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## EMPRICAL ARTICLES

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### The Psychosocial Adjustment of African American Youth from Single Mother Homes: The Relative Contribution of Parents and Peers

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*This study examined the relative roles of parents and peers in the psychosocial adjustment of African American youth (7–15 years old) from single mother homes (N = 242). Main effects of both positive parenting and peer relationship quality were found for youth depressive symptoms. In addition, a main effect of peer relationship quality and an interaction of Positive Parenting × Peer Relationship Quality emerged for youth externalizing symptoms. When mothers engaged in higher levels of positive parenting behavior, peer relationship quality was not associated with youth externalizing symptomatology. When mothers engaged in lower levels of positive parenting behavior, however, higher peer relationship quality was associated with greater youth externalizing symptomatology. Clinical implications and future research directions are discussed.*

As children progress from childhood to adolescence it is considered developmentally appropriate for youth to establish increasing levels of autonomy (Pavlidis & McCauley, 2001). Accordingly, it is during this time that social forces outside the family, particularly peers, gain influence, with some work suggesting that peers become more influential than parents as children age (e.g., Criss, Pettit, Bates, Dodge, & Lapp, 2002). Peer behaviors, as well as the quality of the relationships that youth have with their peers, have been shown to be important correlates of a wide

range of adolescent outcomes, including psychological, social, and academic functioning (e.g., Barrera, Biglan, Ary, & Li, 2001; Kung & Farrell, 2000; Paschall, Ringwalt, & Flewelling, 2003). There is some inconsistency in the literature, however, regarding whether it is youth who have higher or lower quality relationships with their peers who experience more favorable outcomes. Although some research suggests that higher quality friendships are associated with more positive youth outcomes (e.g., Bolger, Patterson, & Kupersmidt, 1998; Gauze, Bukowski, Aquan-Assee, & Sippola, 1996), other findings, particularly with respect to externalizing behaviors, suggest that higher quality peer relationships may lead to riskier outcomes for youth (Hussong, 2000; Nezelek, Pilkington, & Bilbro, 1994; Windle, 1994). It is important to note that youth may be more likely to be influenced by the behavior, *both* the positive and the negative, of the peers with whom they have best relationships.

The findings of the aforementioned research could be interpreted as supportive of the notion that relationships with peers become more important than relationships with parents as children progress in age; however, few studies of peer relationship quality examine the role of peer relationships within the context of the family (e.g., see Rubin et al., 2004, for a notable exception).

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Although some research suggests that a more "authoritarian" or "harsh" parenting style may be less detrimental among African American than European American youth (e.g., Deater-Deckard & Dodge, 1997; Deater-Deckard, Dodge, Bates, & Pettit, 1996), the preponderance of empirical evidence suggests that a parenting style characterized by the combination of both warmth/support and monitoring/control is associated with the most optimal outcomes for children regardless of ethnic/racial background or socioeconomic status (e.g., Amato & Fowler, 2002; McLoyd, 1998; Simons et al., 2002). Whether labeled as an "authoritative parenting style," as is typically done in the literature on European American families (e.g., Fletcher & Jefferies, 1999), or as a "positive parenting style," which it is sometimes referred to in the literature on African American families (e.g., Jones, Forehand, Brody, & Armistead, 2002), this combination of parenting behaviors affects children's adjustment directly, as well as indirectly through the influence of parenting on children's selection of and affiliation with peers (e.g., Barrera et al., 2001; Dishion, Patterson, Stoolmiller, & Skinner, 1991).

