

Fam Psychol. Author manuscript; available in PMC 2010 October 6.

Published in final edited form as:

J Fam Psychol. 2008 August; 22(4): 614–621. doi:10.1037/a0012793.

Intimate Partner Violence and Children's Reaction to Peer Provocation: The Moderating Role of Emotion Coaching

Lynn Fainsilber Katz, **Erin Hunter**, and **Amanda Klowden** Department of Psychology, University of Washington

Abstract

The current study examined the relation between intimate partner violence (IPV) and children's reactions to a stressful peer interaction in a community-based sample. The moderating role of parental emotion coaching in buffering children from negative reactions to a peer was also examined. Children participated in a peer provocation paradigm and mothers completed the Parent Meta-Emotion Interview. Both adaptive (i.e., laughing, ignoring) and maladaptive (i.e., hostile/challenging, odd behaviors) reactions to the provocative peer were examined. IPV was positively related to children's laughing and odd behaviors but was unrelated to ignoring and hostile/challenging behaviors. Additionally, emotion coaching was found to moderate relations between IPV and children's laughing and odd behaviors. The importance of understanding protective factors in families experiencing IPV and of developing emotion coaching parenting programs is discussed.

Keywords

intimate partner violence; parenting; peers; emotion coaching

Exposure to intimate partner violence (IPV) has been linked to a variety of adjustment problems in children, including poor peer relations (Jouriles, Norwood, McDonald, & Peters, 2001). For example, McCloskey and Stuewig (2001) found that witnessing IPV was associated with higher levels of self-reported loneliness in school and increased conflict with a close friend. Children exposed to IPV were also less likely to get along with other children, more likely to get into fights, and more likely to be teased and disliked by their peers. Longitudinal studies have

& Lichter, 2003).

However, there is a dearth of information about the nature of the social skill deficits that are characteristic of IPV-exposed children. In part, this is due to a lack of observational studies examining children's behavior in specific social contexts that may be particularly problematic for IPV-exposed children. Previous research has suggested that children exposed to IPV are especially vulnerable to difficulties with emotional expression and regulation. For example, children exposed to IPV are less likely to exhibit appropriate emotions to events and more likely to express their negative feelings than are children who have not been exposed to IPV (Graham-Bermann & Levendosky, 1998). Additionally, compared with other children, children exposed to IPV tend to be less aware of their emotions and rated by their mothers as more emotionally dysregulated (Katz, Hessler, & Annest, 2007). Due to these difficulties with emotional expression and regulation, children exposed to IPV may struggle in peer situations that require increased emotion regulation abilities.

reported that witnessing IPV as a child predicts aggression toward same-sex peers (McCloskey

One interpersonal context that is likely to be particularly difficult for children exposed to IPV is provocation by a peer. Occasions when children are provoked (e.g., being teased, hit, or insulted by a peer) have been identified by teachers as those instances that are most likely to cause social difficulties for children in general (Dodge, McClaskey, & Feldman, 1985). Given research indicating that children exposed to IPV have difficulty with emotion regulation, they may be even more reactive than are other children when provoked by a peer.

However, not all children exhibit negative outcomes in the face of IPV. Jouriles, Murphy, and O'Leary (1989) found that while many children exposed to IPV exhibited behavior problems, approximately half did not display significant problem behaviors. Further, another study found almost one third of children in a battered women's shelter showed no indication of adjustment problems (Grych, Jouriles, Swank, McDonald, & Norwood, 2000). These findings suggested the presence of protective factors in some families which operate to buffer children from the negative effects of IPV.

Emerging evidence has suggested that parents' emotional capabilities, including their ability to coach their children during emotionally upsetting moments, may serve as protective factors which buffer children from the negative effects of marital conflict and IPV (Gottman, Katz, & Hooven, 1997; Katz & Windecker-Nelson, 2006). Gottman et al. (1997) suggested that parents have an organized set of feelings and thoughts about their own emotions and their children's emotions, which they refer to as parental meta-emotion philosophy (PMEP). Some parents have a PMEP that is high in awareness and coaching of emotion. They are aware of low intensity emotions in themselves and in their children, view the child's negative emotion as an opportunity for intimacy or teaching, validate and label their child's emotion, and problem solve with the child by discussing goals and strategies for dealing with the situation that led to the emotion. Other parents have a PMEP that is low in emotion awareness and coaching. They deny or ignore emotion, view their job as needing to change these toxic feelings as quickly as possible, convey to their children that emotions are not very important, and hope that the dismissing strategy will make the emotion go away quickly.

Research with normative populations has shown that parents who are emotion coaching have children that do better academically, have less physical illness, and are better able to physiologically regulate their emotions (Gottman et al., 1997; Katz, Wilson, & Gottman, 1999). Emotion coaching (EC) has also been associated with better peer relations in families with conduct-problem children (Katz & Windecker-Nelson, 2004). When mothers of conduct problem children were high in EC, their children showed less disconnected peer interaction, less negative conversation and affect, and more high-level peer play than those when mothers were low in EC. Most recently, EC was also found to buffer children from the negative effects of IPV (Katz & Windecker-Nelson, 2006). When mothers were high in EC, IPV was unrelated to their children's behavior problems; however, when mothers were low in EC, IPV was associated with higher levels of aggression, withdrawal, depression, and anxiety.

