The Essential Ingredients of Successful Sibling Relationships: An Emerging Framework for Advancing Theory and Practice

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ABSTRACT—*Although conflict is a frequent and dynamic interpersonal process in children's sibling relationships, ambivalence (i.e., combinations of, or shifts between, positive and negative behaviors and affects) may better characterize normative sibling interactions. Nonetheless, there is a general assumption that reducing conflict is the most effective mechanism for improving sibling relationships. This review argues that the focus on conflict as the predominant attribute of sibling relationships is misplaced and has served to overshadow research on other relationship processes; it has also handicapped the development of effective prevention and intervention tools. Strategies are presented for moving theory, research, and practice toward the identification and development of factors and social processes that promote prosocial forms of sibling engagement and manage conflict. Innovative strategies are needed on two fronts: to help young siblings set their relationship on a positive trajectory and to help them avoid or remediate conflictual interactions.*

KEYWORDS—*sibling relationships; sibling conflict; social understanding*

Few would argue against the suggestion that sibling relationships are challenging for children, marked by significant degrees of conflict, antagonism, and competition. For example, 2- to 4-year-olds can experience 7.65 disputes per hour, with an average length of 10.69 sequential moves or interactions per dispute (Perlman & Ross, 2005). Conflicts between 3- to 9-year-old siblings occur at comparable rates, with each lasting approximately 45 s (Kramer, Perozynski, & Chung, 1999), making the time spent fighting quite substantial. Conflict does appear to be frequent, and there is a general assumption that reducing conflict is the most effective mechanism for improving sibling relationships. In this article, however, I argue that the focus on conflict as the predominant attribute of sibling relationships is unjustifiable; it has served to overshadow research on other aspects of these relationships and has also handicapped the development of effective prevention and intervention tools. An alternate perspective, one that emphasizes the identification of social processes that promote and scaffold prosocial forms of sibling interaction, *along with* social processes that reduce and manage antagonism, competition, and conflict, is likely to yield more productive results with important implications for theory, application, and research.

SIBLING AMBIVALENCE: TOWARD A BALANCED ASSESSMENT OF SIBLING RELATIONSHIP QUALITY

The longitudinal studies that Judy Dunn and her colleagues conducted on the early development of sibling relationships offer the clearest portrayals of the wide range of behaviors that siblings exchange at home and how those behaviors change with development. Home observations of sibling, and mother–sibling, interactions after the entrance of a second child into the family convinced Dunn that *ambivalence*—combinations of, or shifts between, positive and negative behaviors and affects—better describes normative sibling relationships than rivalry or conflict

(Dunn & Kendrick, 1982). Siblings engaged in social interactions that alternated rapidly between instances of conflict, teasing, and threats and instances of shared laughter, affection, and pride, often with a "devastating lack of inhibition" (Dunn, 1985, p. 1). According to Dunn, the continual interchange of intense positive and negative emotion makes sibling relationships a potent force in children's development, helping to shape the development of social understanding.

Acknowledgment of the ambivalent nature of sibling relationships has important implications for the assessment and promotion of sibling relationship quality. Rather than gauging sibling relationships in terms of the degree to which children express processes such as warmth, involvement, conflict, and rivalry, a better indicator may be the frequency and proportion of positive and negative socioemotional processes that occur in sibling encounters, with respect to the overall levels of sibling interaction. For example, Kramer and Gottman (1992) developed an observational coding system that measures sibling relationship quality in terms of the percentage of positive social interactions between siblings. The use of this instrument in a longitudinal study, spanning from the entrance of a second child into the family until the elder child reached late adolescence, revealed robust correlations in the percentage of positive sibling interaction from one point in development to the next across childhood, as well as an increase in levels of positive interaction in early adolescence (Kramer & Kowal, 2005). These results are in line with those of a longitudinal interview study (Kim, McHale, Osgood, & Crouter, 2006) that tracked 200 sibling dyads from middle childhood to late adolescence, in which levels of sibling conflict remained stable but declined after early adolescence. Stability in sibling intimacy differed along with gender constellation; whereas same-sex siblings reported consistent levels of intimacy, mixed-sex siblings reported less intimacy between middle childhood and early adolescence with an upswing in middle adolescence.

