

- and infant exploration in irritable infants. In W. Koops, H. J. G. Soppe, J. L. van der Linden, P. C. M. Molenaar, & J. J. F. Schroots (Eds.), *Developmental psychology behind the dikes* (pp. 249-268). Delft, The Netherlands: Uitgeverij Eburon.
- Wahler, R. G., & Dumas, J. E. (1987). Family factors in childhood psychology: Toward a coercion-neglect model. In T. Jacob (Ed.), *Family interaction and psychopathology: Theories, methods, and findings* (pp. 581-627). New York: Plenum.
- Waters, E., & Sroufe, L. A. (1983). Social competence as a developmental construct. *Developmental Review, 3*, 79-97.
- Wheeler, V. A., & Ladd, G. W. (1982). Assessment of children's self-efficacy for social interactions with peers. *Developmental Psychology, 18*, 795-805.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 297-333.
- Younger, A. J., & Boyko, K. A. (1987). Aggression and withdrawal as social schemas underlying children's peer perceptions. *Child Development, 58*, 1094-1100.
- Younger, A. J., Gentile, C., & Burgess, K. (1993). Children's perceptions of withdrawal: Changes across age. In K. H. Rubin & J. Asendorpf (Eds.), *Social withdrawal, inhibition, and shyness in childhood*. Hillsdale, NJ: Erlbaum.

## Identifying the Links Between Parents and Their Children's Sibling Relationships

Wyndol Furman

University of Denver

Ronita S. Giberson

Graham P. Dimmick Child  
Guidance Service

Siblings are a fundamental part of most children's social worlds. They can be playmates, caretakers, teachers, sources of support, or major nuisances. The emotional ties are both strong and long lasting. Although sibling relationships are important in almost all children's lives, the specific impact these relationships have on children varies because the characteristics of these relationships are so diverse (Furman & Buhrmester, 1985). For example, a critical, punitive older sister and a supportive younger brother are likely to have different influences on their siblings; in fact, the two children in any dyad may experience the relationship differently (Rowe & Plomin, 1981).

Initially, investigators studied how the characteristics of sibling relationships were influenced by family constellation variables, such as sex, sibling sex, relative age, and age spacing of siblings (Koch, 1960). Although the relative age of the siblings does have a marked influence on the distribution of power, family constellation variables have not been found to be very predictive of such features as the warmth or conflict in the relationship (Furman & Buhrmester, 1985).

In a prior paper, we proposed that parent-child relationships and the cognitive, social, and personality characteristics of the children may be more central determinants of the nature of sibling relationships (Furman & Buhrmester, 1985). This emphasis on the links between parent-child relationships and sibling relationships is certainly consistent with contemporary theories that stress the ties among relationships (Bowlby, 1969, 1973). As yet, however, we know less about the specific nature of these links. That is, social scientists have only begun to articulate the means or mechanisms by which parents influence their children's sibling relationships.

### Parents and Sibling Relationships

In this chapter we discuss five general ways in which parents may play a role in shaping sibling relationships. These are (a) the general characteristics of the parents' relationships with their two children, (b) differences in the two children's relationships with their parents, (c) parental techniques of disciplining or responding to specific sibling interactions, (d) anticipatory management strategies or efforts to foster positive sibling interactions and decrease negative ones in the future, and (e) the parents' marital relationship. We review past research relevant to each of these five and then describe two studies that examined each of these potential links. Before proceeding, it is important to recognize that the links between parents' behavior and sibling relationships are probably bidirectional in nature. Although we may occasionally speak of the influence of parents on their children's relationship, the sibling relationship itself may influence the parents' behavior as well. For example, a conflictual parent-child relationship could foster conflict between siblings, but such strife may stress the parent-child relationship as well.

#### Parent-Child Relationships

One would expect that the general nature of parent-child relationships would be linked to sibling relationship qualities for several reasons. First, interactions between parents and individual children might serve as models for interactions between siblings. For example, warm, responsive, caring parent-child interactions could foster warm interactions between siblings. Similarly, conflictual parent-child interactions could serve as a model for antagonistic sibling interactions. Second, attachment theorists have proposed that children develop internal working models of the self, others, and relationships in their early interactions with their caretakers (Bowlby, 1973). Such models may serve as the basis for their expectations for their thoughts and behavior in subsequent relationships with others. Third, one might expect the parent-child and sibling relationships to be linked through either behavioral contagion or displacement mechanisms. For example, conflicts with parents could increase the likelihood that children would be irritated by their siblings' behavior or that they may displace their anger toward their parents onto their siblings. Fourth, family systems theory posits that the functioning of any one subsystem in the family is influenced by interactions within other subsystems (Minuchin, 1974), although the mechanism for such links has not been well articulated. Finally, the children's relationships with parents may be influenced by the tenor of sibling interactions. For example, when the interchanges between siblings are generally harmonious, parents may feel more positively toward their children and interact with them with warmth and affection.