While EC may be generally beneficial to children, how parents interact with their children about emotion may be particularly important in homes with IPV, since these children are exposed to hostile and threatening interactions that can be highly emotionally arousing. EC may help children calm down and learn to understand the feelings generated by the violence. It may also help children feel supported by parents despite heightened family conflict. To the extent that EC helps children regulate emotion, it may also increase children's ability to manage their own negative affect when faced with difficult interpersonal interactions and may increase the probability that they will utilize adaptive responses and avoid maladaptive responses when interacting with others.

The present study addresses two main questions. First, observational methods are used with a community sample to explore how exposure to varying levels of IPV relates to the social skills of children in situations where they are being provoked by a peer. Peer provocation is likely to elicit range of emotional reactions. However, the optimal social response to peer provocation in middle childhood is to appear unfazed or unaffected by the provocative remarks (Gottman & Parker, 1986). For example, children in middle childhood have rated laughing or joking, followed by ignoring the peer, as the best responses to a teasing peer (Scambler, Harris, & Milich, 1998). Undesirable responses to teasing involve those that reveal the child is negatively affected by the provocation, such as by becoming hostile or challenging. Recent work also has suggested that reacting to peer provocation with "odd" or age inappropriate behavior is detrimental to social interactions (Leary & Katz, 2005). Thus, while negative emotions such as sadness and anger may be expected in response to a provocative peer, in the friendship world of middle childhood, openly displaying anger or sadness does not appear to be a competent peer response.

The present study examined both maladaptive and adaptive reactions to peer provocation. Given previous findings (Gottman & Parker, 1986; Leary & Katz, 2005; Scambler et al., 1998), odd and hostile/challenging behaviors were operationalized as indices of maladaptive behaviors, while laughing and ignoring the peer were operationalized as indices of adaptive behaviors in the face of peer provocation. As IPV-exposed children have greater peer problems, and as responding to provocation with either hostile/challenging or odd behaviors is not an adaptive way to manage interactions with peers, we hypothesized that higher levels of IPV would be related to increased hostile/challenging and odd behaviors during the peer provocation task. We also hypothesized that higher levels of IPV would be related to fewer adaptive behaviors, such as laughing and ignoring, during the peer provocation. We focus on exposure to physical interparental aggression as a more severe marker of IPV, while recognizing that verbal aggression is an important and frequent concomitant of physical aggression.

Second, we examined whether EC would moderate the relation between IPV and children's response to peer provocation. While previous research has indicated that EC is associated with fewer behavior problems in children exposed to high levels of IPV, the current article extends these findings into the peer arena by investigating the specific social skill advantages displayed by those children whose parents use EC. In particular, we tested whether EC confers a social skill advantage to children exposed to varying levels of IPV. For those children whose parents are low in EC, we predicted that increases in IPV would be associated with more hostile/challenging and odd behaviors as well as fewer laughing and ignoring behaviors in response to peer provocation. For those children whose parents are high in EC, we predicted that increases in IPV would be associated with fewer hostile/challenging and odd behaviors as well as more laughing and ignoring behaviors in response to peer provocation.

Method

Participants

Children participated in a large-scale longitudinal study on children's conduct problems and family functioning (N = 130). The first phase of the longitudinal study (Time 1) took place when the children were of preschool age. Families with married, cohabitating couples and at least one preschool age child were recruited through preschools, newspaper announcements, and pediatric health care offices, and were compensated \$150 for their participation. Families were again contacted to participate in the second phase of the study (Time 2) 4 years later, when children were between 8 and 10 years old (average age = 9.06 years). Of the families eligible at Time 2, 72% participated in the follow-up procedures (N = 85), with 69 of those families providing data related to IPV. Sixty-four percent of the children in the sample were

male and 36% were female. Participants were predominantly Caucasian (85.9%), with 7.8% identifying as biracial or multiracial, and 6.3% as African American. The majority of the sample was middle class, with an average yearly income between \$60,000 and \$80,000. On average, mothers reported having received some degree of post-high-school education.

Procedures

Mothers were administered a meta-emotion interview and asked to complete questionnaires on the marital relationship as well as general family information. Children participated in a peer provocation paradigm with a confederate child. All procedures described here occurred at Time 2. The meta-emotion interview and peer provocation paradigm were conducted in a laboratory session and questionnaires were completed at home. The meta-emotion interview was audio taped, and the peer provocation paradigm was videotaped. Both were later coded with a behavioral coding system.

