

Part III

INDIVIDUAL FACTORS AND VIOLENCE



CHAPTER 11

Relational Aggression and Gender: An Overview

Nicki R. Crick, Jamie M. Ostrov, and Yoshito Kawabata

Introduction

Childhood aggression has been one of the most widely studied topics in psychology during the past several decades because of its empirically demonstrated, detrimental consequences for children, for families, for schools, and for society in general (for a review see Coie & Dodge, 1998). Despite impressive and significant progress in this area, the majority of past investigations have failed to consider aggression as exhibited by girls (Crick & Dodge, 1994; Robins, 1986). This lack of attention to aggressive girls has taken several forms. In some studies, girls have been excluded from relevant studies altogether. In others, the forms of aggression studied (e.g., physical aggression) have been relatively uncharacteristic of girls, and thus any outcomes obtained were most applicable for boys.

One of the challenges for researchers in recent years has been to rectify the gender imbalance in our knowledge of childhood aggression, and increased attention to the behavioral problems of girls has ensued. In one attempt to address this problem, a

relational form of aggression has been identified that has been shown to have significant promise for increasing our understanding of the aggressive interpersonal exchanges of girls (Crick & Grotpeter, 1995). The purpose of this chapter is to provide an overview of recent studies of relational aggression and gender with a particular focus on the following: (1) the definition of relational aggression and how it differs from other forms of aggression, (2) assessment of relational aggression, (3) developmental manifestations of relational aggression from early childhood to adulthood, (4) gender differences, (5) risk and harm associated with relational aggression, (6) the role of culture, (7) intervention efforts, and (8) contributions, conclusions, and suggestions for future research directions.

What is Relational Aggression?

Relational aggression has been defined as behaviors that employ damage to relationships, or the threat of damage to relationships, as the vehicle of harm (Crick et al.,

1999). These behaviors may be direct or indirect in nature. For example, a direct relationally aggressive act might involve telling a peer that she can't come to your birthday party unless she does what you tell her to do. In contrast, an indirect relationally aggressive act might involve withdrawing one's attention or friendship by giving a peer the "silent treatment," or it may use nasty rumor spreading as a way to encourage others to reject the peer. Direct relationally aggressive acts appear to be more common than indirect relationally aggressive acts during early childhood; however, both types seem to be common during middle childhood and adolescence (Crick et al., 1999).

The specific focus on the potentially harmful manipulation of relationships as the weapon of harm distinguishes relational aggression from other forms of aggression. For example, the most commonly studied aggressive acts, physically aggressive behaviors, involve the use of physical damage (or the threat of physical damage) as the vehicle of harm (e.g., hitting, threatening to beat a peer up unless she does what you tell her to do). Relational aggression can also be distinguished from verbal aggression. Verbally aggressive acts include hostile, mean behaviors that are verbally delivered (e.g., verbal insults), but that do not necessarily involve the use of relationships. Thus, some, but certainly not all, of relationally aggressive behaviors could be considered verbal aggression and vice versa by some researchers (we prefer to consider verbal aggression to be limited to verbal insults that do not specifically involve relationship damage). Relational aggression can also be differentiated from indirect forms of aggression. Indirect aggression involves hostile behaviors in which the perpetrator does not confront the target. Similar to verbal aggression, these behaviors do not necessarily involve the use of relationships to harm others. Thus, indirect aggressive acts could include such behaviors as putting sugar in someone's gas tank or sending anonymous, nasty e-mails. They also could include behaviors that target relationships as the focus of harm, and

thus, some exemplars of indirect aggression overlap with indirect types of relationally aggressive behaviors (e.g., spreading harmful rumors to encourage peers to reject a classmate).

Study of relational aggression has contributed significantly to our understanding of the role of gender in the development of aggression. Traditionally, studies of childhood aggression have targeted forms of aggression that are more typical of boys than girls. The most widely studied form has been physical aggression. Research on physical aggression has resulted in a significant empirical knowledge base of the development and consequences of aggressive behavior for boys; however, it has not yielded nearly as great an understanding of the role of hostile, aggressive behaviors in the lives of girls. In sharp contrast, studies of relational aggression (as well as those of related forms of aggression, such as indirect aggression) have vastly increased our understanding of aggressive girls, in addition to aggressive boys (Crick & Zahn-Waxler, 2003). These studies have demonstrated that, despite theoretical formulations of the development of aggression among girls in which aggressive behavior has been posited to be almost nonexistent during early and middle childhood (Keenan & Shaw, 1997; Moffitt, 1993; Silverthorn & Frick, 1999), relational aggression can be reliably observed among girls (and boys) as early as the preschool years (Crick, Ostrov, Burr et al., 2006; Ostrov & Keating, 2004; Ostrov, Woods, Jansen, Casas, & Crick, 2004; Stauffacher & DeHart, 2005; for a review see Crick, Ostrov, Appleyard, Jansen, & Casas, 2004). Thus, research on relational aggression counters the "myth of the benign childhoods of girls" (Zahn-Waxler, 1993) and provides unique insight into antisocial, aggressive behavior patterns, particularly for girls.

Assessment of Relational and Physical Aggression

Scholars have successfully used a number of measurement techniques (e.g., field

observations, lab-based analogue and play-group designs, peer assessments, structured interviews, responses to hypothetical scenarios, and standard reports from various informants) to document aggressive behavior among children and adolescents across development (see Coie & Dodge, 1998). Recent advances in the study of relational aggression rely on these past methodological traditions, but continually adapt and introduce innovative, developmentally appropriate, psychometrically sound methods to better reflect the nuances of this relationship-based subtype of aggression. More specifically, the study of relational aggression was the impetus for the development of focal child observational procedures used over longer periods of time to capture these relatively more subtle aggressive behaviors during free play sessions in the classroom and on the playground. The use of focal child observational procedures, which requires the observer to stay within earshot of the participant, allows the researcher to assess the unfolding of the interaction and to monitor the nature of the interaction for proper assessment of harmful intent (see Ostrov & Keating, 2004). In addition, these types of methods allow the observer to rule out more benign and adaptive forms of social behavior and play (e.g., rough and tumble play, see Pellegrini, 1989). In some developmental periods (e.g., early and middle childhood) teachers are privy to instances of relationally aggressive behavior and have been used successfully as reliable informants. Self-report methods may not be as reliable for assessing relational aggression within peer relationships, especially during earlier developmental periods; however, peer nomination and peer rating procedures have been used successfully to study both relational and physical aggression during these age periods (see Crick, Casas, & Mosher, 1997; Crick & Grotpeter, 1995). A brief overview of these methods follows; it further underscores the importance of generating unique as well as developmentally appropriate assessment instruments for the study of relational aggression.