Although researchers now recognize ambivalence as a predominant characteristic of sibling relationships, we still lack an understanding of the ideal mixture or proportion of positive and negative behaviors (Conger, Bryant, & Brennom, 2004; Kramer & Bank, 2005). Sibling relationships that consist only of positive interactions may be undesirable (except perhaps in parents' viewpoints), as an absence of conflict could deprive children of experiences that are instrumental for social, emotional, and cognitive development (Shantz & Hobart, 1989). Although parents regularly report that their children fight too much, and in ways that disturb family harmony (Kramer & Baron, 1995), developmental research has shown that, in moderation, conflict plays an essential role in promoting children's acquisition of social and emotional competencies. Constructive forms of sibling and peer conflict provide children with the opportunities to develop skills in conflict management (Hartup, Laursen, Stewart, & Eastenson, 1988; Vandell & Bailey, 1992), identity formation (Shantz & Hobart, 1989), tolerating negative affect (Katz, Kramer, & Gottman, 1992), and social understanding (Dunn & Slomkowski,

1992). In addition, the absence of sibling conflict can also signal difficulties in individuals' psychosocial well-being or in the sibling relationship itself (Schave & Ciriello, 1983). The avoidance of conflict may indicate that individuals are unable to resolve interpersonal difficulties through mutual problem solving (Furman & McQuaid, 1992). Thus, efforts that are geared toward eliminating all forms of sibling conflict could have the unintended effect of impeding children's identity development and abilities to manage conflicts, solve problems, and regulate emotions. Additional research must ascertain what the optimal balance of positive and negative sibling behaviors should be to promote quality sibling relationships. This research must investigate how optimal levels of positive and negative sibling behaviors may change over the course of children's development and in accordance with the age and gender composition of the siblings.

IF SIBLING CONFLICT WERE ELIMINATED, WOULD HARMONIOUS RELATIONSHIPS RESULT?

The absence of conflictual, competitive, and antagonistic behaviors does not ensure that children will establish a positive, engaged relationship. It is important to parents that siblings develop positive, engaged relationships when they are young because they set the stage for supportive relationships later in life when parents may no longer be available (Conger, Williams, Little, Masyn, & Shebloski, 2009; Kramer & Baron, 1995). Such an objective may be wise as older adults with supportive sibling relationships are more likely to report higher levels of well-being (Bedford, 1995; Connidis & Davies, 1992; Goetting, 1986; Gold, 1989). In fact, the strongest predictor of well-being at age 65 among male Harvard alumni was the quality of their relationships with siblings they reported during college (Vaillant & Vaillant, 1990). Longitudinal research also reveals the protective functions of sibling relationships; for example, sibling affection may help constrain the level of internalizing behavior problems that children face during significant stressful life events (Gass, Jenkins, & Dunn, 2007).

Researchers have developed several intervention programs to ameliorate sibling conflict (see Kramer, 2004, for a review). Evaluations of these programs indicate that children who participate in conflict-reduction intervention programs generally succeed in lessening agonistic sibling behaviors; however, engaged sibling interactions do not spontaneously emerge upon the reduction in conflict. Rather, interventions that focus specifically on reducing conflict tend to lead siblings to engage in separate activities, leaving them uninvolved with one another (Leitenberg, Burchard, Burchard, Fuller, & Lysaght, 1977). In their investigation of two methods for reducing sibling conflict, omission training and reinforcing alternate behaviors, Leitenberg et al. (1977) found that although both procedures were successful in reducing the frequency of conflict relative to baseline levels, instances of appropriate sibling interaction were observed only when

alternate, more desirable, behaviors were reinforced. Thus, even when sibling conflict occurs at minimal levels, children may fail to develop prosocial relationships if they lack sibling-relevant social competencies or are not encouraged to use such competencies.

INTENTIONAL APPROACHES TO PROMOTING SUCCESSFUL SIBLING RELATIONSHIPS

If we wish to help children establish relationships that contain higher levels of positive behaviors that they can sustain over time, we must be *intentional* in our efforts to help children develop the precise social and emotional competencies that research suggests children need. Unfortunately, few studies actually identify the skills and competencies that are the essential ingredients of successful sibling relationships. In addition, we know little about the specific competencies siblings of different developmental levels need to develop satisfying relationships.

Sibling relationships are challenging for a number of reasons, including the fact that siblings are often left to their own devices to relate to another child who may be younger and may operate with a limited repertoire of cognitive, emotional, and social competencies. Because sibling relationships can be emotionally charged and frustrating, the essential competencies necessary for prosocial sibling relationships are likely to be multifaceted. They require a wide range of abilities to create mutual engagement and shared enjoyment, appreciate shared and divergent perspectives, maintain a positive emotional climate, and manage conflict. Table 1 represents an "emerging" list of specific competencies that research has identified as potentially important for the establishment of prosocial sibling relationships. This list provides an initial sketch to be embellished by future research on the factors that contribute to sibling relationship quality. The next section provides a brief summary of current research related to each competency.