Measures

IPV—Mothers were asked to complete the Conflict Tactics Scale (CTS; Straus, 1979). The CTS is a measure of physical and verbal aggression between the parents within the past 12 months. The Physical Aggression subscale has adequate reliability, with alphas ranging from . 82 to .88. Items on this subscale included throwing something that hit spouse; pushing, grabbing or shoving spouse; kicking, biting, or hitting spouse with a fist; and threatening spouse with a knife or gun. Maternal report of own and husband's use of physical violence were summed to create a total IPV score. The items most commonly reported by this sample were threw, smashed, or hit something other than spouse; blocked spouse from leaving the room; and pushed, grabbed, or shoved spouse. The Verbal Aggression subscale also has adequate reliability, with alphas ranging from .79 to .88. Items on this subscale included insulted or swore at one another; sulked and refused to talk; stomped out of house; did or said something to spite your spouse. Maternal report of own and husband's verbal aggression were summed to create a total Verbal Aggression score.

Peer provocation—Children participated in a 2-hr lab session, which included being videotaped playing a computer game with a same-sex, same-age peer. Unbeknownst to the participating child, the peer was actually a trained confederate in the study. Five child actors, recruited from a children's theater, participated in three 1.5-hr training sessions in which they learned to play the computer game and were trained by an acting coach on a specific set of provoking comments. Actors were required to demonstrate competence in delivering the provoking comments before they were used in sessions. During the actual interaction, provoking comments were documented, and actors were provided feedback after each session regarding the quality of their performance. On average, actors made 12.32 comments per session.

The computer game used in this procedure was designed for the peer provocation paradigm by Underwood, Hurley, Johanson, and Mosley (1999) and involved each child moving a colored line around the computer screen with the goal of not running into the wall, one's own line, or the opponent's line. After a game explanation and a 5-min practice round, children were told the next round would be a contest, and the target child would choose a prize for the winner. During the 10-min contest, the game was rigged so that the target children had a keystroke delay and thus lost the game approximately 75% of the time. Additionally, the actor children were told to make a standard teasing or bragging comment after each round, such as "Why do you keep losing? Don't you want to win that prize?" and "I'm the master, and you don't have a chance." Both children were told that they could stop the game by waving their hand at the camera, at which point the experimenter would end the interaction. The experimenters also

stopped the game if the target child exhibited a strong negative response. Five children terminated the game.

After the game, the actor completed a questionnaire and participated in an interview to assess their experience, and any problems were discussed. The children were then debriefed about the true nature of the game. The experimenter told the children about the keystroke delay and that the other child was an actor trained to make teasing and bragging comments, emphasizing that it was not the child's fault that they lost or were teased. Children were also told that their participation may one day help other children deal with teasing, and they were given the previously selected prize. Before leaving the laboratory, children had the chance to play the game again with the actor child, either with or without the delay on the actor's keys. Mothers were called 2 days after the session for a follow-up on the family's reactions to the laboratory visit. There were no significant reports of distress at the telephone follow-up.

Children's behavior during the peer provocation task was coded by using the Peer Provocation Coding System (PPCS; Leary & Katz, 2002). Coders identified the number of specified behaviors within each 10-s interval, and the number of occurrences of each code was summed over the course of the interaction. When children stopped the game, the average number of times the child displayed each behavior over the course of all completed 10-s intervals was substituted for the missing data for the remainder of the intervals. Previous findings have indicated that laughing or joking is the most desirable response to a teasing peer as well as that hostile, challenging, and odd behavior are undesirable responses (Scambler et al., 1998; Leary & Katz, 2005), so the current study examined these four behaviors: (a) laughing—when the child laughed or joked with the actor child; (b) ignoring—when the child made no response to the actor's comment; (c) hostile/challenging—when the child became hostile or verbally combative toward the actor child; and (d) odd behavior—when a child engaged in talk or actions that seemed bizarre, strange, or nonsensical. An example of an odd behavior was when a child said, out of the blue, "Do you like Barbie dolls? I like Barbie. I hate Barbie dolls, they're so stupid." Three coders were involved in coding the peer provocation behavior, all blind to the study's hypotheses. Coders became reliable by using the PPCS on a separate data set prior to coding this sample. Interrater reliability was computed separately for each behavior by using intraclass correlations on 62% of the data. Reliabilities were as follows: laughing, .90; ignoring, .94; hostile/challenging, .92; and odd behavior, .91.

EC—Mothers were administered the Meta-Emotion Interview (Katz & Gottman, 1986). They were individually interviewed about their experiences and attitudes toward their own and their children's sadness, anger, and fear. Sample questions included "What is it like for you to be sad?" and "What do you want to teach your child about anger?" The interviews, which lasted between 45 and 60 min, were audio taped and later coded.

