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## 9 Children's, Parents', and Observers' Perspectives on Sibling Relationships

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One of the most noteworthy features of sibling relationships is their marked diversity. Striking differences in sibling relationships exist across cultures. Similarly, considerable differences exist within any one culture or subculture. Some sibling relationships are egalitarian, similar in some respects to those between friends. Others are asymmetrical, requiring one child to be responsible for the other. Sibling relationships vary not only in the distribution of power and responsibility, but also in affective quality. Relationships can be close or distant, harmonious or conflicted, cooperative or competitive.

Recognizing the diversity of sibling relationships, contemporary investigators have been interested in describing the qualities of sibling relationships and their influence on children's development. Two common methods have been used by psychologists to assess the qualities of sibling relationships in middle childhood: self-report measures, used by investigators such as Bowerman and Dobash (1974) or Koch (1960), and observations of sibling interactions, which have been used by others such as Bryant and Crockenberg (1980), or Minnett, Vandell, and Santrock (1983). In most instances, however, these investigators have focused on particular aspects of sibling relationships and have not tried to assess their wide range of characteristics. The psychological constructs hypothesized to underline the relationship have also varied from study to study. Accordingly, the field lacks a systematic way to characterize sibling relationships. In this chapter, we describe our efforts to develop such a framework. Our endeavors involved using self-report measures, observations of sibling interactions, and other less common approaches for studying the qualities of sibling relationships in middle childhood. The issues involved in developing a multiperspective framework are germane not only to the study of sibling relationships but also to the study of other relationships.

### Children's Perceptions of Their Relationships

Although there are a number of different approaches to describing sibling relationships, we began by trying to capture the perspective of the children themselves. In particular, we interviewed children about their relationships with

siblings (Furman & Buhrmester, 1985). Psychologists usually do not include such a step, but anthropologists have repeatedly pointed out the value of ethnographic information (Levine, 1980). This approach can reveal the subjectively important qualities of sibling relationships. The children's descriptions should reflect natural ways of organizing information about relationships. Moreover, their descriptions should cover experiences occurring in a range of different settings. Some of these experiences, particularly negative ones, may not be readily accessible to outside observers.

Forty-nine fifth- and sixth-grade children were asked about their relationships with siblings. Each child was individually interviewed for approximately 20 minutes and was asked a series of standardized questions about a specific relationship (e.g., "What is it like having a brother/sister?"). Table 9.1 depicts the relationship qualities commonly reported by the children. As can be seen in the table, the children provided detailed descriptions of their relationships, mentioning a range of both positive and negative features. On the average the children referred to approximately eight different features. We believe that the richness of these descriptions illustrates the value of obtaining the children's perspectives.

Based on these interviews, we developed a 51-item Sibling Relationship Questionnaire to measure the 15 specific relationship qualities; in addition, overall satisfaction with the relationship and importance of the relationship were assessed. Each of these variables were measured by three 5-point Likert items. The questionnaire was administered to 198 fifth- and sixth-grade children who were predominantly from Caucasian middle-class families in Denver, Colorado. To identify the factors underlying the measure, scores of the 15 specific relationship-quality scales were subjected to a principal-components analysis with an

TABLE 9.1. Relationship qualities reported in open-ended interviews

| Qualities                       | Percentage <sup>a</sup> |
|---------------------------------|-------------------------|
| Intimacy                        | 55                      |
| Prosocial behavior              | 77                      |
| Companionship                   | 93                      |
| Similarity                      | 46                      |
| Nurturance by sibling           | 48                      |
| Nurturance of sibling           | 34                      |
| Admiration by sibling           | 8                       |
| Admiration of sibling           | 81                      |
| Affection                       | 65                      |
| Dominance by sibling            | 18                      |
| Dominance over sibling          | 8                       |
| Quarreling                      | 79                      |
| Antagonism                      | 91                      |
| Competition                     | 10                      |
| Parental partiality             | 20                      |
| General relationship evaluation | 89                      |

<sup>a</sup>Numbers indicate percentage of children who referred to the quality.

TABLE 9.2. Factor pattern coefficients of sibling relationship questionnaire scales

| Qualities              | Factors <sup>a</sup> |                          |          |         |
|------------------------|----------------------|--------------------------|----------|---------|
|                        | Warmth/<br>Closeness | Relative<br>Status/Power | Conflict | Rivalry |
| Intimacy               | 70                   |                          |          |         |
| Prosocial behavior     | 83                   |                          |          |         |
| Companionship          | 78                   |                          |          |         |
| Similarity             | 70                   |                          |          |         |
| Nurturance by sibling  | 28                   | -77                      |          |         |
| Nurturance of sibling  | 26                   | 85                       |          |         |
| Admiration by sibling  | 67                   | 25                       | -29      |         |
| Admiration of sibling  | 69                   | -28                      |          |         |
| Affection              | 69                   |                          | -36      |         |
| Dominance by sibling   |                      | -65                      | 55       |         |
| Dominance over sibling |                      | 80                       | 41       |         |
| Quarreling             |                      |                          | 88       |         |
| Antagonism             |                      |                          | 92       |         |
| Competition            |                      |                          | 63       | 36      |
| Parental partiality    |                      |                          |          | 96      |

