Interparental Aggression and Young Children's Representations of Family Relationships

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Children's maternal, self, and marital representations were examined in 46 children 3½ to 7 years old using the MacArthur Story Stem Battery. Children drawn from agencies serving battered women expressed fewer positive representations of their mothers and themselves, were more likely to portray interparental conflict as escalating, and were more avoidant and less coherent in their narratives about family interactions than children from a nonviolent community sample. Interparental aggression uniquely predicted representations of conflict escalation and avoidance after accounting for parent–child aggression, and the two types of aggression had additive effects in predicting positive maternal representations. The results suggest that witnessing aggression in the family affects children's developing beliefs about close relationships and may be a process by which these experiences give rise to later problems in social and emotional functioning.

Research examining the effects of interparental conflict and aggression on children has focused primarily on investigating child adjustment problems. Although it is important to establish that children living in discordant and violent homes are at increased risk for psychopathology (e.g., Cummings & Davies, 1994; Jouriles, Norwood, McDonald, & Peters, 2001), to fully understand the impact of these experiences on children, it is essential to look beyond measures of maladjustment. Assessing aspects of normal development may provide insight into subtle but significant effects on child functioning and aid in identifying pathways that lead to more serious problems (e.g., Cicchetti & Cohen, 1995; Sroufe, 1989).

Hostile, aggressive family interactions may affect children's socioemotional development in many ways, but one potential effect identified by a number of theoretical perspectives concerns children's developing beliefs and expectations about close relationships. Attachment theory proposes that early caregiver interactions give rise to internal working models that shape how individuals perceive and respond to others (Bowlby, 1973). Although children's experiences with their parents initially are the primary influence on their working models, as they grow older other interactions (e.g., with other family members, peers) are hypothesized to affect their beliefs about relationships as

well (e.g., Marvin & Stewart, 1990; Waters & Cummings, 2000). However, we know little about how family experiences shape children's developing mental representations in early and middle childhood (see Thompson, 2000; Waters & Cummings, 2000).

Similarly, social–cognitive theory and research has demonstrated that individuals develop organized memory structures (e.g., schemas, scripts) on the basis of their experiences with situations, people, and events. These structures are composed of knowledge, beliefs, and expectations relevant to a particular subject, and serve to guide perception, memory, and behavior when the subject is later encountered (for reviews see Baldwin, 1992; Wyer & Carlston, 1994). Children as young as 3 years of age have been shown to form abstract, generalized representations of events after only a few exposures (e.g., Bauer & Mandler, 1990; Fivush, Kuebli, & Clubb, 1992), and whereas their content becomes increasingly complex, the process of forming such event representations appears to be similar across ages (see Baker-Ward, Ornstein, & Principe, 1997).

Conceptual models focused on understanding the effects of interparental conflict also have given increasing attention to children's mental representations (Davies & Cummings, 1994; Graham-Bermann, 1998; Grych & Cardoza-Fernandes, 2001; O'Brien & Chin, 1998; Rossman, 1998). Building on attachment theory, Davies and Cummings (1994) proposed that children's observations of interparental conflict give rise to a set of beliefs about the typical course and resolution of parental disagreements, the stability and predictability of the marital relationship, and the threat posed by conflict to their own well-being. These representations are held to form one of the foundations of children's emotional security, and thus have important implications for their adjustment and sense of well-being. Shamir, Schudlich, and Cummings (2001) recently examined the association between exposure to conflict and representations of interparental and parent–child relationships using a narrative task in which 5- to

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8-year-old children told stories about interparental, parent–child, and triadic family situations. They found that exposure to destructive forms of interparental conflict in the family (e.g., aggression, scapegoating) was correlated with more negative portrayals of marital and parent–child interaction in the stories. Parenting styles also predicted narrative representations: Fathers' use of behavioral control was correlated with more positive marital and parent–child representations, and fathers' use of psychological control predicted negative marital representations. Using a measure of mental representations drawn from children's responses to an audiotaped conflict interaction, Davies and Cummings (1998) found that 6- to 9-year-old children's expectations for the outcome of conflict mediated the relation between their exposure to interparental conflict and internalizing problems.

The proposition that children's experiences with interparental conflict would be organized in memory as a schema was tested by O'Brien and Chin (1998). Schemas are proposed to guide the encoding and recall of material pertaining to a particular topic. O'Brien and Chin examined whether children exposed to higher levels of conflict in the home would evidence preferential recall for negatively toned words relevant to the expression and resolution of conflict. Children listened to taped conflict vignettes and completed questionnaires assessing parental conflict behaviors, and then were asked unexpectedly to remember which of a series of words they had previously heard on the tape and questionnaire. Consistent with schematic processing, children exposed to higher levels of aggressive interparental conflict correctly recognized more of the negative conflict-related adjectives that had been presented to them and incorrectly "recognized" more negative words (i.e., reported false positives) than children exposed to lower levels of conflict.

Other studies also have supported associations between marital and family processes and children's representations of relationships. For example, Toth, Cicchetti, Macfie, and Emde (1997) reported that children with documented histories of parental maltreatment demonstrated more negative self- and mother representations on the MacArthur Story Stem Battery (MSSB; Bretherton, Oppenheim, Buchsbaum, Emde, & The MacArthur Narrative Group, 1990), a narrative procedure developed to assess representations of affective and conflict themes in family relationships. Using an early version of the MSSB with a sample of 3- to 5-year-olds, Bretherton, Ridgeway, and Cassidy (1990) found that a rating of overall attachment security derived from children's narratives was correlated with mothers' marital satisfaction and reports of family cohesion and adaptability.

Studying children's mental representations of family relationships may illuminate several sequelae of interparental aggression. First, it can provide insight into parent–child relationships in discordant and violent families. Watching one caregiver coerce, verbally attack, or physically assault another is likely to have a profound impact on children's views of their mothers and fathers, which in turn may influence their relationship with each parent. Parents embroiled in conflict tend to be more hostile, rejecting, and

neglectful toward their children (for reviews see Erel & Burman, 1995; Grych, 2002), but little is known about how children living in violent homes perceive their parents or their relationship with them. Frosch, Mangelsdorf, and McHale (2000) recently reported that 3-year-old children exposed to higher levels of marital conflict were less likely to be securely attached, but did not attempt to assess children's representations of their parents.

Because working models of the self and caregiver are complementary (see Bowlby, 1973; Bretherton & Munholland, 1999), representations of parents and children are likely to be linked. If a child perceives an attachment figure as available and responsive, he or she will construct a model of the self as worthy, competent, and lovable, whereas neglect or rejection would lead to a model of the self as unworthy and unacceptable. If children view parents as coercive or hostile toward each other, they may wonder if parents will treat them similarly and question their reliability and availability as a secure base (Waters & Cummings, 2000). Witnessing one attachment figure hurt by another also could undermine children's sense of emotional security by threatening their belief in the stability and safety of their own relationships with their caregivers (Davies & Cummings, 1994; Shamir et al., 2001). As a result, such children may be less autonomous and less confident in their ability to explore and master their environment.

