The current study evaluated the effects of contextual risk factors (i.e., negative life events and neighborhood problems) and perceived best friend delinquency on child self-reported delinquency. More specifically, the present study extended the literature by evaluating whether best friend delinquency moderated the effects of contextual risk factors on self-reported delinquency in a community-recruited sample of 147 school-aged children (mean age = 8.22 years, standard deviation = 1.99; 54% male). Indeed, perceived best friend delinquency moderated these associations; however, the effect of best friend delinquency depended on the contextual risk factor. Findings and their implications are discussed. © 2012 Wiley Periodicals, Inc.

Rates of juvenile delinquent offenses (i.e., acts committed by a juvenile for which an adult could be prosecuted in court) remain high, with children between the ages of 10 and 17 years committing an average of over 1.6 million delinquency offenses per year (Office of Juvenile Justice and Delinquency Prevention, 2010). The societal costs of child delinquency are great and include loss of life and property, court and imprisonment costs, substance abuse, psychiatric hospitalization, and placement in special classrooms (Loeber, 1990). Furthermore, because individuals who begin engaging in delinquent
behavior during childhood often face worse psychosocial and legal outcomes than those who begin committing delinquent acts in adolescence (Moffitt, Caspi, Harrington, & Milne, 2002), developing a thorough understanding of factors that contribute to child delinquency is of the utmost importance.

Both negative life events and neighborhood problems are known contextual risk factors of child delinquency (e.g., Kim, Conger, Elder, & Lorenz, 2005; Leventhal & Brooks-Gunn, 2000). Likewise, delinquent peer affiliations are one of the strongest proximal predictors of child delinquency (Ferguson & Meehan, 2011; Granic & Dishion, 2003; Patterson, Dishion, & Yoerger, 2000). However, these behaviors do not occur in the absence of one another (Bronfenbrenner, 1979; Loeber, Farrington, Southamer-Lober, & White, 2008) and thus may interact with one another to put children at risk for delinquent behavior. To date, however, few investigations have simultaneously examined these contextual risk factors, and little to no research has examined best friend delinquency as a moderator of the link between these contextual risk factors and child delinquency. Best friend delinquency may exacerbate the effects of these contextual risk factors. Accordingly, the current study extended the literature by examining associations between negative life events, neighborhood problems, perceived best friend delinquency, and child delinquency. More specifically, best friend delinquency was examined as a moderator of the associations between these contextual risk factors and child delinquency.

Neighborhood

The neighborhood a child lives in can have an influence on many domains of development, particularly externalizing symptoms. For instance, neighborhood problems influence a child’s experience of hazardous, threatening conditions, which affect their feelings and behaviors (Wandersman & Nation, 1998). The neighborhood disorder model posits that neighborhood incivilities, such as vandalism and gang presence, negatively affect residents’ feelings of safety, which, in turn, is associated with child delinquency (Wandersman & Nation, 1998). That is, child perception of danger as it is related to negative aspects of their neighborhood environment is associated with child engagement in subsequent delinquent behavior.

Furthermore, from a social learning perspective (Bandura, 1973), neighborhoods that are full of problems and where crime and delinquency is taking place may model negative, delinquent behavior for an individual. Indeed, in an urban sample of adolescents, the perception of neighborhood problems (e.g., crime, violence, graffiti) was associated with symptoms of oppositional defiant disorder and conduct disorder (Anensel & Sucoff, 1996). Moreover, low-income neighborhoods have adverse effects on children’s externalizing behavior, even when taking into account family characteristics (Leventhal & Brooks-Gunn, 2000). Additionally, in a sample of 13-16-year-old males, living in a disadvantaged neighborhood (i.e., poverty, unemployment) was associated with a high frequency and severe levels of delinquency (Loeber & Wikström, 1993). Neighborhood residential instability in early childhood was also associated with symptoms of substance use disorders and antisocial personality disorder in young adulthood (Buu et al., 2009). Thus, problematic neighborhoods are associated with delinquent behavior throughout childhood and into adulthood, and this is likely due to feelings of danger and a need to protect oneself along with the modeling of negative behaviors within the community.
Negative Life Events

