

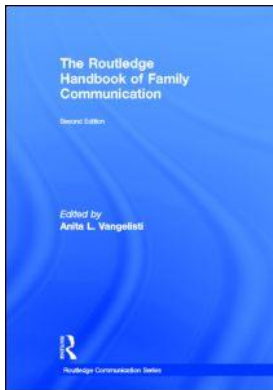
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## **The Routledge Handbook of Family Communication**

Anita L. Vangelisti

### **Perspectives on Studying Family Communication**

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# Perspectives on Studying Family Communication

## Multiple Methods and Multiple Sources

*Judith A. Feeney and Patricia Noller*

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Family communication can be studied using a variety of methodologies, such as self-report, observational and experimental. In this chapter, we discuss the various ways these methodologies can be employed, and the issues related to each of them. Although we provide examples of studies using the various methodologies, we do not claim to cover the field in any comprehensive way, but rather to use illustrative examples, including some from our own work.

Research can also involve a quantitative or a qualitative perspective, although both types of data are sometimes collected in the same study. Quantitative methodologies involve individuals receiving scores—for example, on a questionnaire, as a reaction time in an experiment, or as the frequency with which a particular behavior was observed. These scores can then be analyzed statistically. In contrast, qualitative methodologies tend not to be based on numbers, and may involve intensive interviews, or content analysis of utterances or written statements. Qualitative methodologies focus on the experience of participants, often as recorded in their own words. All methods (whether basically quantitative or qualitative) have advantages and disadvantages. Hence, the key issue is the appropriateness of a methodology for answering a particular research question, and different methods may be usefully combined to provide more comprehensive analyses.

### **Self-Report Methodologies**

Self-report methods are often used to study family communication, either alone or in combination with other methodologies. Self-report methods include questionnaires, diaries, and other experience-sampling techniques. Interviews also involve self-report, facilitated by the interviewer.

#### *Questionnaires*

Self-report questionnaires are appropriate for asking about the general or overall frequency of communication. Widely used measures of family communication include the

Communication Patterns Questionnaire (Christensen, 1988; Christensen & Sullaway, 1984), and the Conflict Resolution Styles Questionnaire (Peterson, 1990; Rands, Levinger & Mellinger, 1981). More recently, and reflecting the awareness of marriage as a significant transition point, Serewicz and Canary (2008) developed self-report scales assessing aspects of disclosure and privacy orientation by in-laws. Using both traditional and on-line methods of administration, the researchers examined associations between these scales and outcomes for the in-law relationship.

The limitations of self-report questionnaires are well known (in fact, they have been more widely acknowledged than the limitations of other methodologies such as observation). Problems include respondents' limited awareness of their own thoughts, feelings and behavior; social desirability and self-serving biases; and the difficulty respondents may experience in trying to mentally aggregate the occurrence of behavior across times and situations. Metts, Sprecher and Cupach (1991) and Ickes (2000) discuss these problems in more detail.

Some of the problems associated with self-report questionnaires can be minimized by using scales to assess the level of socially desirable responding. For example, Snyder (1979) included a measure of "conventionalization," or the tendency to portray one's relationship in an idealistic manner, in his Marital Satisfaction Inventory. Snyder found that controlling for conventionalization tended to decrease the correlations between the factors of his inventory and a measure of global marital satisfaction, but had little effect on the overall significance of these associations.

Although the limitations of self-report questionnaires are well known, the advantages are less well canvassed. For example, in contrast to other methods, questionnaires can be used to assess the frequency of behavior across different times and situations. Self-report methods are also useful for studying behavior retrospectively, and for studying behaviors that rarely occur in the laboratory.

### Assessing Communication Across Times and Situations

Noller and Bagi (1985) asked adolescents and their parents about communication in the family, using the Parent-Adolescent Communication Inventory. This measure assesses communication at the level of the topics discussed (e.g., "interests," "sex problems"); communication on each topic is rated on evaluative dimensions such as frequency, self-disclosure, and satisfaction. The resulting breadth of information could not be obtained using observational methods, which usually involve a brief interaction on a relatively circumscribed topic. Similarly, Noller and Feeney (1998) employed a modification of this measure (using topics suitable for couples) to assess newlyweds' communication over 12 topics and the same evaluative scales used in the earlier study. Topics included "feelings about our relationship" and "plans for the future." These researchers were able to explore the frequency with which particular topics were discussed, and the quality of the communication around each topic.

