Externalizing Behavior in African American Youth from Single Mother Homes: The Relative Role of Parents and Peers

Jessica A. Cuellar

A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of the Masters in the Department of Psychology (Clinical).

Chapel Hill 2010

Approved by:

Mimi Chapman, Ph.D.

Deborah J. Jones, Ph.D.

Mitchell J. Prinstein, Ph.D.

Abstract

Jessica A. Cuellar: Externalizing Behavior in African American Youth from Single Mother Homes:The Relative Role of Parents and Peers (Under the direction of Deborah J. Jones, Ph.D.)

Parents and peers have been identified as important contexts in which to study youth externalizing behavior. African American youth, particularly those from single mother homes, are overrepresented in statistics on aggression and delinquency; yet, relatively few studies have examined the relative influence of *both* parents and peers on externalizing behavior in this at-risk group. The current study examines the contributions of both positive parenting and peer relationships to externalizing behavior in a sample of African American youth from single mother homes (n = 184). Main effects were found for positive parenting and peer deviant behavior, but not for peer relationship quality. The proposed 2- and 3-way interactions were not significant. Peer deviant behavior and peer relationship quality partially mediated the association between positive parenting and youth externalizing behavior. Findings will inform a more theoretically rich contextual model for better understanding of externalizing behavior in African American youth from single mother

List of Tables

Table

1.	Demographic and Descriptive Characteristics of the Sample46
2.	Correlations Among Demographic and Major Study Variables47
3.	Hierarchical Regression Analyses Predicting Youth Externalizing Behaviors

Table of Contents

List of Tables	iii
Introduction	1
Method	11
Results	16
Discussion	20
Appendices	
References	

Introduction

African American adolescents, compared to adolescents from other ethnic groups in the United States, are overrepresented in statistics on externalizing behavior (Office of Juvenile Justice and Delinquency Prevention, 2005). It has been established that particular factors associated with being African American contribute to the increased rate of externalizing behavior in this group. Most notably, over half (51%) of African American youth are being raised in single mother families (US Census, 2008) in which the competing demands of work and family have been shown to compromise parenting (McLoyd, 1990). African American youth from single mother homes are also more likely to confront economic hardship and, as a consequence, are more likely to reside in neighborhoods where they are exposed to higher levels of crime, violence, and deviant peers, increasing their vulnerability for externalizing problems (McLoyd, 1990; Murry, Bynum, Brody, Willert, & Stephens, 2001). Therefore, understanding correlates of externalizing behavior among African American youth from single mother homes has both clinical and public health importance.

Ecological systems theory (Bronfenbrenner, 1979; Garcia Coll & Garrido, 2000; Steinberg, Darling, & Fletcher, 1995) highlights that children must be understood in the multiple contexts in which they live and interact and the family has been identified as a primary context within which to study youth (see Cummings, Davies, & Campbell, 2002 for a review). Most researchers agree that an authoritative or positive parenting style, which incorporates a balance of warmth/support and monitoring/control, is ideal for youth psychosocial adjustment (e.g., Baumrind, 1966; Steinberg, Mounts, Lamborn, & Dornbusch, 1991; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Although some work suggests that relatively higher levels of monitoring/control may be less problematic for ethnic minority children, particularly those living in riskier neighborhoods (e.g., Brody & Flor, 1998), the balance of both monitoring/control and warmth/support has been shown to be protective regardless of race/ethnicity or family structure (e.g., Jones, Forehand, Brody & Armistead, 2002; Steinberg, Lamborn, Darling, & Mounts, 1994; Steinberg, Dornbusch, & Brown, 1992; also see Masten & Coatsworth, 1998). Accordingly, a positive parenting style is likely most beneficial because youth have behavioral restrictions, decreasing their opportunity for engaging in externalizing behavior, discipline or consequences when they engage in externalizing behaviors, and a supportive and constructive relationship with parental figures who can provide guidance regarding appropriate behavioral norms and expectations (e.g., Baumrind, 1966; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Masten & Coatsworth, 1998).

In addition to identifying parents as a primary context in which to study youth externalizing behavior, ecological systems theory (e.g., Bronfenbrenner, 1979; Garcia Coll & Garrido, 2000; Steinberg et al., 1995) highlights the peer context as well. As youth transition into adolescence, parents continue to be an important influence; however, the relative role of peers also increases (e.g., Dishion, Nelson, & Bullock, 2004; Sameroff, Peck, & Eccles, 2004). Most of the work examining peer influences on youth externalizing behavior focuses on how the behavior of the peer, either deviant behavior in particular or externalizing

behaviors more generally, shape externalizing behaviors in youth (e.g., Brendgen, Vitaro & Bukowski, 2000; Kandel, 1980; Patterson, Dishion, & Yoerger, 2000). Both theory and empirical work suggest that youth with externalizing behavior tend to affiliate with other youth who engage in higher levels of deviant behavior as well, a process through which externalizing behaviors are reinforced through the implicit and explicit approval of friends and new deviant behaviors are learned (i.e., deviancy training; Dishion, Spracklen, Andrews, & Patterson, 1996; Patterson et al., 2000). In addition, youth may observe peers being positively and/or negatively reinforced for their deviant behaviors (e.g., youth watching a friend steal and enjoy the stolen item, while at the same time, seeing that this friend does not suffer consequences for stealing when s/he is not caught) and, in turn, increasing the likelihood of modeling (Akers, 2009; Haynie, 2002; Warr, 2002).

Although the research on adolescent externalizing behavior in the context of peer deviant behavior is extensive and largely unequivocal, a second domain of peer relationships, peer relationship quality, has received relatively less research attention and the findings are mixed (see Berndt, 2002, for a review). A higher quality relationship with a friend can be defined as having higher levels of one or more of the following types of qualities: social support, loyalty, self-esteem support, and/or emotional intimacy (Berndt, 2002; Laird et al., 1999). Some literature shows that youth exhibit lower levels of externalizing behavior in the context of higher quality relationships with a peer (e.g., Boykin McElhaney, Immele, Smith, & Allen, 2006; Hartup & Stevens, 1999; Waldrip, Malcolm, & Jensen-Campbell, 2008). These high quality relationships may provide emotional and social support that act as a buffer against developing externalizing behaviors (Boykin McElhaney et al., 2006). Other studies,

however, find that higher quality peer relationships may actually be a risk factor, predicting higher (rather than lower) levels of youth externalizing behavior (Evans et al., 1996; Kupersmidt, Burchinal, & Patterson, 1995; Scholte, van Lieshout, & van Aken, 2001). One possible explanation for these mixed findings is that some studies that examine the role of peer relationship quality focus on high-risk youth (e.g., clinical samples, high-risk neighborhoods) (e.g., Boykin McElhaney et al., 2006; Dishion et al., 1995), while others focus on lower risk community samples (e.g., Hussong, 2000; Scholte et al., 2001). For example, it is plausible that youth in higher risk communities may only have access to other peers living in the same community (i.e., who are also more vulnerable to deviant behavior), whereas youth who reside in lower risk communities may have access to a wider range of peers.

Related to the types of peers to which youth are exposed, most studies of peer relationship quality also fail to consider the extent to which the relationship is with a peer who is engaging in higher versus lower levels of deviant behavior. According to Differential Association Theory (Sutherland, 1924), adolescents are more at risk for externalizing behaviors in the context of high quality relationships with their deviant peers. In other words, youth who have peer relationships characterized by high social support, emotional intimacy and loyalty will engage in higher levels of externalizing behavior if their peers are engaging in, or perceived to be engaging in, higher levels of deviant behavior (e.g., Gardner & Shoemaker, 1989; Laird, Petit, Dodge, & Bates, 1999). Alternatively, other work suggests that youth who have low quality relationships with their highly deviant peers exhibit the highest levels of externalizing behavior (e.g., Dishion, Andrews, & Crosby, 1995; Hussong & Hicks, 2003; Poulin et al., 1999). Consistent with Social Control Theory (Hirschi, 1971),

youth who lack social ties with their peers, or individuals in their community in general, may be more likely to engage in externalizing behavior because they feel less connected with society and, therefore, disregard societal norms.

A small but growing literature acknowledges that the parent and peer contexts may not only have unique influences on youth externalizing behavior, but that they may influence one another and, in turn, externalizing behavior. Much work focuses on mediation models in which parenting is thought to influence externalizing behavior, at least in part, through increasing the opportunity for adolescents to affiliate with deviant peers (e.g., Dishion & Loeber, 1985; Kandel & Andrews, 1987). Studies find that higher levels of positive parenting are associated with lower levels of deviant peer affiliation, which then is associated with lower levels of externalizing behavior (e.g., Goldstein, Davis-Kean, & Eccles, 2005; Mason, Cauce, Gonzalez, & Hiraga, 1996; Werner & Silbereisen, 2003).

Although less researched, positive parenting may also indirectly influence adolescent externalizing behavior through peer relationship quality. That is, the parent-child bond is the first relationship a child develops and may, in turn, influence future approaches to and formation of close relationships later in life, including peer relationships (Bowlby, 1973; Elicker, Englund, & Sroufe, 1992; Sroufe, Carlson, Levy & Egeland, 1999). It may be that a child who experiences higher levels of positive parenting will develop higher quality peer relationships that parallel the relationship with his/her parent (Bowlby, 1973; Ciairano, Rabaglietti, Roggero, & Bonino, 2007; Sroufe et al., 1999), perhaps through the process of modeling (Bandura, 1977). For example, youth who experience positive relationships with their parents/caregivers which are both warm/supportive and consistent/predictable with regard to expectations and consequences may look for and work to establish these same

qualities in relationships with peers.