Finally, how children perceive, understand, and remember conflictual and aggressive interactions may affect how they respond to later incidents of conflict, both within and outside of the family (Davies & Cummings, 1994; Grych & Cardoza-Fernandes, 2001; O'Brien & Chin, 1998). A primary function of schemas or working models is to help an individual predict what will happen in particular situations (e.g., Bauer & Fivush, 1992; Bretherton, Ridgeway, & Cassidy, 1990; Wyer & Carlston, 1994). Children who expect aggression to occur when parents have a disagreement or become angry may feel threatened at the first sign of discord and exhibit greater reactivity to later conflict episodes. Consistent with this hypothesis, Grych (1998) reported that children exposed to higher levels of interparental aggression perceived standardized, audiotaped disagreements between two actors to be more threatening than did children from less discordant homes and were more pessimistic about their ability to cope with such conflicts in their own homes. Conflict schemas may affect functioning in later close relationships as well. Individuals from highly discordant and aggressive families exhibit higher rates of abusive behavior in their own dating and marital relationships (e.g., O'Keefe, 1997), and the beliefs and expectations that children develop by observing their own parents work out their disagreements may contribute to the maintenance of coercive or aggressive behaviors across generations (Grych & Cardoza-Fernandes, 2001).

Thus, emerging conceptual and empirical work supports the idea that conflict and aggression in the home shape children's mental representations of family relationships. Although early findings are promising, many fundamental issues remain to be addressed. The present study was designed to investigate three basic questions. First, do children

exposed to physical aggression between their parents express different maternal and self-representations than children from nonviolent families? In a sample of intact, middle-class families drawn from the community, Shamir et al. (2001) found that fathers' verbal aggression toward their wives was correlated with more negative representations of the mother–child relationship. We expected children exposed to high levels of interparental aggression to perceive their mothers in a more negative light and to portray the self as less capable or autonomous than children from less discordant families. Although children's representations of fathers are also of theoretical interest, they were not examined in the present study because many of the children in the sample were not currently living with a father or father figure, and it is questionable whether their portrayals of fathers in the narratives would have the same meaning as those of children who had daily interactions with their father.

Second, do children exposed to interparental violence differ in their representations of the marital relationship, and more specifically, in their representations of how parents resolve conflicts that arise between them? We predicted that children exposed to interparental aggression would expect conflict to be more poorly resolved, to spread to parent–child relations, and to portray the marital relationship as generally more negative. Because interparental and parent–child conflict tend to covary (see Appel & Holden, 1998), it is also important to determine whether interparental conflict has an effect on children's representations beyond that of parent–child relationships. Therefore, we tested whether interparental aggression contributed unique or additive variance to the prediction of children's family representations after accounting for levels of parent–child aggression.

Finally, do children from violent homes produce less coherent narratives or express greater reluctance to engage in stories about families than children from nonviolent homes? Children with secure working models are able to communicate about family relationships in a clear, cohesive, and understandable manner (see Bretherton & Munholland, 1999), whereas insecurely attached and maltreated children have been shown to have difficulty discussing family-related material and to produce less coherent narratives (e.g., Main, Kaplan, & Cassidy, 1985; Toth, Cicchetti, Macfie, & Emde, 1997). We hypothesized that children from violent homes would experience more threat and fear in family interactions and consequently would be more avoidant and disorganized when producing narratives about family situations.

Method

Participants

Participants were recruited from two sources. In order to obtain a sample of children who had been exposed to high levels of interparental conflict and violence, we worked with four agencies that provide counseling services and shelter to victims of domestic violence. Two of the agencies are located in urban areas and two in smaller towns in the midwestern United States. Staff at each agency identified women who met the inclusion criteria for the study (a child between the ages of 3½ and 7 years whose mother had lived with a husband or partner during the previous year) and briefly described the study to them. Women who were interested in the study were then contacted by one of the investigators, who provided a more extensive explanation of the study's goals and procedures and answered any questions the women had. Although all of the women identified by the staff at the centers initially agreed to participate, approximately 25% could not be reached by phone to schedule an appointment and consequently the participation rate was 75%.

A comparison group of children was recruited through four schools in the same geographical region that had student populations similar demographically to the children recruited from the agencies. A staff member at each school identified families who met the criteria for participating in the study and gave the phone numbers of the parents to the investigators. The investigators then called and described the study to the mother. Fifty percent of the mothers agreed to participate in the study. Most of those who declined cited scheduling difficulties as the reason for not participating.

Efforts to match the samples on important demographic characteristics were largely successful. As Table 1 shows, the groups did not differ on children's age, gender, or ethnicity, mothers' age, education, or marital status, or whether the mothers' partner was the biological father of the child. The only significant difference was that mothers in the agency sample reported lower incomes than those in the school sample, $t(42) = 4.93$, $p < .05$, which may have been due in part to the fact that many of the mothers in the agency groups had left their partners and were reporting one rather than two incomes.

A total of 46 children (29 boys, 17 girls) and their mothers participated in the study, 23 from the agencies and 23 from the schools. The children ranged in age from 3½ to 7 years ($M = 6.17$ years, $SD = 12$ months) but consisted primarily of 5- to 7-year-olds. The sample included one child who was 3½ years, two 4-year-olds, seventeen 5-year-olds, thirteen 6-year-olds, and thirteen 7-year-olds. The average age of the mothers was 33.4 years ($SD = 6.4$ years). Children's ethnicity was as follows: 48% were European American, 30% were African American, 13% were Latino, and 9% described themselves as "other." Of the mothers, 63% were married, 13% were divorced, and 24% were single. In 64% of the families, the mothers' partner was the child's biological father. On average, mothers had completed 13 years of education, with 13% reporting less than a high school education, 35% completing high school, 44% reporting at least 1 year of college or secondary school, and 9% completing some postbaccalaureate work. Mothers in the agency sample reported a median family income in the $10,000–$15,000 range, whereas mothers in the school group reported a median family income in the $35,000–$40,000 range.

