Interaction Behavior Questionnaire and Monitoring and Control Questionnaire

c. Child Behavior Checklist, sum of standardized scores for Aggressive Behavior and Delinquency subscales

d. Child Depression Inventory

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

Table 4 a

Assessment 1 and Assessment 2 Correlations Among Demographics Major Study Variables

	1	2	3	4	5	6	7
1. Child gender	-						
2. Child age at A1	.028	-					
3. Child age at A2	.028	1.00**	-				
4. Mother age in years at A1	-.047	.307**	.307**	-			
5. Mother age in years at A2	-.041	.297**	.297**	.983**	-		
6. Monthly income at A1	-.002	.056	.056	-.067	-.074	-	
7. Monthly income at A2	-.078	-.075	-.075	-.199**	-.219**	.446**	-
8. Peer relationship quality ^a A1	.061	.100	.100	.029	.005	.060	-.068
9. Peer relationship quality ^a A2	.146*	.005	.005	.032	.037	-.151*	-.149*
10. Positive Parenting ^b A1	.014	-.074	-.074	.107	.107	-.034	.040
11. Positive Parenting ^b A2	-.018	-.107	-.107	.090	.094	-.052	.014
12. Externalizing ^c A1	.007	.031	.031	-.086	-.078	.053	.049
13. Externalizing ^c A2	.012	.093	.093	-.020	-.017	.045	.057
14. Internalizing ^d A1	-.026	-.091	-.091	-.173**	-.153*	.060	.011
15. Internalizing ^d A2	-.044	-.009	-.009	-.115	-.127*	.088	-.034

a. Best Friend Questionnaire

b. Sum of standardized scores for Interaction Behavior Questionnaire and Monitoring and Control Questionnaire

c. Child Behavior Checklist, sum of standardized scores for Aggressive Behavior and Delinquency subscales

d. Child Depression Inventory

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

Table 4b

Assessment 1 and Assessment 2 Correlations Among Demographics Major Study Variables

	8	9	10	11	12	13	14
1. Child gender							
2. Child age at A1							
3. Child age at A2							
4. Mother age in years at A1							
5. Mother age in years at A2							
6. Monthly income at A1							
7. Monthly income at A2							
8. Peer relationship quality ^a A1	-						
9. Peer relationship quality ^a A2	.305**	-					
10. Positive Parenting ^b A1	.023	.038	-				
11. Positive Parenting ^b A2	.022	-.005	.640**	-			
12. Externalizing ^c A1	-.160*	-.079	-.299	-.235**	-		
13. Externalizing ^c A2	-.177*	-.192**	-.098	-.015	.279**	-	
14. Internalizing ^d A1	-.230**	-.083	-.258**	-.242**	.409**	.138*	-
15. Internalizing ^d A2	-.201**	-.180**	-.178**	-.188**	.248**	.296**	.347**

a. Best Friend Questionnaire

b. Sum of standardized scores for Interaction Behavior Questionnaire and Monitoring and Control Questionnaire

c. Child Behavior Checklist, sum of standardized scores for Aggressive Behavior and Delinquency subscales

d. Child Depression Inventory

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

Table 5

Results of Hierarchical Regression Analysis for Internalizing Behavior at Assessment 1 (N = 222).

	F	Sig.	ΔR^2	B	t
Block 1	2.74	.04	.03		
Child age in years				-.04	-.58
Child gender				-.02	-.37
Mother's age in years				-.18**	-2.51
Block 2	6.72	.00	.10		
Positive parenting				-.22**	-3.47
Peer relationship				-.22**	-3.42
Block 3	3.73	.00	.02		
Positive Parenting					
Peer relationship				.27	.75
Child age				-.84	-1.69
Gender				.02	.058
Peer relationship					
Child age				.31	.84
Gender				-.51	.61
Block 4	3.29	.00	.01		
Positive parenting x Peer relationship					
Age				-1.11	-.27
Gender				1.21	1.05

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

Table 6

Results of Hierarchical Regression Analysis for Externalizing Behavior at Assessment 1 (N = 222).

	F	Sig.	ΔR^2	B	t
Block 1	0.28	.76	.00		
Child age in years				.04	.59
Child gender				.03	.41
Block 2	6.84	.00	.11		
Positive parenting				-.28**	-4.45
Peer relationship				-.16**	-2.50
Block 3	5.16	.00	.07		
Positive parenting					
Peer relationship				-.14	-.40
Child age				-.96*	-2.01
Gender				-.89**	-2.23
Peer relationship					
Child age				.86**	2.38
Gender				.19	.96
Block 4	4.40	.00	.01		
Positive parenting x Peer relationship					
Child Age				-2.40	-1.30
Gender				-.45	-.40

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

Table 7

Results of Hierarchical Regression Analysis for Internalizing Behavior at Assessment 2 (N = 242).

