

Family Lessons in Attachment and Aggression: The Impact of Interparental Violence on Adolescent Adjustment

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Adolescence is a remarkable developmental period in which children are transformed neurologically, hormonally, cognitively, and socially as they prepare for adult roles and relationships. One of the most important changes to occur during adolescence is the expansion of close relationships beyond family members and friends to romantic partners. For the first time, adolescents begin to "try out" interpersonal strategies for negotiating intimacy outside the family. While friendships with peers grow in importance, early romantic relationships are much more affectively and sexually charged, thereby eliciting a stronger need for greater intimacy and forming the basis of pair bonding (Fraley, Brumbaugh, & Marks, 2005). Experiences in these early romantic exchanges come at a time when adolescents are forming the capacity to extract, represent, and act on core beliefs that are necessary to solidify expectations and responses in intimate relationships. In short, the confluence of social-cognitive and relationship changes that occur in adolescence result in a "sensitive" period for learning about relationships: Adolescents are "primed" to attend to information about intimacy, and they use their

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experiences within their families as a point of reference to understand and negotiate new interpersonal experiences. The lessons that adolescents learn in their families about intimacy, conflict, and aggression go far beyond simply modeling the behavior of their parents; rather, depending on the types of interparental behaviors to which children are exposed, they may come to believe that conflict is highly threatening and that aggression and violence are functionally effective responses. The consolidation of interpersonal behavior patterns and implicit knowledge about intimate relationships sets the foundation for later romantic relationships. For some adolescents, this foundation supports the development of healthy relationships; for others, it propels them into relationships marked by interpersonal aggression and violence that replicates parental relationships they have observed.

In this chapter, we discuss how adolescents' experiences within families are related to risk for aggression and violence in close relationships. We begin with a brief discussion of developmental pathways to aggressive behavior in adolescents and young adults and then review research on the relation between exposure to family violence and the use of interpersonal aggression among adolescents. We argue that adolescence is a critical period during which youth integrate knowledge structures about intimate relationships to guide their interpersonal strategies for negotiating conflict within their own relationships. Although the vast majority of studies have focused on exposure to spousal violence perpetrated by fathers, we discuss new findings from our research that suggest that aggression and violence perpetrated by mothers may be equally, if not more, significant in determining sons' and daughters' tendency to use violence in their relationships. We assert that attachment representations are an important vehicle through which lessons learned in the context of family violence and interparental violence (IPV) become enacted as adolescents enter romantic relationships. Implications for research and intervention are discussed.

DEVELOPMENTAL PATHWAYS TO AGGRESSION AND VIOLENCE

Research on developmental pathways to aggressive behavior has typically focused on physical aggression. A consistent finding across studies is that the use of physical aggression is common in very young children; however, most children successfully learn to inhibit this behavior and use alternate negotiation strategies by the time they are 4 or 5 years of age (Tremblay, 2004). However, the appearance of desistance in the use of overt physical aggression can be misleading because children may learn

to express aggression through different means as they mature. While most children become less physically aggressive as they move from early to middle childhood, they frequently develop other, less obvious but no less damaging forms of aggressive behavior. Relational aggression, for example, tends to rise as children become more competent in the strategic use of language (Bonica, Arnold, Fisher, Zeljo, & Yershova, 2003).

The rise of relational aggression coincides with the escalation of bullying, which is seen as children move into late childhood and early adolescence. Bullying behavior, defined as "negative physical or verbal actions that have hostile intent, cause distress to victims, are repeated over time, and involve a power differential between bullies and their victims" (Craig & Pepler, 2003, p. 577), peaks at about 15 or 16 years of age (Pellegrini & Bartini, 2000; Pepler, Craig, Yuile, & Connolly, 2004; Rigby, 1998). Research on peer victimization in schools has consistently shown that bullying is a widespread problem with significant adverse mental health effects for both perpetrators and victims (Hugh-Jones & Smith, 1999; Olweus, 1994; Pepler, Craig, & Connolly, 1997; Rigby, 1999). In a recent study, almost 20% of approximately 16,000 grade 6 to 10 students reported involvement in bullying either as perpetrators (13%) or as both perpetrators and victims (6%; Nansel et al., 2001). Similar findings have been reported for schools in Canada, Europe, and Asia (Ballard, Argus, & Remley, 1999; Craig & Pepler, 2003; Olweus, 1994; Pellegrini, 2002; Sourander, Helstela, Helenius, & Piha, 2000; Vail, 1999).