Observations. Naturalistic and semi-structured observational designs have successfully captured relationally aggressive behavior at home (Stauffacher & DeHart, 2005), school (i.e., classroom and playground), and in the lab during early childhood (see Crick, Ostrov, Burr et al., 2006; McEvoy, Estrem, Rodriguez, & Olson, 2003; McNeilly-Choque, Hart, Robinson, Nelson, & Olsen, 1996; Ostrov, 2006; Ostrov & Keating, 2004; Ostrov et al., 2004). The focal child approach (Fagot & Hagan, 1985) and associated procedures, in which one child is observed for a continuous period of time (e.g., 10 minutes) for a number of sessions (e.g., five to eight sessions over a 2- to 3-month period), provides a reliable and valid method for assessing relational and physical aggression (Ostrov & Keating, 2004) during early childhood and the transition into kindergarten (for further description see Crick et al., 2004). Additional methods, including scan sampling observations (McNeilly-Choque et al., 1996) and ethnographic observational analysis, have been conducted with young children on the playground as well (Goodwin, 2002).

Teacher reports. Standard teacher report methods (i.e., Preschool Social Behavior Scale-Teacher Form; Children's Social Behavior Scale – Teacher Form) are increasingly used by aggression scholars to assess relational and physical aggression and victimization (e.g., Bonica, Yeshova, Arnold, Fisher, & Zeljo, 2003; Crick, 1996; Crick et al., 1997; Crick, Ostrov, Burr et al., 2006; Dettling, Gunnar, & Donzella, 1999; Hart, Nelson, Robinson, Olsen, & McNeilly-Choque, 1998; Hawley, 2003; Sebanc, 2003). These methods have been shown to be reliable and valid (e.g., Bonica et al., 2003; Crick et al., 1997), even demonstrating significant concurrent (e.g., Ostrov & Keating, 2004) and predictive associations with observational methods (see Crick, Ostrov, Burr et al., 2006). These findings suggest that teachers can reliably detect relationally aggressive behaviors, especially during early and middle childhood, when these behaviors

may be less covert and sophisticated than in the adolescent period. In recent years, additional teacher report measures with acceptable psychometric properties have also been developed and used by researchers (Macgowan, Nash, & Fraser, 2002).

Peer reports. Peer assessment techniques are often used to obtain a reliable index of social behavior (i.e., relational and physical aggression) in classrooms from early childhood (e.g., Crick et al., 1997; Crick, Ostrov, Burr et al., 2006; McNeilly-Choque et al., 1996), middle childhood (e.g., Crick & Grotpeter, 1995; Henington, Hughes, Cavell, & Thompson, 1998; Rose, Swenson, & Waller, 2004; Rys & Bears, 1997), early adolescence (e.g., Cillessen & Mayeux, 2004; Pellegrini & Long, 2003), and late adolescence/early adulthood (e.g., Werner & Crick, 1999). These methods often demonstrate the ability to provide unique variance in the identification of relationally aggressive behaviors and may be most useful during the late middle childhood and adolescent period, when observations are increasingly more difficult to conduct in a nonreactive and ecologically valid manner and when teachers no longer have as much access to the covert aspects of their students' peer relationships.

Additional methods. A myriad of additional reporting instruments have been developed in studies of relational aggression (see Crick et al., 2004). They include self-report instruments (e.g., Little, Jones, Henrich, & Hawley, 2003), open-ended free response interviews concerning disliked peers (e.g., French, Jansen, & Pidada, 2002), assessments of relationally aggressive children's social cognitions (e.g., Leff, Kuper-smidt, & Power, 2003), and hostile attributional biases for relational and instrumental provocation in peer situations (e.g., Crick & Dodge, 1996; Crick, Grotpeter, & Bigbee, 2002). As the field continues to explore the development of relational aggression, specificity in our selection of research instruments may be based on the particular age of the participants and the developmental manifestations of the aggressive behavior.

Developmental Manifestations of Relational Aggression

Studies of relational aggression during early childhood show that these behaviors tend to be direct; displayed in clear view of the victim, bystanders, and adult observers; and based in the present situational context (e.g., "I won't be your friend anymore unless you give me that toy," "You can't come to my house because you are mean," covering ears to signal ignoring; see Crick et al., 1999; Crick, Ostrov, Burr et al., 2006). Recent evidence indicates that relatively sophisticated forms of relational aggression (e.g., malicious secret spreading) may also be reliably detected among 3-year-old girls (Ostrov et al., 2004). However, these more complex behaviors appear to be less frequent and more direct (e.g., secret spreading may be done right in front of and within hearing range of the intended target) than those exhibited by older children. There is corroborating evidence to suggest that the first signs of relational aggression emerge no later than 30 months and continue to become more sophisticated (i.e., more covert and involving third parties) throughout the early childhood period (Bonica et al., 2003; Crick et al., 1997, 1999; Crick, Ostrov, Burr et al., 2006; Hawley, 2003; McNeilly-Choque et al., 1996; Ostrov, 2006; Ostrov & Keating, 2004; Ostrov et al., 2004; Sebanc, 2003). Finally, recent evidence suggests that young children may learn and be socialized by older siblings (i.e., sisters) to display relationally aggressive behavior in the home context, which might serve as a training ground prior to the transition to subsequent peer relationships at school (Stauffacher & DeHart, 2005).