The Meta-Emotion Interview was coded with the Meta-Emotion Coding System (Katz, Mittman, & Hooven, 1994). Coaching of the child's emotions was measured with six items assessing the degree to which mothers showed respect for the child's experience of emotions, taught the child strategies to soothe his or her own emotions, seemed involved in the child's experience of the emotion, knew how to deal with the emotion, had given thought and energy to what the child knows about emotions, and showed interest in the child's experience. These items were coded separately for each emotion (sadness, anger, and fear) on a Likert scale ranging between 5 (*strongly agree*), 1 (*strongly disagree*), and 0 (*don't know*), in accordance to the mother's response to interview questions. The mean of the dimension for each participant was substituted when a code of *don't know* was given. As no specific a priori hypotheses relating to anger and sadness were proposed, and previous research has found parents' global emotion socialization to better predict child behavior than does emotion-specific socialization

(O'Neal & Magai, 2005), a total EC score was computed by summing across anger, fear, and sadness. Higher scores reflected more EC by the mother.

Coders were trained to be reliable (r = .60 or higher) on the Meta-Emotion Coding System by using a separate data set before coding this sample. A total of three Caucasian coders (two female, one male) coded the data, all blind to hypotheses. Observers who coded the Meta-Emotion Interview were entirely independent of those who coded the peer provocation task. Interobserver reliability was conducted on 45% of the sample and was in the adequate range (r = .72). Interitem reliability across the three emotions was calculated, with an alpha of .63.

Demographics—Mothers completed a questionnaire asking for demographic information including family income, child age, child sex, ethnicity, and mother's years of education.

Results

Descriptive statistics for key variables are presented in Table 1. Preliminary analyses of descriptive statistics indicated that the distributions of both the IPV and the odd behavior variables had significant skewness and kurtosis. To reduce the skewness and kurtosis of both the IPV and odd behavior variables, a logarithmic transformation was performed on these variables. Subsequent analyses were conducted by using these logarithmic calculations.

Approximately 25% of respondents reported at least one incident of IPV over the past year, while 94% reported at least one incidence of verbal aggression over the past year. The percentages of children engaging in each peer provocation behavior were as follows: (a) odd, 12.1%; (b) laughing, 80.3%; (c) ignoring, 98.5%; (d) hostile/challenging, 78.8%.

Demographic variables were not significantly correlated with the key variables, with the exception of child gender. Gender was significantly related to two of the peer provocation behaviors, such that boys were less likely to display ignoring behavior, r(64) = .33, p < .01; and more likely to exhibit hostile/challenging behavior, r(64) = -.26, p < .05, in response to peer provocation than were girls. Relations between gender and laughing behavior approached significance, with boys being more likely to respond to peer provocation with laughter than were girls, r(64) = -.23, p < .08.

Correlations among key variables are presented in Table 2. IPV and verbal aggression were strongly correlated. Verbal aggression was positively related to odd behavior. Odd behavior and hostile/challenging behavior were positively correlated. Ignoring behavior was negatively correlated with hostile/challenging behavior and odd behavior.

Hypothesis 1: Relations Between IPV and Social Skills in Response to Peer Provocation

Partial support was found for our first hypothesis. IPV was positively related to odd behavior (r = .28) but not to hostile/challenging behaviors (r = .12) or ignoring behaviors (r = .03). An unexpected finding was that IPV was positively related to laughing (r = .27).

Hypothesis 2: EC as a Moderator

To test our second hypothesis, that EC would moderate the relation between IPV and children's behavior in response to peer provocation, a series of stepwise hierarchical multiple regressions were conducted based on Baron and Kenny's (1986) recommendations for moderation analyses Four regressions were conducted separately, in which the dependent variable was each of the four peer provocation behaviors (see Table 3). Given the gender differences in peer provocation behaviors and the strong correlation between IPV and verbal aggression, verbal aggression and gender were controlled for in the analyses by entering them into the first step of the regression equations. The independent variable (logarithmic transformation of IPV) was entered into the

second step of the regression equation; the moderator (EC) was entered into the third step; and the interaction term between IPV and EC was entered as the fourth step. EC moderated the relations between IPV and laughing and odd behaviors but not relations between IPV and ignoring or hostile/challenging behaviors.

Following the recommendation by Aiken and West (1991), simple regression lines were plotted for high and low values of the EC variable in relation to IPV for laughing behaviors and odd behaviors (see Figures 1 and 2, respectively). Calculations were then conducted to plot the laughing and odd behaviors at high and low levels of IPV and EC. Values of $\pm 1/2$ of a standard deviation were used for the IPV and EC variables to keep the values of IPV on the *x*-axis in the positive and therefore realistic range of values. Finally, the slopes of the high and low coaching regression lines for the plots of both laughing and odd behavior were separately tested for statistical significance. For odd behavior, when parents were lower in EC, increases in IPV were associated with higher levels of odd behavior in the child, t(61) = 3.64, p < .01. When parents were higher in EC, IPV was unrelated to odd behavior, t(61) = 3.67, p > .05. For laughing behavior, when parents were lower in EC, increases in IPV were associated with increases in children's laughing behavior, t(61) = 3.17, p < .01.