Some empirical support has been found for the link between parent-child and sibling relationships. For example, Bryant and Crockenberg (1980) found that mothers' degree of responsivity to their school-aged children's needs was posi-

tively correlated with prosocial behavior and negatively correlated with antisocial behavior in the sibling dyads.

#### Differential Treatment

Recently, much attention has been given to how differences in children's relationships with their parents may influence their relationships with each other. Specifically, large discrepancies between a parent's interactions with one child and those with another child have been hypothesized to be associated with sibling rivalry and conflict. It is easy to imagine how such differential treatment could lead to resentment and strife, but it is also possible that the children's behavior could trigger such differences. Specifically, a parent may hold one child—perhaps the older one—more accountable for mutual misbehavior and thus may punish that child more. Similarly, in dysfunctional families, one child may acquire the role of the “bad child” and be treated differently from his or her sibling, the “good child.”

The differential treatment hypothesis has received considerable support empirically. Bryant and Crockenberg (1980) found that if a mother responded to one child's needs but not to the other's needs, the children were more likely to be disparaging and discomfiting toward each other. Similarly, when mothers communicated more with one child or were more positive in their interactions with one child, the siblings were found to communicate less and engage in fewer prosocial behaviors (Brody, Stoneman, & Burke, 1987). In a study of mother-two-children triads, Stocker, Dunn, and Plomin (1989) observed that differences in responsiveness, affection, or attention by mothers were associated with competitive and controlling interactions between siblings. Sibling relationships were also described less positively by mothers who were rated as being differentially responsive to their children.

#### Disciplinary Strategies

Not only is it important to consider the general nature of a parent's relationships with his or her children, but one should also consider how parents respond to specific sibling interactions or to the absence of certain interactions (e.g., when children have quarrelled or when they have not spent time playing together). The need to examine these particular responses is based on the idea that parenting behavior may be somewhat domain specific (Costanzo & Woody, 1985).

Disciplinary strategies, such as reinforcement, punishment, ignoring, or various inductive techniques (e.g., discussions), may influence sibling relationships in several ways. Like individual parent-child interactions, the manner in which parents choose to intervene in sibling interactions might serve as a model for how siblings behave with one another. Similarly, discrepancies in a parent's discipline of the two children in a sibling pair might impact the sibling relationship. For example, disciplining one of the children more harshly or only rewarding positive behavior by one of the children might lead to increased conflict between the siblings. And, of course, basic learning theory would lead one to expect strategies, such as rein-

forcement or punishment, to affect the frequencies of different behaviors. As was the case for the other mechanisms, one would also expect the nature of the current behavior by the siblings and the past history of such incidents to influence the parents' selection of disciplinary strategies.

Clinical investigators have documented the influence of systematic behavioral programs on sibling interactions. For example, reinforcement for cooperative play and time-out for fights have been shown to decrease rates of sibling conflict (Allison & Allison, 1971; Leitenberg, Burchard, Burchard, Fuller, & Lysaght, 1977; O'Leary, O'Leary, & Becker, 1967). When parents have been taught to stay out of their children's fights, the rates of sibling conflict have decreased (Kelly & Main, 1979; Levi, Buskila, & Gerzi, 1977).

Observational studies of nonclinical samples are consistent with these findings. For example, Kendrick and Dunn (1982) found that if mothers of young male siblings regularly intervened in their quarrels by prohibiting the boys, the sibling interactions were more likely to be characterized by hostility six months later. Sibling interactions have also been found to be more negative when mothers were present than when they were absent (Corter, Abramovitch, & Pepler, 1983).

#### Anticipatory Management

Of course, parents not only respond to difficulties they perceive in the sibling relationship, but they may also do things before such difficulties arise. Actions a parent might take to either encourage or discourage certain aspects of the sibling relationship before difficulties arise are referred to here as *anticipatory management strategies*. An example of such could be establishing a rule that no physical fighting between siblings is allowed. Having two children take swimming lessons together so as to promote positive interactions would be another example of anticipatory management. We believe that such strategies fall into three categories: (a) establishing rules, (b) planning or structuring activities, and (c) having discussions with one or both siblings about problems that might arise in the future. Although such behavior is initiated by the parent, it is important to realize that such initiation may have stemmed from the children's behavior in the past. It should also be noted that this concept is not defined in terms of particular behaviors, but functionally in terms of the parent's intent to encourage or discourage certain acts. For example, some parents may have children do chores together to encourage cooperation, whereas others may have them do household tasks separately to avoid conflict.