The majority of studies investigating relational aggression have focused on middle childhood. Relative to early childhood, relational aggression during this developmental period appears to be more covert and sophisticated (e.g., use of malicious gossip, rumors, or secrets to damage relationships via third parties and beyond the purview of the intended target). However, the

behaviors may still manifest in rather direct ways where the victim is clearly aware of the identity of the perpetrator (e.g., peer exclusion: "You can't sit here at our table"; Crick et al., 1999). Evidence indicates that, in addition to the general peer group, friendships become an important context in which relational aggression is exhibited during middle childhood (Grotzinger & Crick, 1996). Relational aggression within friendships may serve a number of purposes, including maintaining control over the friend, keeping the friend from establishing other close relationships, or as a way to express anger.

During adolescence and adulthood, the nature of relationally aggressive acts continues to grow in complexity. At the same time, these behaviors also maintain many of the same themes as demonstrated at younger ages (e.g., social exclusion, withdrawal of love and friendship). One unique feature of relational aggression during these older developmental periods is that, as the establishment of romantic relationships becomes an important focus of development, this context provides an important "opportunity" for the exhibition of relational aggression. Romantic partners sometimes become the targets of relationally aggressive behaviors, and they also may serve as pawns in relationally aggressive tactics (e.g., a relationally aggressive female may flirt with a friend's romantic partner because she wants to damage the relationship between the friend and the friend's romantic partner).

Gender Differences

In contrast to physical aggression, which has been shown to be more typical of boys than girls starting at about age 4 (for reviews see Coie & Dodge, 1998; Keenan & Shaw, 1997), relational aggression has been hypothesized to be more prevalent among girls (Crick & Grotzinger, 1995). This prediction is based, in part, on evidence that girls are more likely than boys to exhibit relational orientations, or the tendency to focus on, invest in, and to derive self- and psychologically relevant information from interpersonal

relationships (for reviews see Crick & Zahn-Waxler, 2003; Cross & Madsen, 1997; Geary, 1998; Leadbeater, Blatt, & Quinlan, 1995; Maccoby, 1990). Because of these orientations, it has been proposed that using relationships as a vehicle of harm (i.e., relational aggression) is an effective means for aggressing among females because it involves damage to something that they particularly value (for a review see Crick et al., 1999). Further, in contrast to physical aggression, relational aggression involves behaviors that are consistent with female stereotypes and thus are less likely to elicit sanctions from significant others.

A number of studies have examined the issue of gender differences in relational aggression. These studies have varied widely in terms of the type of assessment tools used to measure relational aggression and in the ages of the participants evaluated. The vast majority of studies have used teacher- or peer-report measures, and a few have employed observational techniques. During the preschool years, observational studies have consistently demonstrated that girls are more relationally aggressive than boys (McNeilly-Choque et al., 1996; Ostrov, 2006; Ostrov & Keating, 2004; Ostrov et al., 2004). Studies employing teachers as informants have tended to yield similar results (Crick et al., 1997; Crick, Casas, & Ku, 1999; McNeilly-Choque et al., 1996). In contrast, research based on peer informants has yielded mixed results, with some studies showing that girls are more relationally aggressive than boys and others indicating no gender differences (e.g., Crick et al., 1997, 1999; McNeilly-Choque et al., 1996).

During middle childhood, evaluations of gender differences in relational aggression have relied on teacher, peer, and self-reports. Although the majority of studies have shown that girls are more relationally aggressive than boys, some studies have yielded no gender differences, and others have shown boys to be more relationally aggressive than girls (e.g., Crick, 1997; Crick & Grotzinger, 1995; David & Kistner, 2000; Henington et al., 1998; Rys & Bear, 1997; Tomada & Schneider, 1997). Although

relatively fewer studies have examined gender differences in relational aggression during adolescence and early adulthood, evidence is also mixed with some studies, indicating that girls are significantly more relationally aggressive than boys (e.g., MacDonald & O'Laughlin, 1991) and other studies showing the opposite finding or no gender difference (e.g., Loudin, Loukis, & Robinson, 2003). It is important to note that, at these older developmental periods, self-reports of relational aggression have typically been the assessment tool employed.

Although evidence is mixed in some instances, the majority of studies have yielded gender differences in relational aggression that favor girls. This finding has been most apparent in studies that have employed observational methods, assessment techniques that are less prone to biases due to gender stereotypes than those based on self-, peer, and teacher reports. Additional research is needed to clarify the degree of gender differences in relational aggression across development, ethnic groups, geographic regions, and assessment procedures (see David & Kistner, 2000). Another important issue for future studies, in addition to gender differences in relational aggression, concerns the salience of relational aggression for boys versus girls. Given that relational aggression has been posited to be more hurtful and salient for girls (for evidence that supports this hypothesis see Crick, 1995; Crick, Grotpeter, & Bigbee, 2002), it will be particularly important in future studies to evaluate individual differences in the meaning of relational aggression for both perpetrators and targets.

Developmental Risk and Harm Associated With Relational Aggression

A number of recent investigations have examined the impact of relational aggression on those who serve as the frequent targets. This research was initiated as a way to evaluate whether, similar to physical aggression, relational aggression is indeed hurtful and "aggressive." This issue has been

addressed in two ways. In the first, children's or adolescents' perceptions of the harmfulness of relational aggression have typically been assessed via open-ended interviews or hypothetical-situation questionnaires. Findings from these studies have consistently shown that preschoolers, grade-schoolers, and adolescents view relationally aggressive behaviors as hurtful, hostile, emotionally distressing, and aggressive, especially for girls (e.g., Crick, 1995; Crick, Bigbee, & Howes, 1996; Crick, Grotpeter, & Bigbee, 2002; Crick et al., 2004; French et al., 2002; Goldstein, Tisak, & Boxer, 2002; Roecker-Phelps, 2001). Further, initial evidence indicates that relationally aggressive behaviors that are delivered directly are viewed by grade-school children as particularly hostile (Sumrall, Ray, & Tidwell, 2000).

In the second type of studies designed to examine the hurtfulness of relational aggression, researchers have directly examined the association between the experience of relational aggression (i.e., relational victimization) and indexes of social-psychological adjustment. Findings from these investigations have consistently demonstrated significant links between relational victimization and a host of adjustment difficulties, including internalizing difficulties, externalizing problems, peer rejection, and problematic friendships (Crick & Bigbee, 1998; Crick et al., 1999; Grotpeter & Crick, 1996; Crick & Nelson, 2002; Hipwell, Loeber, Stouthamer-Loeber, Keenan, White, & Krone-Man, 2002; Prinstein, Boergers, & Vernberg, 2001; Putallaz, Kupersmidt, Grimes, & DeNero, 1999; Schafer, Werner, & Crick, 2002).