	F	Sig.	ΔR^2	B	t
Block 1	1.55	.20	.02		
Child age in years				.04	.60
Child gender				-.04	-.64
Mother's age in years				-.14*	-2.09
Block 2	4.01	.00	.06		
Positive parenting				-.18**	-2.77
Peer relationship				-.17**	-2.76
Block 3	2.97	.00	.03		
Positive parenting					
Peer relationship				.04	.11
Child age				-.70	-1.35
Gender				-.40	-1.14
Peer relationship					-2.26
Child age				-1.02*	-.15
Gender				-.03	
Block 4	2.50	.00	.00		
Positive parenting x Peer relationship					
Child age				1.58	.71
Gender				.03	.03

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

Table 8

Results of Hierarchical Regression Analysis for Externalizing Behavior at Assessment 2 (N = 243).

	F	Sig.	ΔR^2	B	t
Block 1	1.10	.33	.01		
Child age in years				.10	1.48
Child gender				.01	.10
Block 2	9.27	.02	.03		
Positive parenting				-.01	-.16
Peer relationship				-.20**	-3.10
Block 3	3.49	.00	.07		
Positive parenting					
Peer relationship				-1.00**	-2.91
Child age				-.03	-.95
Gender				-.21	-.61
Peer relationship					
Child age				.23	.52
Gender				-.60**	-3.08
Block 4	3.01	.00	.01		
Positive parenting x peer relationship					
Child age				-1.96	-.89
Gender				-.93	-.86

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

Table 9

Results of Hierarchical Regression Analysis for Change in Internalizing Behavior from Assessment 1 to Assessment 2 (N = 200).

	F	Sig.	ΔR^2	B	t
Block 1	6.96	.00	.12		
Child age in years				.06	.92
Child gender				-.04	-.53
Mother's age in years				-.14*	-2.02
Internalizing				.31**	4.57
Block 2	6.29	.00	.04		
Positive parenting				-.12	-1.81
Peer relationship				-.16	-2.44
Block 3	3.76	.00	.02		
Positive Parenting					
Peer relationship				.57	1.52
Child age				-.50	-1.00
Gender				.06	.14
Peer relationship					
Child age				.17	.42
Gender				-.17	-.81
Block 4	3.36	.00	.01		
Positive parenting x Peer relationship					
Age				1.69	.74
Gender				1.30	1.06