Positive Engagement
Sibling engagement in constructive activities is positively associated with individual well-being among children (Stormshak, Bellanti, & Bierman, 1996) and adolescents (Tucker, McHale, & Crouter, 2008). Surprisingly, few studies have directly addressed the ways in which positive engagement among siblings contributes to enhanced sibling relationship quality. However, Kramer and Gottman's (1992) longitudinal study of the development of sibling relationships identified four major social processes in firstborn children's interaction with their best friends

Table 1

An Emerging List of Essential Competencies for Prosocial Sibling Relationships in Early Childhood

Competency	Description	Representative research
Positive engagement	Play, conversation, mutual interest, enjoyment, and fun. Identify a set of activities that accommodate the differing developmental levels of all siblings	Howe, Petrakos, Rinaldi, and LeFebvre (2005) and Kramer and Gottman (1992)
Cohesion	Recognize and value instances of help, support, protectiveness, cooperation, loyalty, trust, pride	Furman and Buhrmester (1985) and Kramer and Gottman (1992)
Shared experiences that build support	Appreciate siblings' unique knowledge of one another and of their family to strengthen bond, while avoiding use of such knowledge to disadvantage sib. Value both shared and independent interests	Kowal et al. (2006) and Whiteman et al. (2007)
Social and emotional understanding; perspective taking	Decentering; learn to assess and respect siblings' unique views, needs, goals, and interests in addition to one's own	Dunn (1988), Howe et al. (1998), and Howe and Ross (1990)
Emotion regulation	Identify and manage emotions and behaviors in emotionally challenging and frustrating situations	Volling et al. (2002) and Kennedy and Kramer (2008)
Behavioral control	Refrain from behaviors that siblings find undesirable (e.g., bossiness, teasing, embarrassing in front of friends, tagging along, failing to respect personal boundaries and space, overly exuberant, wild behaviors)	Brody et al. (1999) and Stormshak et al. (1996)
Forming neutral or positive attributions	In ambiguous situations, children may form hostile attributions about the intent of siblings' behaviors; children must learn to check or correct faulty attributions. Family members clarify intentions and communicate about the impact of others' behaviors	Stormshak et al. (1999)
Conflict management, problem solving	Conflicts are social problems that can be solved, yet children need to be explicitly taught these methods. Parental modeling and scaffolding of effective conflict management strategies (e.g., collaborative problem solving, mediation) are essential for child learning	Conger et al. (2009), Kramer et al. (1999), Ram and Ross (2001), Siddiqui and Ross (2004), and Smith and Ross (2007)
Evaluating parental differential treatment practices	Discuss impact of forms of parental differential treatment that are perceived as unfair and adjust parental behaviors so that children's unique needs are met	Kowal et al. (2006), Richmond et al. (2005), and Shanahan et al. (2008)

that were highly predictive of prosocial sibling relationships over a 13-year period. These processes were maintaining connected play interactions and communication, fantasy play engagement, establishing a positive emotional climate, and conflict management. Interestingly, levels of conflict engagement did not predict sibling relationship quality whereas abilities to manage conflict and negative affect did. Although they observed these social processes in the context of friendship interaction, Kramer and Radey (1997) demonstrated that it was possible to teach these competencies to preschool-aged children, resulting in greater positivity in their interactions with infant and toddler-aged siblings.

Cohesion

Sibling relationships are important sources of support for children, and successful sibling relationships often include cooperation, solidarity, loyalty, trust, and pride (Furman & Buhrmester, 1985). For example, fifth- and sixth-grade children in Furman and Buhrmester's study (1985) reported that companionship, admiration, prosocial behaviors, and affection were the most common positive qualities of their sibling relationships. In line with the view that sibling relationships are best described as ambivalent, children also commonly noted negative qualities such as antagonism and quarreling. Cross-cultural research has reinforced the value of sibling relationships as contexts for extending nurturance, comfort, caregiving, teaching, and loyalty across development (Weisner, 1989; Zukow-Goldring, 1995). Although the building of sibling cohesion may have lasting importance, researchers have yet to test this hypothesis directly.