The majority of work that has examined both the influence of parental and peer relationships on youth adjustment has examined the impact of parenting on children's selection and affiliation with deviant peers and subsequent youth adjustment (e.g., Chassin & Barrera, 1993; Dishion et al., 1991; Fuligni & Eccles, 1993). That is, lower levels of positive parenting behaviors increase children's risk for affiliation with deviant peers and, in turn, engagement in risky behaviors. In addition to the selection of peers, however, a small but growing body of theoretical and empirical work suggests that parenting style may also qualify the influence of peer relationships on youth adjustment (see Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Harris, 1998, for reviews). That is, although peer relationships may be less influential in the context of higher levels of positive parenting, children's relationships with their peers may have greater influence on their behavior when parenting is compromised or inadequate (e.g., Galambos, Barker, & Almeida, 2003; Mounts & Steinberg, 1995; Wood, Read, Mitchell, & Brand, 2004). Similar to the literature on peer influence more broadly, there is some suggestion that in the context of compromised or inadequate parenting, youth who have a higher quality relationship with a peer may actually evidence worse, rather than better, outcomes (Helsen, Volleburgh, & Meeus, 2000; Scholte, van Lieshout, & van Aken, 2001; Young, Berenson, Cohen, & Garcia, 2005). Accordingly, some suggest that youth may be more likely to turn to peers in the context of compromised or

inadequate parenting and, if the quality of the relationship with the peer is high, then youth may be more susceptible to peer influence, both positive and negative (e.g., Young et al., 2005).

Albeit an important contribution to the literature, the generalizability of the aforementioned research, which was conducted primarily with European American and two-parent families to African American youth, is questionable. The most recent census data suggest that more than half of African American youth (56%), in contrast to 20% of European American youth, are being raised by single parents, the majority (90%) of whom are single mothers (U.S. Census Bureau, 2004). The stressors associated with single motherhood and its associated socioeconomic disadvantages are linked with more compromised parenting behaviors and, in turn, increased psychosocial adjustment problems among youth from single-mother homes (see Murry, Bynum, Brody, Willert, & Stephens, 2001, for a review). Moreover, African American single mother families are also more likely to live in relatively high-risk neighborhoods, often characterized by the presence of gangs, community violence, and drug use and dealing, each of which has direct effects on youth adjustment, as well as indirect effects through affiliation with deviant peers (Murry et al., 2001).

It is important to note that only a few studies have considered the interaction of parents and peers in the psychosocial adjustment of African American youth, and these studies have focused exclusively on externalizing problems—specifically, substance use (e.g., Farrell & White, 1998; Kung & Farrell, 2000). For example, Kung and Farrell reported that peer pressure had a greater impact on adolescent (12–14 years old) drug use in their predominately low-income, African American (90%) sample among youth whose parents engaged in lower levels of positive parenting behavior than among youth whose parents engaged in higher levels. Although this work provides important insights into predictors of substance use among African American youth, who are overrepresented in the statistics reflecting the prevalence of externalizing and other risky behaviors (e.g., Sickmund, Sladky, & Kang, 2004), less attention has been devoted to examining the relative contributions of parents and peers to depressive symptoms in this group. Although the focus of much less research attention than externalizing symptoms, evidence continues to build which suggests that low-income, African American youth are at risk for depressive symptoms as well (e.g., Forehand, Jones, Brody, & Armistead, 2002; Jones, Forehand, & Neary, 2001; Kim, Ge, Brody, Conger, & Gibbons, 2003). It is important

to note that parenting characterized by lower levels of warmth/support and inadequate monitoring/control may undermine a child's sense of self-efficacy and self-worth, as well as trust and security within the parental relationship, increasing the child's vulnerability to feelings of depression (e.g., Burge & Hammen, 1991; Ge, Conger, Lorenz, & Simons, 1994; Jones et al., 2002). Although relationships with peers may afford such children with an alternative source of support, even positive peer relationships may not fully compensate for parental warmth and involvement. Moreover, similar to the theories regarding externalizing symptoms, positive relationships with peers in the context of lower levels of positive parenting may increase the likelihood that children are influenced by both positive and negative aspects of their peer relations, including their peer's negative affect and mood. Finally, the aforementioned research focuses exclusively on the risky behaviors of peers—in particular, substance use—and subsequent substance use among youth. This prior work does not consider peer relationship quality, however—another important source of peer influence (e.g., Parker & Asher, 1993; Rubin et al., 2004)—or youth psychosocial outcomes more generally.