### Collecting Retrospective Data

An example of a questionnaire designed to collect retrospective data is the Parental Bonding Instrument (PBI; Parker, Tupling & Brown, 1979), which asks participants about parents' behavior toward them when they were children. The measure assesses two dimensions: care (e.g., "Spoke to me in a warm and friendly voice"), and overprotection (e.g., "Tried to control everything I did").

A major issue with retrospective data concerns validity. That is, do participants' responses really reflect what happened "back then," or do they represent subsequent reconstructions of those events? It is worth noting, however, that an individual's perception of what happened earlier in life may have a greater impact on the current situation than "the objective truth." Further, research indicates that offspring's scores on the PBI are related to parents' reports of their own parenting behavior, and to interviewers' and observers' judgments of parenting (Parker, 1983). Data also highlight the importance of perceptions of early parenting to adults' relational experiences. In one study (Feeney, Passmore, & Peterson, 2007), adults adopted during infancy reported more attachment insecurity than a comparison sample raised with both biological parents. However, self-reports of parental bonding were stronger predictors of security than was adoptive status; for both adopted and comparison groups, perceptions of parental care were particularly important.

### Studying Behaviors Unlikely to Occur in the Laboratory

L. J. Roberts (2000) discussed the advantages of self-report methods for studying behaviors such as avoidance and withdrawal. These behaviors are difficult to study observationally, because demand characteristics in the laboratory context are such that individuals are unlikely to use the more obvious forms of these behaviors. For example, participants are unlikely to get up and walk out of the laboratory, and cannot resort to such techniques as turning on the television, although they may use such strategies at home.

L. J. Roberts (2000) reported on the construction of the Interaction Response Patterns Questionnaire, designed to assess different types of withdrawal and avoidance behaviors. Participants are asked to indicate how they believe their partner would respond to them when they engage in a number of different (antecedent) behaviors. The antecedent behaviors include "I criticize, blame or put my partner down" (angry withdrawal), and "When a problem comes up in our marriage, I try to get us to talk about it, share our feelings and work out a solution" (conflict avoidance). Each antecedent behavior is followed by a list of possible behavioral responses, so that partners' reactions to specific interactional contexts likely to trigger withdrawal can be assessed.

Similarly, self-report methods may be particularly useful for studying family violence, which is unlikely to occur during laboratory conversations. Hence, although laboratory paradigms can be used to compare violent and nonviolent couples in terms of arousal levels and communication patterns, the actual occurrence of violence needs to be studied using self-report. The Conflict Tactics Scales (Straus, 1979) have been widely used, and have been criticized for being too simplistic and ignoring the context of violent behavior. There is evidence, however, that those in abusive relationships are more likely to acknowledge the occurrence of violence on an anonymous questionnaire than in an interview (Szinovacz & Egley, 1995). Szinovacz and Egley also advocate collecting questionnaire data from both relationship partners, to ensure that violence is not under-reported.

### *Diaries*

The difficulty participants may have in averaging the occurrence of a behavior across times and situations can be overcome by using a structured diary methodology. Diaries generally require participants to complete a brief report on each interaction of a particular type (e.g., with the spouse or the child), including basic information about when and

where the interaction took place, along with evaluations of the communication process. The best-known versions of this methodology are based on the Rochester Interaction Record (Wheeler & Nezlek, 1977).

The major advantage of the diary method over other self-report methodologies is that the reports can be completed immediately, or at least soon after the event in question. The main limitation centers on possible reactivity; once participants are informed of behaviors to be recorded, they may change their behavior to appear more well-adjusted, or to decrease the demands of the reporting task. A further problem is that participants may not complete the diary forms regularly, or may complete them for several days at the same time. When this happens, diary data become more like retrospective data.

Noller and Feeney (1998) had newlyweds record all couple interactions lasting ten minutes or more, using diary reports based on the Rochester Interaction Record. These reports provided structural information about each interaction (e.g., time, duration, and topic), together with ratings such as initiation, disclosure, conflict and satisfaction. The ratings were used to form measures of “quantity,” “quality,” and “conflict,” which showed significant associations with marital satisfaction. More recently, computerized daily diaries have been used to examine the extent of supportive interactions, and their effects on well-being, among couples dealing with multiple sclerosis (Kleiboer, Kuijer, Hox, Schreurs, & Bensing, 2006).