Unpleasant, negative life events have also been found to be related to a variety of negative psychological outcomes. Experiences ranging from robbery, abuse, natural disasters, financial hardships, serious illness, and loss of close loved ones have been found to correlate with psychosomatic problems, depression, anxiety, fear, panic, and decreased overall competence (Luthar, 1991; Pithner & Drummond, 1997). Most relevant to the current study, negative life events have been found to be associated with delinquency and aggression (Conner, 2002; Conner, Steingard, Anderson, & Melloni, 2003; Fite, Wimsatt, Elkins, & Grassetti, in press; Kim et al., 2003). The link between negative life events and child problem behavior may be explained by both a stress-process framework and as being related to inconsistent and maladaptive environment. Life events that are experienced as negative, unexpected, and largely out of the child or adolescent’s control may lead to behavioral and emotional distress and dysregulation (e.g., Roosa et al., 2010; Thoits, 1983; Turner & Finkelhor, 1996).

Likewise, the shifting relationships, familial, and environmental dynamics associated with negative life events may create an environment of inconsistency, instability, and insecurity, which can be harmful for children (Nagin & Tremblay 2001; Shaw, Gilliom, Ingoldsby, & Nagin, 2003). Additionally, these negative events can also provide models of aggressive and delinquent behavior, which may also lead to associations with delinquent and other antisocial behaviors from a social learning perspective (Bandura, 1973).

Best Friend Delinquency

As stated above, one of the strongest factors associated with delinquent and problem behavior in childhood and adolescence is the association with delinquent peers (Ary et al., 1999; Dishion, Spracklen, Andrews, & Patterson, 1996; Ferguson & Meehan, 2011; Granic & Dishion, 2003; McGloin & Shermer, 2009; Patterson et al., 2000). Previous research has demonstrated that both peer selection and peer socialization processes may contribute to delinquent peer affiliations (Curran, Stice, & Chassin, 1997; Dishion, Capaldi, & Yoerger, 1999; Dishion, McCord, & Poulin, 1999; Fergusson, Swain-Campbell, & Horwood, 2002; Mrug, Hoza, & Bukowski, 2004). Through peer selection, children choose and associate with peers who will support their antisocial and delinquent behaviors (Dishion, French, & Patterson, 1995; Patterson, 1996; Snyder, Dishion, & Patterson, 1986).

Furthermore, as children start associating with deviant peers, they are also likely to adopt more tolerant views of delinquent behavior (Pardini, Loeber, & Stouthamer-Loeber, 2005), and through this socialization process, continued and further delinquent behavior is reinforced (Ary et al., 1999; Deater-Deckard, 2001). Because of the negative outcomes associated with affiliating with delinquent peers, additional research is needed to examine how peer delinquency interacts with other contextual factors, such as negative life events and neighborhood problems, to influence child delinquent behavior.

Previous research has found that peer delinquency has interactive effects with other risk factors to influence child delinquency. For example, peer delinquency has been found to interact with individual child characteristics (e.g., Vitulano, Fite, & Rathert, 2010) and family characteristics (e.g., Lansford, Criss, Pettit, Dodge, & Bates, 2003; Galambos, Barker, & Almeida, 2003; Mrug & Windle, 2009; Vitulo et al., 2003) in predicting risk for child delinquency. To date, however, only a few studies have examined the interactive effects of peer delinquency and contextual risk factors, neighborhood variables specifically. Pettit et al. (1999) found that the effect of...
unsupervised peer contact in sixth grade on externalizing behavior in seventh grade differed based on the level of neighborhood safety. Results indicated a three-way interaction, where the greatest risk for externalizing behaviors was among adolescents with a greater amount of unsupervised peer contact, low parental monitoring, and low neighborhood safety. However, although this study examined unsupervised peer contact, it was not a measure of peer deviancy per se. Similarly, although not examining interactive effects specifically, Ingoldsby et al., (2006) demonstrated that deviant peer relationships within the child’s neighborhood exacerbated the trajectory (additive effect) of early-starting antisocial child behavior for children who had experienced early parent-child conflict and neighborhood disadvantage (neighborhood poverty and neighborhood problems such as unemployment and abandoned homes). The assumed mechanism for this relationship is that negative neighborhood peer relationships may provide the context in which neighborhood norms and values affect child behaviors (Ingoldsby & Shaw, 2002; Ingoldsby et al., 2006; Leventhal & Brooks-Gunn, 2000). Further note, to our knowledge, no studies have examined the interactive effects of peer delinquency on the relation between negative life events and child self-delinquency. Thus, more research examining the effect of peer delinquency on the link between contextual factors and child delinquency is warranted.