<sup>a</sup>Scores are factor loadings on a principal components analysis with a general promax rotation. Factor loadings below .25 are not presented. Factors are minimally correlated ( $-.20 > r < .20$ ) except Conflict and Rivalry ( $r = .35$ ).

oblique rotation. Four factors were extracted and labeled: Warmth/Closeness, Relative Status/Power, Conflict, and Rivalry (see Table 9.2). The Warmth/Closeness factor contains the qualities of intimacy, prosocial behavior, companionship, similarity, nurturance by the sibling, nurturance of the sibling, admiration by the sibling, admiration of the sibling, and affection. The Relative Status/Power factor is an index of the degree of status or power of the target child. Thus, it has positive loadings for nurturance of the sibling, dominance over the sibling, and admiration by the sibling, and it has negative loadings for nurturance by the sibling, dominance by the sibling, and admiration of the sibling. The Conflict factor contains the two dominance scales: quarreling, antagonism, and competition. Finally, the Rivalry factor is composed of competition and perceptions of parental partiality.

The four factors are relatively independent of each other, except for Conflict and Rivalry, which were moderately correlated with each other ( $r = .35$ ). The fact that the Warmth/Closeness and Conflict scores are essentially uncorrelated with each other indicates that positive and negative qualities of a relationship are not bipolar opposites as might have been thought. Three explanations can account for this finding: first, siblings may vary in their style of resolving conflicts. Some may actively fight and argue when disagreements arise, whereas others may avoid each other. Second, siblings may have ambivalent feelings toward each other as Buhler (1939) suggested. Finally, differences in the intensity of the relationship may account for the independence of the two. For example, siblings who frequently interact with each other may be likely to have more positive

interchanges and more negative interchanges than those who only interact occasionally.

It should be noted that the four sibling dimensions are only moderately related to family-constellation variables (i.e., sex, sex of sibling, relative age, and age spacing between siblings). In particular, the reports of warmth or closeness were greater in same-sex dyads than in opposite-sex dyads, particularly when the age spacing was narrow. Not surprisingly, children reported that they had more status or power when they had a younger sibling than when they had an older sibling. Children with a sibling close in age to them reported more conflict than children with a sibling much older or younger than them. Finally, children reported more rivalry when they had a younger sibling than when they had an older one. Although these findings warrant mentioning, their significance should not be overstated. The relative age of the two children is highly predictive of status/power, but neither this variable nor the other constellation variables are strongly related to the other three relationship dimensions (see Furman & Buhrmester, 1985). In other words, there is considerable variation in sibling relationships within any type of family constellation as well as between different family constellations. These findings indicate that if one is to understand the influence of siblings on each other, one cannot just consider family constellation variables, but also must examine the qualitative features of sibling relationships.

Most of the dimensions of sibling relationships correspond with those found in studies of other types of relationships. For example, taxonomic studies of adult relationships have consistently found a dimension of relative status/power (Wiggins, 1979; Wish, Deutsch, & Kaplan, 1976). They also found a positivity/negativity dimension, although recent investigators have found positive and negative qualities to load on separate factors as we did (Braiker & Kelley, 1979; Shaver, Furman, & Buhrmester, 1985).

In our own research on children's relationships (Furman, Adler, & Buhrmester, 1984), we have developed measures for assessing friendships and parent-child relationships that are similar to the Sibling Relationship Questionnaire. Factor analyses reveal some interesting parallels among the dimensions of the different relationships. For friendships, three dimensions have been identified: (a) warmth/closeness, (b) conflict, and (c) exclusivity, the desire to be the only or best friend of each other. As the terms imply, the first two dimensions closely resemble those found in sibling relationships; exclusivity and rivalry are also similar in the sense that both refer to the relative strength of different relationships. In the case of exclusivity, the comparison is between the friendship itself and other friendships either of the children may have; for rivalry, the comparison is between the children's relationships with their parents.

Four dimensions have emerged in our measure of parent-child relationships: (a) warmth, (b) egalitarian closeness, (c) power assertion/conflict, and (d) protectiveness. The relationship qualities that are part of the warmth/closeness dimension in sibling relationships correspond to those in the first two dimensions in parent-child relationships. A distinction is made, however, in parent-child relationships between the parental warmth that can occur in the role of being a

parent and a more egalitarian type of warmth (i.e., the parent as a friend). The power assertion/conflict dimension contains the quarreling and antagonism variables that were found on the conflict dimension of sibling relationships. Unlike the conflict in sibling relationships, however, it is also made up of disciplinary variables, such as verbal and physical punishment. The protectiveness dimension in parent-child relationships also bears some resemblance to the rivalry dimension; that is, protectiveness may reflect a parent's desire that their relationship be special and closer than the child's relationships with people outside of the family. Rivalry may result from a parent's relationship with one child being closer than that with another.

Neither friendships nor parent-child relationships had a factor that directly corresponded to the status/power dimension of sibling relationships. The absence of this dimension probably occurs because the power structure is a defining feature of these relationships; that is, friendships are expected to be egalitarian, whereas parents are expected to have more power than children.