Discussion

Previous research has suggested that IPV is related to maladaptive peer relations in children, such as increased loneliness in school, more conflict with a close friend, difficulties getting along with other children, and an increased likelihood of being teased and disliked by peers (McCloskey & Stuewig, 2001). These findings, though informative, have been preliminary, reflecting general peer outcomes and failing to provide insight into how children exposed to IPV actually behave in stressful peer contexts. Observation of children during peer provocation adds to this understanding by indicating that children exposed to IPV are more likely to respond to peer teasing with laughing and odd behaviors. These reactions are both promising, because laughing is an adaptive response to peer provocation (Scambler et al., 1998), as well as problematic, because odd behavior violates the norms of middle childhood (Gottman & Parker, 1986).

The hypothesis that children exposed to IPV would exhibit higher levels of odd behavior than would their nonexposed counterparts was supported. Leary and Katz (2005) suggested that behaving oddly reveals that the child is disorganized by the stressful situation and cannot inhibit socially unacceptable behavior. Children exposed to IPV may be particularly sensitive to negative affect from others and may become emotionally dysregulated when provoked. In this dysregulated state, they engage in talk or action that seems bizarre, strange, or nonsensical to others. The current finding warrants further research investigating the emotional processes linking exposure to IPV and odd behavior in children.

The unexpected finding of a positive association between IPV and higher levels of laughter may reflect the influence of EC in moderating relations between IPV and social behavior. Humor has long been recognized as an adaptive way to diffuse tension in an uncomfortable situation (Chapman, 1976), and in the context of peer provocation, humor has the added benefit of showing peers that they are unfazed by the provocateur and may lead to a reduction in teasing and an increase in peer acceptance. The current finding of a positive association between IPV and laughter may indicate resilience in at least a subsample of children exposed to IPV.

The hypothesis that children exposed to IPV would be more likely to exhibit hostile/challenging behavior and less likely to ignore a provoking peer than their nonexposed counterparts was not supported. This may be due to observed gender differences in hostile/challenging and ignoring

behaviors. Boys were more likely to show hostile/challenging behavior than were girls, and girls were more likely to ignore provoking comments than were boys. This is consistent with evidence that boys tend to respond to IPV and marital conflict with externalizing behaviors and girls with internalizing behaviors (Edleson, 1999; Jouriles & Norwood, 1995). Future studies with large sample sizes could examine gender as a moderator of relations between IPV and adjustment with peers.

Minor provocations by peers are frequent occurrences in middle childhood, and how children respond to these provocations has important consequences for their social standing. For example, a child's response to teasing affects how friendly and popular they are rated by their peers. Additionally, children who observe the teasing are more likely to remember maladaptive responses than other behaviors, suggesting that children may develop negative impressions of their peers based on undesirable responses (Scambler et al., 1998). The increased likelihood of odd behavior poses problems for peer relations, as these children are seen as "annoying" or "strange" by peers. In fact, Scambler et al. (1998) found that children frequently reported "weird or age inappropriate behavior" to elicit teasing from peers, suggesting that responding to teasing with odd behavior puts a child at risk for future teasing from peers. These unskilled social responses may set the stage for continued teasing and peer rejection and may explain higher levels of victimization in children exposed to IPV (Mohr, 2006).

However, the current findings also provide hope for children exposed to IPV, as mothers' EC abilities functioned as a buffer. High levels of EC protected children exposed to IPV from exhibiting odd, nonsensical behaviors and increased the likelihood that children would use laughter when teased, an effective method of deflecting teasing by a peer (Scambler et al., 1998). Scambler and colleagues (1998) also found that children viewed other children who responded with humor as more friendly than those that responded by ignoring or with hostility. Children who use laughter and who are less likely to exhibit odd behavior may be better able to regulate their emotions in the context of a provoking peer. Katz and colleagues (Gottman et al., 1997; Katz & Windecker-Nelson, 2004; 2006) have suggested that, through EC, parents teach children how to regulate their emotions and how to handle emotionally charged situations. Even in the face of IPV, children whose mothers are EC are better able to regulate their emotional arousal and to exhibit both of the more successful responses to a provocative peer.

The absence of a direct relation between EC and children's behavior during peer provocation is consistent with previous findings on EC and children's peer play (Katz & Windecker-Nelson, 2004). There may be child characteristics such as having a difficult temperament that may challenge even the most skilled EC parent and may decrease the degree to which EC can be effective in increasing positive peer engagement. Research on child characteristics that interact with EC parenting would be useful in understanding the benefits and limits of EC.

It is important to mention that the present study consisted of families reporting low levels of IPV, such as pushing, grabbing, and blocking the other from leaving the room. Thus, the current findings may not generalize to families experiencing more frequent and severe IPV. The low levels of IPV and the fact that IPV was observed in only 25% of the sample raises questions about the reliability of the findings. It is noteworthy, however, that EC emerged as a moderator of the relations between IPV and children's peer behaviors despite low severity and frequency of reported violence. It is also possible that EC may moderate relations only between IPV and child adjustment when there are low levels of violence. Future studies with help-seeking samples that show more frequent and severe levels of violence are needed to examine the role of EC across the severity range of battering.