Importantly, the escalation of bullying behaviors among adolescents often tends to coincide with pubertal development and first-time sexual experiences. As adolescents who bully transition from same-sex peer relationships into romantic relationships, the form and function of bullying behaviors also appear to change to better suit this new interpersonal arena. Incidences of sexual harassment—a prime example of "bullying" in a sexual context—increase significantly during middle school (McMaster, Connolly, Pepler, & Craig, 2002) and have been shown to precede acts of more serious forms of dating violence (Wolfe, Wekerle, Reitzel-Jaffe, & Lefebvre, 1998). For example, Connolly and colleagues (Connolly, Pepler, Craig, & Tardash, 2000) showed that youth aged 12 to 14 who were more advanced in pubertal development also reported bullying others more frequently and engaging in higher levels of aggression within their romantic relationships, thereby further supporting the idea that bullying becomes embedded in a sexual context during mid-adolescence. These researchers, as well as others (e.g., O'Leary, Malone, & Tyree, 1994; Stein, 1995), point out that the use of power and control in early peer-to-peer bullying experiences often persists into romantic relationships, thereby playing a salient role in the emergence of intimate partner violence later on.

The large body of research documenting the rise and fall of various forms of aggression across development forces us to reconsider the argument that most children are socialized out of the use of aggressive behavior early in development. While it appears that the majority of young children learn early to inhibit acts of overt physical aggression, they may nonetheless go on to display other less obvious and even socially condoned aggressive behaviors. These findings illustrate how the manifestation of aggression is transformed over development and highlight the need to cast a broad net when mapping developmental trajectories of aggression and violence. In particular, the rise in acts of covert and relational forms of aggression across development, among both adolescent males and adolescent females, pushes us to consider models of development that move beyond assuming a global decline in aggression as children mature.

The consideration of multiple forms of aggression, as well as multiple targets, seems particularly critical when evaluating the effects of exposure to risk factors, such as IPV. If researchers only measure one form of aggression (e.g., physical aggression) or one target person (e.g., peers), studies may not detect, for example, results showing that early risk exposure increases aggression much later in development or that risk exposure has cumulative effects on youth. At the same time, an analysis that incorporates multiple targets and forms of aggression helps to appreciate that the *function* of aggression may not change over development even though aggression is expressed through different means. Despite the fact that some acts of aggression may serve purely instrumental goals (such as a child using force to take a desired toy or a teen assaulting a victim in the course of a robbery), the majority appear to occur within personally relevant contexts and serve what are best referred to as social or relational goals (such as establishing or defending social dominance or punishing or prohibiting social rejection or abandonment). It is particularly important to consider alternative forms and targets of aggression in the study of female aggression. Statistics show, for example, that violent crimes committed by females are almost exclusively directed toward romantic partners, family members, or children (Archer, 2000; Ehrensaft, Moffitt, & Caspi, 2004).

The idea that aggression and violence serve important interpersonal functions is certainly not new. Such a view is encapsulated in psychodynamic models (Freud, 1972; Snyder & Rogers, 2002), attachment theory (Allen, Marsh, & McFarland, 2002), and social learning theory (Bandura, 1973, 2001; Mischel, 1973). If we accept this view, it raises the question of where and how children learn about the strategic use of aggression and violence to negotiate interpersonal relationships. Families have long been recognized as the "training ground" for future violence within adult

relationships (Straus, 1978), and parents undoubtedly play a significant role in shaping their child's subsequent use of aggressive behavior. As Tremblay and others note (Reid, Patterson, & Snyder, 2002; Tremblay, Masse, Pagani, & Vitaro, 1996), parents can influence their young child's use of physical aggression by actively curbing this behavior and teaching other socially appropriate means of conflict resolution. It is also likely that parents play an important role in determining whether their children become involved in bullying and relational aggression. Research shows, for example, that bullies are more likely to have authoritarian parents (Baldry & Farrington, 2000; Knafo, 2003). We believe, however, that the lessons children learn in their families go beyond what is communicated through their direct experiences of parental socialization and disciplinary practices; what children observe regarding the use of aggression and violence between family members carries a much more powerful message. Not surprisingly, family violence, including aggression and violence toward children and between parents, has been consistently linked with aggressive behavior in children and youth (e.g., Lichter & McCloskey, 2004; Step & O'Leary, 2005).

In sum, research findings suggest that it is necessary to map developmental changes in both the form and the target of aggressive behavior to truly capture developmental trajectories from childhood to adulthood. The use of physical aggression may decline for most children; however, other forms of aggression can emerge. The targets of aggression also change as children move from primary relationships within their families to peer and romantic relationships. Families provide a consummate training ground for children to learn implicit rules about the interpersonal use and misuse of aggression and violence. In the next section, we review research on the effects of exposure to IPV as a prelude to discussing what children and adolescents learn about the interpersonal use of aggression and violence.

EXPOSURE TO FAMILY VIOLENCE: IMPLICATIONS FOR YOUTH AGGRESSION

Each year, more than 10 million children in the United States witness physical aggression between their parents (Straus, 1992). In 2001, children's exposure to family violence accounted for 58% of all substantiated cases of emotional abuse in Canada (Trocme, MacLaurin, & Fallon, 2001). Similarly, the more recent 2004 General Social Survey on Victimization (Statistics Canada, 2005) found that 33% of all victims of spousal abuse also reported that their children saw or heard the violence take place.