A related line of research examines the role of the interaction of the parent and peer contexts on adolescent externalizing behaviors (e.g., Ary, Duncan, Duncan, & Hops, 1999; Aseltine, 1995; Chester, Jones, Zalot & Sterrett, 2007; Deković, 1999). In this line of work, most studies examine the interaction of parenting style with deviant peer behavior. Findings reveal that peer deviant behavior moderates the effect of parenting on youth externalizing behavior (e.g., Dishion et al, 2004; Kung & Farrell, 2000; Svensson, 2003), such that youth who have highly deviant peers *and* their parents engage in lower levels of positive parenting engaged in the highest levels of problem behavior.

Even less attention has been given to the interaction of parenting style and peer relationship quality and findings, as with the broader peer relationship quality literature, are mixed (Chester et al., 2007; Gaertner, Fite, & Colder, 2010; Lansford, Criss, Pettit, Dodge & Bates, 2003). In one study with low-income African American youth from single mother homes, Chester and colleagues (2007) examined positive parenting, the quality of a relationship with a peer, and externalizing behavior. Findings revealed that peer relationship quality was not associated with externalizing behavior in youth when higher levels of positive parenting were present. In contrast, lower peer relationship quality was associated with lower levels of externalizing behavior when mothers displayed higher levels of positive parenting behavior. The authors hypothesized that a third variable, deviant behavior of the peer, may explain the finding (i.e., having a better relationship with a peer would only be risky in the context of lower levels of positive parenting if the peer was engaging in higher levels of deviant behavior). Yet, the authors could not examine this hypothesis because they did not assess deviant behavior of the peer.

Lansford and colleagues (2003) also examined the interrelationship of positive parenting and peer relationship quality; however, the authors also examined deviant behavior of the peer and their study was conducted with predominantly (83%) Caucasian youth in middle school. Results from this study demonstrated that those adolescents who experienced the combination of high quality relationships with their less deviant peers and high positive parenting engaged in the lowest levels of externalizing behavior. This pattern may be consistent with previous research observing that higher quality relationships with peers may act as a protective factor for adjustment difficulties because these relationships provide positive social support (e.g., Boykin McElhaney et al., 2006; Gauze et al., 1996).

The Current Study

In an effort to reconcile and extend prior work on the role of the parent and peer contexts in the psychosocial adjustment of youth, the current study aims to examine the relative contributions of the parent and peer contexts to externalizing behavior in African American youth from single mother homes. Primary study hypotheses will focus on the more established roles of positive parenting and peer deviant behavior, although this study is unique in that both influences will be examined in African American youth from single mother homes, a group at higher risk for externalizing behavior than Caucasian peers or peers from intact homes (Office of Juvenile Justice and Delinquency Prevention, 2005; US Census, 2008). In addition, prior research has suggested that the role of parents and peers could be different for African American youth such that, parents seem to maintain predominant influence over peers throughout adolescence (e.g., Giordano, Cernkovich, & DeMaris, 1993; Stanton et al, 2002; Tragessor, Beauvais, Swaim, Edwards & Oetting, 2007). If this pattern of findings is true with the current sample as well, the findings of prior work

on Caucasian youth may not generalize to the youth examined in this study. The role of peer relationship quality will also be examined; however, these hypotheses will be more exploratory in nature given the inconsistencies in the literature to date.

Of note, this study will focus in particular on best friends, rather than peer groups or friends more generally, for three primary reasons: (1) previous literature indicates that close friends are the most influential peer context (e.g., Laird et al., 1999; Selfhout, Branje, & Meeus, 2008); (2) youth are more accurate in reporting best friend behavior than in reporting peer group or general friend behavior (Prinstein & Wang, 2005; Urberg, Shyu, Liang, 1990); and (3) youth perceptions of best friend behavior may even be more influential than the best friends actual behavior (Iannotti & Bush, 1992; Prinstein &Wang, 2005; also see Kandel, 1996 for a review).

Study Hypotheses

Main Effects on Externalizing Behavior. Building upon past research, it is hypothesized that parenting style (e.g., Jones et al., 2002; Steinberg et al., 1991), best friend deviant behavior (e.g., Brendgen et al., 2000; Patterson et al., 2000) and best friend relationship quality (e.g., Boykin McElhaney et al., 2006; Waldrip et al., 2008) will each contribute uniquely to the externalizing behavior of African American adolescents from single mother homes. It is expected that higher levels of positive parenting and lower levels of perceived best friend deviant behavior will each be associated with lower levels of externalizing behavior. Although the findings in literature examining peer relationship quality and externalizing behavior have been mixed (e.g., Boykin McElhaney et al, 2006; Kupersmidt et al, 1995), it is expected that the *unique role* of a higher quality relationship with a best friend will be a protective factor, such that youth with higher quality best

friendships will evidence lower levels of externalizing behavior (e.g., Boykin McElhaney et al., 2006; Waldrip et al., 2008).

Moderating Effects on Externalizing Behavior. Building upon prior work largely conducted with Caucasian youth (e.g., Deković, 1999; Dishion, et al., 2004; Svensson, 2003), it is also expected that best friend deviant behavior will moderate the relation between positive parenting and youth externalizing behavior. Specifically, it is hypothesized that the combination of both higher levels of positive parenting and lower levels of best friend deviant behavior will result in the lowest levels of externalizing behavior (e.g., Dishion et al., 2004; Farrell & White, 1998; Svensson, 2003; Vitaro, Brengdan, & Tremblay, 2000).

In addition to examining the moderating effect of best friend deviant behavior, the current study will examine the interaction of parenting style and best friend relationship quality. It is hypothesized that youth with high positive parenting and high relationship qualities with their best friends will demonstrate the lowest levels of externalizing behavior. It may be that high positive parenting and high relationship quality with a best friend may place youth at the lowest risk for externalizing behavior because they provide the social support from other individuals or the societal bonding that may keep them from engaging in deviant behavior (e.g., Deković, 1999; Gerard & Buehler, 2004; Hirschi, 1971).

Finally, it is also predicted that a three-way interaction will emerge such that youth who experience the combination of higher positive parenting, higher quality with their best friends, and whose best friends engage in lower levels of deviant behavior will report the lowest level of externalizing behavior (Lansford et al., 1999).

Mediating Effects on Externalizing Behavior. In addition to the proposed main and moderating effects, mediation models will be examined. It is predicted that both best friend

deviant behavior and best friend relationship quality will partially mediate the association between positive parenting and externalizing behavior. Higher levels of positive parenting will be associated with lower levels of best friend deviant behavior. In turn, lower levels of best friend deviant behavior will be associated with lower levels of externalizing behavior (e.g., Goldstein et al., 2005; Mason et al., 1996; Weaver & Prelow, 2005; Werner & Silbereisen, 2003). Partial mediation is predicted for the current sample based on some previous literature noting that parents may be an even larger influence as children progress into adolescence than peers for African American youth (e.g., Giordano et al., 1993; Stanton et al., 2002; Tragessor et al., 2007).

It is also hypothesized that best friend relationship quality will mediate the association between positive parenting and externalizing behavior. According to previous literature and theory, higher levels of positive parenting may lead to higher quality relationships with best friends through modeling and experience with positive interpersonal interactions (e.g., Bandura, 1977; Bowlby, 1973; Ciairano et al., 2007). Therefore, it is expected that higher levels of positive parenting will result in youth high quality best friendship which in turn, will lead to lower levels of externalizing behavior.

Preliminary research has found significant age and gender effects when examining the unique roles of positive parenting, best friend deviant behavior and best friend relationship quality in relation to youth externalizing behavior (e.g., Dishion et al., 2004; Hartup, 1993; Selfhout, et al., 2008; Weaver & Prelow, 2005). Although future research with greater statistical power will need to consider age and gender, the aim of this study is to initiate work that integrates the three literatures on positive parenting, best friend deviant

behavior and best friend relationship quality. Therefore, age and gender will not be examined.

Method

Overview

Data for the current study will be drawn from the African American Families and Children Together (AAFACT) Project (n = 194), a study designed to examine the role of extended family members in the health and well-being of African American youth from single mother homes. African American single mother-headed families with an 11 to 16year-old youth were recruited from counties across central North Carolina. Recruitment was conducted through community agencies (e.g., health departments, YMCAs, churches), public events (e.g., health fairs), local advertisements (e.g., university-wide informational emails, bus displays, brochures), and word-of-mouth (e.g., participants telling other families about the project).