One methodological limitation of this study is that IPV was measured by the wife's report and may not accurately reflect child exposure. Studies of child exposure to violence report

considerable variability in the degree to which children witness interadult violence. For example, Hughes (1988) found that all children in her sample either were present in the same room and directly witnessed the conflict or were in a nearby room and heard the physical conflict. There is also evidence that mother's report of exposure may actually be an underestimate of the degree to which children witness IPV. For example, O'Brien, John, Margolin, and Erel (1994) found that approximately 21% of children in their sample reported seeing the violence, even when one or both parents reported that their children had not seen it. However, it is unclear whether the negative effects of violence vary as a function of whether the child is present in the room in which violence is occurring or can hear the conflict occurring in another room. Since children are sensitive to the resolution of conflict, even when the resolution occurs "behind closed doors" (Cummings, Simpson, & Wilson, 1993), they may be acutely aware of conflict even when it does not occur in front of their eyes. Future studies examining children's own reports of violence exposure and perception of whether conflict was resolved may more adequately capture the child's perceptions of violence and the degree of ensuing harm.

Another limitation is that our sample was primarily Caucasian. It is unclear whether these findings would replicate in a more ethnically diverse population. In particular, studies of EC have largely been conducted with Caucasian samples, and we do not know whether EC will buffer children from the effects of IPV in other racial and cultural groups.

Some limitations of the EC variable are also worth noting, including its moderate internal consistency and that only a single way of assessing EC was obtained. While the moderate internal consistency is of concern, it is important to keep in mind that this is balanced by evidence of external validity of EC across samples (Gottman et al., 1997; Katz & Windecker-Nelson, 2006). Observational methods of assessing EC have been used in previous research (Cleary & Katz, 2007) and have been found to relate to parental report of their meta-emotion philosophy. Future research may use both observational and interview methods to obtain a more robust assessment of EC that may potentially be less influenced by social desirability bias. Additionally, direct assessment of schoolmates' reports of peer acceptance may also provide a more complete window into the peer world of children exposed to IPV.

The current findings support previous research suggesting that parents with more EC philosophies help IPV-exposed children deal with difficult interpersonal situations in a more adaptive manner than parents with less EC philosophies (Katz & Windecker-Nelson, 2006). EC may teach children how to adaptively deal with their reactions to violent conflict, and this could be something these children are bringing into other aspects of their lives. Future longitudinal studies with IPV-referred populations can help determine whether EC can benefit families exhibiting more severe forms of violence. Given current evidence of the protective nature of EC, it is also likely that IPV-exposed families may benefit from an intervention teaching parental EC skills. An EC intervention might involve educating parents about the importance of attending to and respecting their children's emotional experiences while also addressing specific ways that parents can teach appropriate behaviors to their children. Given evidence that children exposed to IPV are at risk for a variety of adjustment problems, it is important that the research community continues to make efforts to understand what protects children from harm in the face of IPV.

References

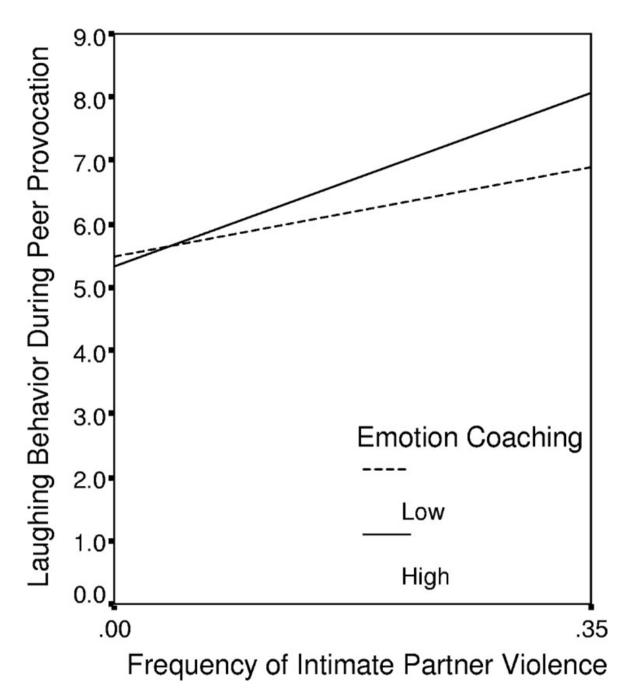
Aiken, LS.; West, SG. Multiple regression: Testing and interpreting interactions. Newberry Park, CA: Sage; 1991.

Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology 1986;51:1173–1182. [PubMed: 3806354]

- Chapman, AJ. Social aspects of humorous laughter. In: Chapman, AJ.; Foot, HC., editors. Humor and laughter: Theory, research and applications. New Brunswick, NJ: Transaction Publishers; 1976. p. 155-185.
- Cleary, R.; Katz, LF. Family level socialization and children's emotional expressivity during middle childhood. Poster presented at the 115th Annual Convention of the American Psychological Association; San Francisco. 2007 Aug.
- Cummings EM, Simpson KS, Wilson A. Children's responses to interadult anger as a function of information about resolution. Developmental Psychology 1993;29:978–985.
- Dodge KA, McClaskey CL, Feldman E. Situational approach to the assessment of social competence in children. Journal of Consulting and Clinical Psychology 1985;53:344–353. [PubMed: 4008719]
- Edleson J. Children's witnessing of adult domestic violence. Journal of Interpersonal Violence 1999;14:839–870.
- Gottman, JM.; Katz, LF.; Hooven, C. Meta-emotion: How families communicate emotionally. Mahwah, NJ: Erlbaum; 1997.
- Gottman, JM.; Parker, J. Conversations of friends: Speculations on affective development. New York: Cambridge University Press; 1986.
- Graham-Bermann SA, Levendosky AA. Traumatic stress symptoms in children of battered women. Journal of Interpersonal Violence 1998;13:111–128.
- Grych JH, Jouriles EN, Swank PR, McDonald R, Norwood WD. Patterns of adjustment among children of battered women. Journal of Counseling and Clinical Psychology 2000;68:84–94.
- Hughes HM. Psychological and behavioral correlates of family violence in child witnesses and victims. American Journal of Orthopsychiatry 1988;58:77–90. [PubMed: 3344803]
- Jouriles EN, Murphy CM, O'Leary KD. Inter-spousal aggression, marital discord, and child problems. Journal of Consulting and Clinical Psychology 1989;57:453–455. [PubMed: 2738217]
- Jouriles EN, Norwood WD. Physical aggression toward boys and girls in families characterized by the battering of women. Journal of Family Psychology 1995;9:69–78.
- Jouriles, EN.; Norwood, WD.; McDonald, R.; Peters, B. Domestic violence and child adjustment. In: Grych, JH.; Fincham, FD., editors. Interparental conflict and child development: Theory, research, and applications. New York: Cambridge University Press; 2001. p. 315-336.
- Katz, LF.; Gottman, JM. The meta-emotion interview. University of Washington, Department of Psychology; Seattle, WA: 1986. Unpublished manual
- Katz LF, Hessler DH, Annest A. Domestic violence, child emotional competence, and child adjustment. Social Development 2007;16:513–538.
- Katz, LF.; Mittman, A.; Hooven, C. The meta-emotion coding system. University of Washington; Seattle, WA: 1994. Unpublished manuscript
- Katz, LF.; Wilson, B.; Gottman, JM. Meta-emotion philosophy and family adjustment: Making an emotional connection. In: Cox, MJ.; Brooks-Gunn, J., editors. Conflict and cohesion in families: Causes and consequences (Advances in family research series). Mahwah, NJ: Erlbaum; 1999. p. 131-165.
- Katz LF, Windecker-Nelson B. Parental meta-emotion philosophy in families with conduct-problem children: Links with peer relations. Journal of Abnormal Child Psychology 2004;32:385–398. [PubMed: 15305544]
- Katz LF, Windecker-Nelson B. Domestic violence, emotion coaching and child adjustment. Journal of Family Psychology 2006;20:56–67. [PubMed: 16569090]
- Leary, AP.; Katz, LF. Peer provocation coding system. University of Washington, Department of Psychology; Seattle, WA: 2002. Unpublished manual
- Leary A, Katz LF. Observations of aggressive children during peer provocation and with a best friend. Developmental Psychology 2005;41:124–134. [PubMed: 15656743]
- McCloskey LA, Lichter EL. The contribution of marital violence to adolescent aggression across different relationships. Journal of Interpersonal Violence 2003;18:390–412.

McCloskey LA, Stuewig J. The quality of peer relationships among children exposed to family violence. Development and Psychopathology 2001;13:83–96. [PubMed: 11346054]

- Mohr A. Family variables associated with peer victimization: Does family violence enhance the probability of being victimized by peers. Swiss Journal of Psychology 2006;65:107–116.
- O'Brien M, John RS, Margolin G, Erel O. Reliability and diagnostic efficacy of parents' reports regarding children's exposure to marital aggression. Violence and Victims 1994;9:45–62. [PubMed: 7826935]
- O'Neal CR, Magai C. Do parents respond in different ways when children feel different emotions? The emotional context of parenting. Development and Psychopathology 2005;17:467–487. [PubMed: 16761554]
- Scambler DJ, Harris MJ, Milich R. Sticks and stones: Evaluations of responses to childhood teasing. Social Development 1998;7:234–249.
- Straus MA. Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. Journal of Marriage and the Family 1979;41:75–88.
- Underwood MK, Hurley JC, Johanson CA, Mosley JE. An experimental, observational investigation of children's responses to peer provocation: Developmental and gender differences in middle childhood. Child Development 1999;70:1428–1446. [PubMed: 10621965]



Emotion coaching as a moderator of the relation between intimate partner violence and laughing behavior during the peer provocation.