We believe that most, although not all, parents know which particular strategies work with their children—either by learning through trial and error or simply by having good intuitions. Accordingly, we expect that anticipatory management strategies tend to foster positive interactions and reduce negative ones. Parents who use such strategies extensively may also differ from those who primarily respond to the immediate problem at hand. For example, one might expect such parents to be more invested in childrearing or perhaps to experience less stress,

In fact, although investigators in the peer and friendship domain have examined the potential impact of such anticipatory strategies (Ladd & Golter, 1988; Parke & Bhavnagri, 1989), relatively little work has been done concerning sibling relationships. Dunn and Kendrick (1981), however, found that when mothers talked to their first-borns about the newborn siblings' needs and intentions, the older siblings behaved in a more friendly manner 14 months later.

#### Parents' Marriage

Although the links are not as direct as those discussed previously, the quality of the marital relationship may have an impact on the sibling relationship. As noted previously, family system theorists would expect all of the subsystems to be inter-related (Minuchin, 1974). Children's observations of interactions between their mothers and fathers may shape their understanding of relationships in general. Marital interactions may also impact each spouse's functioning as a parent (Belsky, 1984; Goldberg & Easterbrooks, 1984); parent-child interactions could then influence the sibling relationship in the ways described previously. Similarly, serious difficulties with a child or children, which are manifested in sibling interactions, may in turn affect the parent-child interactions, the parents, or their marriage.

In the one existing study on the topic, MacKinnon (1989) derived global estimates of the quality of sibling and marital relationships from maternal descriptions. In both married and divorced families, more positive sibling interactions were linked to more positive spousal/ex-spousal relationships.

#### Summary

Previous empirical work has found clear evidence of links between sibling relationships and their parents' behavior and relationships. The roles of some mechanisms, such as the general nature of parent-child relationships or differential treatment, have received more attention than others, such as disciplinary strategies, anticipatory management, or the marital relationship. Most of the research, however, has consisted of single studies by various investigators. Some individuals have conducted a number of studies, but these have usually focused on different topics. Hence, the literature is not very systematic. Moreover, the various links have not been examined simultaneously. These limitations stimulated us to conduct a pair of studies on this topic.

#### An Initial Investigation

Our first study (Katz & Furman, 1990) examined maternal perceptions of sibling relationships, disciplinary techniques, anticipatory management, and mother-child relationships (and differences in them). The sample consisted of 88 predominantly white, middle-to upper-middle-class mothers with two or more children. The target children were in the fifth or sixth grade; their siblings ranged in age from 1 to 16 years; in 51 dyads the children were 3 years or less apart in age, and in 37, the

The mothers completed a battery of questionnaires that included the Sibling Relationship Questionnaire (SRQ) (Furman & Buhrmester, 1985), the Parent-Child Relationship Questionnaire (PCRQ) (Furman & Adler, 1983a), and a Parental Management Inventory (PMI) (Furman & Adler, 1983b).

The Sibling Relationship Questionnaire consisted of 27 three-item scales that assessed perceptions of qualities of the sibling relationship. Two factors were of interest here: Warmth/Closeness (affection, intimacy, companionship, similarity, admiration of and by the sibling) and Conflict (antagonism, quarreling, and competition).

The Parent Child Relationship Questionnaire assessed perceptions of qualities of individual parent-child relationships. It consisted of 23 three-item scales, which fell under five dimensions: Warmth (affection, admiration for and by mother), Personal Closeness (companionship, nurturance, prosocial behavior, intimacy, and similarity), Disciplinary Warmth (positive evaluations, democratic process, and provision of rationales), Power Assertion (verbal punishment, dominance, deprivation of privileges, quarreling, rejection, and physical punishment), and Possessiveness (protectiveness, possessiveness).