#### *Other Experience-Sampling Techniques*

Some researchers have collected diary-type data by using beepers to indicate when participants should complete a report. For example, Larson and Richards (1994) had family members report on their activities and effect at particular points in time. In this way, they could relate family members’ effect to time of day and to the activity being undertaken. In another study of this type, Huston and Vangelisti (1991) used telephone calls involving a highly structured interview protocol to obtain reports of couples’ socio-emotional behavior (e.g., “husband made wife laugh,” “wife dominated conversation”). Such methods can help ensure that data are collected regularly, and soon after the occurrence of the relevant behavior.

#### *Interviews*

Another way of obtaining participants’ perspectives on communication is to use interviews. Interviews vary in the level of structure imposed by the researcher. At the highest level of structure, interviews may not be very different from questionnaires as a methodology, except that the information being sought tends to be more immediate. At the lowest level of structure, the interview may be quite free-flowing and the interviewer may be free to pursue any issues that seem relevant.

Interviews have an advantage over questionnaires, in that the interviewer can use probes to elicit relevant information, or ask follow-up questions for clarification. For example, several groups of researchers have developed interview protocols that explore perceptions of attachment relationships, including aspects of family communication (e.g., Bartholomew & Horowitz, 1991; Main, Kaplan, & Cassidy, 1985). A potential disadvantage is that interviewers may be affected by their own biases, in terms of the questions they ask. In addition, the interviewer’s nonverbal responses to the participant’s answers may affect the extent to which the participant continues to be truthful, or produces socially desirable

responses. This issue may be particularly critical when the information sought concerns socially undesirable or even criminal behavior (see Szinovacz & Egley, 1995, mentioned earlier).

A further disadvantage of interviews is the problem of deciding how to make sense of the data. Where the focus is on participants' experience (e.g., of violence, or family life), it may be enough to describe that experience using suitable quotations from interview transcripts. Caution is needed, however. For example, researchers need to be clear about whether examples being reported represent the modal experience of the group, or are unique to a particular participant. Just as biases can be problematic at the interview stage, they can also influence the way data are analyzed and reported.

### *Integrating Different Types of Self-Reports*

Some researchers combine different self-report methods to provide a more comprehensive picture of family communication. For example, Noller, Feeney, Sheehan, Darlington, and Rogers (2008) examined levels and topics of conflict in divorcing and continuously married families, using questionnaires and in-depth interviews. Both methods indicated that levels of conflict remained high in divorcing families, even years after separation. While the questionnaires provided large amounts of data that could be summarized using standardized scales, the interviews allowed detailed exploration of conflict interactions and their effects on children. Similarly, Schrodt, Baxter, McBride, Braithwaite and Fine (2006) combined structured diaries and interviews, to explore the complexities of communication processes associated with post-divorce co-parenting.

### *Summary of Self-Report Methods*

Despite the limitations of self-report methodologies, it is clear that they occupy an important place in the research arsenal of family communication scholars. Self-report methods are particularly useful for assessing communication across times and situations, for collecting retrospective data (e.g., about parent-child communication), and for assessing behaviors that rarely occur in the laboratory (e.g., violence).

## **Observational Methods**

Observational studies of family communication involve having family members engage in an interaction and then rating or coding their behaviors. The behaviors of interest can be elicited in different ways that vary in terms of the level of structure. Free interaction, such as might occur with families in a park (Sigelman & Adams, 1990) or waiting-room (Noller, 1980a), lies at the least structured end of the dimension. Experiments that involve manipulating the environment to observe the effect on family members' behavior lie at the most structured end, and are discussed later in this chapter.

Many observational studies involve the family or couple coming into a laboratory, and engaging in an interaction that is videotaped. The topic of interaction may be specified by the researcher or chosen by the family. The content of the conversation may or may not be of primary interest; many researchers are more interested in process than in what the family talks about. These laboratory-based observational studies lie somewhere between the free-interaction situation and studies involving manipulation of variables.

### *Choosing a Topic*

As L. J. Roberts and Greenberg (2002) noted, observational studies of couple interaction have focused primarily on conflict. Hence, we know much more about negative behavior between couples than about their positive behavior and intimate exchanges.

Many studies of couple interaction involve partners being asked to discuss a current issue in their relationship (e.g., Noller, Feeney, Bonnell, & Callan, 1994). However, Christensen and colleagues (e.g., Christensen & Heavey, 1990; Heavey, Christensen, & Malamuth, 1995) have shown that behavior in conflict interactions depends on whether the issue being discussed is raised by the husband or by the wife, particularly in terms of demanding and withdrawing behaviors. These researchers suggest that conflict processes in couples should be studied using two topics, one chosen by each partner.