Procedure and Measures

The MSSB was administered to each child individually in a quiet room, either at the agency where the women received services (agency sample) or at the school attended by the child (school sample). These sessions typically lasted 45 min to 1 hr. Mothers completed a questionnaire packet at the same time. Mothers received $15 for participating in the study, and children received a gift certificate for a fast food restaurant. Because one of the questionnaires inquired about parent–child aggression, women were informed that responses indicating that their child had been physically abused or neglected would be reported to the Department of Child and Family Services. When such information was

Table 1
Characteristics of Agency and School Samples

Variable	Agency sample (n = 23)		School sample (n = 23)		t	df
	M	SD	M	SD		
Child age	6.28	1.18	6.17	.83	−0.36	44
Parent age	31.91	6.61	34.91	6.19	1.57	43
Mother's education	13.02	1.88	13.46	2.28	0.71	44
Income	$10–15 K		$35–40 K		5.24*	42
Interparental aggression						
Mother	26.06	12.96	12.73	8.21	−4.04*	41
Partner	42.64	13.98	11.60	6.82	−8.99*	41
Parent–child aggression						
Mother	43.10	43.19	22.22	23.99	−1.99	41
Partner	30.63	41.74	3.90	7.33	−3.00*	41

	%	%	χ^2	df	N
Boys	65	61	0.09	1	46
Child ethnicity			7.13	4	46
European American	52	44			
African American	26	35			
Latino	4	22			
Other	17	0			
Marital status			1.37	3	46
Married	57	69			
Divorced	13	13			
Single	30	17			
Biological father	57	69	0.54	1	45

Note. K = 1,000.
*$p < .05$.

provided, the first author spoke with the mother to better determine whether the incident met criteria for child maltreatment. One new (i.e., previously unreported) case of suspected child maltreatment (from the agency sample) was reported to the Department of Child and Family Services in the course of the study.

MacArthur Story Stem Battery. Children's representations were assessed with the MSSB (Bretherton, Oppenheim, et al., 1990). Narrative methods are particularly well-suited for assessing young children's internal representations because they take advantage of children's natural interest and skill in storytelling (see Bretherton, Ridgeway, & Cassidy, 1990). This measure consists of a series of story stems or beginnings that elicit family-relevant themes such as separation from and reunion with parents, response to injury, and conflict. Children's stories are presumed to reflect their mental representations or working models of relationships, and responses on the MSSB have been linked to theoretically-related measures such as attachment classification derived from the Strange Situation paradigm (Bretherton, Ridgeway, & Cassidy, 1990), maternal adjustment (Oppenheim, Emde, & Warren, 1997), and parental maltreatment (Macfie et al., 1999; Toth et al., 1997). In addition to coding the content of children's narratives (i.e., how each family member is portrayed in the stories), the MSSB includes process codes that reflect the coherence of children's narratives and their tendency to avoid engaging in the task.

Using a "family" of dolls matched to the child's ethnicity (a mother, a father, a same-sex child, an opposite-sex sibling, and a grandmother), toy furniture, and other props to stimulate interest and involvement, the researcher presents the child with a series of brief story stems. The child then is asked to finish the story by showing and telling the administrator what happens next. Each story presents a dilemma or issue to be resolved. For example, in one story a child must cope with his or her parents leaving for a night away while the grandmother babysits. The version of the

MSSB used in this study included nine story stems and one warm-up story that helped familiarize the child with the procedure. Six of the nine stories were taken from the MSSB ("Spilled Juice," "Lost Keys," "Family Dog Lost/Reunion," "Climbing the Rock," "Departure/Reunion," and "Hot Gravy"). Of the nine stories, five introduced attachment themes, such as separation from and reunion with parents and parental responses to a child's injury, and the remaining four involved a conflict between the parents, such as a disagreement over a set of lost keys. The original MSSB includes only one interparental conflict story, so three new story stems were developed for this study in order to provide more reliable data concerning children's expectations for conflict resolution (see Appendix for full text of new stories). The three new conflict stories involved the parents disagreeing about what to have for dinner, whose relatives to visit on an upcoming holiday, and how to punish the child for accidentally breaking a lamp.

Administration of the MSSB was videotaped, and children's verbal responses and physical movement of the dolls were transcribed for coding purposes. Codes for children's representations were derived from the coding manuals for the MSSB (Robinson, Mantz-Simmons, Macfie, & The MacArthur Narrative Working Group, 1992) and the Expanded Attachment Story Completion Test (EASCT; Page & Bretherton, 1995), a version of the MSSB that was adapted for use with children from divorced families. Two content codes or themes for mothers were used in the analyses: Maternal Positive, which was the sum across stories of more specific codes reflecting the expression of affection, nurturance, play, praise, and authoritative discipline, and Maternal Negative, computed as the sum of the aggressive, neglectful, rejecting, and punitive behavior codes across stories. Child representations also were coded as Child Positive, which was the sum of codes reflecting expressions of competence, obedience, and empathy/concern

for parents; and Child Negative, the sum of the low power, oppositional, and aggression codes across stories.

The interparental relationship was represented by three codes. Initially, positive and negative marriage were coded when children made reference to the quality of the parents' marriage in the stories. However, because spontaneous positive or negative comments about the marriage were rare, the positive and negative codes were combined into a single variable, labeled Global Marriage.[1] Higher scores on this measure reflect more positive representations. Two new codes were developed for this study to tap children's expectations for the course of interparental conflict: Conflict Escalation, which reflected the extent to which conflicts between parents escalated or were successfully resolved, and Conflict Spread, which was coded if the parents' conflict led to hostility or aggression expressed by a parent toward the child. With the exception of Conflict Escalation, which was rated on a scale ranging from 1 (completely resolved) to 3 (escalated), content codes were scored as present or absent. Each behavior or action in a story could receive only one code, but multiple codes could be used within a given story to represent different behaviors occurring during the narrative.

There also were two process codes designed to tap how children told the stories: Coherence reflected the degree to which children's stories were logical, meaningful, and resolved the issue or dilemma posed in the story stem; Avoidance referred to the extent to which children resisted telling a story, for example, by making off-task comments or getting up from the table. Each process code was rated on a continuous scale ranging from 1 to 3, with higher scores indicating greater degree of Coherence or Avoidance, respectively. Total scores for each of the content and process codes were computed by adding across the stories.

Reliability of the coding scheme was evaluated by having a second rater code one third of the transcripts. Kappa was computed for the categorical codes, and intraclass correlations were calculated for the continuous codes. Kappa averaged .76 across codes, with a range of .63 to 1.00; intraclass correlations ranged from .76 to .85, with an average value of .79. Similar levels of interrater reliability on the MSSB have been reported in other studies (e.g., range = .62 to .88; Toth et al., 1997).