The Parental Management Inventory was designed to examine the disciplinary techniques and anticipatory management strategies that mothers report using when managing their children's sibling relationships. Disciplinary techniques were assessed by asking mothers how often they utilized each of 11 specific discipline strategies in response to various positive and negative sibling interactions. These strategies were grouped into five scales: Positive Principled Discipline (verbal praise, physical praise, and rewards), Negative Principled Discipline (inductive techniques such as discussion, expressions of disappointment, and requests for changes in behavior), Punishment (demands or yelling, threats, punishment, and deprivation of privileges), Ignoring Positive Behavior, and Ignoring Negative Behavior. Anticipatory management strategies were assessed by asking mothers how often they used such techniques to increase positive sibling interactions or decrease negative sibling interactions in the future.

**Table 4.1. Correlations of Sibling Relationship Qualities and Parent-Child Relationship Qualities (Study 1)**

Parent-Child Relationship Quality	Sibling Relationship Quality	
	Warmth/Closeness	Conflict
Warmth	.54**	-.33*
Personal Closeness	.41**	-.01
Disciplinary Warmth	.33**	.02
Power/Assertion	-.37**	.44**
Possessiveness	.21	-.01

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

As shown in Table 4.1, the general characteristics of the mother's relationships with her two children were found to be strongly associated with qualities of the sibling relationship. Children whose relationships with their mothers were characterized as being high on the three warmth dimensions and low in power assertion were likely to have sibling relationships that were rated as high in warmth. When power assertion was reported as high in mother-child relationships, conflict with siblings was also seen to be high.

To assess the role of differential treatment, differences in ratings between the two mother-child relationships were derived. As expected, differences in perceived warmth were also associated with lower warmth between siblings ( $r = .36$ ).

As shown in Table 4.2, the perceived qualities of the mother-child relationship were also found to be associated with the management efforts mothers made regarding sibling interactions. Mothers who believed that they had warm, egalitarian relationships with their children reported using inductive disciplinary strategies, not ignoring their children's interactions, and making anticipatory efforts to manage their behavior. Mothers whose relationships with their children were characterized by power assertion reported using punitive strategies when intervening in sibling interactions. Mothers who said that they frequently ignored their children's sibling interactions, either positive or negative, reported less warm relationships with their children.

Although it was expected that the type of disciplinary and anticipatory management strategies mothers used would be related to qualities of the sibling relationship, there were, in fact, relatively few significant correlations between sibling relationship qualities and such strategies. Reports of frequent anticipatory efforts were associated with high ratings of warmth ( $r = .22$ ).

**Table 4.2. Correlations of Parent Management Techniques and Parent-Child Relationship Qualities**

Management Technique	Parent-Child Relationship Quality				
	Warmth	Personal Closeness	Disciplinary Warmth	Power/Assertion	Possessiveness
Positive Principled Discipline					
Discipline	.30**	.47**	.34**	-.11	.05
Negative Principled Discipline					
Discipline	.15	.32**	.25*	.05	.20
Punishment	-.14	-.02	.02	.43**	.04
Anticipatory Socialization	.23*	.54**	-.17	-.03	.30**
Ignoring Negative Behavior	-.26*	-.52**	-.36**	.17	-.14
Ignoring Positive Behavior	-.24*	-.37**	-.29**	.14	.02

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

## A Follow-up Study

Before discussing these findings, the results of the second investigation (Giberson & Furman, 1992) should be presented. This study was designed to be a systematic replication and extension of the first. The sample consisted of 62 predominantly white, middle-to upper-middle-class families that included a mother, a father, a target child in grades 3 through 7, and an older school-aged sibling. The samples for the two studies were relatively comparable except that in the first study half of the siblings were younger and a minority of the children came from one-parent families.

The measures were similar to the first, but fathers and children completed them as well. The role of fathers in the development of sibling relationships has been virtually unexplored, despite the fact that at least some fathers are becoming more involved in childrearing activities (Glick, 1977; Smith & Reid, 1980). The inclusion of children's perceptions provided a more complete picture. To reduce the number of variables, the children's and the parents' reports of the sibling relationship were combined. Each parent's reports of their relationships with their children and their management strategies were combined with the children's reports of the corresponding variables. Scores for the two children's relationships with a parent were combined except when differential treatment was assessed.

Additionally, mothers and their two children were observed in their homes interacting in a series of structured tasks. The triads played a game together, discussed how chores were carried out in their families, tried to solve several problems between the siblings, worked on an art project, and talked about positive sibling experiences. These tasks were coded using a molar coding scheme designed to be analogous to the Sibling Relationship Questionnaire and Parent-Child Relationship Questionnaire. In particular, coders observed the interactions and then rated each of the scales on these measures.