Participants

The current study will focus on 184 African American mother-child dyads who participated in AAFACT. Ten participants were excluded from the original sample of 194 due to missing (n = 8) or outlier (n = 2) data. Demographics for the remaining 184 families indicate that the mean age for participating youth is 13.55 years (SD = 1.45; 56% girls). On average, mothers are 39.04 (SD = 7.19) years of age (Range = 26 – 64 years); approximately half (52%) completed some college/vocational school after high school/GED; the majority (83.5%) are employed. Importantly, relative to the majority of work with African American single-mother families which focuses on very low income families (e.g., M =

\$12,415.68/year; Jones, Forehand, Dorsey, Foster, & Brody, 2005; McLoyd, Cauce,
Takeuchi & Leon, 2000; Tamis-LeMonda, Briggs, McClowry, & Snow, 2008), income in
this sample ranged from \$0 to \$120,000 with a mean of \$29,733.96/year (*SD* = \$17,456.49). *Procedure*

Given the sensitive nature of many of the project questions, it was important to establish personal relationships with the participating families. Therefore, interviews were conducted either at a conveniently-located community site or in the family's place of residence, depending on the individual needs of each family. In addition, child-care was provided on an as-needed basis. During each interview, informed consent was obtained from the mother for her and the youth's participation, and the youth gave assent for participation. With consideration for the potential space and privacy constraints in family homes, as well as for potential literacy issues among participants, data from each family member was separately collected on laptop computers using Audio Computer-Assisted Self-Interviewing (ACASI) software, and responses were linked to an assigned identification number rather than to any form of identity. Respondents listened through earphones to pre-recorded questions and personally recorded their answers via the computer mouse and keyboard. This approach helped to reduce the potential for interviewer influence, minimized the error that can result from varying literacy levels in the sample, and maximized confidentiality of the home or community interviews. The mother and youth self-report questionnaires assessed a variety of psychosocial variables, including the constructs of study in the current project. The interviews took approximately 60 to 90 minutes for mother-child dyads to complete. Mother-child dyads were compensated \$25 for their participation (\$15 for mothers and \$10 for youth).

Measures

Demographic Information. Mothers completed a demographic measure in which they provided information about themselves (e.g., age, education), their children (e.g., child age), and their families (e.g., physical address, family income). Basic demographic information was also obtained from youth (e.g., gender, age, grade).

Positive parenting. Two aspects of parenting, the proposed independent variable in this study, were assessed via adolescent report: (a) monitoring and (b) warmth. Maternal monitoring of the adolescent was assessed by reports from the adolescent using Stattin and Kerr's 9-item Maternal Monitoring Scale (MS, 2000). Adolescent-report versions assess the mother's knowledge of her child's whereabouts, activities, and relationships (Dishion & McMahon, 1998). The items are rated on a 5-point scale: *0* (Not at All), *1* (Rarely), *2* (Some of the time), *3* (Most of the time), and *4* (Always). This measure has demonstrated acceptable reliability data in prior research, as well as good test-retest reliability (Kerr & Stattin, 2000; Stattin & Kerr, 2000). Higher scores indicate more maternal monitoring. For youth report of maternal monitoring in this sample, the Cronbach's Alpha is 0.84.

To assess warmth, youth reported on the short form of the Interaction Behavior Questionnaire (IBQ; Prinz, Foster, Kent, & O'Leary, 1979). This form consists of the 20 items that have the highest phi coefficients and the highest item-to-total correlations with the 75 items in the original IBQ. The short form correlates .96 with the longer version. Sample items, which may be endorsed as *True* or *False*, include, "Your mother listens when you need someone to talk to." and "Your mother understands what you mean even when even when she doesn't agree with your or see things the same way as you." Scores can range from 0 to 20, with higher scores indicating greater warmth and support in the mother-child

relationship. Prinz and colleagues (1979) and Robin and Weiss (1980) have reported adequate internal consistency and discriminant validity. The alpha for youth in the current sample was 0.81.

Consistent with prior research (e.g., Chester et al., 2003; Jones et al., 2002; Sterrett, Jones, & Kincaid, 2009), the two parenting measures will be standardized and averaged to form the positive parenting construct. Higher scores will indicate greater adolescent-reported positive parenting.

Best friend relationship quality. Adolescents' relationship quality with their best friend will be examined using a Friendship Quality Survey, developed by Parker and Asher (1993) and adapted from Bukowski, Hoza, and Newcomb (1987). The 41-item questionnaire asked adolescents to indicate their best friend's initials at the top of the survey and respond to the following items in reference to the identified best friend. Using a 5-point scale, adolescents indicated how true a particular quality was of their relationship with their best friend (i.e., "He or she sticks up for me if others talk behind my back," "We make each other feel important and special"). The scale ranges from *not at all true* (0) to a *little true* (1) to somewhat true (2) to pretty true (3) to really true (4). Parker and Asher (1993) reported that internal consistency for the Friendship Quality Survey was satisfactory (1993). Asher and Parker (1993) identified six subscales: (1) Validation and Caring; (2) Conflict Resolution; (3) Conflict and Betrayal; (4) Help and Guidance; (5) Companionship and Recreation; (6) Intimate Exchange. Although research primarily studying close peer relationships have examined both positive and negative features of relationship quality (e.g., Berndt & Keefe, 1995; Hussong & Hicks, 2003; Poulin, Dishion, & Haas, 1999), the current study will exclude the Conflict and Betrayal subscale from the analyses and only examine the subscales

pertaining to positive features of best friend relationship quality. The main focus of this study is to examine the parental and peer protective factors that may influence the development of externalizing behavior. The remaining items were summed to form a total Relationship Quality scale ($\alpha = 0.95$).

Best friend deviant behavior. Adolescents reported on their best friend's involvement in various types of risk behavior using a 20-item questionnaire, adapted from Prinstein, Boergers, and Spirito's (2001) Peer Behavior Inventory. Functioning as an extension of existing measures of peer affiliation and deviant behavior (Dishion, Patterson, Stoolmiller, & Skinner, 1991; Ferguson and Horwood, 1996), the modified scale asks adolescents to first identify their best friend and answer whether each statement is *true* (0) or *false* (1) of their best friend's health and risk behavior during the past three months (i.e., "[He or she] has stolen something worth less than five dollars," "[He or she] ruined or damaged other people's things on purpose"). Higher scores denote higher levels of best friend deviant behavior. Prior research indicates that the similar measures are both reliable and valid (e.g., Dishion et al., 1991; Ferguson and Horwood, 1996); however, given that the current scale was a modification of prior scores, an exploratory factor analysis was conducted.

Two items on the scale were not included in this analysis because too few youth endorsed them ("Stolen something worth more than fifty dollars"; "Suggested that you do something that was against the law"). The factor analysis on the resultant 18 items produced four factors (eigenvalues > 1). Both a 3 and 4 factor model fit well for this measure. Given that one of the four factors consisted of only 2 items and two other items did not load cleanly on the remaining three factors, these four items were removed and an exploratory analysis was conducted with the remaining 14 items, resulting in three factors: 1) Deviant Behaviors

(6 items); 2) Weight/Body Image (4 items); 3) Prosocial Behaviors (4 items). The current study focuses on the deviant behaviors of best friends and will, therefore, not examine those items regarding best friend prosocial or weight/body image behavior. The alpha for the current sample on the Deviant Behaviors subscale is 0.80.

Externalizing behavior. Mothers completed the parent-report form of the CBCL (Achenbach, 1991). This measure describes child problem behaviors and requires parents to make ratings for the target child on a three-point scale: *0* (not true), *1* (sometimes or somewhat true), and *2* (very or often true). The CBCL has proven reliable with samples similar to the current one (e.g., Jones & Forehand, 2003), and Achenbach (1991) has reported mean test-retest reliability of .87, as well as evidence for content and criterion-related validity. For the current sample, the coefficient alpha is 0.80 for the Rule-Breaking subscale and 0.89 for the Aggression subscale. The 35 items of the Aggression and Rule-Breaking subscales were be combined to form a measure of externalizing behavior.

Results

Preliminary Analyses

Descriptive statistics and correlations were examined for all demographic and study variables. As shown in Table 2, three demographic variables were significantly correlated with lower levels of youth externalizing behavior, higher maternal education level (r = -.22, p < .01), higher household income (r = -.16, p < .05) and younger youth age (r = .15, p < .05). As predicted, positive parenting and best friend relationship quality were negatively correlated with youth externalizing behavior (r = -.35, p < .01; r = -.17, p < .05, respectively). Youth who reported higher positive parenting and youth who reported higher best friend

relationship quality were less likely to display externalizing behavior. Also as expected, best friend deviant behavior was positively correlated with youth externalizing behavior (r = .34, p < .01), suggesting that youth who spent time with best friends who engaged in lower levels of deviant behavior tended to engage in lower levels of externalizing behavior themselves. *Regression Analyses*

Regression analyses were conducted to test the study hypotheses examining main, mediating, and moderating effects. The blocks were entered in the following order: Block 1, demographic variables; Block 2, positive parenting, best friend deviant behavior, and best friend relationship quality; Block 3, two-way interactions; Block 4, three way interaction between positive parenting, best friend deviant behavior and best friend relationship quality.

Main Effects of Positive Parenting, Best Friend Deviant Behavior, Best Friend Relationship Quality and Youth Externalizing Behavior. Consistent with bivariate associations, mother's education level, $\beta = -0.16$, p < .05, was a significant correlate of externalizing behavior such that youth who had mothers who attained higher levels of education demonstrated lower levels of externalizing behavior. In the multivariate model with other demographics variables, youth age was found to be a marginal correlate of youth externalizing behavior, $\beta = .14$, p = .05, with younger children engaging in lower levels of externalizing behavior. The association between family income and youth externalizing behavior was not significant in the multivariate model, $\beta = .11$, *n.s.*

In the second block, there was a significant association between positive parenting and youth externalizing behavior, $\beta = -.24$, p < .01. Consistent with study hypotheses, youth who reported higher levels of positive parenting had lower levels of externalizing behavior. Block 2 also indicates a significant association between best friend deviant behavior and

youth externalizing behavior, $\beta = .22$, p < .01. Children who reported that their best friends engaged in lower levels of deviant behavior also presented lower levels of externalizing behavior. In addition, contrary to study predictions, Block 2 analyses indicate that best friend relationship quality was not significantly associated with the outcome variable, $\beta = -$.07, *n.s*, in the multivariate model with demographic, positive parenting, and best friend deviant behavior.