Although many researchers ask couples to discuss a current relationship issue, there are problems associated with this approach. Behavioral differences found between satisfied and dissatisfied couples may be, at least partly, a function of differences in the seriousness of the problems in the two groups of couples. By contrast, conflict topics provided by the experimenter, such as the hypothetical situations used by Raush, Barry, Hertel and Swain (1974) may not be equally salient for all couples. Again, having couples engage in more than one interaction may alleviate some of these problems. For example, Robles, Shaffer, Malarkey, and Kiecolt-Glaser (2006) interviewed each couple and hence chose two or three marital issues judged likely to elicit conflict in subsequent interaction.

### *Focusing on Process*

Where the focus of researchers is on interaction processes, they may have the videotaped interaction coded by trained coders or raters (“outsiders”), or may use the family members (“insiders”) as informants about what happened in the interaction.

### *Outsider and Insider Data*

This distinction between outsider and insider data is an important one (Olson, 1977). Outsider data are often seen as more objective and reliable, but it is important to remember that outsiders know little about the history of the relationships they observe. They may be able to describe behavior very effectively, but cannot be sure what participants are feeling, except by making assumptions about the meaning of their behavior. Further, the more interpretation coders have to engage in, the less reliable and valid are their conclusions. In their studies on demand–withdraw communication (e.g., Heavey, Christensen, & Malamuth, 1995), Christensen and his colleagues have obtained both insider data (self-reports of demanding and withdrawing behavior) and outsider data (global ratings by outsiders of couples’ behavior, and coding of actual nonverbal behaviors). The advantages of this approach are discussed later in this chapter.

### *Coding or Rating by Outside Coders*

Assessments by outsiders may involve micro-coding of each behavior, or more global ratings of the interaction. A number of coding systems are available for micro-coding interaction, particularly couple interaction. One widely used system is the Couples’ Interaction Scoring System (CISS; Gottman, Notarius, & Markman, 1976), which includes

codes for content (verbal) and affect (nonverbal) behavior. Affect is coded as either positive or negative, depending on whether the unit being coded contributes to a more pleasant or more unpleasant climate. A Global Rapid Couples' Interaction Scoring Scheme (RCISS; Krokoff, Gottman, & Hass, 1989) has also been developed. This scheme involves fewer coding categories, allowing for faster coding of interaction. Global scores on positivity–negativity can also be calculated for both speakers and listeners. Another commonly used system is the Marital Interaction Coding System (MICS; Weiss, Hops & Patterson, 1973), which was one of the first attempts to systematize observational coding. Several revisions have since been undertaken (the study by Robles et al., noted earlier, used a revised version of the MICS to examine links between marital conflict and stress hormones).

When behavior is coded at the micro-level, the interaction is generally divided into discrete units based on either time or events (e.g., 15-second units or the talk turn). Hence researchers can assess the types of behavior occurring, the frequency and/or duration of behaviors, and even the sequence in which behaviors occur. Important properties of coding systems include their reliability (both inter-rater and intra-rater) and their validity (the extent to which the codes reflect the interaction processes of interest).

One problem with using outside coders lies in ensuring that the coding reflects some kind of culturally shared meaning. Some researchers have tried to address this problem by using a “cultural informants” approach, which assumes that people learn the meaning and labeling of social behaviors through socialization processes (Smith, Vivian, & O’Leary, 1990). Coders and raters using this approach are not necessarily trained experts; they are asked to base their decisions on all available cues (verbal and nonverbal channels, and the context). The observers should be demographically similar to the participants, because the approach assumes that there is a common set of culturally determined rules that are applied in, for example, couple interaction. Researchers using the cultural informants approach have often relied on outsiders making global ratings, such as those utilized in the Conflict Rating System (e.g., Christensen & Heavey, 1990) to assess demanding and withdrawing behaviors.

### Coding or Rating by Family Members

Where family members themselves are used as informants, a number of different strategies can be employed. Noller et al. (1994) had newlywed couples watch their videotaped conflict interaction, and describe the strategies they had used to try to influence the course of the interaction. Participants’ descriptions were coded into six categories: reason, assertion, partner support, coercion, manipulation and avoidance, which were related to levels of marital satisfaction. In later re-analyses of these data, Feeney (2003) showed that scores on these strategies were also related to the attachment security of both self and spouse.