Conflict and Problem-Solving Scales. Interparental conflict and aggression were assessed with the Conflict and Problem-Solving Scales, V form (CPS-V; Kerig, 1996), a 69-item scale measuring several dimensions of conflictual parental interactions. For the present study, only the Verbal Aggression and Physical Aggression subscales were used because we were interested specifically in aggressive behavior in which parents engaged during conflicts, rather than negative forms of conflict resolution more generally. The Verbal Aggression scale consists of 10 items, including behaviors such as "raise voice, yell, shout"; "make accusations"; "name-calling, cursing, and insulting"; and "be sarcastic." The Physical Aggression scale includes 13 items tapping behaviors such as "throw objects, slam doors, break things"; "push, pull, shove, grab, handle roughly"; and "beat other severely." Mothers rated their own and their partners' behavior on each item with a 4-point scale ranging from 0 (never) to 3 (often). Kerig (1996) reported that the CPS correlates with other parent and child-reported measures of interparental conflict and demonstrates high levels of reliability. In the present sample, coefficient alpha for the Verbal Aggression and Physical Aggression scales for mothers and their partner ranged from .77 to .93. To provide more parsimonious analyses, we combined measures of verbal and physical aggression, which were significantly correlated for mothers and their partners (rs = .50 to .75), to create global indexes of interparental aggression exhibited by each parent. Coefficient al-

pha for the index of mothers' total interparental aggression was .92; for partners, it was .95.

As would be expected from the sampling procedure, the groups differed on level of interparental aggression reported by mothers. The agency sample was characterized by significantly higher levels of interparental aggression exhibited by mothers, $t(41) = 4.05$, $p < .01$, and by their partners, $t(40) = 8.99$, $p < .01$. To provide a better sense of the level of interparental aggression experienced by children in each group, we examined the percentage of children in each group exposed to behaviors representative of relatively mild and severe aggression. In the agency group, 77% of the mothers indicated that they or, more usually, their partner had pushed, pulled, shoved, or grabbed the other "sometimes" or "often" in the previous year, whereas none of mothers in the school group reported that these behaviors had occurred sometimes or often. In the agency group, 50% reported that one partner had severely beaten or choked the other in the previous year, whereas none of the mothers in the school group reported either behavior.

Conflict Tactics Scale, parent–child version. The parent–child version of the CTS (Straus, 1979) was completed by mothers to index the degree of verbal and physical aggression occurring in children's relationships with their mothers and fathers (or mothers' partners). The Verbal Aggression subscale includes items such as "insulted or swore at child" and "did or said something to spite child," and the Physical Aggression subscale includes behaviors such as "pushed, grabbed, or shoved" and "kicked, bit, or hit with a fist." Parents indicated how often each behavior occurred in the past year. The Verbal Aggression and Physical Aggression subscales were combined to form a measure of the total amount of hostility or aggression occurring in the mother–child relationship (α = .76) and the father–child relationship (α = .91) over the previous year.

The agency and school groups differed in the amount of parent–child aggression reported by mothers. Agency mothers reported higher levels of aggression directed toward the child by their partners, $t(37) = 2.99$, $p < .05$, and marginally higher levels by themselves, $t(41) = 1.99$, $p < .06$. Examination of behaviors representative of mild and severe forms of aggression showed that 42% of the mothers in the agency sample stated that either they or their partner had pushed, grabbed, or shoved their child at least once in the past year, whereas 22% of mothers in the school group reported these behaviors. Finally, 16% of mothers in the agency group reported that a parent had kicked, bit, or hit their child with a fist at least once in the prior year, whereas none of the children in the school group were reported to have been kicked, bit, or hit with a fist. Thus, although a small percentage of mothers in the school group reported low levels of mild forms of aggression in both interparental and parent–child relations, children in these families were exposed to very little severe aggression; in contrast, interparental violence was common in the agency group, and parent–child aggression (primarily milder forms) occurred in approximately half of these families.

Results

There were three steps to the data analysis. First, we examined associations between children's narrative representations and their age and gender. Second, we tested whether children from the agency and school samples dif-

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[1]Findings regarding children's marital representations did not change when positive and negative marital codes were analyzed separately.

fered in their maternal, self, and marital representations, and in the level of coherence and avoidance exhibited in their narratives. Third, we investigated whether interparental aggression accounted for unique or additive variance in predicting children's representations after accounting for the level of parent–child aggression in the home.

Children's Age and Gender

Because children's age may be related to the content of their narratives as well as the ease with which they engage in the storytelling task, we examined the correlations between child age and each of the content and process codes (see Table 2). The results showed that increasing age was associated with more positive and less negative maternal representations, more coherent narratives, and less avoidance in engaging in the storytelling task. Age was not related to the child or marital representations. Oppenheim, Emde, and Warren (1997) similarly found that representations of mothers on the MSSB became more positive with age, and Bretherton, Prentiss, and Ridgeway (1990) reported that 5-year-olds provided more detailed and differentiated depictions of family members than did 3-year-olds. We also examined the possibility that children of different ages might produce different patterns of results. We divided the sample into younger (ages 3–5) and older (ages 6–7) groups and tested whether age interacted with their group status (agency vs. school) on the multivariate analyses of variance (MANOVAs) described in the next section. This interaction term was not significant in either analysis, indicating that the differences reported below between the agency and school groups were consistent for younger and older children.

Gender differences have been found in some studies using the MSSB (e.g., Oppenheim, Nir, Warren, & Emde, 1997) but not in others (e.g., Macfie et al., 1999; Shamir et al., 2001). Therefore, we conducted t tests to determine whether boys' and girls' representations differed in the present study. Gender differences were found on two of the representations. Girls tended to portray mothers as more positive ($M = 6.29$), $t(44) = 4.06$, $p < .01$, and less negative ($M = 0.47$), than did boys ($Ms = 3.28$ and 1.55 for positive and negative representations, respectively), $t(44) = 2.74$, $p < .01$. Boys and girls did not differ on the child, marriage, or process codes.

Group Differences on Narrative Representations

Table 2 presents the correlations among the codes used to index children's representations in this study. Positive representations of mothers and children tended to be significantly correlated, as were negative representations of each person, but positive and negative representations of particular people were more modestly correlated. This is consistent with the attachment theory principle that models of self and caregiver are complementary (see Bretherton & Munholland, 1999) and with prior studies showing that positive and negative representations seem to be somewhat independent, rather than to fall at two ends of a continuum (e.g., Oppenheim, Emde, & Warren, 1997; Shamir et al., 2001). Maternal and child codes also showed significant associations with marital representations, and the process codes tended to correlate with the content codes.