Finally, the second study included an assessment of the marital relationship. Both parents completed a Marital Relationship Questionnaire, which consisted of 24 three-item scales. These scales load on five factors: Warmth, Conflict, Power, Traditionality, and Exclusivity.

## Parent-Child Relationships

Like the first study conducted, this study found perceptions of parent-child relationship qualities to be significantly related to perceptions of sibling relationship qualities. Specifically, warmth and personal closeness in mother-child relationships were associated with warmth in sibling relationships ( $r = .46$ ,  $r = .26$ , respectively), whereas power assertion was associated with sibling conflict ( $r = .39$ ). Similar patterns were found in the relations between father-child and sibling relationships (paternal warmth-sibling warmth,  $r = .36$ ; paternal power assertion-sibling conflict,  $r = .48$ ).

Observational ratings of mother-child interactions were found to be significantly related to the observations of sibling interactions (see Table 4.3). The three

**Table 4.3. Correlations of Observed Sibling Relationship Qualities and Observed Mother-Child Relationship Qualities**

Parent-Child Relationship Quality	Sibling Relationship Quality	
	Warmth/Closeness	Conflict
Warmth	.63**	-.63**
Personal Closeness	.67**	-.49**
Disciplinary Warmth	.53**	-.38**
Power/Assertion	-.52**	.64**
Possessiveness	-.08	.14

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

warmth dimensions in mother-child relationships were positively related to sibling warmth and negatively related to sibling conflict ratings. Conversely, observed maternal power assertion was negatively related to observed sibling warmth and positively related to observed sibling conflict.

## Differential Treatment

Maternal differential treatment was found to be related to the quality of the sibling relationship. Specifically, when mothers reported different degrees of warmth with their children, the two were described as having less warm relationships ( $r = .32$ ). Similarly, differences in the observational ratings of the three warmth and power assertion dimensions in mother-child interactions were associated with lower ratings of observed warmth among siblings ( $r = .26$  to  $.52$ ). Differences in observed disciplinary warmth were also associated with high ratings of observed sibling conflict ( $r = .42$ ).

Interestingly, differences in the fathers' relationships with the two children were not significantly related to perceptions of the sibling relationship. Almost all of the previous studies have only examined differences in mother-child relationships. Despite research that suggests that fathers are taking on more childrearing responsibilities (e.g., Smith & Reid, 1980), mothers probably continue to be the more involved parent. Differences in mothers' interactions with their children may therefore be more salient and perhaps more emotionally important to the children. These findings should not, however, lead one to discount the importance of father-child relationships. One need only remember the links between father-child relationships and sibling relationships previously discussed.

## Parental Management

As was found in the first study, perceptions of maternal disciplinary strategies regarding sibling interactions were related to perceptions of mother-child relationships with the children, but not very strongly to perceptions of the sibling relationship. Similarly, fathers' disciplinary strategies were related to the general

nature of their relationships with their children, but not to the sibling relationship.

In the first study, we found a positive relation between maternal anticipatory efforts and warmth in the sibling relationship. These findings were not, however, replicated in the second study in which we tried to distinguish among three types of anticipatory management strategies—discussions about problems that might arise, rule setting, and activity planning. Instead, we found links between anticipatory management and conflict. Specifically, when the sibling relationship was perceived as conflictual, both mothers and fathers reported having more discussions and mothers reported planning more activities to improve sibling interactions ( $r = .32$  to  $.40$ ).

The relatively weak and inconsistent findings regarding parental disciplinary techniques and anticipatory management strategies could result from a number of different factors. First, parents may not actually do what they or their children report that they do. Observational data would be needed to clarify that matter. Second, the Parental Management Inventory assessed the relative frequency of different techniques and may not have been sensitive to the skillfulness, timing, or context of the implementation. On the other hand, the measure's correlations with the general characteristics of parent-child relationships would seem to provide some validation evidence. Some results also seem quite consistent with past research; for example, fathers were seen as making fewer anticipatory management efforts and intervening less often in ongoing sibling interactions. In both studies, parents intervened more when the target child was a female. Perhaps parents believe that social skills are more important for girls and thus place greater emphasis on harmony in sibling relationships.