Building on prior research (e.g., Farrell & White, 1998; Kung & Farrell, 2000), our study examined the relative contribution of relationships with both parents and peers to two domains of psychosocial adjustment among African American youth from single-mother homes: depressive and externalizing symptomatology. It was hypothesized that although both positive parenting and peer relationship quality would be uniquely associated with the youth psychosocial adjustment, these main effects would be qualified by the interaction of the two relationship variables. Based on prior literature in this area, youth whose mothers engaged in higher levels of positive parenting were expected to be less vulnerable to the influence of the quality of their peer relationships. Alternatively, youth whose mothers engaged in lower levels of positive parenting were expected to be more vulnerable to the influence of the quality of their peer relationship; however, the direction of the effect was considered exploratory due to inconsistencies in theory and prior research. That is, it may be expected that in the context of lower levels of positive parenting, youth whose relationships with their peers are also poor may be even more likely to evidence negative outcomes. Alternatively, the aforementioned findings in work by Young et al. (2005) and others (Helsen et al., 2000; Scholte et al., 2001) suggest that youth who have higher quality peer relationships in the context of lower levels of positive parenting may in fact be at greatest risk.

## Method

### Overview

Our study represents secondary analyses of data from the second wave of a two-assessment study examining the psychosocial functioning of African American single-mother-headed families ( $N = 277$ ) with a child in the 7- to 15-year-old age range ( $M = 11.34$  years,  $SD = 1.82$ ; 50% girls; (Forehand et al., 2000). Analyses for our study were limited to the second assessment of the larger study, at which time the Best Friend Questionnaire (BFQ; Brody, 1997), the measure of peer relationship quality for our study, was administered to the entire sample of youth. Accordingly, the age range of youth at the second assessment was 8 to 16 years ( $M = 12.34$  years,  $SD = 1.82$ ), a range reflective of youth who collectively span middle childhood to middle adolescence.

### Participants

Of the 277 families who participated in the first assessment, 242 mother ( $M = 34.92$  years) and child dyads completed the second assessment and had complete data on the variables of interest for our study. The primary reason for participant attrition from the first to the second assessment was refusal to participate due to a lack of continued interest in the study. Other reasons for dropout included family relocation, death of participating parent, and parental incarceration. The participants and dropouts did not differ on demographic variables (mother's age & education, child age & gender, family income) or study variables.

Consistent with the communities from which the families in the larger study were drawn, families had a per capita income of \$3,800 or less, which the Census Bureau defines as below poverty level (U.S. Census Bureau, 2004). Accordingly, 97% of participating families received public assistance. Of the mothers in the sample, 42% had less than a high school education, 38% received a high school diploma or GED, and 20% had some college or trade school education. Forty-three percent of mothers were employed for at least 32 hr/week, 19% were employed for less than 32 hr/week, and 38% were unemployed.

**Recruitment.** Families were recruited from primarily lower income metropolitan and nonmetropolitan counties in the southeastern United States. Recruitment was targeted to communities in which 25% or more of the population was African American to ensure that a viable African

American community existed in the county. Families were recruited through community agencies (e.g., schools) and leaders. Each community contact was given the inclusion criteria (African American single-mother family with a child 7 to 15 years of age); then community contacts gave project staff the names of interested families who were then contacted regarding the project. All study and recruitment procedures were approved by the Institutional Review Boards at Louisiana State University Medical School, Tulane University, and the University of Georgia.