Although these findings suggest that there are some interesting similarities in the dimensions underlying different relationships within our culture, it is unknown if similar dimensions would emerge in other cultures. The strong emphasis on work, sibling caretaking, and prescribed roles in many other cultures (see Chapters 3, 4, and 5, this volume) may result in a set of dimensions similar to the one found for parent-child relationships in this culture or perhaps still another structure. Regardless of what structures emerge in other cultures, one can be certain that the behavioral manifestations of the different dimensions are likely to vary considerably from culture to culture.

The present results indicate that children's perceptions can reveal important information about the nature of sibling relationships. At the same time, their reports do not provide a complete picture of the nature of sibling relationships. The children may not be aware of some important characteristics of their relationships. Even if aware of them, the children may not be willing to discuss them, or they may describe their relationship in an overly positive manner. Similarly, the children's perceptions may not correspond to the overt patterns of interaction that occur. Accordingly, we became interested in developing different measures for assessing the qualities of sibling relationships.

## Different Perspectives on Sibling Relationships

Olson's (1977) framework is a useful model for conceptualizing different methodological approaches for studying relationships. He argued that different individuals provide different perspectives on a relationship. Although Olson was primarily concerned with the differences between insiders' and outsiders' perspectives, we distinguish among three different perspectives: the insider's, the participant observer's, and the outsider's. An insider is a member of the relationship being studied. For our purposes then, an insider would be a sibling describing his or her own sibling relationship. A participant observer is a person who is

indirectly involved in the relationship. In the present case, that would be a parent reporting on his or her children's sibling relationship. Finally, there is the outsider who is uninvolved in the relationship. Typically, this is a social scientist studying a relationship. Not only did Olson distinguish among the different perspectives, but he also differentiated between subjective and objective data. Subjective data involve perceptions or interpretations by a reporter, such as might be obtained on a rating scale. Objective data refer to data that are less influenced by personal perceptions or interpretation. An example of such would be an observational system for coding interactions.

Using this framework, we can identify six different types of research methods that are available for studying interpersonal relationships. The six types are depicted in Table 9.3. The Sibling Relationship Questionnaire, when completed by the siblings themselves, would be an example of subjective insider data. If the SRQ were completed by the parents, the measure would be an instance of subjective participant observer data. One could obtain subjective outsider data by having research assistants complete the questionnaire after observing siblings interact. Objective data could be obtained from any of the three perspectives by having the appropriate person code patterns of interaction on the basis of some standardized criteria. For example, children, parents, or research assistants could count the frequency of operationally defined types of interaction.

Although each of the six approaches is valuable, most individuals studying sibling or other personal relationships have relied on either insider subjective data or outsider objective data, that is, self-report measures or behavioral observations. Moreover, most studies only include one method. Olson persuasively argued that it is necessary to incorporate multiple perspectives and multiple types of data in studying relationships. The reason is simple. Each of the different perspectives and approaches provides somewhat different information about a relationship.

We believe that there are important constraints in the degree of convergence theoretically possible among the different approaches for studying *relationships*. Some of these constraints are not the result of methodological inadequacies. Rather, lack of correspondence can arise because of meaningful differences in perspective. In other words, it is an error to believe that there is only one accurate view of a relationship. Different views can exist for five primary reasons: the extent of exposure to the relationship; the degree of awareness of the context of the behavior; the influence of attitudes, feelings, and ego involvement; the refer-

TABLE 9.3. Types of methodological approaches

| Data type  | Perspective                |   |  |
|------------|----------------------------|---|--|
|            | Insider                    | Participant observer                      | Outsider                                 |
| Subjective | Self-report (child SRQ)    | Other family members' report (parent SRQ) | Strangers' report (outsider raters' SRQ) |
| Objective  | Behavioral self-monitoring | Behavioral monitoring by family member    | Behavior coding (conversational coding)  |

ence points used for interpreting the information; and the competence and motivation of the reporter.

Exposure to the relationship refers to the amount of data or information one has about the sibling relationship. The degree of exposure will vary as a function of the number of interactions that have been observed and the range of different contexts in which interactions are observed. Table 9.4 depicts the amount of exposure one would expect different reporters to have typically. Of course, one would expect less convergence with reporters who have had less exposure to the relationship or have had exposure to the relationship in a different context. As social scientists, we are particularly likely to observe sibling relationships in a different context than other reporters.

Reporters also differ in whether they have direct exposure to the underlying feelings, attitudes, or perceptions concerning the relationship. Siblings' descriptions can reveal their own perceptions or feelings about their relationships, whereas parents' or social scientists' descriptions are primarily based on what is observed in the patterns of interactions. The latter two groups usually have to infer feelings and attitudes from these observations. Although insiders are certainly not completely aware of their own attitudes and feelings, we believe they are typically more aware of them than outsiders are.