Social learning theory posits that the environment and social experiences provide the context that sets the stage for the behavior that is exhibited, specifically through the mechanisms of modeling and reinforcement (Bandura, 1973). Children are exposed to delinquent behavior when they reside in problematic neighborhoods or experience negative life events, and delinquent peer associations may further model, reinforce, and provide opportunities for a child to engage in such delinquent behaviors. Thus, peer delinquency is expected to exacerbate the influence of both neighborhood problems and negative life events on child delinquency.

**Current Study**

In sum, although there is ample literature supporting the effect of contextual risk factors and peer delinquency on child delinquency, little research has examined their interactive effects. Accordingly, the current study examined peer delinquency as a moderator of the links between neighborhood problems and negative life events and child delinquency. Peer delinquency was expected to interact with both neighborhood problems and negative life events to put an individual at increased risk for delinquency.

The current study focused on best friend delinquency, as best friend delinquency has been specifically indicated in this line of research (e.g., Laird, Pettit, Dodge, & Bates, 1999; Reitz, Dekovic, Meijer, & Engels, 2006). Further note that child depressive symptoms often co-occur with delinquency and other antisocial behaviors (e.g., Loeber et al., 2008). Accordingly, depressive symptoms were controlled for in analyses.

**METHODS**

The methods used in the current study were approved by the appropriate institutional review boards.

**Participants**

Participants were recruited from a community-based program that provides low-cost care for approximately 300 school-age children daily. A table with a sign that said “Earn $5.00”
was displayed for 1 week in the main hallway where parents come in to pick up their children. Only families who approached the table were informed of the study. One hundred forty-seven children were enrolled in the study by caregivers, who provided written consent for study participation.

Children ranged from 5 to 13 years of age (mean \( M = 8.22 \), standard deviation \( SD = 1.99 \)). Approximately 17% of the children were in kindergarten, 13.61% were in first grade, 17.69% were in second grade, 14.29% were in third grade, 20.41% were in fourth grade, 8.44% were in fifth grade, 4.08% were in sixth grade, and 4.08% were in seventh grade at the time of assessment. Just over half of the children were male (54.4%). The racial composition of the sample was 67% African American, 20.5% Caucasian, 5% Hispanic/Latino, and 7.5% biracial or identified with another racial/ethnic group. The majority of study participants (96%) received a fee reduction for their children to attend the program, and 87% of all children received government assistance in paying fees. Approximately 86% of the children attended the program daily. The demographic characteristics and average daily attendance of the present sample is representative of the larger program population.

**Procedures**

Child data were collected over the course of 1 week from children whose parents provided written consent. Children provided written assent just prior to their participation. Children were informed that they did not have to participate if they did not want to and that nonparticipation would not affect their activity at the program. Assent forms were read aloud to the children, and the children were encouraged to ask questions prior to signing the form. Children were also instructed throughout the interview that they could stop at anytime without any penalty.

Children were administered questionnaires in small groups that ranged from 3 to 15 children at a time. For younger children (kindergarten through second grade), there was never less than one study staff member per two children. For older children (third grade and higher), there was never less than one study staff member per five children. All questionnaires were read aloud by a study staff member in order to control for differences in reading ability, and children then reported their own answers using paper-pencil measures. Study staff monitored the room to ensure that children were staying on pace and following along.

Any questions regarding items were addressed confidentially and individually with the child who alerted study staff by raising his or her hand. In a few instances (<10) where children were unable to maintain the pace of the group, study staff took them aside and read items to them individually, answering questions throughout the administration and checking for understanding. The interviews were typically completed in approximately 25 minutes, and children received $5.00 for participation. Note that facility staff were not privy to the children’s answers and waited just outside the testing room while children completed the measures in order to ensure confidentiality and increase accuracy in reporting.