### Procedure

Although the second assessment is the focus of this study, procedures for the first and second assessments were identical. Mother-child dyads participated in two interviews at each assessment: (a) the sociodemographic interview, during which assent and consent for participation was obtained, as well as the family's sociodemographic information, and then (b) the psychosocial interview, which followed within 2 weeks of the sociodemographic interview, during which all major study variables presented in our analyses were obtained. Due to concerns regarding literacy for the mothers as well as the comprehension of some of the measures for the younger children in the study, self-report questionnaires were administered in an interview format to both mothers and youth, although each was interviewed privately by a separate interviewer to ensure confidentiality. 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).

Approximately 15 months after the first assessment, mothers were contacted and invited to participate with their child in a second assessment. Families were compensated \$50 for their participation in each data collection session.

### 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, European American families. This issue was resolved through the formation of focus groups that were composed of African American community members in the states and counties from which the sample was drawn. These groups

included 60 individuals who were selected to participate because they were demographically representative of the study population (i.e., low-income, African American, single parents).

The focus groups evaluated each instrument to determine whether it was appropriate for use with African American families. Group leaders presented each instrument one at a time and then described its purpose. Focus groups were asked to review each measure and indicate in a group discussion whether they considered the instrument to be a valid assessment for African American families. The focus groups agreed that all the instruments were appropriate for the study population. The groups then reviewed each item on the scale and suggested wording changes as well as deletion of items that they perceived to be unclear or irrelevant to families and children in their communities. Focus group suggestions were documented and reviewed by project staff with extensive experience working with African American families who made those wording modifications that were believed to significantly increase the cultural relevance of the scales without compromising their overall psychometrics.

It is important to note that no items were deleted from the measures examined in our study; however, a confirmatory factor analysis was performed for each measure that has not typically been used with a similar sample to ensure that each scale was comprised of a coherent set of items for this study's population.

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

**Positive parenting.** Two aspects of parenting, the proposed independent variable in our study, were assessed via mother report: (a) monitoring and (b) maternal warmth and support. The Monitoring and Control Questionnaire was used to assess the extent to which a mother monitored child behavior (Kotchick et al., 1997). The Monitoring and Control Questionnaire 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?” For our sample, a factor analysis revealed that all 17 items loaded at .40 or above on one factor, and the alpha coefficient was .91.

The short form of the Interaction Behavior Questionnaire (Prinz, Foster, Kent, & O’Leary, 1979) 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 Interaction Behavior Questionnaire 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 higher; consequently, only these 14 items were included in the measure for data analysis. The alpha coefficient for these 14 items was .85.

Consistent with prior research (e.g., Jones et al., 2002), the two parenting measures, which were correlated ( $r = .28, p < .01$ ), were standardized and averaged to form the parenting construct. Higher scores indicated greater mother-reported positive parenting.

**Peer relationship quality.** Peer relationship quality was assessed using youth report on the BFQ (Brody, 1997). Items on the BFQ are rated on a 5-point Likert scale ranging from 1 (*definitely not true*) to 5 (*very true*). Youth were asked to respond to the items while thinking about their relationship with their best friend. Sample items on the BFQ include “Your friend trusts your judgment,” “Your friend makes you feel good about your ideas,” and “Your friend tells you you’re good at things.” Given that this instrument was developed for use in a previous study, it was subjected to exploratory factor analysis. The number of factors was determined by examining the eigenvalues 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 for our sample. Higher scores indicated better youth-reported peer relationship quality.

**Youth psychosocial adjustment.** Two domains of youth psychosocial adjustment, the proposed dependent variables, were assessed: youth-reported aggressive and delinquent behaviors and youth-reported depressive symptoms.

**Externalizing symptoms.** Youth-reported aggressive and delinquent behaviors were examined using the Aggressive Behavior and Delinquent Behavior subscales of the Youth Self-Report (YSR) form of the Child Behavior Checklist (Achenbach, 1991). Sample items on the Aggressive Behavior subscale, which are endorsed on a 3-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 symptoms typically displayed by children in the age range included in this study, has acceptable reliability and validity data (Achenbach, 1991). However, given that it has not been standardized with children as young as some of those included in this investigation, a factor analysis was conducted. All 19 items on the Aggression subscale loaded at .40 or greater and were retained. The alpha coefficient for this subscale with our sample was .87.