Best Friend Deviant Behavior and Best Friend Relationship Quality as a Moderators. Block 3 of the regression model included two 2-way interactions to test the moderating roles of best friend deviant behavior and best friend relationship quality in the relationship between positive parenting and youth externalizing behavior. All variables were centered before creating the two-way interaction term for these analyses.

As shown in Table 3, results indicate that best friend deviant behavior, $\beta = -.09$, *n.s.*, and best friend relationship quality, $\beta = -.08$, *n.s.*, did not significantly moderate the association between positive parenting and youth externalizing behavior. Although not a focus of the current study, the third 2-way interaction term of best friend deviant behavior X best friend relationship quality was found to be statistically significant, $\beta = -.30$, p < .01. However, when this interaction was probed using the methods suggested by Preacher and colleagues' (2006), the results of the analyses indicated that neither of the regression lines were significantly different from 0; therefore, the finding will not be discussed further.

3-way Interaction Positive Parenting X Best Friend Deviant Behavior X Best Friend Relationship Quality. Results from the fourth regression block indicate that the three-way interaction between positive parenting, best friend deviant behavior, and best friend relationship quality was not significant, $\beta = -.16$, *n.s.*

Best Friend Deviant Behavior as a Mediator. Best friend deviant behavior was examined as a mediator in the association between positive parenting and youth externalizing behavior. According to Baron and Kenny's mediation model (1986), mediation is evidenced only when three preliminary conditions are met. First, a significant correlation must be established between the predictor variable (positive parenting) and the possible mediating variable (best friend deviant behavior). The information in Table 2 indicates a significant negative correlation between positive parenting and best friend deviant behavior (r = -.38, p< .01).

Second, a significant association between the predictor variable (positive parenting) and outcome variable (youth externalizing behavior) must be established. As shown in Table 3 there is a significant association between positive parenting and youth externalizing behavior, $\beta = -.24$, p < .001.

In order to satisfy the third condition for mediation, the proposed mediating variable (best friend deviant behavior) must be significantly associated with the outcome variable (youth externalizing behavior). As demonstrated in Table 3, best friend deviant behavior is significantly linked with youth externalizing behavior, $\beta = .22$, p < .01. Higher levels of youth reported best friend deviant behavior is significantly associated with higher levels of externalizing behavior.

After verifying that the three conditions have been met, mediation is determined by demonstrating that there is a significant difference in coefficients for the outcome variable (positive parenting) with and without best friend deviant behavior included in the model. A Sobel test was conducted indicating that best friend deviant behavior significantly mediates the association between positive parenting and youth externalizing behavior (p < .01).

Best Friend Relationship Quality as a Mediator. The mediating role of best friend relationship quality in the association between positive parenting and youth externalizing behavior was also examined by following Baron and Kenny's mediation model (1986) outlined above. First, a significant association was established between positive parenting and best friend relationship quality (r = 0.26, p < .01), indicating that higher positive parenting was associated with higher youth reports of best friend relationship quality (see Table 2). The second condition for mediation was verified in previous regression analyses, indicating that there is a significant association between positive parenting and youth externalizing behavior (r = -.35, p < .01). In addition, a significant association between best friend relationship quality (mediating variable) and youth externalizing behavior (outcome variable) was established at (r = -.17, p < .05), thus satisfying the third condition for mediation. Higher levels of best friend relationship quality was significantly associated with lower levels of externalizing behavior. In addition, a Sobel test indicated significant partial mediation such that best friend relationship quality influenced the association between positive parenting and youth externalizing behavior, p < .05.

Discussion

This study examined *both* parent and peer contexts for externalizing behaviors among African American youth from single mother homes. When all variables were included in one regression model, positive parenting and best friend deviant behavior were each found to be uniquely associated with the outcome variable. Contrary to study hypotheses, the hypothesized 2-way and 3-way interactions (i.e. positive parenting x best friend deviant behavior; positive parenting x best friend relationship quality; positive parenting x best friend deviant behavior x best friend relationship quality) were not significantly associated with youth externalizing behavior. Both models examining the roles of peer variables (best friend deviant behavior & best friend relationship quality) as a mediator of the association between positive parenting and externalizing behavior were also significant.

Positive parenting was significantly associated with youth externalizing behavior such that, youth who had higher levels of positive parenting engaged in lower levels of externalizing behavior. These findings are consistent with prior research noting that youth who receive relatively higher levels of warmth and support, as well as higher levels of monitoring, from their parents are less likely to engage in externalizing behavior (Masten & Coatsworth, 1998). Although the bulk of the positive or authoritative parenting literature has focused on Caucasian youth and youth from intact homes, a growing body of evidence suggests that a positive parenting style is ideal for African American youth as well (e.g., Jones et al., 2002; Steinberg et al., 1994; Steinberg et al., 1992; also see Masten & Coatsworth, 1998). These youth may feel like they have adequate attention and guidance from their parents, keeping them from engaging in deviant or risky behavior because they do not have to act out to seek out attention, even if it is negative attention, from their parents. For African American youth, the family has been highlighted as potentially an even more important influence than peers as children progress into adolescence (e.g., Giordano et al., 1993; Stanton et al., 2002; Tragessor et al., 2007).

It was also found that youth whose best friends engaged in lower levels of deviant behavior engaged in lower levels of externalizing behavior. Research related to peer deviant behavior and youth externalizing problems have found similar findings suggesting that youth behavior tends to be similar to their friend's behavior (e.g., Brendgen et al., 2000; Kandel,

1980; Patterson et al., 2000). This similarity may be a result of modeling, peer reinforcement (deviancy training), or initial peer selection (Berndt, 1999; Dishion et al., 1996). Peer deviance may be particularly important to understand with African American youth from single mother homes who are more likely to live in low income neighborhoods than Caucasian youth (McLoyd, 1990) and, in turn, are exposed to higher levels of risk factors, including deviant peers (Wallace & Muroff, 2002). Furthermore, some research notes that African American youth may spend more time with their neighborhood peers than with peers from other contexts (e.g., school; DuBois & Hirsch, 1990). Study findings suggest that although positive parenting is protective, the level of best friend deviancy still has an influence on African American youth from single parent homes.

Contrary to the study hypothesis, best friend relationship quality was not significantly associated with youth externalizing behavior when considered in the broader context of positive parenting and best friend deviant behavior. Although the literature is mixed, other studies did not find significant main effects for peer relationship quality and youth externalizing behavior as well (e.g., Selfhout et al, 2000; Zimmerman, Ramirez-Valles, Zapert, & Maton, 2000). There are several reasons why this study may not have found a significant association of relationship quality with externalizing behavior. First, it may be that the quality of the relationship may not be what is most important for this particular sample. Instead, some research suggests that the amount of time youth spend with their best friend may be more influential (Evans et al., 1996; Haynie & Osgood, 2005). The current study did not ask youth to report on the amount of time they spent with their best friends or what activities they engaged in together. Second, prior research seems to suggest that relationship quality may influence girls differently than boys in the context of externalizing

problems (e.g., Giordano, Cernkovich & Pugh, 1986; Laird et al., 1999). Since this study examines both males and females in one model, it is possible that an effect for a particular gender may have been missed. Ideally, gender would have been examined, however, the statistical power of the current study precluded this opportunity. Lastly, it may be that the study's sample was not large enough to detect a relatively smaller effect of relationship quality. Previous studies have noted that relationship quality, compared to other variables (i.e., parenting style) has a small effect (e.g., r = -.13, Laird et al, 1999 & Lansford et al., 2003; r = .03, Hussong & Hicks, 2003) to start with. The current study indicates a similar pattern (Positive Parenting r = .35; Best Friend Deviant Behavior r = .34; Best Friend Relationship Quality r = .17).

In addition to examining the main effects, the current study examined 2 and 3-way interactions. The interactions of interest for this study were not significantly associated with the outcome variable, youth externalizing behavior. Contrary to study hypotheses, best friend deviant behavior did not moderate the association between positive parenting and youth externalizing behavior. It is possible that aspects of the peer relationship other than those measured in the current study moderate the link between positive parenting and externalizing problems. For example, this study assessed peer deviance, but more general peer externalizing behaviors were not assessed. Perhaps a significant interaction would result when looking at the best friend's general externalizing behavior (e.g., aggression, social withdrawal; Mrug & Windle, 2009; Vitaro et al., 2000). This would be of particular interest in the current study's sample since youth were reporting fairly low levels of best friend deviant behavior.

Second, this study's failure to detect an interaction between best friend deviant behavior and positive parenting may be due to the way peer deviant behavior was measured. This study decided to use youth's report of their best friend's deviant behavior because previous theory, based predominantly on Caucasian samples, suggested that perceived best friend behavior may be more influential on youth behavior than actual best friend or general peer group behavior (Iannotti & Bush, 1992; Prinstein &Wang, 2005; also see Kandel, 1996 for a review). Perhaps other measurement strategies for examining peer deviant behavior would better detect an interaction between peer deviant behavior and positive parenting. For example, this study may have found a significant interaction if it had examined best friend's report of his/her own deviant behavior or if peer group deviant behavior was assessed instead of just best friend's behavior (e.g., Farrell & White, 1998; Laird et al., 1999; Weaver & Prelow, 2005).