We then tested the hypothesis that the children from the agency and shelter groups would differ in their narrative representations. Because several of the representations were intercorrelated, we conducted two multivariate analyses of covariance (MANCOVAs), one on the positively themed codes and one on the negatively themed codes. Age was included as a covariate because it was related to several of the representations. Table 3 reports the means and standard deviations of each group's scores on the MSSB codes for children's maternal, child, and marital representations, as well as for the narrative process variables. The MANCOVA on the "positive" codes (Mother Positive, Child Positive, Global Marriage, Coherence) revealed a significant difference between the children from the agencies and schools, Wilks's lambda = 7.29, $F(3, 41) = 5.09$, $p < .01$. Analyses of covariance (ANCOVAs), with age as a covariate, con-

Table 2
Intercorrelations Among Children's Representations

| Measure | Mother | | Child | | Marriage | | | Process | |
	Positive	Negative	Positive	Negative	Global	Conflict Escalation	Conflict Spread	Coherence	Avoidance
Mother Positive									
Mother Negative	−.42*								
Child Positive	.32	−.06							
Child Negative	−.13	.48*	.24						
Global Marriage	.14	−.14	−.10	−.10					
Conflict Escalation	−.64*	.40*	−.19	.42*	−.30*				
Conflict Spread	−.24	.53*	.06	.77*	−.03	.52*			
Coherence	.58*	−.49*	.23	−.46*	.07	−.01	−.45*		
Avoidance	−.62*	.36*	−.42*	.18	.01	.59*	.31*	−.75*	
Age	.47*	−.36*	.16	−.17	−.17	−.18	−.18	.41*	−.46*
M	4.39	1.15	2.89	0.85	−1.22	5.57	0.70	21.57	15.15
SD	2.82	1.38	1.68	1.26	1.53	2.93	1.03	3.67	4.68

*$p < .05$.

Table 3
Analyses of Group Differences in Children's Representations

MSSB codes	Agency sample		School sample		$F(1, 43)$
	M	SD	M	SD	
Mother representations					
Positive	3.48	2.59	5.30	2.80	7.96**
Negative	1.39	1.56	0.91	1.16	1.88
Child representations					
Positive	2.30	1.49	3.48	1.68	6.65*
Negative	0.87	1.29	0.83	1.27	0.03
Marital representations					
Global	−1.50	1.60	−1.00	1.51	0.83
Conflict Escalation	6.48	3.01	4.65	2.59	6.05*
Conflict Spread	0.74	0.96	0.65	1.11	0.11
Process codes					
Coherence	20.35	3.58	22.78	3.42	7.59*
Avoidance	17.09	4.11	13.22	4.47	13.81**

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

ducted on the individual narrative codes indicated that children from nonviolent homes reported more positive mother representations, $F(1, 43) = 7.96$, $p < .01$; more positive child representations, $F(1, 43) = 6.65$, $p < .05$; and more coherent narratives, $F(1, 43) = 7.59$, $p < .01$. The groups did not differ on the Global Marriage code. A MANCOVA performed on the negatively themed codes (Mother Negative, Child Negative, Conflict Escalation, Conflict Spread, Avoidance) also showed a significant group difference, Wilks's lambda = 0.70, $F(5, 39) = 3.28$, $p < .05$. Follow-up ANCOVAs on these codes indicated that children from the agency group reported greater conflict escalation in their narratives, $F(1, 43) = 6.05$, $p < .05$, and exhibited more avoidance, $F(1, 43) = 13.81$, $p < .01$. The groups did not differ on negative maternal or child representations, nor on a tendency for conflict in the stories to spread from parents to children.

It should be noted that the agency and school groups differed in family income, which presents a potential confound for understanding the results described above. In the past, researchers have sometimes attempted to control for such differences with statistical procedures such as ANCOVA. However, use of statistical controls in an attempt to equate nonequivalent groups in a nonexperimental study can cause serious interpretive problems (Appelbaum & McCall, 1983; Cook & Campbell, 1979; Steinberg & Fletcher, 1998). If the control variable is measured with error (as nearly all variables are), the mathematical adjustments introduced by covariance analyses may eliminate actual differences or falsely produce differences between groups (Appelbaum & McCall, 1983; Cook & Campbell, 1979). The use of statistical controls in these situations can also produce new but unknown confounds, so it is preferable to be aware of potential confounds and attempt to understand their possible effect on the data rather than attempt to "correct" them (Steinberg & Fletcher, 1998). Consequently, we examined whether the group differences reported above would be found in both lower (<$20,000) and higher (>$20,000) income families. We reran the MANCOVAs described earlier with the addition of family income as a factor and tested

the significance of the interaction of income and group status; a significant interaction term would mean that the effects of group status were different for families at different economic levels. The interaction term was not significant in either analysis ($ps > .10$), and the differences between school and agency group means were in the same direction for both income levels on 8 out of the 9 MSSB codes (the only exception was the Child Negative code). These results indicate that the group differences reported above are less likely to be attributable to the agency group having lower average income, though it does not eliminate the possibility that income affected the results in a less significant fashion.

Interparental and Parent–Child Aggression as Predictors of Children's Representations

The third question addressed in the study was whether interparental aggression accounted for variation in children's representations beyond that accounted for by parent–child aggression. Because children exposed to greater interparental aggression also tend to experience more parent–child aggression (in this study, these variables were correlated for both mothers, $r = .52$, and their partners, $r = .67$) and because parent–child relationships have been shown to predict children's narrative representations (e.g., Bretherton, Ridgeway, & Cassidy, 1990; Toth et al., 1997), significant differences between groups could reflect the effects of exposure to parent–child rather than interparental aggression. To examine this possibility, correlations first were computed between all of the MSSB representations and the measures of interparental and parent–child aggression completed by mothers. Hierarchical regression analyses then were conducted on those variables that correlated significantly with measures of both interparental and parent–child aggression to determine whether interparental conflict added unique, additive, or no additional variance after accounting for levels of parent–child aggression.

The power to detect reliable associations between the aggression measures and children's representations is sub-

stantially increased by combining the agency and school groups for these analyses. However, doing so could produce misleading results if the pattern of correlations among the variables differed across the two samples. To explore this possibility, we used Box's M test to assess whether the associations among the measures were similar in the agency and school groups. For each index of aggression, Box's M test was nonsignificant (all $ps > .10$), indicating that the pattern of covariances was not significantly different across groups. Consequently, we conducted the correlational analyses on the sample as a whole.

Table 4 presents the correlations between the MSSB content and process codes and mothers' and their partners' aggression in both interparental and parent–child interactions. Most of the MSSB codes were associated with at least one measure of aggression, and many were related to more than one index. Positive representations of mothers were negatively correlated with partners' aggression toward the mother and toward the child, but negative maternal representations were not predicted by either interparental or parent–child aggression. Turning to the child codes, we found that negative self-representations were positively related to mother's aggression toward the child, but none of the aggression variables predicted positive self-representations. Global representations of marriage were not associated with either type of aggression, but interparental conflict was more likely to escalate in the narratives of children exposed to higher levels of partners' interparental aggression and mother–child aggression. Children experiencing greater mother–child aggression also were more likely to portray interparental conflict spreading to include the children in the narratives. Analyses of the process codes indicated that all four aggression measures were significantly associated with children's avoidance on the MSSB and that narratives were less coherent when children experienced higher levels of partner–mother aggression and mother–child aggression.