Not that long ago, child witnesses to IPV were labeled as "the forgotten victims" (Elbow, 1982), and the impact of witnessing violent acts among family members was largely discounted. Early studies confounded the effects of exposure to IPV with the effects of experiencing direct child abuse (Edleson, 2001). Since then, a substantial body of evidence has emerged that supports the specific linkage between IPV and child aggression; of note, these studies control for the relationships between other forms of maltreatment and child aggression, thereby isolating the effects of IPV on children's aggression (Kitzmann, Gaylord, Holt, & Kenney, 2003). Some investigators have shown that exposure to IPV can produce negative effects on par with those found for direct maltreatment, including physical and sexual abuse (e.g., Carroll, 1994; Kitzman et al., 2003). For example, Maxwell and Maxwell (2003) compared the effects of child physical abuse with observing family violence and found that the latter was the most significant predictor of adolescent aggression. Similarly, results from Kernic et al. (2003) suggested that, compared to nonmaltreated children, exposure to maternal IPV was significantly associated with child behavior problems in both the presence and the absence of co-occurring child maltreatment. In terms of the manifestation of aggression, Connor, Steingard, Cunningham, Anderson, and Melloni (2004) demonstrated that exposure to IPV was related to proactive aggression, whereas physical abuse predicted reactive aggression. Not only do these studies underscore the profound effects of exposure to IPV on child and youth aggressive behavior, but they have led some researchers to argue that exposure to IPV is potentially even more damaging than direct abuse or neglect alone (Somer & Braunstein, 1999). The strong effect of IPV may be due to the fact that it carries salient information about the use and meaning of aggression in close relationships, which, as we discuss later, has a profound effect on adolescents' emerging belief systems and interpersonal response patterns.

Does the type of IPV that adolescents observe, such as physical versus verbal IPV, matter? An interesting finding to emerge from the literature is that physical IPV may have more detrimental effects than other forms of IPV, such as verbal aggression between parents alone. A recent comprehensive review and meta-analytic evaluation of 118 studies by Kitzmann and colleagues (2003) observed that 63% of children and adolescents (up to the age of 19) exposed to *physical* IPV functioned worse in the domains of psychological well-being and social and academic functioning than those not exposed. This effect was similar in studies of clinical and nonclinical populations and was comparable to the effects found in children exposed to physical abuse alone. Exposure to interparental *verbal* aggression, on the other hand, was not found to be associated with negative consequences of the same magnitude.

One possibility is that visually modeled aggressive and violent behavior is more emotionally provocative than merely hearing parents demean and threaten each other. Of course, it is worthwhile to point out that physical IPV likely includes acts of verbal IPV and therefore represents a more severe variant of interparental aggression. At a minimum, once IPV has escalated to physical acts of aggression, it is more serious because of its potential to result in both physical and emotional harm to one or both parents and the child. This interpretation is supported by research showing that physical IPV produces a wide range of mental health problems apart from aggressive behavior: It is associated with a host of internalizing problems, health issues, and overall maladjustment (Kitzmann et al., 2003). A similar conclusion was reached by Wolfe and colleagues (Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003) based on their meta-analysis of 41 studies examining the effects of children's exposure to domestic violence.

These findings have prompted investigators to undertake more in-depth studies on the effects of physical IPV that address how exposure to physical IPV at different points of development impacts short- and long-term outcomes. In the short-term, exposure to IPV in childhood has been shown to be associated with social or relational aggression (e.g., Crick et al., 1999), physical aggression (e.g., Cummings & Davies, 1994), and bullying (e.g., Baldry, 2003). Investigations of the long-term effects of exposure to IPV have revealed that children who observed their parents aggress against each other are at greater risk for being victims or perpetrators of violence during adolescence in both peer and romantic relationships (e.g., Wolfe et al., 1998) and are at greater risk to engage in aggressive acts toward romantic partners as young adults (e.g., Bensley, Van Eenwyk, & Simmons, 2003; Ehrensaft et al., 2004).

In sum, research clearly shows that exposure to IPV is concurrently associated with increased risk for aggression and violence in childhood and adolescence. More important, findings from longitudinal studies show that the effects of IPV are carried with children as they move toward adulthood and shift from a primary focus on family and peer relationships to involvement in romantic relationships. These findings suggest that children acquire basic rules about the interpersonal use of aggression and violence that they generalize across relationships. Next, we consider what these basic rules might be and how they develop.