The Delinquent Behavior subscale of the YSR (Achenbach, 1991) was also used. The subscale items, which are also endorsed on a 3-point scale of 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.” Again, because this version of the YSR was not standardized with those as young as some children in our sample, a factor analysis was conducted. All 11 items of the Delinquent Behavior subscale loaded at .40 or greater and were retained, yielding an alpha coefficient of .72.

Scores on the Aggression and Delinquent Behavior scales were standardized and averaged to form an externalizing symptoms construct. Higher scores indicated greater youth-reported aggressive and delinquent behaviors.

**Depressive symptoms.** Depressive symptoms were examined using the youth-reported Child Depression Inventory (CDI; Kovacs, 1981). 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 youth ranging from 7 to 17 years old. All items

**Table 1.** Descriptive Statistics and Correlations Among Major Study Variables

| Variables                              | <i>M</i> | <i>SD</i> | Correlations |        |
|--|----------|-----------|--------------|--------|
|  |          |           | 1            | 2      |
| 1. Peer Relationship Quality           | 47.24    | 5.67      | —            | —      |
| 2. Positive Parenting <sup>a</sup>     | 1.77     | 0.39      | —            | —      |
| 3. Externalizing Symptoms <sup>b</sup> | 0.01     | 1.78      | -.19**       | -.02   |
| 4. Depressive Symptoms                 | 7.90     | 6.42      | -.18**       | -.19** |

<sup>a</sup>Standardized and summed scores for the Interaction Behavior Questionnaire and Monitoring and Control Questionnaire.

<sup>b</sup>Standardized and summed scores for the two subscales of the Youth Self-Report.

\*\* $p < .001$ .

loaded at .40 or greater, yielding an alpha coefficient for our sample of .76. Higher scores on the CDI indicate greater youth-reported symptoms.

## Results

### Preliminary Analyses

Correlations among demographic variables (e.g., maternal and child age, child gender, family income) and the outcomes of interest were examined. Maternal age was significantly associated with youth depressive symptoms ( $r = -.14$ ,  $p < .01$ ) but not youth externalizing symptoms; therefore, mother's age was statistically controlled in the analyses predicting only youth depressive symptoms. Although none of the other demographic variables were significantly associated with the outcomes of interest, child age was also controlled in the primary analyses given the relatively broad age range of the sample.

Descriptive statistics for each of the major study variables, as well as correlations among major study variables, are presented in Table 1. Consistent with the proposed hypotheses, peer relationship quality was significantly and negatively correlated with both youth depressive ( $r = -.17$ ,  $p < .01$ ) and externalizing ( $r = -.19$ ,  $p < .01$ ) symptoms; however, positive parenting was only associated with youth depressive symptoms ( $r = -.18$ ,  $p < .01$ ). Youth who had better relationships with peers evidenced both fewer depressive symptoms, as well as aggressive and delinquent behaviors, whereas a better relationship with parents was associated with only fewer depressive symptoms.

### Primary Analyses

Correlation analyses were followed by hierarchical regression analyses to test the main and interactive

roles of positive parenting and peer relationship quality.<sup>1</sup> As previously mentioned, child age was entered in Block 1 for both outcome variables to account for the relatively broad age range, whereas maternal age was entered in Block 1 for only the analysis with depressive symptoms as the outcome variable; the main effects of positive parenting and peer relationship quality were entered in Block 2; and all possible two-way interactions, including the proposed two-way interaction of Positive Parenting  $\times$  Peer Relationship Quality, were entered in Block 3. The same order of entry was followed for analyses predicting youth externalizing symptoms, except maternal age was not included in the model as a covariate. All continuous variables were centered prior to creating interaction terms.