Hierarchical regression analyses then were conducted on the four narrative codes that were predicted by indexes of both types of aggression (Mother Positive, Conflict Escalation, Coherence, and Avoidance). Children's age and the measure of parent–child aggression associated with a particular representation were entered in the first step, followed by the index of interparental aggression related to the code in the second step (see Table 5).

The equation for positive maternal representations showed that partner–child aggression and children's age together significantly predicted children's positive portrayals of mothers, with each accounting for unique variance. Partners' interparental aggression did not add significant unique variance when it was entered in the equation. When both types of aggression were included in the analysis, neither accounted for significant unique variance, indicating that interparental and parent–child aggression have additive effects on positive representations of mothers. Representations of interparental conflict escalation were significantly predicted by age and mother–child aggression in the first step, with mother–child aggression accounting for unique variance. When added in the second step, partners' interparental aggression added unique variance to the prediction of conflict escalation. Mother–child aggression was no longer significant once interparental aggression was included in the equation. Narrative coherence was significantly predicted by mother–child aggression and age in the first step, with the aggression measure accounting for unique variance. Adding partners' interparental conflict in the second step did not add significantly to the prediction of coherence, whereas mother–child aggression continued to account for unique variance. Finally, all four measures of aggression were significantly correlated with children's avoidance during the MSSB, but because intercorrelations among the measures reduced the likelihood that any one of them would account for unique variance, the indexes of parent–child and interparental aggression that were most highly correlated with Avoidance were included in the regression equation. In the first step, child age and mother–child aggression together accounted for significant variance, but only age was a unique predictor. Adding partners' interparental aggression in Step 2 added significantly to the variance accounted for in children's Avoidance, and both interparental aggression and age were found to be unique predictors.

Discussion

Attachment and social–cognitive theories converge on the idea that children form mental representations of relationships based on the nature of their interactions with significant others, especially their parents. These representations are important developmentally because they are proposed to shape children's expectations and behavior in later relationships (Bowlby, 1973; Bretherton & Munholland, 1999). Initial research has shown that the quality of parent–child interaction is related to the formation of mental representations of parents and the self (e.g., Bretherton, Ridgeway, & Cassidy, 1990; Oppenheim, Emde, & Warren, 1997; Toth et al., 1997), but little is known about the impact of other family interactions on children's schemas or working models or about representations for other kinds of family relationships. The present study builds on prior research by showing that aggression between parents also predicts chil-

Table 4
Associations Between MacArthur Story Stem Battery (MSSB) Codes and Aggression Measures

MSSB code	Interparental aggression		Parent–child aggression	
	Partner	Mother	Partner	Mother
Mother Positive	−.42*	−.25	−.37*	−.26
Mother Negative	.24	.03	.12	.27
Child Positive	−.32*	−.22	−.04	.14
Child Negative	.11	.03	.13	.53**
Global Marriage	−.17	−.14	−.09	−.09
Conflict Escalation	.48*	.19	.28	.40*
Conflict Spread	.27	−.00	.16	.33*
Avoidance	.43*	.32*	.32*	.33*
Coherence	−.41*	−.27	−.31	−.53*

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

Table 5
Regression Analyses Testing Unique Effects of Aggression Index

Criterion variables/ step and predictor	*b*	*t*	R^2	*F*(3, 36)
Mother Positive				
1 Age	.43	3.14**		
Partner–child aggression	−.40	−2.88**	.34	9.01**
2 Age	.43	3.16**		
Partner interparental aggression	−.24	−1.30		
Partner–child aggression	−.24	−1.30	.37	6.69**
Conflict Escalation				
1 Age	−.19	−1.24		
Mother–child aggression	.39	2.56*	.23	5.66**
2 Age	−.28	−1.93		
Mother–child aggression	.18	1.08		
Partner interparental aggression	.41	2.66*	.36	6.76**
Coherence				
1 Age	.24	1.65		
Mother–child aggression	−.45	−3.13**	.32	8.86**
2 Age	.28	1.96		
Mother–child aggression	−.34	−2.06*		
Partner interparental aggression	−.22	−1.40	.36	6.71**
Avoidance				
1 Age	−.38	−2.53*		
Mother–child aggression	.22	1.46	.25	6.07**
2 Age	−.47	−3.26**		
Mother–child aggression	.01	0.06		
Partner interparental aggression	.40	2.62*	.37	6.98**

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

dren's representations of parent–child and marital relationships.

Analyses of children's narratives on an adaptation of the MSSB showed that children whose mothers had been victims of spousal abuse differed from children from nonviolent families in both the content of their representations and the way in which they communicated their narratives. Specifically, children drawn from agencies serving battered women portrayed mothers in their stories as less nurturant, affectionate, and authoritative, but did not view them as more aggressive, rejecting, or neglectful. Similarly, their self-representations were less positive (less powerful, obedient), but not more negative (aggressive, oppositional) than were those of children from a sample drawn from the community. Differences were also found on marital representations: Interparental conflict was more likely to escalate and be left unresolved in the narratives of children exposed to interparental violence. However, these children did not differ from children in the community sample in making spontaneous positive and negative comments about the marital relationship in their narratives or in the tendency for interparental conflict to involve the children. Finally, children from the agency group exhibited more avoidance during the storytelling task and told stories that were less coherent than were those of children from the community group.

We also examined whether children's exposure to interparental aggression added to the prediction of children's representations after accounting for the level of parent–child aggression that they had experienced. Hierarchical regression analyses showed that interparental aggression

uniquely predicted children's expectation that conflict would escalate and their tendency to avoid engaging in the narrative task. Interparental aggression and father–child aggression had additive effects on representations of mothers: children whose fathers (or father figures) directed higher levels of aggression toward both them and their mothers portrayed mothers less positively. Although partners' interparental aggression also was correlated with children's narrative coherence, it did not account for unique or additive variance after accounting for parent–child aggression. Other representations were correlated only with interparental or parent–child aggression: Higher levels of aggression directed toward mothers by their partners were associated with less positive child representations, and greater mother–child aggression predicted more negative self-representations and expectations that conflict would spread to children.