In a related vein, insiders and to some degree participant observers are more likely to be aware of the context of the behavior (see Table 9.4). For example, sometimes behaviors develop an idiosyncratic meaning over the course of the relationship. A seemingly innocuous behavior, such as a way of greeting someone, may either be construed positively or negatively, depending upon the history of the relationship. Siblings, in fact, are infamous for their ability to make seemingly innocent comments that are actually deadly zingers. Insiders are aware of these private meanings, but outsiders have to rely principally on normative interpretations of behavior. This problem is analogous to the one anthropologists face then trying to study a culture different from their own.

Because insiders are more aware of the context of the behavior, it may appear that their perspective is more "accurate" than the outsiders' perspective, but this is not really the case. Insiders' perceptions of interactions can be clouded by their

TABLE 9.4. Factors influencing convergence of reports<sup>a</sup>

|   | Perspective       |                               |                             |
|---|-------------------|-------------------------------|-----------------------------|
|   | Sibling (insider) | Parent (participant observer) | Social scientist (outsider) |
| Exposure to relationship                | High              | High-medium                   | Low                         |
| Awareness of context                    | High              | High-medium                   | Low                         |
| Attitudes, feelings and ego involvement | High              | Medium                        | Low                         |
| Competence and motivation               | Low-medium        | Medium                        | High                        |

<sup>a</sup>Differences in reference points can also affect the convergence of perspectives (see text).

own attitudes, feelings, and ego involvement in the relationship. Siblings or parents can have an investment in the evaluation of the relationship, resulting in a potentially biased description of the relationship. The influence of social desirability or other self-presentational strategies are well known to social scientists. In other instances, however, the sibling or parent may not be consciously or unconsciously trying to misrepresent the relationship, but their reports may be influenced by their feelings about the relationship. Whether one wants to consider such alterations of perceptions to be distortions or not is a moot point. At the very least, however, trying to conceptualize the differences among the perspectives in terms of accuracy seems to be of questionable value.

As pointed out in Table 9.4 the reference points for comparisons may also vary among the three perspectives. For example, when evaluating an interaction, a social scientist is likely to compare it to those observed in other sibling relationships. A sibling may compare the relationship not only to other sibling relationships, but also to relationships in his or her network (e.g., friendships). Additionally, a sibling may compare an interaction with previous interactions that have occurred in that relationship—interactions a social scientist is not likely to be aware of. For example, an insider may consider a sibling's small affectionate gesture to be quite affectionate if the sibling has usually not been affectionate in the past. To some degree parents or participant observers can also make these within-relationship comparisons, but their judgements may also be strongly influenced by comparisons to other relationships in their own or their children's network. For example, when asked to interpret the relationship between two children, a parent may compare it to other sibling relationships in the family (if there are more than two children) or he or she may compare it with his or her own sibling relationships as a child.

Finally, the competence and motivation of the different reporters also differs. Of course, children do not have the cognitive abilities to remember and integrate information that adults have. Moreover, it is unclear how motivated children are to provide accurate and reliable information about their relationships. Parents and social scientists also can differ on these dimensions. Parents vary considerably in intelligence and motivation, but ideally we screen research staff on these dimensions and teach them to work systematically. (We dare not comment on the intelligence and motivation of principal investigators, but they are probably "different" from those of the other reporters as well!)

Thus, the three perspectives are likely to yield somewhat different views, because of a number of different factors. In some cases, the lack of convergence reflects a methodological limitation of one approach (e.g., the limitations of competence and motivation in children's reports). In many cases, however, the differences are not the results of artifacts, but instead they are substantive (e.g., the differences in points of comparison).

### Objective and Subjective Data

Objective and subjective data can also yield somewhat different information. As scientists, we like to minimize the degree of inference or interpretation and, thus,

we typically prefer objective data. On the other hand, subjective data have appealing pragmatic and theoretical features (Furman, 1984). Some variables, such as feelings of affection, seem inherently subjective. Certainly, behavioral markers of sibling affection can be measured, but it is unclear if these markers index feelings of affection as accurately as subjective reports of the feelings of affection.

More generally, in most objective coding systems, variables are operationalized in terms of a series of specific categories of behavior. For example, quarrels, insults, teasing, and aggression may be designated to be operational manifestations of conflict; such a list, however, may not include all indices. For example, ignoring the other's request may also be an index. Alternatively, some indices may not prove to reflect conflict, at least not in all instances. For example, teasing may actually be affectionate in nature in many instances. These issues are particularly critical in cross-cultural studies. Outsiders to a culture may be prone to make errors arising from ethnocentrism, interpreting behaviors in terms of their own culture.

Even if one were successful in obtaining a comprehensive and accurate list of behaviors reflecting a construct, some instances of behavior may be more indicative of that construct than others. For example, a heated personal argument may be more indicative of conflict than a squabble over some factual matter. In an objective coding system, however, scores are obtained by summing the number of instances, and thus each instance of a category is weighted equally.