Finally, although variables can be both mediators and moderators, it is plausible that in the current sample, positive parenting influences the extent to which youth affiliate with deviant peers (or that deviant peers influence parenting, although this is not assessed in this study), but that the influence of one of these variables does not depend on the level of the other (ie., mediation but not moderation). Other studies also failed to find an interaction effect between positive parenting and best friend deviant behavior on youth externalizing behavior (e.g., Barnes et al., 2006; de Kemp, Scholte, Overbeek, & Engels, 2006; Marshal & Chassin, 2000). Alternatively, it may be that there are other variables that may be moderating this association such as youth gender and mother's single parent status (Weaver & Prelow, 2005). African American single mothers may need to exercise higher levels of monitoring because they tend to live in more risky neighborhoods (Amato & Fowler, 2002;

Jones, Forehand, O'Connell, Armistead, & Brody, 2005). A stronger stance on parenting may prevent outside factors, such as peer deviance, from affecting parenting behavior. Furthermore, parents seem to have more influence over their African American youth than their Caucasian peers as these youth transition into adolescence (Giordano et al., 1993; Stanton et al, 2002; Tragessor et al., 2007).

Consistent with the aforementioned hypothesis, the results for the current study also indicated that best friend relationship quality did not moderate the association between positive parenting and youth externalizing behavior. A recent study examining the moderating effect of relationship quality on the association between positive parenting and youth externalizing behavior found similar results (Gaertner et al., 2010). Although both studies examined adolescents from single parent homes, it is important to note that the current study findings are inconsistent with the results in a study by Chester and colleagues (2003). One difference that distinguishes these two studies is the incomes levels of these two samples. The sample examined by Chester and colleagues (2003) was very low income (M =\$12,000; the current study has a relatively higher average income and broader range of income. The difference in income suggests that all of the youth in the sample in Chester et al.'s study lived in lower income (i.e., higher risk) neighborhoods and in turn, youth were more at risk to be exposed to deviant peers. In addition, youth in the Chester et al. (2003) study were recruited from more homogeneous neighborhoods than in the current study (i.e., inclusion criteria for the study required that participants came from neighborhoods that were at least 25% African American; 75% families lived in poverty), suggesting a narrower range of peers dealing with the same high-risk circumstances.

As mentioned above, the failure to obtain the proposed interaction may be due to sample characteristics or methodology. For example, it may be that the relationship qualities youth have with close friendships in general may be more influential than the relationship quality with one friend. These results may also indicate that perhaps best friend relationship quality was not measured appropriately for this sample and examining specific relationship quality characteristics may be more helpful. For example, Giordano and her colleagues (1986) found that African American youth had close friendships that were more stable than the Caucasian youth who participated in the study. The same study noted that African American youth reported significantly lower levels of trust and caring in their relationships than Caucasian youth. Perhaps the stability of a relationship, rather than other attributes such as trust and caring, are more influential for African American youth behavior. Or, as previously noted, it may be that the study simply did not have the statistical power to detect the relatively small effect of best friend relationship quality or its moderating role.

In addition to the two 2-way interaction effects, the proposed 3-way interaction between positive parenting, best friend deviant behavior and best friend relationship quality was not significant. As mentioned in the discussions regarding best friend deviant behavior and relationship quality, it may be that parenting and peer influences have strong main effects, however, they do not seem to affect the other's level of influence on youth externalizing behavior. Again, the failure to find a significant 3-way interaction between these three variables may be due to imprecise variable measurement for an African American youth sample. As mentioned before, perhaps the time spent with a best friend rather than the level of deviant behavior or having the best friend report on his/her own deviant or externalizing behavior would be better predictors of moderation for this sample. At the same

time, specific attributes of relationship quality (i.e. loyalty, stability) may moderate the influences of positive parenting and best friend deviant behavior more strongly than a constellation of relationship qualities. Or, in the end, it may be that the 3-way interaction between positive parenting, best friend deviant behavior, and best friend relationship quality simply does not exist for this sample.

Consistent with study hypotheses and previous research (e.g., Ciairano et al., 2007; Goldstein et al., 2005; Mason et al., 1996; Werner & Silbereisen, 2003; Sroufe et al., 1999), both best friend deviant behavior and best friend relationship quality were found to partially mediate the association between positive parenting and youth externalizing behavior. Consistent with prior research, higher positive parenting led to lower levels of best friend deviant behavior which, in turn, led to lower levels of adolescent externalizing problems. Youth who receive higher levels of positive parenting are associated are less likely to affiliate with deviant peers because of the higher levels of monitoring from parents as well as the warmth and support youth already receive from their parents. In turn, youth are less likely to engage in externalizing behavior (e.g., Goldstein et al., 2005; Mason et al., 1996; Werner & Silbereisen, 2003). For best friend relationship quality, positive parenting led to higher levels of relationship quality with best friends which, in turn, led to lower levels of youth externalizing behavior. It could be that children who receive higher levels of positive parenting later develop higher quality relationships with their close friends that are similar to the relationships they had with their parents in providing high levels of warmth and support (Bowlby, 1973; Ciairano et al., 2007; Sroufe et al., 1999). These high quality relationships with their best friends then serve as a protective factor against youth externalizing behavior.

A few limitations for the current study merit discussion. First, this study is a crosssectional examination of parenting and peer associations with adolescent externalizing behavior. Future longitudinal studies will provide opportunities to examine the direction of association, which is important given possible bidirectionality (Giordano et al., 1986; Laird et al., 2003; McGloin, 2009; Scaramella, Conger, Spoth, & Simons, 2002). Second, results of this study should not be generalized to non-African American adolescents or youth from two-parent homes. In addition, this study did not examine the role of age and gender in the study model which is an important next step since prior research has suggested unique contributions of age and gender in the context of parent and peer influences on externalizing behavior (e.g., Dishion et al., 2004; Hartup, 1993; Selfhout, et al., 2008; Weaver & Prelow, 2005).

Some strengths of this study should also be mentioned. This study examines an understudied population, African American adolescents from single mother homes. Previous literature focusing on parent and peer influences on youth externalizing behavior has primarily examined Caucasian youth or youth from intact homes. Furthermore, African American youth from single mother homes are overrepresented in statistics on youth externalizing behavior (Office of Juvenile Justice and Delinquency Prevention, 2005) and are at greater vulnerability to developing externalizing problems due to economic hardship and exposure to crime and violence (McLoyd, 1990; Murry et al., 2001). In addition, the current sample represents families from a broader range of socioeconomic categories than most previous studies focusing on African American single mother families which have exclusively examined low income families (McLoyd, et al., 2000; Tamis-LeMonda et al., 2008). Thus, it is difficult to determine if results of prior studies are a product of their

sample's socioeconomic status or are more representative of African American families in general. The current study is also one of the first to integrate the three literatures of positive parenting, best friend deviant behavior, and best friend relationship quality and the first to do so in an African American population. Prior research has predominantly focused on either the parenting or peer context in the development of youth externalizing behavior and peer deviance or peer relationship quality. Importantly, work with African American youth has suggested that parent and peer contexts may play different roles than Caucasion adolescents (Giordano et al., 1986; Giordano et al., 1993).

The current study also has clinical implications. Findings may be used to help inform the development of clinical interventions for African American youth from single mother homes in the area of externalizing behavior. In particular, the results of this study highlight the importance of considering the role of peers in the growing number of prevention programs targeting African American youth (Strong African American Families, Brody et al., 2006; Parents Matter! Program, Forehand, Miller, Armistead, Rotchick, & Long, 2004). In addition, the study results highlight the direct and indirect effects of two dimensions of peer influence, peer risky behavior and peer relationship quality, which provide a more in depth examination of how close friendships affect the development of externalizing behavior and in turn, can help further inform the development of peer modules in family-focused clinical prevention and intervention programs.

Appendix A

Parental Monitoring (Adolescent-Report)

The next several items will ask you how much your mother know about your activities.

Choose: 0 = Not at All 1 = Rarely 2 = Some of the time 3 = Most of the time 4 = Always

How often does your mother know:

- 1. What you do during your free time?
- 2. Who you have as friends during your free time?
- 3. What type of homework you have?
- 4. What you spend your money on?
- 5. When you have an exam or assignment due at school?
- 6. How you do on different subjects in school?
- 7. Where you go when out at night with friends?
- 8. What you do and where you go after school?
- 9. In the past month, how often has your mother had no idea where you were at night?

Appendix B

Maternal Warmth (Adolescent-Report)

Think back over the <u>last several weeks</u> at home. The following statements have to do with you and your mother. Please tell us if you believe that the statement is mostly **true** or mostly **false** about you and your mother. Your answers will not be shown to your mother or anyone else in your family.

Choose: 0 = True 1 = False

1. Your mother understands you. She knows where you are coming from.

2. When your mother and you fuss with each other, you end your fusses calmly sometimes.

- 3. Your mother and you almost always seem to agree or get along okay with each other.
- 4. You enjoy the talks your mother and you have.
- 5. When you state your opinion, or say what you think, your mother gets upset.
- 6. At least three times a week, your mother and you get angry or fuss at each other.
- 7. Your mother listens when you need someone to talk to.
- 8. Your mother is a good friend to you.
- 9. Your mother says you have no consideration or respect for her.
- 10. At least once a day your mother and you get angry or fuss at each other.
- 11. Your mother is bossy when you talk.
- 12. Your mother doesn't understand you or doesn't know where you are coming from.
- 13. The talks your mother and you have are frustrating or they make you mad.
- 14. Your mother understands what you mean even when she doesn't agree with you or see things the same way as you do.
- 15. Your mother seems to always be complaining about you or talking bad about you.
- 16. You think your mother and you get along very well.
- 17. Your mother screams a lot.
- 18. Your mother puts you down or says bad things about you.
- 19. If you run into problems, your mother helps you out.
- 20. You enjoy spending time with your mother.