Taken together, these sets of studies provide relatively robust evidence for the harmful nature of relational aggression for those who experience it. Another line of research has been devoted to the examination of the consequences of relational aggression for those who perpetrate it. These studies have clearly demonstrated that relational aggression is associated with a variety of adverse adjustment outcomes, both concurrent and future, for children from the preschool to the adolescent years (e.g.,

Crick, 1996; 1997; Crick & Grotpeter, 1995; Crick, Ostrov, & Werner, 2006; Grotpeter & Crick, 1996; Foster, 2005; Werner & Crick, 1999; Zimmer-Gembeck, Geiger, & Crick, 2005). For example, relational aggression has been shown to significantly predict future peer rejection, depressive/anxious symptoms, and delinquent behavior (Crick, Ostrov, & Werner, 2006; Murray-Close, Ostrov, & Crick, 2007; Zimmer-Gembeck et al., 2005). Additionally, two studies have demonstrated a link between ADHD, specifically the combined subtype, and relational aggression (Blachman & Hinshaw, 2002; Zalecki & Hinshaw, 2004), a finding that has been replicated elsewhere with independent samples (Leff, Costigan, Eiraldi, & Power, 2000). Other studies with school-aged children have documented a link between relational aggression and disruptive behavioral disorder symptoms (Prinstein et al., 2001). Recent preliminary findings also suggest a link between personality disorders and relational aggression. That is, a time-dependent link between relational aggression and features of borderline personality disorder has been empirically supported (Crick, Murray-Close, & Woods, 2006) in recent longitudinal research with a large group of young adolescents.

It is noteworthy, that, when boys engage in high levels of relational aggression, which is a gender non-normative practice, they are at greater risk of adjustment problems than girls who are relationally aggressive or even boys who display gender-normative physically aggressive behaviors (Crick, 1997). Similarly, when girls display extreme levels of physical aggression relative to their peers they are at greater risk for developing problematic social-psychological adjustment outcomes. Thus, it is crucial that both boys and girls are included in future studies of physical and relational aggression in order to determine those most at risk for maladaptive outcomes.

Studies of the close relationships of relationally aggressive children have provided additional information about their adjustment difficulties. The friendships of relationally aggressive children have been shown to

be characterized by aversive features, such as relatively high levels of jealousy and preferences for exclusivity (Grotpeter & Crick, 1996; Sebanc, 2003). Further, the romantic relationships of relationally aggressive young adults have been demonstrated to be associated with problematic behaviors, such as anxious clinging to the partner, frustration, lack of trust, and jealousy (Linder, Crick, & Collins, 2002).

In addition to their risk for adjustment problems and problematic relationships, relationally aggressive children may also be at risk for continued behavioral problems. Recent evidence from longitudinal studies indicate that relational aggression is moderately stable across 18- to 24-month periods during early childhood (see Crick, Ostrov, Burr et al., 2006; Ostrov et al., 2004) and over a 36-month period in middle childhood (Zimmer-Gembeck et al., 2005). Moreover, across a 12-month period, girls increase in their use of relational aggression at a faster rate than boys (i.e., as indicated by significant slope differences; Murray-Close et al., 2007). Thus, if left untreated relationally aggressive behaviors may continue across different peer groups and developmental periods.

These findings indicate that, similar to physically aggressive children, relationally aggressive children may be at serious risk for social-psychological maladjustment. Combined with the findings demonstrating a significant association between relational victimization and maladjustment, these results provide substantial evidence for the importance of a research focus on relational aggression, in addition to physical aggression.

Relational Aggression and Culture

Although a myriad of studies exploring relational aggression and victimization have been conducted in the United States, a relatively smaller literature exists exploring these important developmental questions with children from other cultures. Investigating the role of culture in aggression, particularly relational aggression, is essential

because the meaning and functions of relational aggression might differ across cultures and contexts.

A few studies have been conducted in other Western cultures. For example, Russell, Hart, Robinson, and Olsen (2003) conducted a study of American and Australian preschool children, and the results of their factor analysis demonstrated that Australian preschool teachers reliably distinguished between relational and physical aggression. In terms of gender differences, the teachers perceived that girls were significantly more relationally aggressive, whereas boys were significantly more physically aggressive. Research in Germany with children in middle childhood has demonstrated that girls were more relationally victimized and boys were more physically victimized (Schafer et al., 2002).

To test important questions related to the role of relational aggression in societies that place comparably greater emphasis on the salience of relationships, recent attention has also turned to cultures that may be more collectivistic or interdependent in nature. In a Russian study with preschool children (Hart et al., 1998), teachers and peers reliably distinguished among relational and physical forms of aggression. In contrast to previous findings with U.S. children, no gender differences were found in physical and relational aggression, a finding that the authors believe was attributable to the collectivistic-oriented society in which children's socialization was potentially highly influenced by the former Soviet Union. Similarly, research with Italian children revealed that, as expected, separate factors for relational and physical forms of aggression as well as prosocial behavior emerged from teacher and peer reports. In contrast to a priori expectations, results indicated that boys were both more physically and relationally aggressive than girls. The gender differences favoring boys, according to the investigators, may be due to cultural differences in family and kin networks in rural village contexts. Interestingly, not all interdependent cultures demonstrate these effects, and given the range of variability in cultures it

should not be surprising that some findings do not generalize across these groups. For example, results from a school-aged sample of Indonesian children, using culturally specific qualitative interviews and quantitative methods, demonstrated that boys exhibited higher frequencies of physical aggression, whereas girls were significantly more involved in relational aggression (French et al., 2002).