Shared Experiences That Build Support

Siblings have a unique knowledge of one another that may be unavailable to other family members. Growing up in the same household can facilitate the formation of bonds and a sense of solidarity that is difficult to achieve in other relationships. Such bonds may be very helpful for coping with family transitions and stressors, such as parental divorce (Jenkins, 1992). However, intimate knowledge of a sibling can be a double-edged sword, used to disadvantage as well as support and nurture. Even 2-year-olds use their unique knowledge to tease, annoy, or frustrate a sibling (Dunn, 1988). Research on sibling deidentification suggests that along with shared history and intimate knowledge of a sibling, individuals are also motivated to carve out unique identities, which may be shaped in part by their perception of their siblings' attributes and qualities (Schachter, Shore, Feldman-Rotman, Marquis, & Campbell, 1976; Whiteman, McHale, & Crouter, 2007). We need investigations of how to facilitate and use shared experiences to enhance sibling solidarity and long-term connectedness, while balancing individual needs for autonomy and individuation.

Social and Emotional Understanding; Perspective Taking

Dunn (1988) has emphasized the importance of early sibling relationships as a context for social understanding and social-cognitive development. The experience of relating to a younger sibling helps children learn about the desires, needs, and ideas of other individuals as separate from their own (Dunn, 1988) while acquiring the language of emotion (Brown & Dunn, 1992). Children who are better able to understand and discuss their own and their siblings' internal states are more likely to interact prosocially (Stocker, Burwell, & Briggs, 2002) and with less sibling conflict (Howe, Petrakos, & Rinaldi, 1998). The ability to appreciate a sibling's point of view helps children to understand the mental states of others, thereby contributing to the development of a theory of mind (Astington, 1993; Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991; Pernoff, Ruffman, & Leekam, 1994). Volling, McElwain, and Miller (2002) found that preschool-aged older siblings with higher emotion understanding scores were less likely to demonstrate negative emotions and failure to regulate behavior in a "social triangle"—a context designed to elicit jealousy in which children observe their younger siblings receiving unilateral attention from their mothers. Taken together, these findings suggest bidirectional linkages between social understanding and prosocial sibling relationships. Researchers have yet to fully evaluate the impact of teaching children competencies in social understanding and perspective taking on sibling relationship quality.

Emotion Regulation

Children's ability to regulate negative affect, and to participate in complex and emotion-laden interactions with their siblings, may be critical for the development of harmonious sibling relationships. Kennedy and Kramer (2008) tested the contribution of emotion regulation competencies in promoting sibling relationship quality as part of an experimental intervention. Improvement in parental down-regulation—a form of emotion regulation that considers the amount of effort that parents devote to calming their children when their emotions are highly charged or limiting children's inappropriate expression of behaviors and emotions (Katz & Gottman, 1986)—was indeed associated with gains in sibling relationship quality. Thus, instruction in emotion regulation, along with related competencies in emotion and social understanding, may be important for enhancing sibling relationships.

Behavioral Control

In addition to emotion regulation, behavioral regulation or self-control may be an essential ingredient of prosocial sibling relationships. In their study of the sibling relationships of rural African American children between the ages of 9 and 12 years, Brody, Stoneman, Smith, and Gibson (1999) examined self-regulation processes that they defined as the ability to set and attain goals, plan actions and consider their consequences, persist with challenging tasks, and refrain from directing aggressive behaviors to others. These forms of self-regulation were linked with more positive parent–child relationships, and children who demonstrated these forms experienced more harmonious and less conflictual sibling relationships. Although research has not

explicitly studied this issue, children who are more able to refrain from behaviors that siblings find undesirable—including bossiness, teasing, embarrassing in front of friends, tagging along, failing to respect personal boundaries and space, and overly exuberant behaviors—are likely to enjoy more prosocial sibling relationships.

Forming Neutral or Positive Attributions

Stormshak, Bellanti, and Goodman (1999) demonstrated that children's hostile attributions about a sibling's behavior can be detrimental to sibling relationship quality, particular when one child has a conduct disorder. These results suggest that children may benefit from learning to carefully consider the attributions that they form about their sibling's behavior, for example, by asking each other to explain their intentions before forming attributions, offering reasons for behaviors that are likely to elicit a negative reaction, and when in doubt, interpreting sibling behavior in a benign, neutral, or positive light.