The director, who used a computerized child tracking system, provided data regarding demographic information and average weekly attendance for children whose parents signed consent forms. The director was provided a laptop with Medialab interview software installed, and he entered this information directly into the computer. He was able to report all of this information in less than 5 minutes per child and was compensated $2.00 per child for taking the time to report this information.
Measures

Child and peer delinquency. Child delinquency and the delinquency of the child’s best friend were assessed using child reports of Fergusson, Woodward, and Horwood’s (1999) delinquency items. For self-reported delinquency, children indicated whether they had engaged in a particular behavior in the past year by responding to 14 “yes” or “no” items. For measures of the best friend’s delinquency, the child was instructed to give their best estimate as to whether his or her best friend had engaged in any of the same 14 behaviors over the past year. Items included “Stolen or tried to steal something worth more than $50” and “Been in trouble with the police.” There is literature that suggests that children are knowledgeable about their best friend’s behavior (Ladd & Emerson, 1984). Moreover, other studies have revealed that child reports of peer delinquency are similarly related to constructs as other informants of peer delinquency (e.g., Fite, Wynn, & Pardini, 2009). Items were summed for analyses with higher scores representing greater levels of delinquency. Children’s reports of their own delinquency ranged from 0 to 12 out of a possible total score of 14. Similarly, scores for the child’s best friend’s level of delinquency ranged from 0 to 12. Because of dichotomous responses, internal consistencies were not computed.

Neighborhood problems. Children completed nine items assessing perceived neighborhood problems. The items were chosen from widely used and well-established measures of neighborhood characteristics. More specifically, four items were taken from the Institutional Control Measure (Elliott et al., 1996) and five items were taken from the Neighborhood Disorder Scale (Fauth, Leventhal, & Brooks-Gunn, 2004). A sample item is “People using drugs in public places is a problem in my neighborhood.” Children responded using a 5-point Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Mean scores were computed and used for analyses. High scores indicate low levels of neighborhood problems. The internal consistency of this scale in the current sample was good (α = .87).

Negative life events. A self-report questionnaire comprising 26 items was used to assess negative life events (Swearingen & Cohen, 1985). Children were asked to respond “yes” or “no,” indicating whether they had experienced undesirable life experiences including parental divorce, parental job loss, and familial incarceration in the past year. Extant research has indicated that sums of item scores (each equally weighted) are as highly correlated with dependent variables, as are “impact ratings” (Johnson & Bradlyn, 1988). Accordingly, in the current study, items were summed and analyzed with each event weighted as “one.” Previous studies have found that negative life event scales are indeed related to problem behaviors and aggression (e.g., Kim et al., 2003; Fite et al., in press), which may suggest predictive validity. Because each event may occur independently of others and because responses were dichotomous, internal consistency was not computed (Hoffman & Su, 1997; Kim et al., 2003).

Depressive symptoms. Children completed the “withdrawn/depressed” subscale of the Youth Self Report (Achenbach & Rescorla, 2001). The scale comprises eight items that assess unhappiness and sadness. Children responded using a 3-point scale, ranging from 0 (not true) to 2 (very or often true). This measure has been found to be reliable and valid (Achenbach & Rescorla, 2001). The internal consistency of the measure in this sample was good (α = .88).
Table 1. Correlations, Means, and Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self delinquency</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Best friend delinquency</td>
<td>.54*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Negative life events</td>
<td>.33*</td>
<td>.44*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Neighborhood problems</td>
<td>-.24*</td>
<td>-.15</td>
<td>-.19*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Depression</td>
<td>.22*</td>
<td>.17*</td>
<td>.14</td>
<td>-.24*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Age</td>
<td>.07</td>
<td>.06</td>
<td>.20*</td>
<td>-.07</td>
<td>.16</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Gender</td>
<td>.13</td>
<td>.17*</td>
<td>.05</td>
<td>-.06</td>
<td>-.03</td>
<td>.07</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Race</td>
<td>.15</td>
<td>-.12</td>
<td>-.01</td>
<td>-.07</td>
<td>.12</td>
<td>-.10</td>
<td>-.09</td>
<td>–</td>
</tr>
<tr>
<td>Mean</td>
<td>1.03</td>
<td>.94</td>
<td>6.63</td>
<td>3.37</td>
<td>.65</td>
<td>8.22</td>
<td>1.54</td>
<td>1.80</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.91</td>
<td>1.89</td>
<td>4.92</td>
<td>1.20</td>
<td>.46</td>
<td>1.99</td>
<td>.50</td>
<td>.40</td>
</tr>
</tbody>
</table>