LESSONS LEARNED FROM INTERPARENTAL VIOLENCE

What are the implicit lessons that children and adolescents learn through exposure to IPV? Interparental and family violence more generally

provide an important learning context for the acquisition of new behaviors. Social learning theory (Akers, 1973; Bandura, 1973, 2001; Mischel, 1973) is unquestionably the most well-known model designed to account for the effects of exposure to family violence on the development of aggression in children and adolescents. According to this perspective, exposure to aggression creates a learning context for children to acquire aggressive behaviors via imitation. Models of aggression are particularly salient when they are personally relevant, as in the case of parents, and when the context in which modeling occurs is emotionally provocative (Crockenberg & Langrock, 2001). Thus, almost by definition, IPV situations are a high-impact learning context.

What underlying processes account for the lessons that children and adolescents learn through exposure to IPV *beyond* the acquisition of aggressive behavior through modeling? To answer this question, we draw from findings from research on attachment and developmental psychopathology. At the heart of attachment theory is the assumption that experiences within the child-caregiver relationship gradually become organized into an internal representation that embodies rich and multifaceted relational information (Bowlby, 1980). This "internal working model" guides the child's attention, encoding, and interpretation of relational events; it also gives rise to affective experiences of comfort or anxiety and to behavioral sequences of approach or avoidance toward the primary caregiver. The foundations of the internal working model are based on early experiences within caregiving relationships that set the course for navigating close relationships in later life (Hamilton, 2000; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). However, research clearly shows that the attachment system both shapes and is shaped by interpersonal experiences over the life span (Waters et al., 2000). For example, security of attachment can be undermined through exposure to family adversity (such as parental loss or divorce); conversely, insecure attachment can be mitigated through improved quality of parenting practices (Weinfield, Sroufe, & Egeland, 2000). Comparable shifts have been documented in adults who experience loss of close relationships versus those who experience opportunities for openness and intimacy within a romantic relationship (Crowell, Treboux, & Waters, 2002).

A number of researchers have examined the parameters of internal working models, demonstrating that these cognitive-affective representational structures result in largely "automatic" processing of information. For example, below-threshold activation of attachment representations automatically influences the interpretation of neutral stimuli (Mikulincer, Hirschberger, Nachmias, & Gillath, 2001), and attachment representations increase the accessibility of congruent memories related to interpersonal experiences (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo,

1996). Like other representational structures, the influence of attachment representations on information processing and reactions to provocative stimuli are difficult to inhibit, particularly when mental resources needed to maintain suppression are stressed (Mikulincer, Dolev, & Shaver, 2004).

Attachment needs reign on par to other basic biological needs, and most theorists agree that the attachment system exerts influence on affect, cognition, and behavior regardless of how atypical the child-caregiver relationship may appear to observers (Cicchetti, Toth, & Lynch, 1995; Sroufe, Carlson, Levy, & Egeland, 1999). Children who experience only intermittent but highly emotionally charged interactions with their parents are no less likely to be influenced by them than are children who experience consistent and relatively benign interactions. In fact, because the attachment system is triggered by perceived threat, exposure to emotionally provocative interactions with caregivers, such as those often found in family violence, will almost certainly exert a strong influence on shaping attachment representations (Owen & Cox, 1997). In these cases, automatic processing of threat cues through activation of the attachment system is essential for survival: Children must detect early signs of impending threat, anticipate escalation, and efficiently use behavioral strategies to ensure maximum caregiver proximity and protection within a context that is emotionally provocative. This presents an insurmountable challenge to the child: He or she must contend with the fact that the well-being of one or both caregivers may be at risk, and as a result, the well-being of the child is also at risk, even if the child is not a direct target of aggression and violence. Moreover, because both parents are likely attachment figures for the child, the attack of one parent on the other or mutual violence between parents necessarily doubles the level of threat. Of equal importance is the erosion of trust that the child invests in each parent to respect the role of the other parent as a source of comfort and support to the child and to one another.

Although few studies have specifically examined the relationship between exposure to IPV and child attachment, it would not be surprising to find that children exposed to chronic IPV are at higher risk for insecure attachment than those not exposed. By definition, children exposed to IPV experience frightening parental behavior in a context where their needs are likely overshadowed or ignored. We also know that insecure attachment in children and adolescents is linked concurrently and prospectively with aggressive behavior (Doyle & Moretti, 2000; Moretti, DaSilva, & Holland, 2004; Moretti & Peled, 2004). Insecure attachment can take several forms and can be related to IPV in different ways: In some children, for instance, the attachment system becomes "overactivated," leading to excessive anxiety and heightened proximity seeking.

This pattern of anxious-ambivalent/preoccupied attachment develops in response to inadequate parental sensitivity and inconsistent responsiveness; the child learns that the parent will provide comfort and protection if the attention of the caregiver can be elicited. These children, therefore, vigilantly monitor the availability of their parents and often display heightened overtures of need to provoke parental responsiveness. As a result, they appear clingy, protest separation, and are likely to be drawn into IPV rather than avoid it. Their preoccupation with the availability of their parents inhibits appropriate exploration of the world and increases their sensitivity to conflict as a potential threat to security.