Ruzzene and Noller (1991) had partners review the videotape of their conflict interaction and make global ratings of their own and their partner’s effect. Spouses also selected the three partner behaviors that had the most impact on their own feelings during the interaction, and rated the impact of these significant events. In addition, they made judgments about the partner’s intention in performing that behavior; this perceived intention could be compared with the individual’s self-reported intention. In a similar vein, Guthrie and Noller (1988) asked couples to identify the “emotional moments” in their interaction, and coded these for the occurrence of particular nonverbal behaviors.



These studies allowed the researchers to document patterns of interaction, and to assess their links with variables such as gender and relationship satisfaction.

### Frequency Versus Sequence

Frequency data indicate whether one type of family member uses a particular behavior more or less often than others do. However, to capture the complexity of couple interaction, it may also be important to understand the sequencing of partners' behavior—that is, how an action by partner A affects partner B, how B consequently acts, how B's actions then affect A, and so on (Gottman, Markman, & Notarius, 1977; Margolin, 1988). For example, subtle differences in the communication patterns of couples in violent, compared with nonviolent relationships, may emerge only when behaviors or emotions are analyzed in terms of sequencing, rather than overall frequency. Time-series analysis can be used to investigate these issues. This method involves assessing the strength of the association between one stream of behavior (e.g., continuous assessment of heart rate) and another stream of behavior (e.g., coding of actual behavior or emotional expression).

L. J. Roberts and Krokoff (1990) used time-series analysis, and continuous ratings by trained observers, to study the conflict interactions of married couples. Their focus was on patterns of hostility and withdrawal; specifically, whether wives became hostile in response to husbands' withdrawal, or husbands' withdrawal was a response to wives' hostility. Sequential analyses have also shown the destructive effects of negative reciprocity, in which one partner's expression of displeasure follows the other partner's expression of displeasure at a rate greater than expected by chance (L. J. Roberts, 2006). As we shall see in a later section, Noller and N. D. Roberts (2002) used time-series analysis to explore the links among arousal, effect, and behavior in couples.

### *Focusing on Content*

Sometimes, researchers are more interested in the content of the interaction, or what the family members say, than in the interaction process. In this case, researchers generally use some method of content analysis, and a qualitative approach. Many methods can be used, including asking fairly global questions about the content of the interaction, or using content analysis packages such as NUDIST or ETHNOGRAPH, which focus on patterns of word usage.

Noller, Feeney and Blakeley-Smith (2001) studied the attributions couples made about changes in their relationships. Couples were asked to discuss the three major relational "contradictions" (autonomy versus connectedness, openness versus closedness, and novelty versus predictability) highlighted by Baxter (e.g., Baxter & Simon, 1993), with a focus on describing change in those areas of their relationship. Trained coders studied the transcripts of the conversations for answers to specific questions, such as: Did the couple report change over time in that area of their relationship? What was the nature of that change? To what factors did they attribute that change? By analyzing the content of the conversations, the researchers examined how the couples experienced relational changes, and how these changes were shaped by individual, dyadic, and situational factors. Similarly, in research by Feeney and Fitzgerald (2012), the content of couples' discussions pointed to individual, dyadic, and situational factors that impacted on attempts to resolve hurtful events.

*Summary of Observational Methodologies*

Observational data can be used in various ways to increase our understanding of interaction processes in couples and families. Researchers can focus on the frequency of behaviors, or the sequence in which they occur. Either the content of the interaction or the process (or both) may be of interest. The interaction can be coded or rated, either by family members or by trained coders. In addition, ratings may be either global (summarizing the entire interaction) or made at regular intervals.

**Experimental Studies**

In discussing research into family processes, Cummings (1995) argued that “the experimental method can make significant contributions toward explaining the bases for associations between variables, the direction of effects, and the causal relations” (p. 175). He noted that researchers have found many associations between family factors and child development, but that patterns of cause and effect need clarification. For example, marital conflict may cause children to “act out,” but children’s acting out behavior may also create conflict between the parents. Cummings also noted that experiments offer the advantage of assessing immediate responses in specific contexts. However, experimental methods may need to be adapted, given the sensitive nature of family problems and associated ethical issues. For example, it would be inappropriate to try to elicit violent behavior in the laboratory. Experimental studies of family communication include analog studies of marital conflict, studies of responses to hypothetical situations, and studies using the standard content methodology.