As demonstrated in Table 2, findings of the hierarchical regression analyses indicated that peer relationship quality was associated with both depressive ( $\beta = -.18$ ,  $p < .01$ ) and externalizing ( $\beta = -.19$ ,  $p < .01$ ) symptoms. Youth who reported higher quality relationships with a peer evidenced fewer adjustment difficulties in both domains. Consistent with the findings from the correlation analysis, greater levels of positive parenting were associated with lower levels of child depressive ( $\beta = -.17$ ,  $p < .01$ ) but not externalizing ( $\beta = -.01$ , *ns*) problems. Analyses also yielded a two-way interaction of Positive Parenting  $\times$  Peer Relationship Quality for youth externalizing ( $\beta = -.97$ ,  $p < .01$ ) but not depressive ( $\beta = -.01$ , *ns*) symptoms.

The significant two-way interaction was explicited in accordance with the recommendations of Aiken and West (1991) using Preacher, Curran,

<sup>1</sup>The analyses were repeated to examine whether the main effects of positive parenting or peer relationship quality, or the interaction of Positive Parenting  $\times$  Peer Relationship Quality, were moderated by child age or gender. None of the interactions including child age or gender were significant and, therefore, are not presented here. Analyses are available from Deborah Jones upon request.

**Table 2.** Hierarchical Regression Analysis Predicting Depressive and Externalizing Symptoms ( $n = 242$ )

|                                 | <i>F</i> | $\Delta R^2$ | <i>B</i> | <i>t</i> |
|---------------------------------|----------|--------------|----------|----------|
| <b>Depressive Symptoms</b>      |          |              |          |          |
| 1. Block 1: Demographics        | 2.13     | .01          |          |          |
| Mother's age                    |          |              | -.14     | -2.06*   |
| Child age                       |          |              | .04      | 0.59     |
| 2. Block 2: Main Effects        | 5.02*    | .05          |          |          |
| Positive parenting (PP)         |          |              | -.17     | -2.77**  |
| Peer relationship quality (PRQ) |          |              | -.18     | -2.84**  |
| 3. Block 3: Interaction         | 4.00*    | .00          |          |          |
| PP $\times$ PRQ                 |          |              | -.01     | -0.04    |
| <b>Externalizing Symptoms</b>   |          |              |          |          |
| 1. Block 1: Demographics        | 2.21     | .005         |          |          |
| Child's age                     |          |              | .10      | 1.49     |
| 2. Block 2: Main Effects        | 3.88*    | .03          |          |          |
| Positive parenting (PP)         |          |              | -.01     | -0.18    |
| Peer relationship quality (PRQ) |          |              | -.19     | -3.06**  |
| 3. Block 3: Interaction         | 5.14**   | .03          |          |          |
| PP $\times$ PRQ                 |          |              | -.97     | -2.92*   |

\* $p < .05$ ; \*\* $p < .01$ .

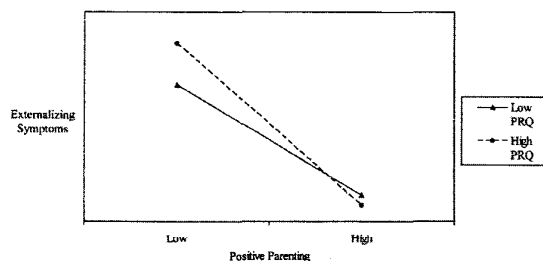
and Bauer's (2006) Web-based calculator. As demonstrated in Figure 1, under conditions of higher levels of positive parenting, peer relationship quality was not associated with youth externalizing symptoms. In contrast, under conditions of lower levels of positive parenting, youth who reported higher quality relationships with their peers evidenced *greater* externalizing symptoms.