Members of collectivistic/interdependent-oriented cultures (e.g., Japan, China) place high value on relationships with others and groups (Markus & Kitayama, 1991). Therefore, cultural differences in the social-cognitive processes in the formation of the self may be particularly important to the etiology of relational aggression and the relative influence of these behaviors on social and emotional adjustment problems (e.g., loneliness, depression). Preliminary analysis of a recent cross-cultural study showed that, regardless of gender, Japanese children who were relationally aggressive and/or relationally victimized by peers displayed more depressive symptoms than American children involved with these behaviors (Kawabata, Crick, & Hamaguchi, 2006a, b). This finding suggests that relational aggression and victimization may be more detrimental to children's social and emotional adjustment in interdependent-oriented cultures (e.g., Japan) than those in independent-oriented cultures (e.g., United States) that may place less emphasis on interpersonal close relationships with peers. Additional cross-cultural research is warranted to fully understand the mechanism by which relational aggression and victimization relate to adjustment problems. Research is especially needed in Asian and African cultures because they have been neglected or understudied in the past.

Finally, it is important to highlight that, in contrast to most of existing cross-cultural research on relational aggression, the aforementioned French et al. (2002) study made an effort to replicate their findings among different cultural groups (i.e., American and Indonesian youth) using culturally derived and defined methods and constructs (i.e.,

the emic or culturally specific conceptual and methodological approach) and compared their findings across the two cultures to test for the possibility of cultural diversity or universality of relational aggression (i.e., the etic or universal approach to studying human behavior; Berry, 1999; Pike, 1967). In future studies it will be important not to simply assume that measures developed in the United States or other Western cultures are directly transferable to and valid in other cultures, even if the best cross-cultural practices (e.g., back translation) are implemented. Accordingly, both emic and etic approaches are necessary to fully understand the nature of relational aggression around the world.

Intervention for Relationally Aggressive Children

Despite the fact that school administrators report they are more likely to intervene for incidents involving physical aggression than relational aggression (Xie, Swift, Cairns, & Cairns, 2002), a few attempts to conduct school-based interventions (e.g., "Second Step" program) have been successful during this developmental period (Van Schoiack-Edstrom, Frey, & Beland, 2002). Preliminary empirical evidence demonstrates that intervention efforts within inner-city urban schools are feasible and successfully reduce relationally aggressive social cognitions and relationally aggressive behaviors among at-risk girls (see Leff, Goldstein, Angelucci, Cardaciotto, & Grossman, in press). Group-based interventions with relationally aggressive adolescent girls may also offer some promise at reducing positive attitudes about these behaviors (see Cummings, Hoffman, & Leschied, 2004). Finally, initial attempts during the early childhood period offer some possible points of intervention for simple classroom-based approaches (e.g., implementation of the "You can't say you can't play" rule) with kindergarten children (Harrist & Bradley, 2003). Although the state of knowledge regarding relational aggression is limited with respect to informa-

tion that is needed to develop empirically based intervention and prevention programs (Geiger, Zimmer-Gembeck, & Crick, 2004), this should be a high-priority goal for the immediate future. To increase the effectiveness and viability of these efforts, additional research is needed that targets mechanisms and factors that contribute to the development and maintenance of relational aggression (e.g., family and peer factors that increase the risk for engagement in relational aggression).

Contributions, Conclusions, and Future Directions

In addition to enhancing the gender-balanced nature of the types of aggressive behaviors considered by researchers and other professionals, the study of relational aggression has contributed in a number of ways to the broader study of childhood aggression. One important theoretical contribution has been the recognition that a substantial number of girls experience serious behavioral problems during the early and middle childhood years in the form of relational aggression. This finding stands in stark contrast to existing theories of the development of aggression. These models typically posit that behavioral difficulties do not tend to emerge for girls until adolescence (e.g., Keenan & Shaw, 1997; Silverthorn & Frick, 1999).

A second contribution that has emerged because of the recent focus on relational aggression is the identification of adjustment outcomes associated with aggression that have not previously been included in aggression research. For example, although it has not been examined in past studies of aggression, as already discussed, recent research on relational aggression has shown that it is significantly associated with borderline personality features (Crick, Murray-Close et al., 2006; Werner & Crick, 1999).

Research on the family factors associated with relational aggression has also resulted in new innovations for aggression researchers. Specifically, these investigations

have involved the assessment and study of family factors that have not been considered in past research. For instance, evidence indicates that relational aggression is associated with family relationships that are enmeshed, jealous, and exclusive (for a review see Crick et al., 1999), relationship features that have not been a focus of past studies of aggression and that stand in sharp contrast to those assessed in traditional studies of aggression (e.g., conflict, lack of intimacy and warmth). These studies have also highlighted the importance of studying fathers, in addition to mothers, particularly when attempting to understand the aggressive behavior of girls (Crick, 2003; Nelson & Crick, 2002). The role of fathers has often been neglected in past research.

Another addition that research on relational aggression has made to the broader study of aggression concerns the contexts in which aggression has been examined. The majority of past studies have focused on children's engagement in aggressive behaviors toward peers within group settings such as classrooms or playgroups. However, recent studies of relational aggression have demonstrated the importance of also assessing aggressive behaviors and their consequences within the context of close, dyadic relationships, such as friendships or romantic relationships (Crick & Nelson, 2002; Linder, Crick, & Collins, 2002).

Efforts to develop observational procedures for assessing relational aggression have also resulted in new innovations in aggression research. Because of the relatively subtle and verbal nature of some relationally aggressive acts, observational methods used in past research to measure physical aggression have largely proved inadequate. Thus, to address this issue, researchers have begun to generate creative, new observational approaches that appear to reliably and validly assess physical and relational forms of aggression, as well as other types of social behaviors (Ostrov & Keating, 2004; Ostrov et al., 2004; Putallaz et al., 1999). These approaches have involved both naturalistic observations and laboratory analog tasks. The methods that have been developed tend

to differ from past approaches in their use of longer time intervals per observation and in their ability to capture all verbalizations.

Although a great deal of progress has been made in our understanding of relational aggression during the past decade, our knowledge in this area lags far behind that of more traditionally studied forms of aggression such as physical aggression. As a result, a number of exciting challenges remain for future research on relational aggression. One of the most serious limitations of existing relational aggression research concerns the lack of longitudinal studies. Only a few prospective studies have been published and, although they have contributed significant information to existing knowledge, a number of shortcomings should be rectified in future empirical efforts. Long-term longitudinal studies are needed that include comprehensive assessments of the antecedents, correlates, and consequences of relational aggression and that examine changes, as well as continuities, in the prevalence of relational aggression across multiple developmental periods.