*Analog Studies*

Analog studies try to simulate, under controlled conditions, a situation analogous to real life. Cummings and colleagues (e.g., Cummings, Simpson, & Wilson, 1993; Cummings & Davies, 1994) were interested in children’s responses to conflict between adults. They prepared videotapes that allowed them to manipulate dimensions of conflict, while avoiding the ethical issues involved in exposing children to real-life conflicts. This series of studies explored how children’s reactions to inter-adult conflict are affected by such variables as parents’ history of physical aggressiveness, whether the conflict is resolved or not, and whether the children have behavior problems or not. For example, El-Sheikh, Cummings, and Reiter (1996) found that children were much more negative about adults who consistently failed to resolve conflicts than about those who succeeded in resolving them.

In another application of the analog method, Noller, Atkin, Feeney, and Peterson (2006) created audiotapes of marital conflict involving four conflict styles: mutual negotiation, coercion, mother-demand/father withdraw, and father-demand/mother withdraw. These tapes were played to family groups consisting of mother, father and an adolescent son or daughter. For half the tapes, the conflict was child-related; for the other half, the conflict involved only the couple. Responses to the different scenarios provided interesting insights into marital conflict in families with adolescents. For example, family members saw mutual conflicts much more positively than other types of conflict, and mother-demand as more typical than father-demand. Further, adolescents’ responses to the scenarios depended on whether conflict was child-related or not.

### *Responses to Hypothetical Situations*

Some communication scholars ask participants to imagine themselves in particular social situations (usually described in written form), and to describe their responses to those situations. An example of an experimental study using this approach is that of Beach and colleagues (Beach, Tesser, Fincham, Johnson, & Whitaker, 1998), who asked couples to describe situations involving competition or comparison with their partner. According to the self-evaluation maintenance model, reactions to such situations depend on relative performance (whether one outperforms or is outperformed), the closeness of the other, and the relevance of the particular activity to one's self-definition. These predictions have generally been supported (e.g., Beach et al., 1998; Noller, Conway, & Blakeley-Smith, 2008).

Other researchers have used experiments involving hypothetical situations to assess the effects of adult attachment style on perceptions of relationship partners and the emotional climate of relationships. In these studies (see Mikulincer & Shaver, 2007, for a review), respondents imagine themselves in a relationship with a hypothetical partner whose attachment characteristics are manipulated by the researchers. This method also allows researchers to evaluate how participants' own attachment characteristics influence their responses to targets with different attachment styles.

### *Studies Using the Standard Content Methodology*

Noller (1980b, 1984, 2001) used the standard content methodology, based on the work of Kahn (1970), to compare distressed and nondistressed couples in terms of their accuracy at understanding one another's nonverbal communication. Standard content methodology is ideal for this purpose, because participants use the same words to create messages with different meanings. Specifically, they are asked to create negative, neutral and positive messages, by changing the nonverbal behavior accompanying the words; their partners are then asked to "decode" the messages (that is, to say whether they are perceived to be negative, neutral or positive in tone). The validity of this methodology was supported by a laboratory study showing that much couple communication is characterized by neutral words, with the emotional tenor of the messages being conveyed by nonverbal behavior (Noller, 2001).

### *Summary of Experimental Methods*

Experiments are not widely used in family research, but are useful for elucidating patterns of association between family communication, and variables such as family functioning and child adjustment. Relevant methods include analog studies, descriptions of hypothetical situations, and tasks involving the standard content methodology.

### **Studies Combining Observational and Experimental Methods**

Some researchers have combined observational and experimental methods by manipulating the circumstances in which an interaction takes place, and observing the effects of manipulated variables (e.g., information about the purpose of the interaction, or instructions about how to relate to infants). For example, Stack and Arnold (1998) asked mothers to change their touch and hand gestures, and recorded the infant's responses to these changes. Similarly, Meltzoff and Moore (1979) conducted studies in which they instructed

mothers to behave in particular ways, and assessed the ability of young infants to imitate their mother's behavior.

Following the work of Raush and colleagues (1974), Feeney (1998) used relationship partners as confederates, instructing one member of the couple to act distant and the other to try to reconcile. The verbal and nonverbal behaviors of participants in each of the roles were then coded, and related to dimensions of attachment security. The effects of attachment security were stronger in these interactions than in a comparison condition, in which partners were primed to experience conflict over a less threatening topic (use of shared leisure time).