*p < .05

DATA ANALYSIS

All analyses were conducted using SAS 9.1 statistical software. Variables were standardized prior to analyses to aid in the interpretation of results. Correlations were first estimated in order to establish bivariate associations. Multiple regression models were then estimated to determine unique effects as well as examine whether perceived best friend delinquency moderated the effects of contextual factors on child self-reported delinquency. Significant interactions were probed at high (+1 SD) and low (−1 SD) values of perceived best friend delinquency to determine the nature of the interaction according to standard procedure (Aiken & West, 1991).

RESULTS

Descriptive Statistics

Correlations, means, and standard deviations are reported in Table 1. As expected, high levels of perceived best friend delinquency, negative life events, and neighborhood problems were each moderately to highly associated with high levels of child self-reported delinquency. Note that perceived best friend delinquency and child delinquency shared 29% of their variance, suggesting that they were related but distinct variables. Furthermore, depressive symptoms were positively associated with self-reported delinquency. Negative life events were associated with neighborhood problems and best friend delinquency. However, best friend delinquency and neighborhood problems were not statistically related to one another. Older children experienced more negative life events than younger children, and boys reported higher levels of perceived best friend delinquency than girls. Yet no gender, racial, or age differences in self-reported delinquency emerged.

Regression Models

A first-order effects multiple regression model was estimated, whereby delinquency was regressed on negative life events, neighborhood problems, and peer delinquency while also accounting for the variance associated with age, gender, race, and depressive symptoms. As seen in Table 2, best friend delinquency and race were the only variables uniquely associated with delinquency, such that high levels of perceived best friend delinquency and minority youth were associated with high levels of self-reported delinquency. Findings
Table 2. First-Order Effects Regression

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best friend delinquency</td>
<td>.50*</td>
<td>.09</td>
<td>5.33</td>
</tr>
<tr>
<td>Depression</td>
<td>.07</td>
<td>.10</td>
<td>.65</td>
</tr>
<tr>
<td>Negative life events</td>
<td>.04</td>
<td>.10</td>
<td>.37</td>
</tr>
<tr>
<td>Neighborhood Problems</td>
<td>−.16</td>
<td>.09</td>
<td>−1.83</td>
</tr>
<tr>
<td>Age</td>
<td>.02</td>
<td>.09</td>
<td>.24</td>
</tr>
<tr>
<td>Gender</td>
<td>.01</td>
<td>.08</td>
<td>.13</td>
</tr>
<tr>
<td>Race</td>
<td>.21*</td>
<td>.09</td>
<td>2.32</td>
</tr>
</tbody>
</table>

* indicates that best friend delinquency is uniquely associated with delinquency, above and beyond the shared variance amongst all the variables in the model.

The interactions between the contextual risk factors and best friend delinquency (i.e., negative life events X best friend delinquency and neighborhood problems X best friend delinquency) were then simultaneously added to the model, \( F(9) = 9.86, \ p < .0001, R^2 = .48 \), and significant effects emerged. When considering negative life events (\( \beta = −.22, \ p = .00 \); See Figure 1), negative life events were unrelated to delinquency at high levels of peer delinquency (\( \beta = −.18, \ p = .12 \)). However, at low levels of best friend delinquency, negative life events were positively associated with delinquency (\( \beta = .26, \ p = .02 \)). In contrast, high levels of neighborhood problems (\( \beta = −.36, \ p < .0001 \); See Figure 2) were associated with high levels of delinquency at high levels of best friend delinquency (\( \beta = −.61, \ p < .0001 \)). However, neighborhood problems were unrelated to delinquency at low levels of best friend delinquency (\( \beta = .11, \ p = .27 \)).