It is not difficult to understand how IPV can contribute to anxious-ambivalent/preoccupied attachment in children. IPV reduces both the psychological and the physical availability of one or both caregivers, and it specifically does so in situations that are directly threatening to the child. Furthermore, the unpredictability that typically characterizes IPV increases anxiety among family members that is then experienced by the child. The fundamental lesson learned by children in this context is that others are insensitive and unresponsive to their needs for protection from physical or psychological danger and unwilling to respond. As a result, expressions of need may escalate and may be communicated through behaviors that include but are not limited to extreme anger, threats and acts of aggression, and violence. The link between anxious-ambivalent/preoccupied attachment and aggression has been supported in several studies using both normative and clinical adolescent samples (Allen et al., 2002; Moretti et al., 2004).

Not all children, however, respond to IPV with anxiety and overactivation of the attachment system. Some children withdraw and disengage from family relationships, particularly during IPV incidents. From an attachment perspective, these children are seen to "deactivate" the attachment system, mask the expression of attachment needs, engage in avoidance behaviors, and suppress anxiety. Despite their calm presentation, research shows that anxious-avoidant/fearful children experience heightened physiological arousal when separated from attachment figures (Dozier & Kobak, 1992). Their avoidant stance develops in response to parental insensitivity and consistent rejection and punishment for the expression of attachment needs. The fundamental lesson learned by children in this context is that attachment figures are not available to meet one's needs regardless of how they are expressed and that the failure to mask their expression will lead only to rejection and punishment. The perception of conflict triggers anxiety and avoidance rather than aggressive behavior toward others. However, Mayseless (1991) suggests that aggression may be expressed when these individuals feel pressed into intimacy because this generates anxiety about anticipated rejection.

These two forms of adaptation to IPV represent "organized" strategies to manage the challenges to attachment that are present in this situation. Research has shown, however, that exposure of children to extreme trauma, such as chronic and severe family violence, often results in the failure of the child to develop an organized strategy in response to attachment needs (Liotti, 2004). "Disorganized attachment" (Holmes, 2004) is a response to the fundamental view that the attachment relationship is not an effective source of care and protection. The child vacillates between coercing the caregiver into action and alternatively providing care for the caregiver; both approach and avoidance behaviors are expressed but with little predictability. The child seems unable to integrate experiences of fear, loss, and abandonment and thus fails to form a coherent mental representation of experiences within the attachment relationship (West & George, 1999). This increases vulnerability in a number of ways but most notably in the impaired capacity to use an integrated mental representation from past experiences to modulate affective arousal and intimacy within new relationships. In recent years, disorganized attachment has emerged as a key risk factor predicting externalizing behavior problems, poor social-emotional functioning, and deficits in behavior and affect regulation (Green & Goldwyn, 2002; Lyons-Ruth, Alpern, & Repacholi, 1993).

What happens as children growing up in the context of IPV enter adolescence? Among the host of developmental changes that occur in the transition to adolescence, two stand out as particularly relevant in understanding the impact of IPV on adjustment. First, adolescents undergo qualitative shifts in metacognitive and representational capacity from early to late adolescence (Case, 1985; Chalmers & Lawrence, 1993; Selman, 1980) and develop a more differentiated and complex view of self and others (Harter, 1999; Marsh, 1989; Moretti & Higgins, 1999a, 1999b). As a consequence, adolescents begin to form increasingly generalized and traitlike conceptualizations of themselves and others—adolescents now begin to think about people as having personality types and predictable behavior based on these generalizations. Adolescents also enter a new social-psychological phase of life. Time spent with parents drops sharply, while time spent with peers rises and adolescents increasingly turn to peers for intimacy and support (Furman & Buhrmester, 1992; Laursen & Williams, 1997; Levitt, Guacci-Franco, & Levitt, 1993). Dating relationships also begin in early adolescence—around age 13 for girls and 14 for boys (McCabe, 1984), and adolescents begin to explore romantic relationships as a new forum for attachment.

As a function of these changes, adolescents begin to move into a person-based world rich in relationships. How do these shifts in metacognitive and social functioning influence the meaning of lessons learned

from exposure to IPV? Adolescents now begin to encode IPV not only in terms of its direct impact on them but also as illustrative "blueprints" for negotiating conflict in romantic relationships. The lessons learned about intimacy and conflict during adolescence combine with earlier attachment lessons learned in the context of IPV, forming a rich internal representation that guides adolescents' navigation of new romantic relationships, particularly with respect to the management of conflict. Representations now include cognitive-affective expectations about the relative sensitivity and responsiveness of attachment figures to one's distress plus information on the meaning of conflict in intimate relationships and how aggression and violence can be strategically deployed in this context. Hence, IPV now has the potential to shape the adolescent's cognitive and emotional understanding of the *psychological and interpersonal meaning* of conflict in new, romantic relationships—that is, as a situation that is threatening rather than an opportunity for growth, intimacy, and resolution. In addition, IPV likely shapes the adolescent's understanding of viable solutions for conflict, which in this case include aggression and violence.