It is also possible that parental disciplinary techniques and sibling relationship qualities are not related. In both studies, parents reported that their most common response was to ignore the positive or negative sibling interactions. In our discussions with parents, they commonly stated that they believed that the relationship was relatively established and that there was little they could do to change it (e.g., "They just don't have much in common. That is just the way they are."). Thus, parents may simply accept the relationship as it is. When they intervene, it may be to end a specific negative interchange or to stimulate a positive interaction at the time, but not to try to alter the general flavor of the relationship. Parents may be more invested in altering the relationship if the conflicts had exceeded some level or if the amount of positive interaction were truly minimal. This idea could be examined by studying dysfunctional sibling relationships; the current samples contained relatively few such cases.

It may be that parents work most actively to influence the sibling relationship when siblings are quite young and that their efforts decline once the tenor of the sibling relationship has been established. Popular books on sibling relationships seem to emphasize the management of young children's relationships (e.g., Calladine & Calladine, 1979). Currently, data are being gathered to examine parental disciplinary techniques and anticipatory management techniques with preschool-aged siblings.

Alternatively, it may be that parents go through stages of active involvement. As children develop, different sibling issues might emerge, which would then necessitate fresh management efforts by parents. For example, managing problems that arise around the issue of sharing might be prominent when children are young; the issue of "tagging along" would probably not be relevant until children were older.

Finally, it seems possible that parent-child relationships may mediate the relations between disciplinary strategies and sibling relationships. Children may interpret parental interventions as more of a sign of "how my parent chooses to interact with me" than as "how I should interact with my sibling." This interpretation could influence the parent-child relationships, which in turn may be linked to sibling relationships.

#### Marital Relationship

The fifth mechanism that was examined was the marital relationship. Consistent with our expectations, we found that perceived conflict in marital relationships was positively associated with sibling conflict, whereas perceived warmth was negatively related ( $r = .57$ ,  $r = -.33$ , respectively). Just as parent-child relationships may serve as models, interactions between husbands and wives may serve as models for children's interactions with their siblings. Child influences might also occur; a high degree of conflict in the sibling relationship might lead to conflictual interactions between parents.

There were also fairly strong associations between marital relationship qualities and parent-child relationship qualities. In general, perceived warmth in the marital relationship was positively associated with perceived warmth in mother-child and father-child relationships ( $r = .33$ ,  $r = .30$ , respectively). When the marital relationship was reported to be more conflictual, mother-child and father-child relationships were reported to be more conflictual ( $r = .33$ ,  $r = .34$ , respectively). These findings are consistent with the idea that the marital relationship and the sibling relationship may also be indirectly linked through the parent-child relationships. That is, interactions between husbands and wives might affect their functioning as parents, which in turn could affect the sibling relationship.

#### Future Directions

The pair of studies we conducted explored a variety of potential links between parents and their children's sibling relationships. The associations involving some variables—for example, individual parent-child relationships, or differential treatment—have been studied by others and were fairly strong in the present studies. Other variables, such as marital relationship qualities, have been studied less extensively, but the findings from the present study suggest that these variables deserve further investigation.

For example, children's perceptions of marital relationship qualities might be assessed in future studies. In addition, it would be interesting to assess sibling rela-

tionships in a sample of families that included a wide range of marital functioning as the marital relationships of families in the current sample tended to be fairly positive. Relatively little work has been done on sibling relationships in divorced or remarried families (see Hetherington, 1988; MacKinnon, 1989).

The inclusion of fathers in the second study provided some initial information about the role fathers play in sibling relationships. Observations of fathers' interactions with sibling dyads would, of course, be an important next step. One may also want to assess fathers' general levels of involvement with their children. Fathers who are very involved with their children may influence the sibling relationship in different ways than fathers who are not very involved.

We believe that the absence of links between parental management and sibling relationship qualities could reflect a problem in assessing causal links that has received little attention. Consider how anticipatory management and sibling conflict might be linked. If anticipatory management strategies are generally effective, then one might expect high rates of such to be related to low conflict. On the other hand, the parent may decide to engage in anticipatory management strategies because the children are fighting all the time. If so, high rates could be related to frequent conflict. These two causal influences could mask the impact of each other.

The problem could also reflect the fact that the opportunities for intervention in sibling relationships may vary widely from family to family. That is, sibling conflicts may occur often in some families, but rarely in others. It is hard to assess differences in the particular means in which parents react, when the seeming opportunities for some reactions are so variable.

More generally, this problem occurs because the difference between absolute levels and changes in levels is commonly blurred. For example, anticipatory management should lead to a *decrease* in rates of conflict, rather than a low level per se. The assessment of such changes cannot be examined in cross-sectional studies. Experimental manipulations could examine the impact on such strategies on a short-term basis, but such efforts are often not possible or ethically appropriate unless a clinically significant problem is involved.