### Discussion

This study examined the relative contribution of parents and peers to both depressive and externalizing symptoms among African American youth from single-mother homes. Findings partially supported the proposed hypotheses. Main effects of both positive parenting and peer relationship quality were found for youth depressive symptoms. In

addition, a main effect of peer relationship quality and an interaction of Positive Parenting  $\times$  Peer Relationship Quality emerged for youth externalizing symptoms. When mothers engaged in higher levels of positive parenting behavior, peer relationship quality was not associated with youth externalizing symptoms. However, when mothers engaged in lower levels of positive parenting behavior higher peer relationship quality was associated with greater youth externalizing symptoms.

The quality of the relationship that youth had with their peers was associated with both depressive symptoms, as well as aggressive and delinquent behaviors. Of importance, relationships with peers have been shown to become increasingly important as children grow and develop (e.g., Paschall et al., 2003; Pavlidis & McCauley, 2001). In our study, youth who had more positive relationships with their peers reported lower levels of depressive symptoms and reported engaging in lower levels of both aggressive and delinquent behaviors. Although beyond the scope of this study, higher quality peer relationships may be reflective of youth who are appropriately and successfully establishing some level of individuation from their parents and, in turn, are less vulnerable to the feelings of depression and acting out behaviors that often accompany struggles with this process (e.g., Allen, Porter, & McFarland, 2006; Connell & Dishion, 2006). Similarly, youth who have more positive relationships with their peers may feel a greater sense of social support and belonging, which may decrease their vulnerability to depressive symptoms associated with family or other stressors that they encounter as well as decrease



**Figure 1.** Two-way interaction plot of Positive Parenting  $\times$  Peer Relationship Quality for externalizing symptoms. Low peer relationship quality (PRQ),  $t = -2.71$ ,  $p < .01$ ; high PRQ,  $t = -2.76$ ,  $p < .01$ .

the likelihood of engaging in aggressive and delinquent behaviors as a way of coping with depressive symptoms (e.g., Gauze et al., 1996; Slavin & Rainer, 1990). It is important to note, however, the association between peer relationship quality and aggressive and delinquent behaviors should be interpreted with caution given the obtained two-way interaction of parents and peers, which is discussed in detail next.

In addition to the role of peer relationship quality, youth whose mothers engaged in higher levels of positive parenting reported fewer depressive symptoms. Although some work suggests that a harsh parenting style may be less detrimental among African American than European American youth (e.g., Deater-Deckard & Dodge, 1997; Deater-Deckard et al., 1996), the predominance of literature suggests that a parenting style characterized by a balance of both warmth/support and monitoring/control is ideal for children's optimal growth and development regardless of race or income level (e.g., Amato & Fowler, 2002; Fletcher & Jefferies, 1999; Jones et al., 2002). That is, children raised in homes characterized by higher levels of positive parenting experience more trust and security in the parent-child relationship as well as higher levels of self-worth and self-reliance, which in turn are associated with more favorable outcomes.

Contrary to the proposed hypothesis, positive parenting was not uniquely associated with youth externalizing symptoms. As highlighted elsewhere, the contribution of positive parenting to externalizing symptoms may change as children affiliate more with peers (Fulgini & Eccles, 1993). As children grow and develop, they are typically afforded increasing levels of independence and, in turn, increased and often unsupervised contact with peers. Although it is developmentally appropriate for youth to turn increasingly to their peers, regardless of sociodemographics, the compromises in parenting and the parent-child relationship that occur with older relative to younger youth may be particularly problematic for low income and single mother families (Dumas & Wahler, 1983). Once their children progress beyond early childhood, low-income and single-mother parents may through necessity shift their attention increasingly from the parent-child relationship and parenting to securing resources for the family. In turn, youth from low-income, single-parent homes may be more likely to turn to and invest in peer relationships when this occurs, and parental influence on youth may be further compromised. It is important to note that the lack of an association between positive parenting behavior and youth aggressive and delinquent behaviors should be interpreted

cautiously, however, given the obtained significant two-way interaction between the two variables.