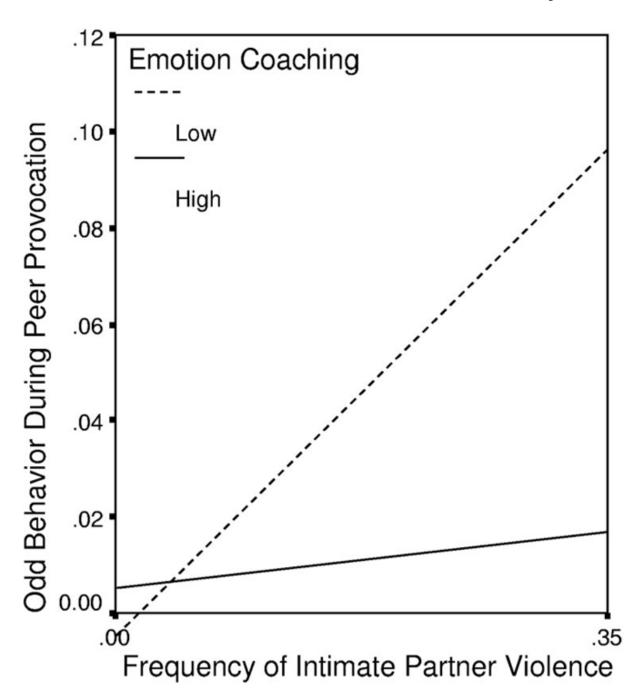


Figure 2. Emotion coaching as a moderator of the relation between intimate partner violence and odd behaviors during the peer provocation.

Katz et al.

Descriptive Statistics for Key Variables

Variable	N	N Minimum Maximum	Maximum	M	SD
Intimate partner violence a	69	0.00	1.61	0.17	0.35
Verbal aggression	69	0.00	167.00	28.13	32.86
Emotion coaching	89	54.30	74.00	65.48	4.26
Peer provocation behavior					
Laughing	99	0.00	21.00	5.07	5.20
Ignoring	99	0.00	16.00	5.42	3.71
Hostile/challenging	99	0.00	17.74	4.11	4.28
Odd a	99	0.00	1.20	0.07	0.23

 $^{^{}a}$ Logarithmic transformation of variable.

Page 14

Table 2

Intercorrelations: Intimate Partner Violence, Interparental Verbal Aggression, Emotion Coaching, and Behaviors During Peer Provocation

Katz et al.

Key variable	1	2	3	4	5	9	7
1. Intimate partner violence a		.77*	.05	.27*	.03	.12	.28*
2. Verbal aggression			.01	11.	09	.17	.31*
3. Emotion coaching				.11	.20	.15	08
Behavior during provocation							
4. Laughing					07	.01	01
5. Ignoring						40**	25*
6. Hostile/challenging							.41**
7. Odd ^a							

aLogarithmic transformation of variable.

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

Page 15

 Table 3

 Hierarchical Regression Analyses Testing Emotion Coaching as a Moderator of the Relation Between Intimate Partner Violence and Peer Provocation Behaviors

Step and procedure	R^2	ΔR^2	ΔF	β^a
Laughing ^b				
1. Child gender	.06	.06	1.95	-0.22
Interparental verbal aggression				0.11
2. Intimate partner violence	.15	.09	6.46*	0.47*
3. Emotion coaching	.15	.00	0.32	0.07
4. Intimate Partner Violence \times Emotion Coaching	.21	.05	3.97*	4.04*
Ignoring				
1. Child gender	.12	.12	4.09*	0.33**
Interparental verbal aggression				-0.10
2. Intimate partner violence	.13	.02	1.23	0.21
3. Emotion coaching	.19	.05	3.74	0.23
4. Intimate Partner Violence \times Emotion Coaching	.20	.01	0.92	1.96
Hostile/challenging				
1. Child gender	.10	.10	3.25*	-0.26*
Interparental verbal aggression				0.18
2. Intimate partner violence	.10	.00	0.00	-0.01
3. Emotion coaching	.11	.02	1.01	0.12
4. Intimate Partner Violence \times Emotion Coaching	.13	.02	1.18	- 2.31
Odd^{bc}				
1. Child gender	.10	.10	3.38*	-0.08
Interparental verbal aggression				0.31*
2. Intimate partner violence	.10	.01	0.47	0.19
3. Emotion coaching	.11	.01	0.55	-0.09
4. Intimate Partner Violence × Emotion Coaching	.24	.12	9.58**	-6.16**

Note. Each dependent variable was examined in a separate regression equation.

^aStandardized regression weight.

^bBehaviors exhibited during the peer provocation paradigm.

^cLogarithmic transformation of variable.

p < .05.

^{**} p < .01.