To some degree, longitudinal studies can examine such changes by assessing the relations between variables after partialling out prior levels of the variables. Assessment of changes with two points of data are notoriously unreliable, however. Moreover, the issues of causal closure and specification of time lags are daunting problems that are universally ignored (Gollob & Reichardt, 1987). Growth curve analyses can address the issue of reliability of estimates of change, but their promise is not fully clear yet.

We believe the problem also reflects the fact that social scientists' measures are snapshots of a system of variables that have a history of influence on one another. Moreover, they may have reached some state of relative homeostasis with one another. It is not clear how well static pictures—even repeated ones—capture the process of change.

Although these studies shed some light on the potential links between familial subsystems, the task has only begun. One need only review the initial part of this chapter to see that there are multiple potential mechanisms underlying any of these ties. For example, the links between the general characteristics of parent-child relationships and sibling relationships could be explained in terms of modeling, internal working models, behavioral contagion, displacement, family systems theory, or the influence of the sibling relationships on parent-child relationships. Some of these different links may reflect different theoretical accounts of the same phenomena, but some of the differences seem substantive. Thus, we need further work to specify the precise mechanism or, more likely, mechanisms that are involved.

A good illustration of this kind of work can be found in the attachment literature. Bowlby (1973) argued that young children construct internal working models of the world and those in it, including oneself, on the basis of early experiences with caretakers. Numerous studies have documented the effects of early attachment on subsequent behavior (see Bretherton & Waters, 1985), but the mechanisms involved have not been very clear. Recently, Cassidy (1988) examined the links between attachment history and self-concept and found evidence for the idea that the self provides a mechanism through which the attachment experience can continue to influence functioning over time and when the caretaker is not present. Her study did not rule out other potential mechanisms—another critical task—but it does help move us toward a more precise understanding of the nature of the links. Without such work, we may simply be documenting the old adage, "Good things go together." As scientists, we need to do better.

## References

- Allison, T. S., & Allison, S. L. (1971). Time out from reinforcement: Effect on sibling aggression. *The Psychological Record*, 21, 81-86.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55, 83-96.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation*. New York: Basic Books.
- Bretherton, I., & Waters, E. (Eds.). (1985). Growing points in attachment theory and research. *Monographs of the Society for Research in Child Development*, Whole No. 209.
- Brody, G., Stoneman, Z., & Burke, M. (1987). Child temperaments, maternal differential behavior, and sibling relationships. *Developmental Psychology*, 23, 354-362.
- Bryant, B. K., & Crockerberg, S. B. (1980). Correlates and dimensions of prosocial behavior: A study of female siblings with their mothers. *Child Development*, 51, 529-544.
- Calladine, A., & Calladine, C. (1979). *Raising brothers and sisters without raising the roof*. Minneapolis, MN: Winston Press.
- Cassidy, J. (1988). Child-mother attachment and the self in six-year-olds. *Child Development*, 59, 121-134.
- Carter, C., Abramovitch, R., & Pepler, D. (1983). The role of the mother in sibling interaction. *Child Development*, 54, 1599-1605.
- Costanzo, P. R., & Woody, E. Z. (1985). Domain-specific parenting styles and their impact on the child's development of particular deviance: The example of obesity proneness. *Journal of Social and Clinical Psychology*, 3, 425-445.