Appendix C

Best Friend Deviant Behavior – Deviancy Subscale (Adolescent- Report)

For each of the following statements, please tell us whether each is **true** or **false** about your best friend over the past <u>three months</u>.

- 1. Stolen something worth less than five dollars.
- 2. Gotten into trouble with the police for some of the things he or she has done
- 3. Smoked cigarettes.
- 4. Gotten drunk.
- 5. Cheated on school tests.
- 6. Used pot.

Appendix D

Best Friend Relationship Quality (Adolescent-Report)

Please tell us how true each of these statements is about your relationship with your best friend. Your answers can range from **not at all true** to **really true**.

Choose: 0 = Not at All 1 = Rarely 2 = Some of the time 3 = Most of the time 4 = Always

- 1. Please tell us your best friend's first and last initials again:
- 2. We always sit together at lunch.
- 3. He or she gets mad at me a lot.
- 4. He or she tells me I am good at things.
- 5. He or she sticks up for me if others talk behind my back.
- 6. We make each other feel important and special.
- 7. We always pick each other as partners for things.
- 8. He or she says "I'm sorry" if he or she has hurt my feelings.
- 9. He or she sometimes says mean things about me to other kids.
- 10. He or she has good ideas about things to do.
- 11. We talk about how to get over being mad at each other.
- 12. He or she would like me even if others didn't.
- 13. He or she tells me I am pretty smart.
- 14. We always tell each other our problems.
- 15. He or she makes me feel good about my ideas.
- 16. I talk to him or her when I'm mad about something that happened to me.
- 17. We help each other with chores a lot.
- 18. We do special favors for each other.
- 19. We do fun things together a lot.
- 20. We argue a lot.
- 21. I can count on him or her to keep promises.
- 22. We go to each others' houses.
- 23. We always hang out together during lunch, study hall, or other breaks during school
- 24. He or she often gives me advice with figuring things out.
- 25. We talk about the things that make us sad.
- 26. We make up easily when we have a fight.
- 27. We fight a lot.
- 28. We share things with each other.

- 29. We talk about how to make ourselves feel better if we are mad at each other.
- 30. He or she does not tell others my secrets.
- 31. We bug each other a lot.
- 32. He or she comes up with good ideas on ways to do things.
- 33. We loan each other things all the time.
- 34. He or she helps me so I can get done quicker.
- 35. He or she gets over our arguments really quickly.
- 36. We count on each other for good ideas on how to get things done.
- 37. He or she doesn't listen to me.
- 38. We tell each other private things.
- 39. We help each other with schoolwork a lot.
- 40. We tell each other secrets.
- 41. He or she cares about my feelings.

Appendix E

CBCL Parent Report – Aggression & Rule-Breaking Combined Scale

The following is a list of items that describe children and adolescents. For each item that describes your child now or within the past 6 months, please tell us whether the item is very true, somewhat true, or not true of your child. Please answer all items as well as you can, even if some do not seem to apply to your child.

Aggression Subscale:

- 1. Argues a lot.
- 2. Cruelty, bullying, or meanness to others.
- 3. Demands a lot of attention.
- 4. Destroys his or her own things.
- 5. Destroys things belonging to his or her family or others.
- 6. Disobedient at home.
- 7. Disobedient at school.
- 8. Gets in many fights.
- 9. Physically attacks others.
- 10. Screams a lot.
- 11. Stubborn, sullen, or irritable.
- 12. Sudden changes in mood or feelings.
- 13. Sulks a lot.
- 14. Suspicious.
- 15. Teases a lot.
- 16. Temper tantrums or hot temper.
- 17. Threatens people.
- 18. Unusually loud.

Rule-Breaking Subscale:

- 19. Drinks alcohol without parents' approval.
- 20. Doesn't seem to feel guilty about misbehaving.
- 21. Breaks rules at home, school, or elsewhere.
- 22. Hangs around with others who get in trouble.
- 23. Lying or cheating.
- 24. Prefers being with older kids.
- 25. Runs away from home.
- 26. Sets fires.
- 27. Sexual problems.
- 28. Steals at home.
- 29. Steals outside the home.
- 30. Swearing or obscene language.
- 31. Thinks about sex too much.
- 32. Smokes, chews, or sniffs tobacco.
- 33. Truancy, skips school.
- 34. Uses drugs for nonmedical purposes (don't include alcohol or tobacco).
- 35. Vandalism.

References

- Achenbach, T. M. (1991). *Manual for Child Behavior Checklist 4–18 and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Akers, R.L. (2009) Social Learning and Social Structure: A General Theory of Crime and Deviance. Piscataway, NJ: Transaction Publishers.
- Amato, P. R., & Fowler, F. (2002). Parenting practices, child adjustment, and family diversity. *Journal of Marriage and Family*, 64, 703-716.
- Ary, D. V., Duncan, T. E., Duncan, S. C., & Hops, H. (1999). Adolescent problem behavior: The influence of parents and peers. *Behaviour Research and Therapy*, *37*, 217-230.
- Aseltine, R. H. (1995). A reconsideration of parental and peer influences on adolescent deviance. *Journal of Health and Social Behavior*, *36*, 103-121.
- Bandura, A. (1977). Social learning theory. Oxford England: Prentice-Hall.
- Barnes, G. M., Hoffman, J. H., Welte, J. W., Farrell, M. P., & Dintcheff, B. A. (2006). Effects of parental monitoring and peer deviance on substance use and delinquency. *Journal of Marriage and Family*, 68, 1084-1104.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal* of Personality and Social Psychology, 51, 1173-1182.
- Baumrind, D. (1966). Effects of authoritative control on child behavior. *Child Development*, *37*, 887-907.
- Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science*, 11, 7-10.
- Berndt, T. J., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development*, 66, 1312-1329.
- Bowlby, J. (1973). *Separation: Anger and Anxiety*. Attachment and loss. Vol. II. London: Hogarth.
- Boykin McElhaney, K., Immele, A., Smith, F. D., & Allen, J. P. (2006). Attachment organization as a moderator of the link between friendship quality and adolescent delinquency. *Attachment & Human Development*, *8*, 33-46.
- Brendgen, M., Vitaro, F., & Bukowski, W. M. (2000). Deviant friends and early adolescents' emotional and behavioral adjustment. *Journal of Research on Adolescence*, 10, 173-189.

- Brody, G. H., Murry, V. M., Gerrard, M., Gibbons, F. X., McNair, L., Brown, A. C., et al. (2006). The strong African American families program: Prevention of youths' highrisk behavior and a test of a model of change. *Journal of Family Psychology*, 20, 1-11.
- Brody, G. H., & Flor, D. L. (1998). Maternal resources, parenting practices, and child competence in rural, single-parent African American families. *Child Development*, 69, 803-816.
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist, 34*, 844-850.
- Bukowski, W. M., Hoza, B., & Newcomb, A. F. (1987). *Friendship, popularity, and the "self" during adolescence*. Unpublished manuscript, University of Maine, Department of Psychology.
- Chester, C., Jones, D. J., Zalot, A., & Sterrett, E. (2007). The psychosocial adjustment of African American youth from single mother homes: The relative contribution of parents and peers. *Journal of Clinical Child and Adolescent Psychology*, *36*, 356-366.
- Ciairano, S., Rabaglietti, E., Roggero, A., Bonino, S., & Beyers, W. (2007). Patterns of adolescent friendships, psychological adjustment and antisocial behavior: The moderating role of family stress and friendship reciprocity. *International Journal of Behavioral Development*, 31, 539-548.
- Cummings, E. M., Davies, P. T., & Campbell, S. B. (2002). Developmental psychopathology and family process: Theory, research, and clinical implications. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41, 886-886.
- de Kemp, Raymond A. T., Scholte, R. H. J., Overbeek, G., & Engels, R. C. M. E. (2006). Early adolescent delinquency: The role of parents and best friends. *Criminal Justice and Behavior*, *33*, 488-510.
- Deković, M. (1999). Risk and protective factors in the development of problem behavior during adolescence. *Journal of Youth and Adolescence*, 28, 667-685.
- Dishion, T. J., Andrews, D. W., & Crosby, L. (1995). Antisocial boys and their friends in early adolescence: Relationship characteristics, quality, and interactional process. *Child Development*, 66, 139-151.
- Dishion, T. J., & Loeber, R. (1985). Adolescent marijuana and alcohol use: The role of parents and peers revisited. *American Journal of Drug and Alcohol Abuse*, 11, 11-25.