An additional challenge for the future will be to systematically examine the role of gender in the development of relational aggression and its consequences. Given that gender differences have been proposed with respect to the meaning, prevalence, and perceived hurtfulness of relational aggression, studies are needed that explore the role of relational aggression in the lives of boys versus girls. Another important avenue for future empirical efforts will be to further develop and refine observational methods for assessing relational aggression and to expand the range of ages and contexts in which observations can be applied. Thus far, observational studies have focused on preschool and grade-school children in peer and sibling contexts. It will be important in future studies to consider additional age groups (e.g., adolescents, adults) and settings (e.g., sports teams, school dances, neighborhoods, work contexts). Further, it will be of value to include children or adolescents of both genders in these investigations so that gender differences can be evaluated with observational

techniques (existing observational studies with middle childhood samples have neglected boys thus far). In sum, we are excited by the recent increase in empirical research exploring developmental questions related to physical and relational aggression, and we strongly encourage further quality investigations in this burgeoning area.

Acknowledgments

Preparation of this chapter was facilitated, in part, by grants from NIMH (MH63684), NSF (BCS-0126521), and NICHD (HD046629) to the first author. We appreciate the support of the parents, children, teachers and directors involved in our ongoing research endeavors. Finally, we acknowledge our many past and present collaborators who have assisted us in refining our understanding of relational aggression in our own research projects.

References

- Berry, J. W. (1999). Emics and etics: A symbiotic conception. *Culture and Psychology*, 5, 165–171.
- Bonica, C., Yeshova, K., Arnold, D. H., Fisher, P. H., & Zeljo, A. (2003). Relational aggression and language development in preschoolers. *Social Development*, 12, 551–562.
- Blachman, D. R., & Hinshaw, S. P. (2002). Patterns of friendship among girls with and without attention-deficit/hyperactivity disorder. *Journal of Abnormal Child Psychology*, 30, 625–640.
- Cillessen, A. H. N., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development*, 75, 147–163.
- Coie J. D., & Dodge, K. A. (1998). Aggression and antisocial behavior. In N. Eisenberg (Ed.). *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 779–862). New York: John Wiley.
- Crick, N. R. (1995). Relational aggression: The role of intent attributions, feelings of distress, and provocation type. *Development and Psychopathology*, 7, 313–322.
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development*, 67, 2317–2327.
- Crick, N. R. (1997). Engagement in gender normative versus non-normative forms of aggression: Links to social-psychological adjustment. *Developmental Psychology*, 33, 610–617.
- Crick, N. R. (2003). A gender-balanced approach to the study of childhood aggression and reciprocal family influences. In A. C. Crouter & A. Booth (Eds.), *Children's influence on family dynamics: The neglected side of family relationships*. (pp. 229–235). Mahwah, NJ: Lawrence Erlbaum.
- Crick, N. R., & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: A multi-informant approach. *Journal of Consulting and Clinical Psychology*, 66, 337–347.
- Crick, N. R., Bigbee, M. A., & Howes, C. (1996). Gender differences in children's normative beliefs about aggression: How do I hurt thee? Let me count the ways. *Child Development*, 67, 1003–1014.
- Crick, N. R., Casas, J. F., & Ku, H. C. (1999). Relational and physical forms of peer victimization in preschool. *Developmental Psychology*, 35, 376–385.
- Crick, N. R., Casas, J. F., & Mosher, M. (1997). Relational and overt aggression in preschool. *Developmental Psychology*, 33, 579–587.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74–101.
- Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development* 67, 993–1002.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, 710–722.
- Crick, N. R., Grotpeter, J. K., & Bigbee, M. A. (2002). Relationally and physically aggressive children's intent attributions and feelings of distress for relational and instrumental peer conflicts. *Child Development*, 73, 1134–1142.
- Crick, N. R., Murray-Close, D., & Woods, K. A. (2006). Borderline personality features in childhood: A shorter-term longitudinal study. *Development and Psychopathology*, 17, 1051–1070.