- Dunn, J., & Kendrick, S. (1981). Interaction between young siblings: Association with the interaction between mother and first-born. *Developmental Psychology, 17*, 336-343.
- Furman, W., & Adler, T. (1983a). *The Parent-Child Relationship Questionnaire*. Unpublished manuscript, University of Denver, Denver, CO.
- Furman, W., & Adler, T. (1983b). *The Parent Management Inventory*. Unpublished manuscript, University of Denver, Denver, CO.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the qualities of sibling relationships. *Child Development, 56*, 448-461.
- Giberson, R. S., & Furman, W. (in preparation). *The role of parents in sibling relationships*.
- Glick, P. C. (1977). Social change and the American family. In *The social welfare forum: Official proceedings of the 104th annual forum*. Chicago, IL: National Conference on Social Welfare.
- Goldberg, W. A., & Easterbrooks, M. A. (1984). The role of marital quality in toddler development. *Child Development, 20*, 504-515.
- Gollob, H. F., & Reichardt, C. S. (1987). Taking account of time lags in causal models. *Child Development, 58*, 80-92.
- Hetherington, E. M. (1988). Parents, children, and siblings: Six years after the divorce. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families* (pp. 311-331). Oxford, UK: Oxford University Press.
- Katz, T. A., & Furman, W. (1990). *Mothers and sibling relationships*. Unpublished manuscript, University of Denver, Denver, CO.
- Kelly, F. D., & Main, F. O. (1979). Sibling conflict in a single-parent family: An empirical case study. *American Journal of Family Therapy, 7*, 39-47.
- Kendrick, C., & Dunn, J. (1982). Protest or pleasure: The response of first-born children to interactions between their mothers and infant siblings. *Journal of Child Psychology and Psychiatry, 23*, 117-129.
- Koch, H. L. (1960). The relation of certain formal attributes of siblings to attitudes held toward each other and toward their parents. *Monographs of the Society for Research in Child Development, 25* (4, Serial No. 78).
- Ladd, G. W., & Golter B. S. (1988). Parents' management of preschooler's peer relations: Is it related to children's social competence. *Developmental Psychology, 24*, 109-117.
- Leitenberg, H., Burchard, J. D., Burchard, S. M., Fuller, E. J., & Lysaght, T. V. (1977). Using positive reinforcement to suppress behavior: Some experimental comparisons with sibling conflict. *Behavior Therapy, 8*, 168-182.
- Levi, A. M., Buskila, M., & Gerzi, S. (1977). Benign neglect: Reducing fights among siblings. *Journal of Individual Psychology, 33*, 240-245.
- MacKinnon, C. E. (1989). An observational investigation of sibling interactions in married and divorced families. *Developmental Psychology, 25*, 36-44.
- Minuchin, S. (1974). *Families and family therapy*. Cambridge, MA: Harvard University Press.
- O'Leary, K., O'Leary, D., & Becker, B. (1967). Modification of a deviant sibling interaction pattern in the home. *Behavior Research and Therapy, 5*, 113-126.
- Parke, R. D., & Bhavnagri, N. P. (1989). Parents as managers of children's peer relationships. In D. Belle (Ed.), *Children's social networks and social supports* (pp.241-259). New York: Wiley.
- Rowe, D. C., & Plomin, R. (1981). The importance of nonshared (E<sub>i</sub>) environmental influences in behavioral development. *Developmental Psychology, 17*, 517-531.
- Smith, A. D., & Reid, W. J. (1980). *The family role revolution*. Paper presented at the program meeting of the Council on Social Work Education, Los Angeles.
- Stocker, C., Dunn, J., & Plomin, R. (1989). Sibling relationships: Links with child temperament, maternal behavior, and family structure. *Child Development, 60*, 715-727.

## Typology of Close Friendships, Relationship Models, and Friendship Reasoning in Early Adolescence

Shmuel Shulman

Tel-Aviv University

During early adolescence, changes in patterns of relationships that children form can be observed. Interest in particular same-sex friends becomes more focused, and close friendships or chumships are established. Children express real interest and concern for these close friends and become aware of and sensitive to their feelings. According to Sullivan (1953), this new kind of friendship is a reflection of the emerging need for interpersonal intimacy. Sharing of intimate and affectionate feelings is the hallmark of close friendships and distinguishes between "common" friends and close friends, chums (Oden, Hartzberger, Mangaine, & Wheeler, 1984). Levels of commitment and reciprocity are the indicators of how close a friendship is.

However, relationships and friendships are not individual features but rather dyadic processes (Hartup, 1986; Hinde, 1979). This chapter intends to extend the understanding of close friendship in early adolescence from a dyadic/systemic perspective. A system is not only composed of a set of units or elements. Elements are organized by the nature of relationships between them (Steinglass, 1978). In line with this contention, the chapter deals with the factors that coordinate interactions between individuals within a friendship/relationship.

Understanding of friendships and their functions is mainly based on interviews with children regarding their friendships and their individual conceptions of friendship and intimacy (Bigelow, 1977; Ginsberg, Gottman & Parker, 1986; Sharabany, Gershoni, & Hoffman, 1981; Youniss, 1980). The few studies that focused on interactions between friends (though not from a systems perspective) showed different dynamics within friendship. Charlesworth and La Freniere (1983) and Newcomb and Brady (1982) have shown that when working on a task, friends are more attentive to each other than nonfriends and interaction is more harmonious and more aimed at equal distribution of rewards. On the other hand, Berndt (1985) found that even close friends are not capable of restraining competition and of acting in a generous way toward each other. In reality, there are conditions where an equal distribution of rewards is not possible and competition and hostility between