- Dishion, T. J., & McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review*, 1, 61-75.
- Dishion, T. J., Nelson, S. E., & Bullock, B. M. (2004). Premature adolescent autonomy: Parent disengagement and deviant peer process in the amplification of problem behaviour. *Journal of Adolescence*, 27, 515-530.
- Dishion, T.J., Patterson, G.R., Stoolmiller, M., & Skinner, M.L. (1991). Family, school, and behavioral antecedents to early adolescent involvement with antisocial peers. *Developmental Psychology*, 27, 172-180.
- Dishion, T. J., Spracklen, K. M., Andrews, D. W., & Patterson, G. R. (1996). Deviancy training in male adolescents friendships. *Behavior Therapy*, *27*, 373-390.
- DuBois, D. L., & Hirsch, B. J. (1990). School and neighborhood friendship patterns of blacks and whites in early adolescence. *Child Development*, *61*, 524-536.
- Elicker, J., Englund, M., & Sroufe, L. A. (1992). Predicting peer competence and peer relationships in childhood from early parent–child relationships. In R. D. Parke, G. W. Ladd, R. D. Parke & G. W. Ladd (Eds.), *Family–peer relationships: Modes of linkage*. (pp. 77-106). Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.
- Evans, T. D., Cullen, F. T., Burton, V. S. J., Dunaway, R. G., Payne, S.R. (1996). Religion, social bonds, and delinquency. *Deviant Behavior*, *17*, 43-70.
- Forehand, R., Miller, K. S., Armistead, L., Kotchick, B. A., & Long, N. (2004). The parents matter! program: An introduction. *Journal of Child and Family Studies*, 13, 1-3.
- Ferguson, D.M., & Horwood, L.J. (1996). The role of adolescent peer affiliation in the continuity between childhood behavioral adjustment and juvenile offending. *Journal* of Abnormal Child Psychology, 24, 205-221.
- Gaertner, A. E., Fite, P. J., & Colder, C. R. (2010). Parenting and friendship quality as predictors of internalizing and externalizing symptoms in early adolescence. *Journal of Child and Family Studies*, *19*, 101-108.
- García Coll, C., & Garrido, M. (2000). Minorities in the united states: Sociocultural context for mental health and developmental psychopathology. In A. J. Sameroff, M. Lewis, S. M. Miller, A. J. Sameroff, M. Lewis & S. M. Miller (Eds.), *Handbook of developmental psychopathology (2nd ed.)*. (pp. 177-195). Dordrecht Netherlands: Kluwer Academic Publishers.
- Gardner, L., & Shoemaker, D. J. (1989). Social bonding and delinquency: A comparative analysis. *The Sociological Quarterly*, *30*, 481-500.

- Gauze, C., Bukowski, W. M., Aquan-Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self-perceived well-being during adolescence. *Child Development*, 67, 2201-2216.
- Gerard, J. M., & Buehler, C. (2004). Cumulative environmental risk and youth problem behavior. *Journal of Marriage and Family*, *66*, 702-720.
- Giordano, P. C., Cernkovich, S. A., & DeMaris, A. (1993). The family and peer relations of black adolescents. *Journal of Marriage & the Family*, 55, 277-287.
- Giordano, P. C., Cernkovich, S. A., & Pugh, M. D. (1986). Friendships and delinquency. *American Journal of Sociology*, 91, 1170-1202.
- Goldstein, S. E., Davis-Kean, P., & Eccles, J. S. (2005). Parents, peers, and problem behavior: A longitudinal investigation of the impact of relationship perceptions and characteristics on the development of adolescent problem behavior. *Developmental Psychology*, 41, 401-413.
- Hartup, W. W. (1993). Adolescents and their friends. In B. Larson (Ed.), *Close friendships in adolescence* (pp. 3-22). San Francisco: Jossey-Bass.
- Hartup, W. W., & Stevens, N. (1999). Friendships and adaptation across the life span. *Current Directions in Psychological Science*, 8, 76-79.
- Haynie, D. L. (2002). Friendship networks and delinquency: The relative nature of peer delinquency. *Journal of Quantitative Criminology*, 18, 99-134.
- Haynie, D. L., & Osgood, D. W. (2005). Reconsidering peers and delinquency: How do peers matter? Social Forces, 84, 1109-1130.
- Hirschi, T. (1971). Causes of delinquency. Oxford England: U. California Press.
- Hussong, A. M. (2000). Perceived peer context and adolescent adjustment. *Journal of Research on Adolescence, 10*, 391-415.
- Hussong, A. M., & Hicks, R. E. (2003). Affect and peer context interactively impact adolescent substance use. *Journal of Abnormal Child Psychology*, *31*, 413-426.
- Iannotti, R. J., & Bush, P. J. (1992). Perceived vs. actual friends' use of alcohol, cigarettes, marijuana, and cocaine: Which has the most influence? *Journal of Youth and Adolescence*, 21, 375-389.
- Jones, D. J., & Forehand, G. (2003). The stability of child problem behaviors: A longitudinal analysis of inner-city African American children. *Journal of Child and Family Studies*, *12*, 215-227.

- Jones, D. J., Forehand, R., Brody, G. H., & Armistead, L. (2002). Positive parenting and child psychosocial adjustment in inner-city single-parent African American families: The role of maternal optimism. *Behavior Modification*, *26*, 464-481.
- Jones, D. J., Forehand, R., Dorsey, S., Foster, S., & Brody, G. (2005). Coparent support and conflict in African American single mother-headed families: Associations with maternal and child psychosocial functioning. *Journal of Family Violence*, 20, 141-150.
- Jones, D. J., Forehand, R., O'Connell, C., Armistead, L., & Brody, G. (2005). Mothers' perceptions of neighborhood violence and mother-reported monitoring of African American children: An examination of the moderating role of perceived support. *Behavior Therapy*, 36, 25-34.
- Kandel, D. B. (1980). Drug and drinking behavior among youth. *Annual Review of Sociology*, *6*, 235-285.
- Kandel, D. B. (1996). The parental and peer contexts of adolescent deviance: An algebra of interpersonal influences. *Journal of Drug Issues*, *26*, 289-315.
- Kandel, D. B., & Andrews, K. (1987). Processes of adolescent socialization by parents and peers. *International Journal of the Addictions*, 22, 319-342.
- Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology*, 36, 366-380.
- Klein, K. & Forehand, R. (1997). Delinquency during the transition to early adulthood: Family and parenting predictors from early adolescence. *Adolescence*, 32, 61-80.
- Kung, E. M., & Farrell, A. D. (2000). The role of parents and peers in early adolescent substance use: An examination of mediating and moderating effects. *Journal of Child* and Family Studies, 9, 509-528.
- Kupersmidt, J. B., Burchinal, M., & Patterson, C. J. (1995). Developmental patterns of childhood peer relations as predictors of externalizing behavior problems. *Development and Psychopathology*, 7, 825-843.
- Laird, R. D., Pettit, G. S., Bates, J. E., & Dodge, K. A. (2003). Parents' monitoring-relevant knowledge and adolescents' delinquent behavior: Evidence of correlated developmental changes and reciprocal influences. *Child Development*, 74, 752–768.
- Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (1999). Best friendships, group relationships, and antisocial behavior in early adolescence. *The Journal of Early Adolescence*, *19*, 413-437.

- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62, 1049-1065.
- Lansford, J. E., Criss, M. M., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Friendship quality, peer group affiliation, and peer antisocial behavior as moderators of the link between negative parenting and adolescent externalizing behavior. *Journal of Research on Adolescence*, 13, 161-184.
- Marshal, M. P., & Chassin, L. (2000). Peer influence on adolescent alcohol use: The moderating role of parental support and discipline. *Applied Developmental Science*, 4, 80-88.
- Mason, C. A., Cauce, A. M., Gonzales, N., & Hiraga, Y. (1996). Neither too sweet nor too sour: Problem peers, maternal control, and problem behavior in African American adolescents. *Child Development*, 67, 2115-2130.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, *53*, 205-220.
- McElhaney, K. B., Immele, A., Smith, F. D., & Allen, J. P. (2006). Attachment organization as a moderator of the link between friendship quality and adolescent delinquency. *Attachment & Human Development*, *8*, 33-46.
- McGloin, J.M. (2009). Delinquency balance: Revisiting peer influence. *Criminology*, 47, 439-477.
- McLoyd, V. C. (1990). The impact of economic hardship on black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, 61, 311-346.
- McLoyd, V. C., Cauce, A. M., Takeuchi, D., & Wilson, L. (2000). Marital processes and parental socialization in families of color: A decade review of research. *Journal of Marriage & the Family*, 62, 1070-1093.
- Mrug, S., & Windle, M. (2009). Moderators of negative peer influence on early adolescent externalizing behaviors: Individual behavior, parenting, and school connectedness. *The Journal of Early Adolescence*, 29, 518-540.
- Murry, V. M., Bynum, M. S., Brody, G. H., Willert, A., & Stephens, D. (2001). African American single mothers and children in context: A review of studies on risk and resilience. *Clinical Child and Family Psychology Review*, 4, 133-155.