These findings are similar to data reported by the only other published study examining links between interparental conflict and children's narrative representations. Shamir et al. (2001) also reported that destructive forms of conflict resolution were associated with maternal representations but found that children from more conflictual homes displayed more negative, rather than less positive, representations. The differences across studies in the relations between conflict and positive representations are consistent with Oppenheim, Emde, and Warren's (1997) proposal that positive representations may be more sensitive measures in highly stressed or at-risk samples than in well-functioning samples, because there may be ceiling effects on these representations in the latter group. The reason that negative

maternal representations were not correlated with interparental aggression is not clear. The nonsignificant associations between interparental aggression and global representations of the marriage in the present study appear to be at odds with Shamir et al.'s (2001) data showing a significant correlation between destructive forms of conflict resolution and negative representations of the marital relationship. However, Shamir et al.'s negative marital code tapped behaviors occurring in the context of a marital conflict (e.g., aggression, stalemating), which in the present study were included in the Conflict Escalation code; findings from this code parallel those reported for Shamir et al.'s negative marital code.

The present study has a number of implications for understanding the impact of conflict and violence in the family. Previous research has shown that children who are victims of parental maltreatment exhibit more negative maternal representations (Toth et al., 1997), and our data indicate that interparental and parent–child aggression contribute additively to predicting less positive portrayals of mothers. One explanation for this finding is that mothers who are victims of spousal abuse may be less able to provide sensitive and responsive care to their children because their own emotional resources are depleted (Holden, Stein, Ritchie, Harris, & Jouriles, 1998; Levandosky & Graham-Bermann, 2000). Interparental aggression thus may affect children's perceptions of mothers because it undermines mothers' capacity to parent effectively.

Alternatively, the link between interparental aggression and maternal representations may reflect the efforts of children exposed to interparental violence to make sense of highly distressing events, rather than veridical portrayals of parent–child relationships. Although working models and schemas are based on actual interactions, they also reflect children's attempts to understand those interactions (Bretherton, Ridgeway, & Cassidy, 1990; Stein & Liwag, 1997). Their narrative representations thus reflect the meaning of the events to them, and incorporate their subjective interpretations as well as hopes and fears related to the event (e.g., Bretherton & Munholland, 1999). The cognitive–contextual framework proposes that witnessing hostile, aggressive conflict between parents initiates efforts by children to understand what is happening and why (Grych & Fincham, 1990), and it may be very difficult for young children to comprehend why their parent or parents are hurting each other. Because children often are told that punishment is a result of their own misbehavior, perhaps young children trying to interpret their fathers' aggression toward their mothers perceive it as a response to something their mothers did or failed to do, a perception that may be reinforced by men overtly blaming their partners for causing the abuse. In addition, children may view their mothers as less competent and powerful because they are victimized by their partners.

The finding that children who had experienced more mistreatment by their father (or father figure) also exhibited less positive maternal representations may indicate that children in these families view their mothers as failing to protect them from harm. In attachment terms, children's confidence in their mother as a secure base, someone who is available and responsive if the child is threatened, may be undermined in children who are victims of parental aggression (also see Waters & Cummings, 2000). Thus, children's working models of their mothers may be influenced both by their observations of interactions between their parents and by their mothers' ability to protect them from danger posed by other family members.

Parent and child representations are presumed to be complementary in attachment theory (e.g., Bretherton & Munholland, 1999), and accordingly we found that child representations also were less positive in the agency sample. Participants in the violent group portrayed the child in their narratives as less powerful, capable, and self-reliant than did participants in the school sample, which may reflect the sense of helplessness that may arise when children witness aggression between parents. This finding also supports the idea that children who witness violence between caregivers experience a threat to their emotional security that undermines their sense of competence and autonomy (Davies & Cummings, 1994; Shamir et al., 2001). Consistent with Toth et al.'s (1997) findings, correlational analyses also indicated that children who experienced more mother–child aggression had more negative self-representations, in which they portrayed the child in the narratives as more disobedient and aggressive. Different patterns of relations with negative and positive representations suggest that these two aspects of self-image are somewhat independent, a conclusion supported by a relatively low correlation between them (see also Oppenheim, Emde, & Warren, 1997). Whereas children whose mothers are very punitive and harsh may perceive themselves as misbehaving and disobedient, children who witness aggression between caregivers may feel a lack of power and competence.

Mother–child aggression also predicted whether conflict between parents was portrayed as spreading to include children. In distressed families, conflict is more likely to spread from one relationship to another (e.g., Christensen & Margolin, 1988), and parent–child aggression may often arise in the course of parental hostilities if children are triangulated in the conflict between the parents. These data suggest that children's expectation of being drawn into a parental conflict depends more on how the parents (specifically mothers) treat them than on the level of aggression parents exhibit toward each other.

The findings regarding children's representations of interparental conflict support the hypothesis that children develop a schema regarding the course and outcome of disagreements between couples based on their observations of interparental conflict (Grych & Cardoza-Fernandes, 2001; O'Brien & Chin, 1998). Conflict schemas may affect children's socioemotional functioning in a number of ways. First, schemas provide a cognitive mechanism to explain the "sensitization" effect, in which children exposed to higher levels of interparental conflict become more distressed when witnessing later conflict (e.g., Davies, Myers, Cummings, & Heindel, 1999; El-Sheikh, 1994; Grych, 1998). Children who expect that conflict will escalate are likely to experience heightened fear and threat when they perceive

hostility or discord between their parents and may be more likely to intervene in the conflict to prevent it from intensifying (Grych & Cardoza-Fernandes, 2001). Conflict schemas can be characterized as contextual factors in Grych and Fincham's (1990) cognitive–contextual framework and would provide a link between children's prior experiences with interparental conflict and their appraisals of new conflict episodes (Grych & Fincham, 1990). Appraisals, in turn, are likely to have a reciprocal effect on children's schemas. What is represented in schemas (or working models) depends not just on the events that occur, but on how children perceive, interpret, and understand the events (Baker-Ward et al., 1997; Stein & Liwag, 1997; Wyer & Carlston, 1994). The schema construct therefore may prove useful for linking children's cognitive and emotional processing in particular situations with more global beliefs about relationships.

Conflict schemas also provide a process by which family experiences are transmitted to later close relationships in adulthood. When individuals face conflict with an intimate partner, they access the expectations, emotions, and behavioral responses they associate with this context (e.g., Grych & Cardoza-Fernandes, 2001). If they view aggression as justifiable, normative, or effective in ending disagreements, they may tend to rely on coercive or violent means to dominate or control their partner (also see Graham-Bermann, 1998). Children also may become hypervigilant to discord and perceive threat in situations that are not objectively disturbing or harmful. Such children may become overreactive to signs of anger or aggression from others and could respond either by striking out against peers or romantic partners or perhaps becoming avoidant of close relationships (Crittenden & Ainsworth, 1989; Dodge, Bates, & Pettit, 1990; Rossman, 1998).