The impact of parent–child attachment representations on romantic relationships has been demonstrated in a number of studies. In early studies, researchers demonstrated a concordance between individuals' attachment representations of their parents and their representations of relationships with romantic partners (Owens, Crowell, Pan, & Treboux, 1995)—in other words, individuals appeared to develop attachment representations with romantic partners that mirrored their relationships with their own parents. Subsequent longitudinal studies have shown that security of attachment with parents in late adolescence predicts relationship quality (e.g., shared positive affect, overall quality) with romantic partners in early adulthood (Roisman, Madsen, & Hennighausen, 2001). Research has also pinpointed the important link between attachment security and how adolescents manage conflict in romantic relationships. Specifically, adolescents with insecure attachment have been shown to use less adaptive strategies in managing conflict in romantic relationships, including more escalation, negativity, and withdrawal, and the tendency to experience more fear, anger, and anxiety (Creasey & Hesson-McInnis, 2001).

In sum, adolescents exposed to IPV enter into the world of romantic relationships with significant handicaps. They are more likely to have an insecure and possibly disorganized attachment style and as a result are not only prone to perceive their new partners as insufficiently available to meet their attachment needs but also likely to experience considerable anxiety and threat in response to relationship conflict. Through exposure to IPV, they have come to learn that aggression, conflict, and intimacy are linked. In addition, they have not been provided with adequate models or learning

opportunities to develop alternative conflict resolution strategies. A number of processes that have been discussed in relation to attachment are likely involved in mediating the relationship between IPV and aggression of adolescents in close relationships. These include negative self–other beliefs, impaired affect regulation, and limited capacity for reflective thought and integration (Fonagy, 2003). There are other factors that may influence the effect of exposure to IPV on the interpersonal use of aggression and violence by adolescents. For example, it is quite possible that the effects of IPV perpetrated by mothers versus fathers differ in how strongly and in what relationship contexts they impact risk for adolescent aggression and violence. It is also conceivable that daughters and sons are influenced differently in maternal- versus paternal-perpetrated IPV. We consider these issues next.

DO THE EFFECTS OF MATERNAL VERSUS PATERNAL
IPV ON DAUGHTERS AND SONS DIFFER?

While a number of studies have examined sex differences in the outcome of exposure to IPV (i.e., impact on sons versus daughters; for reviews, see Kitzmann et al., 2003; Wolfe et al., 2003), few have investigated whether there are different effects when IPV is perpetrated by mothers versus fathers. In part, this is due to the fact that the majority of studies have focused on the effects of IPV on child outcomes in samples of "battered women" where only father-perpetrated IPV is measured (e.g., Ronfeldt, Kimerling, & Arias, 1998). Results from this research generally show that exposure to IPV is more strongly related to sons' rather than daughters' use of aggression. For example, adolescent boys exposed to IPV have been found to hold beliefs that condone the use of aggression in romantic relationships and to engage in more aggressive acts toward their partners (e.g., Kinsfogel & Grych, 2004). Similarly, Chen and White (2004) found that parental fighting predicted engagement in intimate partner violence in young men but not young women. These findings are consistent with early research examining retrospective reports of adult males who batter their partners: Men exposed to physical aggression between their parents were found to be three times more likely to abuse their wives compared to men not exposed to IPV (Straus, Gelles, & Steinmetz, 1980). Although this early research actually found comparable effects for mother's violence (e.g., Straus, 1979), a disinclination at that time among domestic violence professionals to examine female-perpetrated IPV allowed for the impression that the effect of IPV on children typically occurs via transmission of risk from fathers to sons through modeling of aggressive behavior.

Only recently have researchers returned to direct examination of the differential effects of female- versus male-perpetrated IPV; findings have *been* equivocal. Some have found that, compared to paternal IPV, exposure to maternal IPV is equally likely to predict intimate partner violence (e.g., Jankowski, Leitenberg, Henning, & Coffey, 1999), whereas others concluded that exposure to maternal IPV is more strongly related to later partner violence (e.g., Foshee, Bauman, & Linder, 1999; Ulman & Straus, 2003). For example, Ulman and Straus (2003) found that children who observed *only their mothers* engaging in violence toward their fathers were more aggressive than were children who observed *only their fathers* engaging in violence toward their mothers.

Studies examining the impact of maternal versus paternal IPV on daughters versus sons provide evidence for same-sex modeling effects. For example, Jankowski et al. (1999) showed that children who observed only their parent of the same sex (i.e., mothers of daughters vs. fathers of sons) perpetrate IPV were at greater risk for later physical aggression against their romantic partners, while children who observed only their opposite-sex parent engage in physical aggression were not. Further evidence of same-sex modeling was recently provided by Kaura and Allen (2004), who found that father- but not mother-perpetrated IPV was predictive of dating violence in young adult men and that mother- but not father-perpetrated IPV was predictive of dating violence in young adult women.