- Office of Juvenile Justice and Delinquency Prevention. (2005). 2005 Case Processing Summary Rates for Delinquency Offenses. Available from http://ojjdp.ncjrs.gov/ojstatbb/dmcdb/asp/display.asp?year=2005&offense=1&display type=rates
- Osgood, D. W., Wilson, J. K., O'Malley, P. M., & Bachman, J. G. (1996). Routine activities and individual deviant behavior. *American Sociological Review*, *61*, 635-655.
- Parker, J.G., & Asher, S.R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and dissatisfaction. *Developmental Psychology*, 29, 611-621.
- Patterson, G. R., Dishion, T. J., & Yoerger, K. (2000). Adolescent growth in new forms of problem behavior: Macro- and micro-peer dynamics. *Prevention Science*, 1, 3-13.
- Poulin, F., Dishion, T. J., & Haas, E. (1999). The peer influence paradox: Friendship quality and deviancy training within male adolescent friendships. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 45, 42-61.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, *31*, 437-448.
- Prinstein, M.J., Boergers, J., & Spirito, A. (2001). Adolescents' and their friends' health-risk behavior: Factors that alter or add to peer influence. *Journal of Pediatric Psychology*, 26, 287-298.
- Prinstein, M. J., & Wang, S. S. (2005). False consensus and adolescent peer contagion: Examining discrepancies between perceptions and actual reported levels of friends' deviant and health risk behaviors. *Journal of Abnormal Child Psychology*, 33, 293-306.
- Prinz, R., Foster, S., Kent, R., & O' Leary, K. (1979). Multivariate assessment of conflict in distressed and non-distressed mother-adolescent dyads. *Journal of Applied Behavior Analysis*, 12, 691-700.
- Robin, A., & Weiss, J. (1980). Criterion-related validity of behavioural and self-report measures of problem-solving communication skills in distressed and non distressed parent--adolescent dyads. *Behavioural Assessment*, 2, 339-352.
- Sameroff, A. J., Peck, S. C., & Eccles, J. S. (2004). Changing ecological determinants of conduct problems from early adolescence to early adulthood. *Development and Psychopathology*, 16, 873-896.

- Scaramella, L. V., Conger, R. D., Spoth, R., & Simons, R. L. (2002). Evaluation of a social contextual model of delinquency: A cross-study replication. *Child Development*, 73, 175-195.
- Scholte, R. H. J., van Lieshout, Cornelis F. M., & van Aken, Marcel A. G. (2001). Perceived relational support in adolescence: Dimensions, configurations, and adolescent adjustment. *Journal of Research on Adolescence*, 11, 71-94.
- Selfhout, M. H. W., Branje, S. J. T., & Meeus, W. H. J. (2008). The development of delinquency and perceived friendship quality in adolescent best friendship dyads. *Journal of Abnormal Child Psychology*, 36, 471-485.
- Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology*, 11, 1-13.
- Stanton, B., Li, X., Pack, R., Cottrell, C.H., & Burns, J.M. (2002). Longitudinal influence of perceptions of peer and parental factors on African American adolescent risk involvement. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 79, 536-548.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71, 1072-1085.
- Steele, R., Nesbitt-Daly, J., Daniel, R. & Forehand, R. (2005). Factor-structure of the Parenting Scale in a low-income African American sample. *Journal of Child and Family Studies*, 4, 535-549.
- Steinberg, L., Darling, N. E., & Fletcher, A. C. (1995). Authoritative parenting and adolescent adjustment: An ecological journey. In P. Moen, G. H. J. Elder, K. Lüscher, P. Moen, G. H. J. Elder & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development*. (pp. 423-466). Washington, DC US: American Psychological Association.
- Steinberg, L., Dornbusch, S. M., & Brown, B. B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. *American Psychologist*, 47, 723-729.
- Steinberg, L., Lamborn, S. D., Darling, N., & Mounts, N. S. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 65, 754-770.
- Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, 63, 1266-1281.

- Steinberg, L., Mounts, N. S., Lamborn, S. D., & Dornbusch, S. M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. *Journal of Research on Adolescence*, 1, 19-36.
- Sterrett, E. M., Jones, D. J., & Kincaid, C. (2009). Psychosocial adjustment of low-income African American youth from single mother homes: The role of the youth–coparent relationship. *Journal of Clinical Child and Adolescent Psychology*, 38, 427-438.
- Sutherland, E. H. (1924). Principles of Criminology. Chicago: University of Chicago Press.
- Svensson, R. (2003). Gender differences in adolescent drug use: The impact of parental monitoring and peer deviance. *Youth & Society*, *34*, 300-329.
- Tamis-LeMonda, C., Briggs, R. D., McClowry, S. G., & Snow, D. L. (2008). Challenges to the study of African American parenting: Conceptualization, sampling, research approaches, measurement, and design. *Parenting: Science and Practice*, 8, 319-358.
- Tragesser, S. L., Beauvais, F., Swaim, R. C., Edwards, R. W., & Oetting, E. R. (2007). Parental monitoring, peer drug involvement, and marijuana use across three ethnicities. *Journal of Cross-Cultural Psychology*, 38, 670-694.
- Urberg, K. A., Shyu, S., & Liang, J. (1990). Peer influence in adolescent cigarette smoking. *Addictive Behaviors*, 15, 247-255.
- U.S. Census Bureau. (2008). Current population survey, 2008 America's Families and Living Arrangements. Available from <u>http://www.census.gov/population/www/socdemo/hh-fam/cps2008.html</u>
- Vitaro, F., Brendgen, M., & Tremblay, R. E. (2000). Influence of deviant friends on delinquency: Searching for moderator variables. *Journal of Abnormal Child Psychology: An Official Publication of the International Society for Research in Child and Adolescent Psychopathology*, 28, 313-325.
- Wade, S., Wolfe, C., Brown, T. & Pestian, J. (2005). Can web-based family problem-solving intervention work for children with traumatic brain injury? Rehabilitation Psychology, 50, 337-345.
- Waldrip, A. M., Malcolm, K. T., & Jensen-Campbell, L. (2008). With a little help from your friends: The importance of high-quality friendships on early adolescent adjustment.
- Wallace, J. M., Jr., & Muroff, J. R. (2002). Preventing substance abuse among African American children and youth: Race differences in risk factor exposure and vulnerability. *The Journal of Primary Prevention*, 22, 235-261. *Social Development*, 17, 832-852.

- Warr, Mark. 2002. *Companions in Crime: The Social Aspects of Criminal Conduct*. Cambridge, UK: Cambridge University Press.
- Weaver, S. R. & Prelow, H. M. (2005). A Mediated-Moderation Model of Maternal Parenting Style, Association with Deviant Peers, and Problem Behaviors in Urban African American and European American Adolescents. *Journal of Child and Family Studies*, 14, 343-356.
- Werner, N. E., & Silbereisen, R. K. (2003). Family relationship quality and contact with deviant peers as predictors of adolescent problem behaviors: The moderating role of gender. *Journal of Adolescent Research*, 18, 454-480.
- Zimmerman, M. A., Ramirez-Valles, J., Zapert, K. M., & Maton, K. I. (2000). A longitudinal study of stress-buffering effects for urban African-American male adolescent problem behaviors and mental health. Journal of Community Psychology, 28, 17–33.

Variable	%	Mean (SD)	Possible Range	
Adolescent gender Male Female Adolescent age (yrs)	44 56	13.36 (1.56)		
Mother age (yrs)		38.01 (6.70)		
Monthly family income		\$29,803.26 (\$17,562.76)	\$0-120,000	
Mother education level Less than HS diploma Some HS/ HS diploma or GED Some college/voc. school College degree Some graduate, law, or medical school Graduate, law or medical school degree	0.5 13.6 52.2 20.1 5.4 8.2			
Maternal Monitoring		26.26 (7.23)	0-36	
Maternal Warmth		16.21 (4.45)	0-20	
Best Friend Risky Behavior		0.77 (1.38)	0-12	
Best Friend Relationship Quality		89.59 (28.54)	0-136	
Aggressive Behavior		4.94 (4.88)	0-36	
Rule-Breaking Behavior		2.50 (2.92)	0-34	

Table 1: Demographic and Descriptive Characteristics of the Sample (n = 184)

	1	2	3	4	5	6	7	8	9
1. Child gender	1.0								
2. Child age .	.03	1.0							
3. Mother age	01	.30**	1.0						
4. Household income	02	.09	.14	1.0					
5. Mother education	06	04	02	0.39**	1.0				
6. Positive Parenting	.04	17*	03	.03	.04	1.0			
7. Best Friend Deviant Behavior	14	.37**	.06	.13	12	38**	1.0		
8. Best Friend Relationship Quality	y .41*	* .10	.13	.06	.06	.26**	16*	1.0	
9. Externalizing Problems	05	.15*	08	16*	22**	35**	.34**	17*	1.0
$*n < 05 \cdot **n < 01$									

Table 2: Correlations Among Demographic and Major Study Variables (n = 184)

*p < .05; **p < .01

Variable	F	$R^2\Delta$	В	SE B	β	t
Block 1: Demographic Variables	4.49**					
Mother's Education Level	1.12		98	.49	16	-1.99*
Household Income			.00	.00	11	-1.44
Youth's Age			.65	.33	.14	0.05*
Block 2: Main Effects	8.45***	.14				
Positive Parenting			-2.12	.64	24	-3.29***
Best Friend Deviant Behavior			1.16	.41	.22	2.84**
(BFDB)						
Best Friend Relationship Quality			02	.02	07	-1.01
(BFRQ)						
Block 3: 2-way Interaction	7.98***	.06				
Positive Parenting x BFDB			52	.45	09	-1.14
Positive Parenting x BFRQ			02	.02	08	-1.07
BFDB x BFRQ			05	.01	30	-3.77***
Block 4: 3-way Interaction	7.45***	* .01				
Positive Parenting x BFDB x BFF	RQ		02	.01	16	-1.48

Table 3. Hierarchical Regression Analyses Predicting Youth Externalizing Behaviors_____

 $rac{p \le .05; **p < .01, ***p \le .001}{rac{p \le .001}{rac{p$