The findings pertaining to narrative coherence and avoidance also support a link between exposure to aggression in the family and children's developing working models. How children communicate on the MSSB is believed to reflect their level of anxiety in confronting emotional family issues and the extent to which they have well-integrated, organized beliefs and feelings about their experiences (Bretherton, Ridgeway, & Cassidy, 1990; Oppenheim, Nir, et al., 1997). Higher levels of both interparental and parent–child aggression were related to decreased coherence, but only mother–child aggression uniquely predicted children's narrative coherence. In contrast, although each of the aggression measures was related to a greater tendency for children to avoid completing the stories, only partners' interparental aggression accounted for unique variance when indexes of interparental and parent–child aggression were examined together. Violence in general and maternal mistreatment in particular thus appear to be particularly disruptive to children's ability to develop (or express) organized representations of family relationships. These data are consistent with research showing that insecurely attached children resist or give irrational or poorly integrated responses to tasks designed to elicit attachment representations (see Main et al., 1985) and support the hypothesis that exposure to aggression in family interactions undermines children's formation of secure attachment representations (Toth et al., 1997).

Finally, we found some evidence for age and gender differences in children's representations. Given that children's cognitive capacities and ability to communicate increase with age, it is understandable that older children produced more coherent, organized narratives and were less avoidant during the storytelling task. Like Oppenheim, Emde, and Warren (1997), we also found that older children portrayed mothers more positively and less negatively than did younger children. Because neither of these studies assessed parenting independently, it is not clear whether the quality of parenting changes with age or whether children's perceptions of their parents change over time. It is also possible that children's descriptions of mothers become more congruent with social norms as they get older (Oppenheim, Nir, et al., 1997), but further research is needed to understand the nature of these developmental changes.

For the most part, boys and girls did not differ in their representations. The only gender differences in the study concerned maternal representations: Girls tended to portray mothers more positively and less negatively in their narratives than did boys. Oppenheim, Nir, et al. (1997) reported that girls exhibited more prosocial and fewer aggressive themes than boys on the MSSB at age 4½ years but not at age 5½ years, but most other studies that have used the MSSB have failed to find gender differences in children's narratives (Macfie et al., 1999; Oppenheim, Emde, & Warren, 1997; Toth et al., 1997). The present results require replication but could reflect either differences in the quality of the relationship mothers have with daughters and sons, or their children's perceptions of those relationships. It would be interesting to examine whether boys in violent families were particularly likely to hold more negative representations of mothers, but we were unable to test whether these gender differences were similar across groups because of the relatively small number of girls in the sample.

Limitations

Although this study provides insights into the developing family representations of children exposed to domestic violence, it has a number of limitations that should be noted. First, because the study is cross-sectional, we cannot conclude that children's narrative representations are the result of their experiences with interparental and parent–child aggression. It is unlikely that causal effects flow in the opposite direction, but it is possible that unmeasured factors account for the association between family aggression and children's representations. Second, single measures of children's representations and family aggression were obtained, which limits the assessment of these constructs. Including multiple indexes and raters of family aggression and measures of more specific types of representations (e.g., children's perception of the parent as protector) in future studies will provide more comprehensive and fine-tuned assessment of their representations and exposure to family violence. Third, the study's generalizability may be limited by the relatively small sample size and income differences between the two groups; although differences in income do

not appear to account for differences in children's representations, it will be important to determine whether the results generalize to families from varied socioeconomic levels. Finally, given that only half of the families in the school sample agreed to participate, it is possible that the school sample underestimates the level of aggression occurring in nonclinic-referred families.

Implications for Application and Public Policy

The links between children's exposure to aggression in the family and their representations of family relationships have a number of implications for clinical intervention and prevention (see also Buchsbaum, Toth, Clyman, Cicchetti, & Emde, 1992; Grych, 2000). First, they suggest that treatment of children from violent homes may be enhanced by focusing on children's perceptions of their relationships with each parent and their beliefs about relationships more generally. Assessing how children perceive their parents may provide insight into their sense of felt security as well as the nature of their relationship with each parent. Young children's attachment security may be influenced most directly by improving the quality of their relationships with their caregivers, and determining that children perceive parents as threatening, unavailable, or unable to nurture and protect the child could help clinicians target which aspects of parent–child or interparental relationships need to be addressed in treatment.

Second, it may be important for clinicians to assess whether children are developing maladaptive beliefs about conflict and aggression that may perpetuate relationship problems in their lives. If children do express problematic beliefs about interpersonal conflict and aggression, treatment could focus on how children perceive and respond to anger and conflict both within and outside of the family. Because schema-inconsistent information tends to be filtered out or poorly remembered, to produce lasting change in children's representations it will be important to repeatedly expose children to different models and alternative ways of handling the disagreements and frustrations that inevitably occur in relationships. Through play, stories, or discussion of hypothetical or real interpersonal situations, children may learn more constructive ways of managing anger and conflict.

Children's mental representations provide a mechanism bridging work on the development of attachment in infancy and its expression in adult relationships, and linking exposure to violence in the family of origin with the perpetration of abuse toward intimate partners. Even if interventions directly targeting children's representations of close relationships do not immediately impact their adjustment, they may well have a long-term, preventive effect on the use of coercion, control, and violence in later dating and marital relationships.

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Appendix

Text of Stories Added to the MacArthur Story Stem Battery

Note: Text reflect stories used with girls. Name and gender of child character is male for male participants.

Visiting Relatives

At dinner one night, Susan's mom and dad are talking about going to visit some of their relatives next weekend, but disagree about where they should go. Their voices start to get angry.

F: We always go to your parent's house. This time I want to go visit my family.
M: That's not true, we saw your family last month.
F: I don't want to see your parents this weekend.
M: Well I do!

Show me and tell me what happens now.

Pizza for Dinner

Susan and her brother are in the living room and their mom is in the kitchen. Their dad walks in the door, and looks into the kitchen.

F: Hi. What's for dinner?
M: Susan asked for pizza.

F: (angrily) Pizza! I've worked hard all day and all you've got for dinner is pizza! I don't want pizza!
M: (angrily) Well that's too bad! I worked hard too and this is all I've had time to make!

Show me and tell me what happens now.

Punishment

Susan and her father are in the living room. Her mom walks into the room, and dad walks over to her.

F: Susan broke a lamp today when she was playing in the living room after I told her to go outside to play. We have to decide what punishment she should have.
M: Oh, don't make a big deal out of it. I don't see any reason to punish her.
F: Well, I disagree. You're too easy on them!
M: And you're too strict!

Show me and tell me what happens now.