In our research (Moretti, Obsuth, Odgers, & Reebye, in press), we examined the effects of exposure to physical IPV perpetrated by mothers versus fathers on sons' and daughters' use of aggression across multiple relationships (friends, romantic partners, and parents). Participants were adolescent girls and boys with clinically elevated levels of aggressive behavior. We statistically estimated unique effects for maternal versus paternal IPV and found that their impact varied depending on the sex of the child and the relationship under question. Same-sex modeling effects were found when examining the impact of exposure to maternal versus paternal IPV on adolescent girls' and boys' use of aggression toward friends: fathers' perpetration of physical IPV was associated with increased physical aggression toward friends by sons but not daughters; in contrast, mothers' perpetration of physical IPV was associated with increased physical aggression toward friends by daughters but not sons. Turning to adolescent aggression within their romantic relationships, findings showed that only mothers' perpetration of physical IPV was significantly related to the use of aggression by both boys *and* girls toward their romantic partners; in contrast, father IPV was unrelated. Adolescent aggression toward parents was accounted for by parental physical abuse rather than exposure to IPV. Importantly, other findings

remained significant even when we controlled for the effects of parental physical abuse against the adolescents.

Same-sex modeling of aggression via exposure to parental IPV may be important in determining aggression in friendships because close friendships during adolescence are often same sex rather than opposite sex. Of more relevance to the current discussion, our findings on the relationship between maternal IPV and aggression toward romantic partners by daughters and sons are intriguing, as they suggest that maternal IPV may carry a special message to daughters and sons about the use of aggression and violence in intimate relationships. Why might mothers play a special role in shaping the use of aggression and violence by their sons and daughters in romantic relationships? First, mothers spend more time than fathers interacting with their children throughout childhood and adolescence, and their interactions are characterized by more caregiving (Collins, Madsen, & Susman-Stillman, 2002). Second, mothers hold a favored position as primary attachment figures compared to fathers: Even as adults, individuals rank their mothers as more important attachment figures than their fathers, and mothers are typically ranked second only to romantic partners (Doherty & Feeney, 2004; Trinke & Bartholomew, 1997). Thus, the primary attachment of children with their mothers, combined with mothers' interactions with their partner, serve as a powerful training ground for learning about how attachment relationships are navigated.

We are not suggesting, however, that children are unaffected by their relationships with their fathers or by paternal IPV. Research shows that attachment to fathers also plays an important role in determining child and adolescent adjustment (Rubin, Dwyer, & Booth-LaForce, 2004). In contrast to mothers, whose relationships with their children are characterized mostly by caregiving, fathers spend more time in playful activities with their children (Williams & Radin, 1999). Through these activities, children develop social skills and social competence (Feiring & Taska, 1996) that become increasingly important as they mature and move toward autonomy. In fact, Parke and Buriel (1998) suggest that while fathers play an important role in their children's development of autonomy (i.e., separateness or independence), mothers play a crucial role in children's and adolescents' ability to develop and maintain connections with others (i.e., intimacy, secure attachment, relationships). Thus, children's attachment relationships with their mothers and fathers are equally important for their development but appear specific in their impact. As such, observing how mothers negotiate their relationships with their partners and particularly how they manage conflict may be especially salient for adolescents as they learn to navigate new romantic relationships.

Clearly, further research is needed to better understand the complex factors that underlie the influence of mothers' versus fathers' IPV on adolescents' use of aggression in relationships. Yet we suggest, based on findings from our research and other studies, that mothers may play a more important role than previously assumed in determining the strategies that their sons and daughters employ to manage conflict in their own romantic relationships. In contrast, same-sex modeling of aggression by parents seems to determine the effects of IPV on sons' and daughters' peer-directed aggression.

IMPLICATIONS FOR FUTURE RESEARCH

Our review of the literature on the relationship between IPV and adolescent aggression and the intergenerational transmission of partner violence highlights four central points. First, children's developing attachment representations may provide a powerful framework for understanding the relationship between IPV and the use of aggression during adolescence. As the discussion in this chapter illustrates, exposure to both father- and mother-perpetrated IPV exerts powerful and potentially wide-ranging effects on the developing child: Attachment models may bring us closer to understanding the heterogeneity in these outcomes. Future work examining attachment is required in order to bring us closer to understanding the mechanisms and processes that underlie the impact of exposure to IPV on adolescent outcomes. With that said, there are undoubtedly other important consequences of witnessing chronic or severe IPV that need to be considered alongside the effects on child attachment. Most important, research has clearly established that IPV often produces trauma symptoms and syndromes in children and adolescents that impair functioning and bias the processing of emotionally provocative information (Margolin & Gordis, 2000). Research on the etiology of disorganized attachment has shed some light on the relationship between trauma and the development of attachment representations, but again further work is necessary to understand the specific consequences of exposure to maternal versus paternal IPV for daughters and sons.