- Crick, N. R., & Nelson, D. A. (2002). Relational and physical victimization within friendships: Nobody told me there'd be friends like these. *Journal of Abnormal Child Psychology*, 30, 599-607.
- Crick, N. R., Ostrov, J. M., Appleyard, K., Jansen, E. A., & Casas, J. F. (2004). Relational aggression in early childhood: "You can't come to my birthday party unless..." In M. Putallaz, & K. L. Bierman (Eds.), *Aggression, antisocial behavior, and violence among girls: A developmental perspective*. New York: Guilford Press.
- Crick, N. R., Ostrov, J. M., Burr, J. E., Jansen-Yeh, E. A., Cullerton-Sen, C., & Ralston, P. (2006). A longitudinal study of relational and physical aggression in preschool. *Journal of Applied Developmental Psychology*, 27, 254-268.
- Crick, N. R., Ostrov, J. M., & Werner, N. E. (2006). A longitudinal study of relational aggression, physical aggression and children's social-psychological adjustment. *Journal of Abnormal Child Psychology*, 34(2), 127-138.
- Crick, N. R., Werner, N. E., Casas, J. F., O'Brien, K. M., Nelson, D. A., Grotmeter, J. K., et al. (1999). Childhood aggression and gender: A new look at an old problem. In D. Bernstein (Ed), *Gender and motivation. Nebraska symposium on motivation* (Vol. 45, pp. 75-141). Lincoln, NE: University of Nebraska Press.
- Crick, N. R., & Zahn-Waxler, C. (2003). The development of psychopathology in females and males: Current progress and future challenges. *Development and Psychopathology*, 15, 719-742.
- Cross, S. E. & Madsen, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122, 5-37.
- Cummings, A. L., Hoffman, S., & Leschied, A. W. (2004). A psychoeducational group for aggressive adolescent girls. *Journal for Specialists in Group Work*, 29, 285-299.
- David, C. F., & Kistner, J. A. (2000) Do positive self-perceptions have a "dark side"? Examination of the link between perceptual bias and aggression. *Journal of Abnormal Child Psychology*, 28, 327-337.
- Detling, A. C., Gunnar, M. R., & Donzella, B. (1999). Cortisol levels of young children in full-day childcare centers: Relations with age and temperament. *Psychoneuroendocrinology*, 24, 519-536.
- Dodge, K. A. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), *The Minnesota Symposium on Child Psychology* (pp. 159-181). Cambridge: Cambridge University Press.
- Fagot, B. T., & Hagan, R. (1985). Aggression in toddlers: Responses to the assertive acts boys and girls. *Sex Roles*, 12, 341-351.
- Foster, S. L. (2005). Aggression and antisocial behavior in girls. In D. J. Bell, J. Debra, S. L. Foster, & E. J. Mash (Eds). *Handbook of behavioral and emotional problems in girls*. (pp. 149-180). New York, NY: Kluwer Academic/Plenum Publishers
- French, D. C., Jansen, E. A., & Pidada, S. (2002). United States and Indonesian children's and adolescents' reports of relational aggression by disliked peers. *Child Development*, 73, 1143-1150.
- Geary, D. C. (1998). *Male, female: The evolution of human sex differences*. Washington, DC: American Psychological Association
- Geiger, T., Zimmer-Gembeck, M., & Crick, N. R. (2004). The science of relational aggression: Can we guide intervention? In M. Morretti & C. Feiring (Eds.), *Girls and aggression: Contributing factors and intervention principles*. New York: Springer.
- Goldstein, S. E., Tisak, M. S., & Boxer, P. (2002). Preschoolers' normative and prescriptive judgments about relational and overt aggression. *Early Education & Development*, 13, 23-39.
- Goodwin, M. H. (2002). Exclusion in girls' peer groups: Ethnographic analysis of language practices on the playground. *Human Development*, 45, 392-415.
- Grotmeter, J. K., & Crick, N. R. (1996) Relational aggression, overt aggression, and friendship. *Child Development*, 67, 2328-2338.
- Harrist, A. W., & Bradley, K. D. (2003). You can't say you can't play: Intervening in the process of social exclusion in the kindergarten classroom. *Early Childhood Research Quarterly*, 18, 185-205.
- Hart, C. H., Nelson, D. A., Robinson, C. C., Olsen, S. F., & McNeilly-Choque, M. K. (1998). Overt and relational aggression in Russian nursery-school-age children: Parenting style and marital linkages. *Developmental Psychology*, 34, 687-697.
- Hawley, P. H. (2003). Strategies of control, aggression, and morality in preschoolers: An evolutionary perspective. *Journal of Experimental Child Psychology*, 85, 213-235.
- Henington, C., Hughes, J. N., Cavell, T. A., & Thompson, B. (1998). The role of relational aggression in identifying aggressive boys and girls. *Journal of School Psychology*, 36, 457-477.

- Hipwell, A. E., Loeber, R., Stouthamer-Loeber, M., Keenan, K., White, H. R., & Krone-Man, L. (2002). Characteristics of girls with early onset disruptive and antisocial behaviour. *Criminal Behaviour & Mental Health, 12*, 99–118.
- Kawabata, Y., Crick, N. R., & Hamaguchi, Y. (2006a). *Relational victimization and culture: Links to social information-processing patterns and social-psychological adjustment*. Manuscript submitted for publication.
- Kawabata, Y., Crick, N. R., & Hamaguchi, Y. (2006b). *The role of culture in relational aggression: Links to social-psychological adjustment problems among Japanese and U.S. school children*. Manuscript submitted for publication.
- Keenan, K., & Shaw, D. (1997). Developmental and social influences on young girls' early problem behavior. *Psychological Bulletin, 121*, 95–113.
- Kirsh, S. J., & Olczak, P. V. (2002). The effects of extremely violent comic books on social information processing. *Journal of Interpersonal Violence, 17*, 1160–1178.
- Leadbeater, B. J., Blatt, S. J., Quinlan, D. M. (1995). Gender-linked vulnerabilities to depressive symptoms, stress, and problem behaviors in adolescents. *Journal of Research on Adolescence, 5*, 1–29.
- Leff, S. S., Costigan, T. E., Eiraldi, R., & Power, T. J. (2000, April). *An examination of children's aggressive behaviors and social skills as a function of ADHD subtype and gender*. Poster presented at the biennial meeting of the Society of Research in Child Development, Minneapolis, MN.
- Leff, S. S., Goldstein, A. B., Angelucci, J., Cardaciotto, L., & Grossman, M. (in press). Using a participatory action research model to create a school-based intervention program for relationally aggressive girls: The Friend to Friend Program. In J. Zins, M. Elias, & C. Maher (Eds.), *Handbook of prevention and intervention in peer harassment, victimization, and bullying*. New York: Haworth Press.
- Leff, S. S., Kupersmidt, J. B., & Power, T. J. (2003). An initial examination of girls' cognitions of their relationally aggressive peers as a function of their own social standing. *Merrill-Palmer Quarterly, 49*, 28–53.
- Linder, J. R., Crick, N. R., & Collins, W. A. (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development, 11*, 69–86.
- Little, T. D., Jones, S. M., Henrich, C. C., & Hawley, P. H. (2003). Disentangling the "whys" from the "whats" of aggressive behavior. *International Journal of Behavioral Development, 27*, 122–183.
- Loudin, J. L., Loukas, A., & Robinson, S. (2003). Relational aggression in college students: Examining the roles of social anxiety and empathy. *Aggressive Behavior, 29*, 430–439.
- Maccoby, E. E. (1990). Gender and relationships: A developmental account. *American Psychologist, 45*, 513–520.
- MacDonald, C., & O'Laughlin, E. (1997, April). Relational aggression and risk behaviors in middle school students. Poster presented at the biennial meeting of the Society for Research in Child Development, Washington, DC.
- Macgowan, M. J., Nash, J. K., & Fraser, M. W. (2002). The Carolina Child Checklist of risk and protective factors for aggression. *Research on Social Work Practice, 12*, 253–276.
- MacBrayer, E. K., Milich, R., & Hundley, M. (2003). Attributional biases in aggressive children and their mothers. *Journal of Abnormal Psychology, 112*, 698–708.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.
- McEvoy, M. A., Estrem, T. L., Rodriguez, M. C., & Olson, M. L. (2003). Assessing relational and physical aggression among preschool children: Inter-method agreement. *Topics in Early Childhood Special Education, 23*, 53–63.
- McNeilly-Choque, M. K., Hart, C. H., Robinson, C. C., Nelson, L., & Olsen, S. F. (1996). Overt and relational aggression on the playground: Correspondence among different informants. *Journal of Research in Childhood Education, 11*, 47–67.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*, 674–701.
- Morales, J. R., Cullerton-Sen, C., Crick, N. R., & Casas, J. F. (in press). Relational aggression in dyadic peer relationships: Once I ran to you, now I run from you. In S. Fein, M. Moretti, & G. R. Goethals (Eds.), *Gender and aggression*. Erlbaum: New York.
- Murray-Close, D., Ostrov, J. M., & Crick, N. R. (2007). Growth of relational aggression during