Some of these problems with observational data can be reduced by having judges subjectively rate the variable of interest because they can evaluate the meaning of a behavior in its context rather than rigidly adhere to an objective system of rules.<sup>1</sup> At least theoretically, judges could take into account unusual indices of a construct or ignore instances of behaviors when they don't seem to be indicative of that construct. Similarly, they may be able to weight certain striking indices of the construct more heavily than other instances. These arguments are admittedly speculative. We do not know if judges are sensitive to these issues. They may be unreliable in their judgments or have idiosyncratic definitions of the construct, thus yielding less accurate measures of the construct. Relatively few investigators have compared subjective ratings and objective ratings, although the existing evidence suggests that subjective molar ratings can sometimes capture much of the critical information obtained in detailed objective coding systems. In fact, sometimes they may even be more predictive of outcome measures than objective molecular codings (Bakeman & Brown, 1980; Waters, 1978).<sup>2</sup>

There is one more appealing feature of subjective ratings. The meaningful differences among insider, participant observer, and outsider that we discussed are likely to be more apparent in subjective data than in objective data. After all, the purpose of an objective coding or rating system is to provide a common framework for evaluating relationships. If successful in providing such a shared framework, one should markedly reduce, if not totally eliminate, the differences among the three perspectives. The elimination of these differences is often

highly desirable, but if interested in identifying and studying the differences, one may be more successful in using subjective rather than objective forms of data.

### Empirical Illustrations of Different Perspectives

Up to this point, we have provided a series of conceptual arguments that at least some of the differences among perspectives or types of data are meaningful ones rather than the result of measurement error. We have also conducted two studies that empirically address the issue of concordance.

In the first study (Furman & Adler, 1986), subjective descriptions of sibling relationships were obtained from insiders and two types of participant observers. In particular, 90 fifth- and sixth-grade children, their mothers, and their fathers completed Sibling Relationship Questionnaires in their home. Additionally, 66 siblings who were in the second grade or beyond also completed the measures. Factor scores were derived by averaging scores of scales that were primary loaders on that factor. The first six rows of Table 9.5 depict the pattern of factor score correlations among the family members. For three of the four factors, there is a moderately high degree of agreement (mean  $r = .57$ ). The correlations between mothers and fathers (mean  $r = .69$ ) tend to be higher than those between the children and the parents (mean  $r = .53$ ). A number of reasons may account for this finding. The parents are more cognitively sophisticated and perhaps more motivated than the children. Alternatively, the children may tend to paint a more positive picture of their own relationships than parents do. The mean ratings by parents or children did not differ, however, as would be expected by such an explanation. Finally, fathers and mothers are both participant observers and thus are likely to have similar perspectives. In fact, many of the parents probably discuss their perceptions of their children's sibling relation-

TABLE 9.5. Correlations among family members' SRQ's

|                | Warmth/<br>Closeness | Conflict | Relative<br>Status/Power | Rivalry |
|----------------|----------------------|----------|--------------------------|---------|
| Study 1        |                      |          |                          |         |
| Mother-father  | .66**                | .61**    | .79**                    | .05     |
| Mother-child   | .31**                | .47**    | .78**                    | .07     |
| Mother-sibling | .52**                | .57**    | .75**                    | .11     |
| Father-child   | .41**                | .45**    | .74**                    | -.02    |
| Father-sibling | .42**                | .32*     | .62**                    | .05     |
| Child-sibling  | .69**                | .41**    | .71**                    | .10     |
| Study 2        |                      |          |                          |         |
| Parent-child   | .44**                | .39**    | .22                      | .11     |

\* $p < .01$ .

\*\* $p < .05$ .

ships. In a related vein, parents may also be unaware of or excluded from some facets of the sibling relationships; the children's greater exposure to the relationship may cause them to have different perceptions from those of their parents. The shared perspective explanation receives some empirical support from the fact that the correspondence on the three factors between sibling and child (mean  $r = .57$ ) is at least as great as that between parent and child. Because the children are less sophisticated cognitively, one would expect the sibling-child correlation to be lower unless that factor was counterbalanced by the influence of both children being insiders to the relationship.

The one factor on which there is little agreement is Rivalry. This factor is represented by only a single scale, but even in comparison to other single scales, the amount of agreement is low. There really may be less agreement about rivalry, but it is also possible that there is little correspondence because family members, particularly parents, may be unwilling to admit to preferential treatment of certain children. In fact, the variance of these scores was approximately half that of the other factor scores or most scales. Currently, we are exploring alternative ways of assessing rivalry.

In the second study (Jones & Furman, 1986), not only were insiders' and participant observers' reports collected, but also subjective and objective outsider reports were collected. In particular, the subjects were 80 sibling dyads, with the older children in the fourth grade and the younger children in preschool through third grade. The siblings were videotaped during a 30-minute free play session in a laboratory. Subjective insider data were obtained by having the older siblings complete Sibling Relationship Questionnaires. Similarly, subjective participant observer data were gathered by having a Sibling Relationship Questionnaire completed by the accompanying parent, who in almost all cases was a mother. Additionally, subjective outsider data were collected by having 10 raters watch videotapes of the dyads, and then complete similar questionnaires describing their impressions of the relationships. They did not complete the parental partiality items because they did not observe the children interacting with their parents. They observed 10 practice tapes first, but they received no instructions concerning how to infer relationship qualities except to base it on their observations. Of course, the parents or children neither received instructions nor observed tapes. In effect, we were asking if strangers who observed the tapes would perceive the same relationship qualities as parents and children perceived.