Second, this review provides yet another reason to view early adolescence as a critical period of development. Although early experiences have precedence in determining the foundations of attachment representations and early patterns of aggressive behavior, it may be more productive to understand development as a series of "sensitive" periods where particular issues have ascendancy. In this sense, adolescence can be seen as a unique developmental window in which children consolidate early experiences in attachment relationships with new observations and experiences

in romantic relationships. Further research is needed to investigate how adolescents consolidate their beliefs and interpersonal strategies during this critical period to negotiate romantic relationships, including the use of aggression and violence.

Third, research to date on IPV is hampered by the tendency to cast partner aggression in terms of individuals rather than dyadic interactions. While it is important to recognize that maternal IPV is more significant than previously assumed, we believe it is even more important to be mindful of the fact that IPV is essentially dyadic in nature. New research paradigms and analytic strategies for investigating the dyadic nature of IPV and the impact of these interaction patterns on children and adolescents are emerging (Ferrer & Nesselroade, 2003) and should be applied in future research.

Finally, although we have intentionally focused on the effects of IPV on the development of child and adolescent aggression, it is important to situate this line of research within the broader literature on aggression. Exposure to IPV and other forms of maltreatment is not the only cause of child and adolescent aggression, nor does it always produce the same effects in all youth. Research clearly shows that children differ in their vulnerability to harmful environments based on a wide range of genetic and neurodevelopmental factors (Caspi et al, 2002; Jaffe, Caspi, & Moffitt, 2005). Thus, it is best to view IPV as one of many risk factors and to understand that risk is a dynamic term that represents the interaction between child vulnerability and social context (Reiss, Neiderhiser, Hetherington, & Plomin, 2000).

FROM RESEARCH TO PREVENTION AND INTERVENTION

In this chapter, we have focused on examining theory and research as it pertains to understanding the impact of IPV on adolescent aggression from an attachment framework. Issues of prevention and intervention are beyond the scope of our discussion and are discussed elsewhere in this volume (see, e.g., chapters 19, 22, and 23). Nonetheless, our review and analysis prompts a few brief observations. First, in light of the fact that adolescence marks a sensitive period for the consolidation of beliefs about intimacy and the initiation of romantic relationships, efforts are needed to plan, implement, and evaluate risk reduction programs for youth exposed to IPV. Education programs have been developed to inform adolescents about partner violence, and some show promising findings in the general population (Foshee et al., 2004). However, few programs have been developed specifically for at-risk youth, and their

effectiveness is unknown. Furthermore, while education about partner violence is important to disseminate to all youth, it is equally important that programs target beliefs about intimacy and violence and promote adaptive strategies and skills to negotiate interpersonal conflict.

Second, the growing evidence that attachment plays a significant role in the etiology and transgenerational transmission of aggression toward intimate partners (Serbin & Karp, 2004) points to the importance of targeting these issues in intervention. Unfortunately, the majority of programs designed to reduce IPV are primarily behaviorally focused and tend not to address underlying attachment issues. New therapeutic models that integrate attachment concepts have shown promise in working with perpetrators of partner violence (Sonkin & Dutton, 2003) and families dealing with aggressive and violent behavior (Moretti, Holland, Moore, & McKay, 2004; Obsuth, Moretti, Holland, Braber, & Cross, 2006; for reviews of existing interventions and promising approaches, see chapters 2 and 10 in this volume). Continued development and evaluation of programs with a strong base in attachment theory and research will push the field forward in understanding the problem of interpersonal violence and responding with effective interventions.

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CHAPTER 10

The Evolution of Battering Interventions: From the Dark Ages Into the Scientific Age

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Intimate partner violence (IPV) is a public health epidemic in the United States and Canada. Each year, approximately 6 million American women experience "mild" aggression (e.g., pushing, grabbing, slapping) at the hands of their husbands or boyfriends, and approximately 2 million women experience severe intimate violence (e.g., being hit with a fist, choked, and so on) (Straus & Gelles, 1990). Lifetime prevalence data indicate that between 21% and 34% of women will be the victims of physical aggression by their husbands or intimate partners (Browne, 1993). Comparing incidence and prevalence rates, more people are directly affected by IPV than by breast cancer (American Cancer Society, 2004). Despite gender-specific federal projects (e.g., the Violence Against Women Act), men are also victims of IPV, a topic that until recently has been downplayed. As is the case with male victims of breast cancer, the problem of male victims of IPV is real, although it has not been perceived as a health epidemic among men as it has among women.

Both breast cancer and IPV have grown as topics of scientific inquiry and media focus. Unfortunately, whereas the breast cancer field has seen improvements in early detection and the development of effective treatments, IPV has not. A meta-analysis of the experimental outcome studies (Babcock, Green, & Robie, 2004) reveals that the effects due to treatment are small. Despite declarations that arrest followed by