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

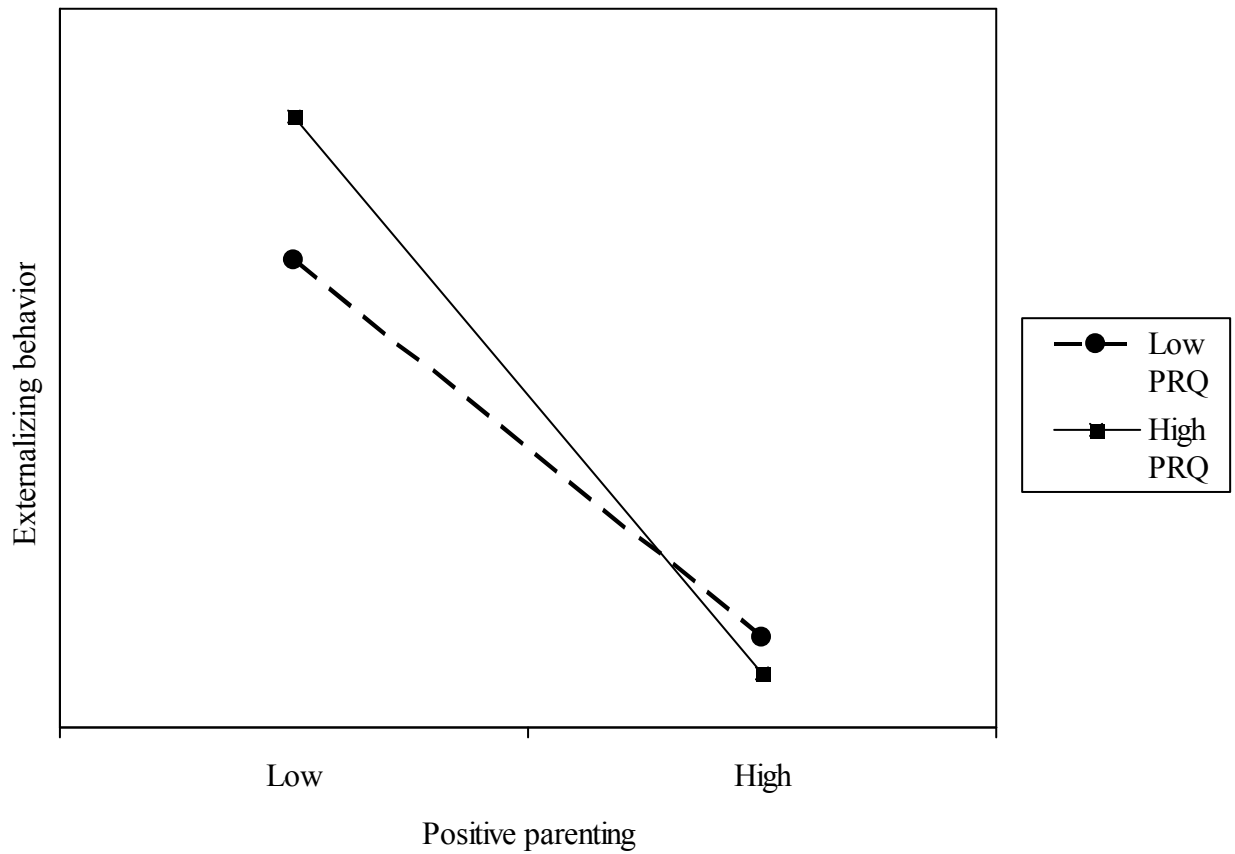
Table 10

Results of Hierarchical Regression Analysis for Change in Externalizing Behavior from Assessment 1 to Assessment 2 (N = 200).

	F	Sig.	ΔR^2	B	t
Block 1	6.01	.00	.08		
Child age in years				.08	1.23
Child gender				.01	.07
Externalizing				.27**	4.01
Block 2	4.71	.00	.02		
Positive parenting				-.04	-.53
Peer relationship				-.16*	-2.24
Block 3	2.62	.00	.01		
Positive Parenting					
Peer relationship				-.53	-1.38
Child age				-.00	-.00
Gender				.43	1.00
Peer relationship					
Child age				-.11	-.26
Gender				-.14	-.64
Block 4	2.51	.00	.01		
Positive parenting x Peer relationship					
Age				2.71	1.16
Gender				1.50	1.19

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

Figure 1. Assessment 2: Two-way interaction plot of positive parenting and peer relationship quality for externalizing behavior. Low peer relationship quality (PRQ): $t = -2.71, p < .01$, high peer relationship quality (PRQ): $t = -2.76, p < .01$.



Appendix 1

Brief Demographic Assessment

1. How much schooling have you completed?	1 = less than high school	_____
	2 = H. S. or GED	_____
	3 = H.S. + Voc. ed	_____
	4 = Some college	_____
2. What is your marital status?	1 = Never married	_____
	2 = Married	_____
	3 = Common law	_____
	4 = Separated	_____
	5 = Divorced	_____
	6 = Widowed	_____
	7 = Engaged	_____
3. How much money do you live on each month?		_____
4. Think back over the past year and tell me how much difficulty you had with paying your bills. Would you say you had:		
	4 = A great deal of difficulty	_____
	3 = Quit a bit of difficulty	_____
	2 = A little bit of difficulty	_____
	1 = No difficulty at all	_____
5. Are you employed outside of the home?		
	Yes = 1	_____
	No = 0	_____
a. If yes,		
	2 = Part time (less than 32 hours/week)	_____
	1 = Full time	_____
6. How many people live in your household?		_____
7. Of those, how many are under age 18?		_____

Appendix II

Best Friend Questionnaire

The next questions I am going to ask you are about friendships. You can help me by answering all of the questions as honestly as possible. Please think of the person who you feel is your closest friend. Please answer the next questions about this friend. What is the first name of your best friend? _____ Tell me the answer which best describes how you feel about things with this closest friend.

We will use this scale for the first questions:

1 = Definitely NOT True 2 = Mostly NOT True 3 = Sort of True 4 = Mostly True
5 = Very True

1. Your friend trusts your judgment.	_____
2. Your friend tells you you're good at things.	_____
3. Your friend makes you feel good about your ideas.	_____
4. Your friend helps you feel better about yourself when you are not doing well in something like sports or a class.	_____
5. If your friend knows that you are upset, s/he tries to help you.	_____

Please use this scale for these next questions:

1 = Never 2 = Not Often 3 = Sometimes 4 = Often 5 = All the time

6. How often do you and your friend get made at each other?	_____
7. How often do you and your friend argue?	_____
8. How often do you and your friend have a hard time getting along with each other?	_____
9. How often does your friend act like s/he does not like you?	_____
10. How often does your friend criticize or say bad things about you?	_____
11. How often does your friend do something to hurt your feeling on purpose?	_____

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