In a study involving parents and their sons, Jouriles and Farris (1992) manipulated the interactions of parents by having them engage in either conflictual or nonconflictual marital interactions. The researchers examined the effects of these interactions on parents' subsequent interactions with their sons. They showed that even this relatively brief and mild manipulation affected the interactions of these nonclinical families, although fortunately (given ethical considerations), the effects dissipated over time.

### *Summary of Research Combining Experimental and Observational Methods*

Some researchers combine observational and experimental methods, by manipulating instructions or procedures and observing the behavior elicited. Sometimes a member of the dyad or family group is used as a confederate and asked to behave in a particular way, so that researchers can study the impact of changes in behavior. This type of research may be particularly useful for studying behaviors that are unlikely to occur unsolicited in less structured interactions.

## **Multiple Methods and Sources**

In discussing observational methodologies, we have already noted that researchers may combine insider and outsider data, and observational and experimental methods. In addition, there are other examples of family communication research using two or more approaches to data collection.

### *Advantages of Combining Methods*

Multi-method research is increasingly popular: Nothing lends more credence to a research finding than demonstrating that the same results were found across samples and methodologies, particularly when the methodologies provide different types of information from different sources. As noted earlier, Christensen and colleagues have obtained both self-report and observational data on demand-withdraw communication; findings are generally similar across methods. For example, Noller and Christensen (see Feeney, Noller, Sheehan, & Peterson, 1999) coded the actual nonverbal behavior of couples, and related the frequency of particular behaviors to couples' ratings of demanding and withdrawing. More recently, Caughlin and Ramey (2005) conducted a comprehensive analysis of demand-withdraw in parent-adolescent dyads, using multiple measures: Demand-withdraw behavior during family members' laboratory-based discussion of conflict topics was rated by outsiders and insiders (both parent and adolescent), and insiders also provided retrospective reports of demand-withdraw over a longer (two-month) period.

Extending work on the distinction between insider and outsider data, Noller and Guthrie (1991) related this distinction to different types of data as explicated by Huston and Robins (1982). These researchers showed how the different types of data of interest to family communication researchers (subjective conditions, subjective events and interpersonal events) can be assessed using both insider and outsider data (see Table 2.1).

Noller and Roberts (2002) used multiple methods to assess conflict interaction, emotional experience, and emotional expression in couples. This study will be discussed in some detail, to highlight the advantages of the multi-method approach. Experience of emotion was assessed using self-report ratings and physiological measures; expression of emotion was assessed using outsiders' coding of behavior. Specifically, couples engaged in conflict interactions and provided continuous ratings of their subjective experience of anxiety, at the same time that their physiology was monitored. They also made global ratings of their emotional reactions using hand-held dials. After the session, trained experts coded videotapes of the interactions for behavior and affective displays. Table 2.2 shows how the various assessments used in this study fit into the categories discussed earlier; of the six categories, only outsider data on subjective conditions (which would involve outsiders rating global aspects of the relationship) were not obtained.

In this study, the researchers explored the conflict interactions using time-series analysis, relating participants' experience of anxiety to their own and their partners' behaviors (coded by outsiders). As noted earlier, examining sequence may be crucial when

Table 2.1 Integrative Framework for Describing Types of Data about Communication

<i>Types of information</i>			
Source of information	Subjective conditions	Subjective events	Interpersonal events
Insider	Self reports of attitudes to, and beliefs about, the relationship	Reports of feelings, intentions etc., of self and partner	Self-reports of behavior using video, diaries etc.
Outsider	Global judgments of relationship properties (e.g., satisfaction)	Ratings and judgments of feelings, intentions, etc.	Coding of behavior by trained coders or observers

Source: Noller and Guthrie (1991)

Table 2.2 Application of integrative framework to study of couple violence

<i>Type of information</i>			
Source of information	Subjective conditions	Subjective events	Interpersonal events
Insider	Self-report questionnaire measuring relationship satisfaction	Ratings of effect during interaction using hand-held dials	Reports of presence or absence of violence in the relationship
Outsider	(No measure of subjective conditions by outsiders)	Physiological responding using physiograph; ratings of affective displays by coders	Ratings of behavior by trained coders using the Couple Communication Scales

Source: Noller and Roberts (2002)

studying the conflict interactions of couples in violent relationships. These couples show greater temporal connection of behavior than those in nonviolent relationships, particularly reciprocation of negativity (e.g., Burman, Margolin, & John, 1993), suggesting that partners in violent relationships are more sensitive or reactive to each other's negative actions. Specifically, Noller and N. D. Roberts (2002) explored the effects of violence on the links between:

- a an individual's anxiety/arousal and the partner's subsequent anxiety/arousal;
- b an individual's behavior and the partner's subsequent anxiety/arousal;
- c an individual's anxiety/arousal and his or her own subsequent behavior
- d an individual's behavior and the partner's subsequent behavior.