DISCUSSION

The current study examined the unique effects of negative life events, neighborhood problems, and perceived best friend delinquency on child self-reported delinquency. Furthermore, the study extended the literature by examining perceived best friend delinquency as a moderator of the link between negative life events and neighborhood problems and child delinquency. Findings suggested that best friend delinquency was the risk factor most strongly uniquely associated with child self-reported delinquency, and that

1 Although child self-reports of study constructs have been reported with children as young as kindergarten and first grade (e.g., Fite, Stoppelbein, Greening, & Preddy, 2011; Fite, Vitulano, & Preddy, 2011; Loeber et al., 1998; 2008; Luby, Belden, Sullivan, & Spitznagel, 2007; Meuret, Ehrenreich, Pincus, & Ritz, 2006), we thought some may question the veracity of findings using self-reports with such young children. Accordingly, we re-ran analyses using children aged 7 years and older, and findings remained identical. Best friend delinquency was the only risk factor uniquely associated with delinquency in the first-order effects regression model (\( \beta = .69, \ p < .0001 \)) and both the neighborhood X best friend delinquency (\( \beta = −.49, \ p = .0002 \)) and the negative life events X best friend delinquency (\( \beta = −.37, \ p < .0001 \)) interactions were consistently found.

2 Although not a primary focus of the current paper, additional two-way (negative life events X neighborhood problems) and three-way (negative life events X neighborhood problems X best friend delinquency) interactive effects were examined. However, no significant effects emerged (\( \beta s = .007 \) and −.02, \( p s > .86 \)).
indeed best friend delinquency influenced the associations between neighborhood problems and negative life events and child delinquency. However, the effect of best friend delinquency was not consistent across the contextual factors. Whereas best friend delinquency strengthened the association between neighborhood problems and delinquency, negative life events were unrelated to child delinquency in the presence of high levels of best friend delinquency. Findings are further discussed in turn below.

Consistent with expectation and previous research (e.g., Ferguson & Meehan, 2000; Kim et al., 2003; Loeber & Wikström, 1993), high levels of negative life events, neighborhood problems, and best friend delinquency were positively associated with child delinquency at the bivariate level. However, when simultaneously examining associations in regression analyses, findings suggested that best friend delinquency was the only risk factor uniquely associated with child delinquency. These results suggest that best friend delinquency is the strongest of the three risk factors of child delinquency, and is a risk factor above and beyond the shared variance associated with these risk factors. Findings are consistent with the overarching literature suggesting that peer delinquency is one of the strongest proximal predictors of child delinquency (e.g., Ary et al., 1999; Dishion et al., 1996; Ferguson & Meehan 2011; Granic & Dishion, 2003; Patterson et al., 2000).
Furthermore, current findings extend the literature by suggesting that best friend delinquency moderates the link between contextual risk factors and child delinquency. More specifically, best friend delinquency exacerbated the link between neighborhood problems and child delinquency. At high levels of peer delinquency, neighborhood problems were strongly, positively associated with child delinquency. In contrast, at low levels of best friend delinquency, neighborhood problems were unrelated to child delinquency. As seen in Figure 2, children most at risk for delinquency are those who experience high levels of neighborhood problems and also report high levels of best friend delinquency. Findings are consistent with previous research, suggesting that neighborhood problems and peer delinquency are risk factors for child delinquency (Ferguson & Meehan, 2011; Leventhal & Brooks-Gunn, 2000; Loeber et al., 2008), and they extend the literature to suggest that together they produce the highest level of risk.