- middle childhood: Associations with gender and internalizing problems. *Development and Psychopathology*, 19, 187–203.
- Nelson, D. A., & Crick, N. R. (2002). Parental psychological control: Implications for childhood physical and relational aggression. In B. K. Barber (Ed). *Intrusive parenting: How psychological control affects children and adolescents*. (pp. 161–189). Washington, DC: American Psychological Association.
- Ostrov, J. M. (2006). Deception and subtypes of aggression during early childhood. *Journal of Experimental Child Psychology*, 93, 322–336.
- Ostrov, J. M., & Keating, C. F. (2004). Gender differences in preschool aggression during free play and structured interactions: An observational study. *Social Development*, 13, 255–277.
- Ostrov, J. M., Woods, K. E., Jansen, E. A., Casas, J. F., & Crick, N. R. (2004). An observational study of delivered and received aggression and social psychological adjustment in preschool: "This white crayon doesn't work." *Early Childhood Research Quarterly*, 19, 355–371.
- Pellegrini, A. D. (1989). Categorizing children's rough-and-tumble play. *Play & Culture*, 2, 48–51.
- Pellegrini, A. D., & Long, J. D. (2003). A sexual selection theory longitudinal analysis of sexual segregation and integration in early adolescence. *Journal of Experimental Child Psychology*, 85, 257–278.
- Pike, K. L. (1967). *Language in relation to a unified theory of the structure of human behavior*. The Hague: Mouton.
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*, 30, 479–491.
- Putallaz, M., Kupersmidt, J., Grimes, C. L., & DeNero, K. (1999, April). Overt and relational aggressors, victims, and gender. Paper presented at the biennial meeting of the Society for Research in Child Development, Albuquerque, NM.
- Robins, L. (1986). The consequences of conduct disorder in girls. In D. Olweus, J. Block, & M. Radke-Yarrow (Eds.), *Development of antisocial and prosocial behavior: Research, theories, and issues*. (pp. 385–414). New York: Academic Press.
- Roecker-Phelps, C. E. (2001). Children's responses to overt and relational aggression. *Journal of Clinical Child Psychology*, 31, 240–252.
- Rose, A. J., Swenson, L. P., & Walker, E. M. (2004). Overt and relational aggression and perceived popularity: Developmental differences in concurrent and prospective relations. *Developmental Psychology*, 40, 378–387.
- Russell, A., Hart, C. H., Robinson, C., & Olsen, S. F. (2003). Children's sociable and aggressive behavior with peers: A comparison of the U.S. and Australia, and contributions of temperament and parenting styles. *International Journal of Behavioral Development*, 27, 74–86.
- Rys, G. S., & Bear, G. G. (1997). Relational aggression and peer relations: Gender and developmental issues. *Merrill-Palmer Quarterly*, 43, 87–106.
- Schafer, M., Werner, N. E., & Crick, N. R. (2002). A comparison of two approaches to the study of negative peer treatment: General victimization and bully/victim problems among German schoolchildren. *British Journal of Developmental Psychology*, 20, 281–306.
- Seban, A. M. (2003). The friendship features of preschool children: Links with prosocial behavior and aggression. *Social Development*, 12, 249–268.
- Silverthorn, P., & Frick, P. J. (1999). Developmental pathways to antisocial behavior: The delayed-onset pathway in girls. *Development and Psychopathology*, 11, 101–126.
- Stauffacher, K., & DeHart, G. (2005). Preschoolers' relational aggression with siblings and friends. *Early Education and Development*, 16, 185–206.
- Sumrall, S. G., Ray, G. E., & Tidwell, P. S. (2000). Evaluations of relational aggression as a function of relationship type and conflict setting. *Aggressive Behavior*, 26, 179–191.
- Tomada, G., & Schneider, B. H. (1997). Relational aggression, gender, and peer acceptance: Invariance across culture, stability over time, and concordance among informants. *Developmental Psychology*, 33, 601–609.
- Van Schoiack-Edstrom, L., Frey, K. S., & Beland, K. (2002). Changing adolescents' attitudes about relational and physical aggression: An early evaluation of a school-based intervention. *School Psychology Review*, 31, 201–216.
- Werner, N. E., & Crick, N. R. (1999). Relational aggression and social-psychological adjustment in a college sample. *Journal of Abnormal Psychology*, 108, 615–623.
- Xie, H., Swift, D., Cairns, B. D., & Cairns, R. B. (2002). Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during

- early adolescence. *Social Development*, 11, 205–224.
- Zahn-Waxler, C. (1993). Warriors and worriers: Gender and psychopathology. *Development and Psychopathology*, 5, 79–89.
- Zalecki, C. A., & Hinshaw, S. P. (2004). Overt and relational aggression in girls with attention deficit hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology*, 33, 125–137.
- Zimmer-Gembeck, M., Geiger, T., & Crick, N. R. (2005). Relational aggression, physical aggression, prosocial behavior, and peer relations: Gender moderation and bidirectional associations. *Journal of Early Adolescence*, 25, 421–452.