The findings were further strengthened by using multiple measures of the extent to which one time-series could be predicted from another. For example, three measures of the extent to which females' anxiety/arousal could be predicted from the male partner's anxiety/arousal were initially created, one each for interbeat interval, skin conductance level, and self-reported anxiety. Likewise, three measures of the extent to which males' anxiety/arousal could be predicted from the female partner's anxiety/arousal were created. For each gender, the three measures of the predictability of anxiety/arousal were averaged to form an "emotional linkage" score. Thus, this final variable reflects emotional linkage between partners, as measured by a combination of self-reported anxiety and physiological arousal. Of course, combining measures in this way is only meaningful when physiological and self-report data show similar patterns of association with other variables. When such convergence exists, researchers can be confident in the reliability of summary measures and the robustness of their findings.

Multiple methods continue to be used in creative ways. For example, Verhofstadt, Buysse, Ickes, de Clercq, and Peene (2005) randomly assigned couples to a conflict condition (discussion of a marital problem) or a support condition (discussion of a personal problem). Coding by trained observers indicated that the support condition was characterized by less blame and invalidation, and by more facilitation behavior (e.g., assent). Withdrawal levels, however, were similar in both conditions. As well as using experimentation and observation, this study used questionnaires to assess on-line cognitions; in this way, the researchers assessed whether particular behaviors, as rated by outsiders, were more likely than others to have an impact on partners' on-line cognitions.

### *Developments in Analyzing Data from Multiple Sources*

Interaction between partners is the very essence of close relationships. Hence, as we have noted, the study of family communication often involves interaction being described by two or more family members, and perhaps by outsiders as well. Because such data sets involve an event or target being described by more than one person (or more than one method), they violate the statistical assumption of independence of observations, and require special analytic techniques (Gonzalez & Griffin, 2000).

Although a comprehensive discussion of these techniques cannot be offered here, one development increasingly applied to couple data is worth noting; namely, the actor-partner interdependence model (APIM). As Kashy and Kenny (2000) discussed, relationship researchers often deal with "mixed" independent variables, such as marital intimacy; that is, variables for which variation exists both within the dyad and between dyads. For

these variables, APIM analyses can be used to separate out the *actor effect* (e.g., the effect of partner A's intimacy on A's score on the outcome variable), and the *partner effect* (the effect of partner A's intimacy on B's score on the outcome variable).

A recent application of this technique is a study by Karantzas, Feeney, McCabe and Goncalves (unpublished manuscript). This study examined the role of attachment insecurity (anxiety and avoidance) and trust as predictors of conflict-centered communication. Attachment insecurity had pervasive *actor effects*, with anxiety and avoidance predicting low levels of trust for both men and women; in turn, lack of trust predicted destructive conflict-centered communication for both genders. In terms of *partner effects*, attachment anxiety was associated with partners' reports of destructive conflict-centered communication, but not with partner's trust.

These findings raise interesting questions. For example, why is attachment anxiety detrimental to the individual's (actor's) trust and to the partner's perception of communication, but not to the partner's trust? The findings probably reflect the strategies associated with attachment insecurity. For example, individuals high in attachment anxiety tend to be very dependent; they seek constant reassurance of partners' love, and monitor their behavior for signs of disaffection. Although this wary and distrustful relational style tends to be frustrating for the partner, it signals that the anxious individual values the relationship and wants it to continue; hence, distrust is unlikely to be one of the problems associated with partnering an anxious individual. More generally, this type of statistical model may clarify the ways in which relationship attitudes and behaviors impact on the individual's versus the partner's experience of interaction, and identify critical variables that shape communication patterns.

### Summary and Conclusions

Research employing multiple measures can be used effectively to study the complex phenomenon that is family communication. While some excellent research has been conducted, more work is needed that combines insider and outsider data, and takes full advantage of the diverse methods available. Using multiple approaches to data collection can help offset the shortcomings of any given method, and achieve a better understanding of family communication.

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