Best friend delinquency also moderated the link between negative life events and child delinquency; however, findings were contrary to expectation. At low levels of best friend delinquency, negative life events are positively associated with delinquency. In contrast, at high levels of best friend delinquency, negative life events are unrelated to delinquency. As expected, and observed in Figure 1, low levels of peer delinquency in conjunction with low levels of negative life events are at least risk for problem behavior. However, at high levels of best friend delinquency, children are reporting high levels of delinquency regardless of the level of negative life events. Findings suggest that in the presence of delinquent peers, negative life events are not as strong of a risk factor for delinquency. Yet in the absence of delinquent peers, negative life events are associated with increased levels of delinquency. It appears that best friend delinquency is the most important factor of child delinquency and can overshadow the effects of negative life events. Yet when a delinquent best friend is not present, negative life events put children at risk for delinquency. Note, however, that this is the first study to evaluate the interactive effects of negative life events and best friend delinquency. Therefore, findings should be replicated before firm conclusions are drawn.

Limitations and Conclusions

Study limitations should be considered when interpreting results. First, note that current data are cross-sectional in nature. It will be important for future research to further evaluate associations longitudinally and bidirectionally, as peers mutually influence one another (e.g., Hartup, 1999). Furthermore, data were correlational in nature. Thus, causation cannot be assumed. An additional limitation is that variables of interest were assessed via child-report. Extant literature suggests that children are good reporters of their own behaviors (Fite, Stoppelbein, & Greening, 2009; Raine et al., 2006), and child self-reports of these constructs have been used with the current age group (e.g., Fite, Stoppelbein, Greening, & Preddy, 2011; Fite, Vitulano, & Preddy, 2011; Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998; Loeber et al., 2008; Luby, Belden, Sullivan, & Spitznagel, 2007; Meuret et al., 2006). Moreover, research suggests that parents may underestimate children’s exposure to problems such as violence. Specifically, work by Zimmerman and Pogarsky (2011) found that a majority of parents (66%) underestimated their own children’s exposure to violence. Thus, it can be argued that child perception of behavior is what is important, and we further note that findings are in the expected direction.

On the other hand, children tend to attribute their own behaviors to the behavior of their peers and might not be accurate reporters of peer delinquency (Ennett & Bauman, 1993; Bauman & Ennett, 1994; Haynie, 2001). Similarly, child reports of
neighborhood problems may reflect the child’s perception rather than an objective report of a neighborhood’s attributes. Although child reports of peer delinquency have been found to be similarly related to others’ reports of peer delinquency (e.g., Fite, Wynn, & Pardini, 2009), and self-reports of neighborhood problems are common (e.g., Aneshensel & Sucoff, 1996), future studies should use multiple informants.

Despite these limitations, the current study yields important information for understanding the relationship between delinquency, peer delinquency, neighborhood, and negative life events. First, findings provide further support to suggest that peer delinquency, best friend delinquency in particular, is one of the strongest risk factors for child delinquency. Furthermore, findings suggest that the effect of contextual factors may be influenced by the presence of best friend delinquency. That is, neighborhood problems become particularly problematic in the presence of delinquent best friends. In contrast, negative life events do not appear to be as important when delinquent peer relationships are present. Negative life events are associated with delinquent behavior only when delinquent peers are not present.

From an intervention perspective, findings indicate a primary focus of treatment for delinquency should be delinquent peer influence. There is evidence suggesting that selection and socialization processes are involved in the association between peer delinquency and best friend delinquency (Fergusson et al., 2002; Mrug et al., 2004). Therefore, interventions need to include helping children make good choices in friendship selection as well as subsequent monitoring and supervision. Furthermore, current findings suggest that children who reside in problematic neighborhoods and have delinquent best friend relationships are at particular risk for engaging in delinquent behavior, and should be specifically targeted for prevention efforts. Finally, negative life events may only be relevant as a target of intervention when delinquent best friends are not present.

REFERENCES


Journal of Community Psychology DOI: 10.1002/jcop


Journal of Community Psychology DOI: 10.1002/jcop


IMPORTANT NOTE:

Regarding “The Positive Impact of Attending a Community-Based Youth Program on Child Depressive Symptoms,” by Fite, P. J., Vitulano, M. L., and Preddy, T. M., published in the September 2011 issue of Journal of Community Psychology (Vol. 39, No. 7, pp. 804–814), please note that the data-collection procedures were identical to those of this current article, with child-reported data collected over 2 sessions and children receiving $5 for each data-collection session.