Finally, objective outsider data were obtained by coding the siblings' conversations. The observational system consisted of 16 categories, which are listed in Table 9.6. Within this scheme, indices were included of three of the factors measured by the Sibling Relationship Questionnaire. For example, Warmth/Closeness was expected to be reflected in the frequencies of the categories of approval, agreement, compliance, self-disclosure, inquiries about the other (disclosure inquiries), comments about mutual play or the other's play, and laughter. Conflict was expected to be reflected by disapproval, disagreements, and non-compliance. Relative Status/Power was expected to be measured by the relative frequencies of commands, requests, help, and requests for help by the two chil-

TABLE 9.6. Correlations between observer ratings and conversation categories<sup>a</sup>

| Conversational category    | Observer ratings |          |        |
|----------------------------|------------------|----------|--------|
|                            | Warmth           | Conflict | Status |
| Approval                   | .51**            | -.32**   | .19    |
| Agreements                 | .51**            | -.15     | -.04   |
| Compliance                 | .44**            | -.08     | .18    |
| Self-disclosure            | .37**            | .07      | -.17   |
| Disclosure inquiries       | .22*             | -.08     | -.12   |
| Mutual/other play commands | .48**            | .06      | .01    |
| Laughter                   | .50**            | .00      | -.28*  |
| Disapproval                | -.08             | .66**    | .06    |
| Disagreements              | .31**            | .12      | -.12   |
| Noncompliance              | .08              | .32**    | -.14   |
| Commands                   | .31**            | .22*     | .11    |
| Older child                | .24*             | .20      | .34    |
| Younger child              | .30**            | .17      | -.28*  |
| Requests                   | .31**            | -.20     | -.05   |
| Older child                | .27*             | -.09     | .50**  |
| Younger child              | .14              | -.15     | .31**  |
| Help                       | .33**            | -.10     | .21*   |
| Older child                | .24*             | -.08     | .34**  |
| Younger child              | .28*             | -.06     | -.30** |
| Requests for help          | .39**            | -.04     | .01    |
| Older child                | .34**            | -.17     | -.25*  |
| Younger child              | .28*             | .06      | .17    |
| Self-play commands         | .47**            | -.10     | -.07   |
| Miscellaneous              | .27*             | .24*     | -.20   |
| Total verbalizations       | .42*             | .13      | -.12   |

<sup>a</sup>High scores on the status variable indicate greater status by the older child.

\* $p < .05$ .

dren. Finally, categories for self-play comments and miscellaneous play comments were included.

What correspondence was found among the different approaches? The last row of Table 9.5 depicts the correspondence between the children's and parents' perceptions for this study. The results are very similar to those obtained in the first study except for those pertaining to Relative Status/Power. In this study, the correlation is only .22, yet in the other study the correlation between mother and child reports was very high— .78. Why the inconsistency? Relative Status/Power is strongly associated with the relative age of the two siblings. In the first study, children's perceptions of their relationships with both older and younger siblings were assessed. In the present study, the children were always older than their siblings and almost all reported having more status and power than their sibling. Thus, the lower correlation in the present study may be a function of the restricted range in the scores on Relative Status/Power.

Whereas the correspondence between parent and child reports was generally encouraging, there was little correspondence between either of these reports and

the objective observational coding of the children's conversation. Only 28% of the hypothesized correlations between the parent reports and the conversational categories were significant ( $p < .05$ ), and only 11% of the correlations between child reports and the conversational categories were significant. The frequency of disapproving comments was significantly related to both parent and child reports of conflict ( $r = .39$ ,  $r = .28$ ,  $p$ 's  $< .05$ ); an unpredicted, but logical complement, of this finding was that approving comments were negatively related to reports of conflict by the parents and children ( $r = -.29$ ,  $r = -.24$ ,  $p$ 's  $< .05$ ). The parents reports of status were also significantly correlated with four of the eight hypothesized indices of status, but the child's reports were only significantly correlated with one. Aside from these results, there were no obvious patterns in the correlations that were significant or near significant. The proportion (versus frequency) of different conversational categories were even less related to the family members' perceptions. In effect, there is little correspondence between the objective observational coding and the subjective insider or participant observer reports.

What about the correspondence with the outsider subjective ratings? Composite outsider ratings were derived by summing the 10 raters' factor scores. The internal consistency of these composite scores ranged from .85 to .92, indicating that the composite ratings were relatively reliable. As can be seen in Table 9.6, the outside ratings were significantly correlated with many of the conversational coding categories. For example, ratings of Warmth/Closeness were positively related to total verbalizations and most specific categories. The highest correlations, however, were with approval, agreements, compliance, mutual or other's play comments, laughter, and self-play comments. Conflict ratings were related to the frequencies of disapproval, noncompliance, commands, and miscellaneous comments. They were inversely related to the frequency of approval. High status of the older child was associated with frequency of approval. High status of the older child was associated with frequent commands and help by that child; low status was associated with frequent commands and help by the younger child. The complementary pattern was found for requests for help. We also conducted multiple regression analyses to determine how well the outsiders' ratings could be predicted from equations comprised of the conversational categories significantly related to them. The multiple  $R$ 's all exceeded .70. These results indicate that many of the variables we coded are used by naive raters to draw inferences about relationship qualities, or at the very least we can reproduce their judgments from the conversational categories.