Conflict Management and Problem Solving

Although children as young as 2.6 years can use tactics of conflict negotiation with positive results (Perlman & Ross, 2005), such behaviors occur much less frequently than contentious ones. Ram and Ross (2001) reported that less than 5% of conflict moves of siblings 2–8 years of age involve expressions of concern, comfort, or apologies. Nonetheless, children who demonstrate negotiation or collaborative problem-solving tactics when managing a conflict of interest are more likely to consider their relationship with their sibling as more positive than do children who rely on contention or struggles (Ram & Ross, 2001). Thus, training in conflict management is likely to enhance sibling relationship quality.

Evaluating Parental Differential Treatment Practices

Children who receive less favored treatment from parents, and who perceive such treatment to be unfair or unjustified, tend to develop poor sibling relationships (Kowal & Kramer, 1997; McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000). Because individual family members are likely to form divergent understandings of why parental differential treatment (PDT) occurs, and because the reasons behind PDT are rarely acknowledged let alone discussed among family members (Kowal, Krull, & Kramer, 2006), a shared understanding of what constitutes fair treatment may be difficult to achieve but critical for optimal sibling and family functioning. It may be valuable to develop interventions that help family members to openly communicate about the attributions they form when PDT occurs and its impact, and also to correct unfair parental practices.

THE FULL FRAMEWORK

The preceding list of essential ingredients includes competencies that children may be directly taught in order to strengthen their relationships with siblings. However, both social learning and family systems theories suggest that parents play key roles in promoting the acquisition and performance of these competencies.

The Role of Parents

Parents can model social behaviors they wish their children to enact, and in addition, parental prompting, coaching, and reinforcement of these complex behaviors are likely to enhance the probability that siblings will enact the competencies independently. Furthermore, parents should try to establish a family environment that values harmonious sibling relationships and that avoids interpersonal processes found to inhibit prosocial relationships, such as unwarranted differential treatment and ineffective responses to sibling conflict. In short, parents should be encouraged to be aware of their objectives for their children's relationship and how they are teaching their children to achieve these aims (Kramer & Baron, 1995).

One promising approach for enlisting parents as partners in intervention efforts involves teaching them to use formal mediation strategies, along with positive communication skills, to respond to their children's conflicts (Siddiqui & Ross, 2004; Smith & Ross, 2007). In comparison with a control group that received no mediation training, children whose parents learned mediation used more constructive conflict resolution strategies (such as offering and accepting solutions) and also demonstrated social-cognitive gains, such as understanding the validity of dual perspectives in conflict situations (Smith & Ross, 2007).

A Comprehensive Approach

Interventions that work directly with both children and their parents to improve sibling relationships are exceedingly rare. Exceptions are the Fun With Sisters and Brothers Program (Kramer & Radey, 1997), aimed at prevention with preschool-aged children who have infant- and toddler-aged siblings, and the More Fun With Sisters and Brothers Program (Kennedy & Kramer, 2008), a preventive intervention aimed at siblings in the 4- to 8-year range. Both programs teach children a developmentally appropriate set of social and emotional competencies that research shows to be associated with enhanced sibling relationship quality. The social and emotional competencies that both programs target largely parallel those in Table 1. A parent education component helps maintain and apply the training gains to the home and other natural contexts.

Both programs are cast as "experimental interventions," and studies have tested both their general effectiveness and the specific contributions of the targeted social-emotional competencies to improve sibling relationship quality with respect to randomly assigned control groups. In addition to supporting their effectiveness for promoting prosocial sibling interactions, research conducted to date has demonstrated that gains in emotion regulation significantly contributed to prosocial sibling behaviors (Kennedy & Kramer, 2008). This finding has important implications for the

advancement of conceptual models regarding the functions of emotion regulation for children's social development. Ongoing research will examine the contributions of the additional social-emotional competencies that the Fun With Sisters and Brothers interventions target.

CONCLUSION

As research on sibling relationships progresses, and as we develop and refine theoretically and empirically based prevention and intervention programs, the "essential ingredients" of successful sibling relationships will become increasingly clear. The ultimate framework will acknowledge the ambivalent nature of normative sibling relationships and contain ingredients that help children at different developmental levels create successful relationships. As research results guide the development and implementation of prevention and intervention efforts, their evaluation through experimental intervention paradigms will be critical for illuminating potential processes of change. As researchers build a more comprehensive framework for understanding sibling relationships, the reciprocal exchange of information between research, intervention, and evaluation will play an important role in advancing theory construction and practice.

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