As previously noted, our interpretation of the main effects alone would suggest that positive parenting is not associated with youth externalizing symptoms in our sample and that higher quality peer relationships are negatively associated with externalizing symptoms. However, the obtained two-way interaction of Positive Parenting  $\times$  Peer Relationship Quality suggests that *both* parents and peers play a role in youth aggressive and delinquent behavior and that high-quality peer relationships may, under certain circumstances, even be risky. Specifically, under conditions of higher levels of positive parenting, youth evidenced lower levels of adjustment difficulties relative to youth whose parents engaged in lower levels, regardless of the quality of the relationship that the youth had with a peer. However, under conditions of lower levels of positive parenting, youth who reported higher quality relationships with a peer evidenced *relatively greater* externalizing symptoms than youth who reported lower quality relationships with a peer. As previously discussed, higher quality peer relationships have been associated with worse youth outcomes in several prior studies (Hussong, 2000; Nezlek, Pilkington, & Bilbro, 1994; Windle, 1994). Although beyond the scope of this study, one possible explanation for the pattern of findings in this study is that youth may turn to peer support as an alternative to family support when parenting is compromised. Although peers may be available to the adolescent and willing to provide support, the type of support that they provide may not function as a replacement for family support or even be beneficial to the adolescent, particularly if support is provided for acting out and rule-breaking behavior or if the support involves sharing in deviant behaviors to cope (e.g., drug and alcohol use, etc.).

Of course, the findings of our study must be interpreted in the context of the study's limitations. First, the study relied entirely on self-report measures to assess both positive parenting and the quality of peer relationships. Future studies that include both self-report and observational measures of these constructs will provide a more rigorous test of the proposed hypotheses. Also related to measurement, our procedures for enhancing the cultural relevance of our measures is not a substitute for the development and use of measures that have been standardized with African American families. Future research should give even greater attention to the use of measures that have been developed and standardized with the population of interest. Third, our study assessed peer relationship quality but not peer behavior.

A more thorough understanding of the mechanisms by which higher levels of peer relationship quality may contribute to poorer youth outcomes in the context of lower levels of positive parenting (e.g., greater affiliation with deviant peers) is necessary to better inform prevention and intervention efforts. Fourth, the cross-sectional design of this study examined children whose ages collectively spanned middle childhood to middle adolescence. Greater confidence in the obtained interaction of Positive Parenting  $\times$  Peer Relationship Quality will be attained if the results are replicated in a future longitudinal study that follows children as they transition across these developmental periods. Although we statistically controlled for age in our sample and age did not further moderate the interaction of positive parenting and peer relationship quality, future studies should continue to examine the role of age in these changing relations. Fifth, building on past research in the area, our study examined two domains of youth adjustment problems: depressive and externalizing symptoms. Future research should not only examine a broader range of internalizing problems, including anxiety and physical symptoms, but also give greater attention to youth adaptive outcomes as well. Finally, this study examined a relatively low-income community sample of African American single-mother families and the strength of associations among the variables of interest were relatively modest; thus, caution is warranted in generalizing the findings to families from other income levels, other ethnic/racial groups, or clinical samples.

Despite its limitations, this study also has several strengths. First, this study focused on African American youth, a relatively understudied group in both the family and peer literature. Second, this study extended the literature on the relative contribution of parents and peers to youth adjustment from a relatively limited focus on European American, two-parent homes to African American youth from single-mother homes. Finally, this study contributes to a growing literature that highlights the importance of examining both depressive and externalizing symptoms in this relatively understudied population, which tends to more exclusively be the focus of externalizing disorder and risky-behavior research (Sickmund et al., 2004).

In summary, the findings of this study suggest that both parents and peers are associated with the depressive and externalizing symptoms of African American youth. It is important to note that research that examines only one source of influence or research that examines main but not interactive effects of the two variables may underestimate the continued role of parents in the

adjustment of older children. Of course, additional research is necessary before treatment recommendations based on our findings can be made. However, the findings begin to suggest that prevention and intervention programs that narrowly target either parents or peers may be overlooking important interactive influences on youth adjustment.

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