By contrast, the subjective outsider ratings were not highly correlated with either the parents' or the children's reports. As can be seen in Table 9.7, there are some indications of agreement between the parents' reports and the outsiders' ratings, but even these correlations are modest in size. If anything, the correlations between parent and outsider appear to be a little smaller than the correlations between parent and child reports.

What conclusions should be drawn from these results? When different methods are used to study the same relationships, many investigators believe that similar

TABLE 9.7. Outsider SRQ ratings correlations with parent and child reports

| Respondent | Warmth/Closeness | Conflict | Relative Status/Power |
|------------|------------------|----------|-----------------------|
| Parent     | .02              | .31**    | .43**                 |
| Child      | .10              | .16      | .17                   |

\*\* $p < .01$ .

results should be obtained. If the methods do not yield similar results, the validity of one of the two methods is usually questioned. Behavioral observations are often considered more trustworthy than self-reports because of their greater objectivity. Is our self-report or parent measure invalid? We do not think so. Although we cannot review all of the evidence here, the scale has good psychometric properties and the findings we have concerning constellation effects and the effects of parent-child relationships on sibling relationships are consistent with those of others who have studied sibling relationships (see Adler & Furman, 1986; Furman & Buhrmester, 1985). Moreover, in the present studies parents' and children's reports were found generally to correspond at a moderately high level. Perhaps one might wish that the correspondence would be even higher, but we do not believe that it should be, because theoretically they have different perspectives on the relationship.

Even though we believe that the SRQ is a valid index of perceptions of sibling relationships, it is possible that an alternative measure may be more highly correlated with the observations. For example, more success may have been obtained if we had asked specific questions about particular behaviors rather than the general attitudinal questions that typify the SRQ. Such a measure, however, begins to resemble an *objective* insider measure in that the subjective perception of interpretation by the reporter has been reduced. In effect, the process of interpreting the meaning of a behavior would be done by the scientist, not the insider. Whether one wants such a change depends on one's purpose.

The validity of the observational data is more difficult to demonstrate. The measures and setting used in the present study are similar to those commonly used to study relationships, but obviously commonality of use is not proof of validity. Perhaps relationship qualities are not clearly manifested in specific conversational categories, or at least not the ones we measured. In retrospect, some of the molecular variables we expected to be indices of relationship factors probably are not. For example, most disagreements were concerned with minor matters of fact, and probably do not reflect conflict. In fact, examination of Table 9.6 indicates that disagreements were not related to the observer ratings in the predicted manner. One could use such information to refine the coding system for subsequent work.<sup>3</sup>

Although a few coding categories were not accurate indices of the relationship factors, most of the categories seemed to be. In fact, the outsider ratings can be predicted relatively well from the conversational codes. Yet, the correspondence with the parent or child ratings was a little greater for the subjective outsider

ratings than for the conversational codings. This pattern suggests that we may not have fully captured the observed relationship qualities in our codings of conversations. Perhaps our raters were sensitive to subtle markers of Warmth/Closeness or Power that were not included in the conversational coding scheme (e.g., terms of address, politeness, etc.). The raters could also have been sensitive to the sequence of events or to particularly important episodes—information that is not reflected in the simple frequency scores. Still, the level of correspondence between outsider ratings and parent or child ratings is modest at best, suggesting that the major contributors to the discrepancies lie elsewhere.

There are several properties of the observational paradigm that might have contributed to the low correspondence between the outsider measures and the reports from family members. Only a single 30-minute period of interaction was observed. The children were only observed during free play, during which some relationship qualities may not be apparent. Additionally, the observation took place in an unfamiliar laboratory playroom, and only the two children were present. In effect, the children were almost required to interact with each other.

Obviously then, the present data do not prove that discrepancies will still occur if we conducted home observations, observed on multiple occasions, observed when other people were present, or otherwise changed our methodology. Yet we believe that some degree of discrepancy will continue to occur because of the differences in perspective.

## Conclusion

We believe that several important lessons can be learned from our experience. First, we must not assume that the results we obtain with one approach will necessarily correspond with results obtained by a different approach. Investigators using self-report or subjective approaches are generally not guilty of making this assumption. Typically, they are aware of the limitations of their measures and the need to validate them. On the other hand, those who use observational measures are not as likely to demonstrate that their measures are valid. If the interaction is observed, it must be real. Yet, these results suggest that seeing is not necessarily believing. As noted previously, we may not have seen a representative sample of the children's interactions. Perhaps greater correspondence can be obtained by observing in the home, but this should not be assumed. It too needs to be demonstrated.

The second important lesson is that the level of correspondence may not be particularly high in most cases, even if the measures are perfectly valid. In his review of research of family interactions, Olson (1977) reported that discrepancies are commonly found between what participants report their relationship is like and what is seen in actual interactions. Discrepancies seem to be the rule, not the exception.

Just because discrepancies may be inevitable does not mean that the measures do not need to be validated. As noted earlier, one needs to determine if the obser-



ational setting and coding system are appropriate. Similarly, simply asking children or parents for their perceptions does not necessarily guarantee that they report their actual perceptions. They may misrepresent their actual feelings if they feel a need to present their relationship in a socially desirable manner to an investigator. Thus, it is essential that one validate any measure, but the central validation issues are whether the observations are representative observations and whether the measures of perceptions accurately represent perceptions—not whether the measures of these *different* constructs correspond highly. Certainly, demonstrating correspondence among different approaches to studying relationships is validation evidence, but one needs to recognize that this correspondence will have theoretical upper limits, which may be considerably lower than perfect correspondence. Unfortunately, we do not yet have criteria for determining when the level of correspondence is what it should be and when it is lower than it should be because of measurement problems. In fact, an interesting, yet unexplored, question is what factors lead to high correspondence or low correspondence among different approaches. Over the years social scientists have learned a great deal about the problems of measurement error and how to reduce them. In contrast, much less is known about the factors that results in meaningful differences in perspectives.

A third lesson is that the selected method should take into account the strengths and weaknesses of the approach and should be based on the conceptual issue of the investigation. For example, if one is interested in the sequences of events in the interactions between siblings, observational techniques are clearly the method of choice. By contrast, if one is interested in the subjective impact of the relationship, then sibling or parental reports are likely to be most appropriate. The point is simple. Although some methodological chauvinists may believe that a certain approach, usually observational data, is always preferable, in actuality no method is inherently superior for all purposes.

Because of the discrepancies among different approaches, many social scientists have advocated that multiple sources of data be collected. Although we are inclined to join this bandwagon, several caveats are warranted. First, multiple approaches are only desirable if they are each appropriate means of addressing the conceptual issue at hand. For example, it makes little sense to collect self-report measures, as well as observational measures, when assessing sequences of interaction.

Second, one needs to be careful about using different approaches for assessing different constructs. Consider an instance in which one is examining the links between sibling relationships and parent-child relationships. One could have children complete questionnaires assessing both relationships. Of course, significant correlations may be found between the two relationships because of the shared method variance. On the other hand, what would happen if different perspectives were used to assess the different constructs? For example, one could have children complete Sibling Relationship Questionnaires and parents complete Parent-Child Relationship Questionnaires. If significant relations are found, everything is generally satisfactory (although the strength of the relations

may be attenuated). If not, it could indicate that there are not significant relations or it could reflect the differences in perspectives between parents and children. One needs to remember that the dissimilarity of perspectives may account for the absence of results, just as much as the similarity of methods may account for the presence of results.

Finally, careful consideration needs to be given to the issues involved in integrating data from different perspectives. Some individuals have proposed aggregating multiple sources of data (Schwarz, Barton-Henry, & Pruzinsky, 1985). If the different perspectives are relatively similar, the reliability of the measurement will increase, but not necessarily the validity. In effect, one will no longer be measuring either perspective, but instead will be measuring the *shared perspective*. The unique perspective of each is effectively lost. Sometimes this is desirable, but sometimes it is more appropriate to examine the perspectives separately. Aggregation not only reduces the impact of the limitations of specific measures, but it also reduces the impact of the unique strengths of a measure as well. One is left with the common denominator.

Despite these caveats, we find ourselves in accordance with Olson's (1977) point. One needs to incorporate multiple perspectives and multiple types of data so that one can obtain a comprehensive picture of relationships. This point is particularly important in cross-cultural studies, which have insiders and outsiders to a culture as well as insiders and outsiders to specific relationships.

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## Footnotes

<sup>1</sup>Objective coding systems can also include rules for interpreting behaviors within the ongoing context. For example, one could include a rule that affectionate teasing should not be scored as derisive teasing. This is not typically done because the rules can become too complicated and because it may be difficult to reliably identify "affectionate teasing." If it were done, however, the coding system would be more subjective than the usually objective one; hence, it would have some of the same advantages and disadvantages of the typical objective coding system.

<sup>2</sup>The distinction between molecular and molar coding systems (i.e., small versus large coding units) bears some resemblance to that between subjective and objective coding systems. Molecular coding systems usually, although not always, require less interpretation by a rater than molar or global coding systems. A molecular coding system can provide a rich, detailed description of interactions that can not be obtained in a molar coding system, although such rich descriptions require considerable investments of time and money. Molecular coding systems are also more sensitive to contextual or situational variables than molar coding systems (Cairns & Green, 1979). This sensitivity is an advantage and disadvantage. On the one hand, it permits us to study the influence of situational and contextual variables on patterns of interaction. On the other hand, it means that our data are influenced by situation-specific or unstable relationship characteristics as well as by stable characteristics. Thus, if we are interested in obtaining reliable estimates of stable

characteristics, we will need longer periods of observation with a molecular coding system than with a molar coding system (Moskowitz & Schwartz, 1982).

<sup>3</sup>An alternative procedure would be to have the children identify behavioral instances of Warmth, Conflict, or Power. This procedure would be analogous to the interview step in the development of the Sibling Relationship Questionnaire.

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