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<https://doi.org/10.15760/etd.2577>

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AN ABSTRACT OF THE THESIS OF Carol Ann Bloom for the Master of Science
in Speech-Communication presented August 4, 1976.

Title: The Assessment of Interviewee Experience of the Expressive
and Interpersonal Meanings of Interviewer Nonverbal Behavior.

APPROVED BY MEMBERS OF THE THESIS COMMITTEE:

Theodore Grove, Chairman

Robert Vogelsang

Larry Steward

Barry Anderson

The present study investigated the expressive and interpersonal functioning of nonverbal behavior within a dyadic relationship. A questionnaire derived from the Interpersonal Perception Method of Laing, Phillipson, and Lee (1966) was developed to assess the impact of an interviewer's nonverbal behavior on the interviewee's experience of herself, the interviewer, and their relationship.

To determine this impact and evaluate the usefulness of the instrument, two interviewer nonverbal behavior sets were defined. Two female interviewers interviewed a total of sixteen female interviewees for each

behavior set, using the same verbal style and interview format throughout each one-time interview. The interviewees then filled out the questionnaire which consisted of 160 statements constructed from five categories of issues and four relational phases. The interviewees endorsed each statement along an evaluative, true-false continuum. The interviewees' responses to the items were grouped according to phase, category, and behavioral set.

The significant within-instrument variation among phases and categories suggested that the instrument was sensitive to the impact of verbal behavior, interviewee expectations, and experimental context, as well as nonverbal behavior. Its usefulness in assessing the experience of the interviewee was thereby confirmed, but limited by the interview conditions of the present study. The significant differences found between the behavior sets within each phase and category validated their previously established impacts. These results provided further evidence that nonverbal behavior functions as a qualifier of verbal behavior.

THE ASSESSMENT OF INTERVIEWEE EXPERIENCE
OF THE EXPRESSIVE AND INTERPERSONAL MEANINGS OF
INTERVIEWER NONVERBAL BEHAVIOR

by

CAROL ANN BLOOM

A thesis submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE
in
SPEECH-COMMUNICATION

Portland State University
1977

TO THE OFFICE OF GRADUATE STUDIES AND RESEARCH:

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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER	
I REVIEW OF THE LITERATURE	1
Basic Functions of Nonverbal Behavior	1
Focus and Methodology of Previous Research	3
Purpose of the Present Study	6
Summary of the Present Study	7
Nonverbal Interviewer Behavior Sets	7
Verbal Interviewer Style	10
Assessment of Interviewee Perceptions	12
The Interpersonal Experience Questionnaire	14
Hypotheses	15
II METHOD	17
Subjects	18
The Marlowe-Crowne Social Desirability Inventory	18
Interviewers	19
Interview Format	20
Interviewer Training	21
Pilot Interviews	23
The Interpersonal Experience Questionnaire	24

CHAPTER

PAGE

Setting	26
Procedure	26
Method of Analysis	28
Pilot Data	
Interviewer Effect	
Homogeneity of Variance	
Analysis of Variance	
Follow-up Tests of Significance	
Analysis of Covariance	
Post-Experimental Survey	
III RESULTS	35
Pilot Data	35
Interviewer Effect	38
Homogeneity of Variance	38
Analysis of Variance	39
Follow-up Tests of Significance	40
Phases	
Categories	
Phase-Category Interaction	
Treatment-Category Interaction	
Treatment-Phase Interaction	
Analysis of Covariance	48
Post-Experimental Survey	49
IV DISCUSSION	52
Establishing the Nonverbal Conditions	52
Establishing the Verbal Condition	54
Impact of Interviewer Nonverbal Behavior	57
Within Instrument Variation	60

CHAPTER

PAGE

Interpretations	62
The Relationship Variables: Overview	
Phases	
Categories	
Treatments	
Limitations, Implications, and Suggestions for Further Research	76
Receiver Assessment of Nonverbal Statements	
Assessment and Context	
The Relationship Variables	
The Interpersonal Experience Questionnaire	
Summary	92
REFERENCES	97
APPENDICES	103
Appendix A: Rater Questionnaire	104
Appendix B: Interviewer Verbal Behaviors	107
Appendix C: The Interpersonal Experience Questionnaire	109
Appendix D: Laing's Classification of the Forty Issues Used on the IEQ	116
Appendix E: Recruiting Speech	113
Appendix F: Initial Questionnaire	119
Appendix G: Interview Format	123
Appendix H: Interviewee Briefing and Advice of Ethical Considerations	125
Appendix I: Interviewee Instructions for the IEQ	127
Appendix J: Final Post-Experimental Survey	128

LIST OF TABLES

TABLE	PAGE
<p>I Kendall's Coefficient of Concordance among the Three Raters of the Pilot Interviews for Each Item of the Rater Questionnaire</p>	36
<p>II Fisher Exact Probability Contingency Tables and Modal Scores for the Three Categories of Items on the Rater Questionnaire</p>	37
<p>III Analysis of Variance Results for Treatment, Phase, and Category Totals on the IEQ (N=16)</p>	39
<p>IV Summary Table of IEQ Results for the Treatment-Phase Interaction in the Analysis of Variance including Treatment and Phase Totals</p>	41
<p>V Duncan's Multiple Range Test Results for the Category Main Effect in the Analysis of Variance</p>	42
<p>VI Duncan's New Multiple Range Test Results for the Phase-Category Interaction of the Analysis of Variance</p>	43
<p>VII Summary Table of the IEQ Results for the Phase-Category Interaction of the Analysis of Variance</p>	44
<p>VIII Duncan's Multiple Range Test Results for the Treatment-Category Interaction in the Analysis of Variance</p>	46
<p>IX Summary Table of the IEQ Results for the Treatment-Category Interaction in the Analysis of Variance</p>	46

TABLE

X	Duncan's Multiple Range Test Results for the Treatment-Phase Interaction in the Analysis of Variance	47
XI	Results of Analysis of Covariance of Marlowe-Crowne Social Desirability Scores with IEQ Scores (N=16) . .	48
XII	Summary of Results for Post-Experimental Survey Including Per Item Treatment Means and Modal Scores	50
XIII	Summary Table for the IEQ Results in the Self-Other, Other-Self, and Other-Other phases of the Treatment-Phase-Category Interaction	74

LIST OF FIGURES

FIGURE	PAGE
1 Scaling of items on the IEQ	15
2 Three factor, split-plot design with repeated measures on phase and category	31
3 Source table for a three way analysis of variance on a three factor, split-plot fixed model design with repeated measures on phase and category	33

CHAPTER I

REVIEW OF THE LITERATURE

Human nonverbal behavior could be said to encompass all the things which people do with their bodies--including how they arrange themselves and their environment--as opposed to the nature of the content of what people say. Reports of research into the function of nonverbal behaviors constitute a sizable body of literature in the journals of communication, social and clinical psychology, and anthropology over the past ten years. Nonverbal behaviors investigated include an individual's use of his voice, eyes, face, limbs, torso, and even position in relation to others. The growing interest in studying the area of nonverbal behavior reflects the recognition by professionals in the human sciences of its importance for the understanding of human affairs and its potential as a facilitator of both constructive and destructive human interaction. Applied areas include effective psychotherapy, the understanding of family communication patterns which foster a schizophrenic adaptation in young children, and facilitating awareness of the dynamics of advertising.

I BASIC FUNCTIONS OF NONVERBAL BEHAVIOR

Ekman and Friesen (1968) have listed five primary functions of nonverbal behavior. According to them, nonverbal behavior can reflect the state and process of interpersonal relationship and metacommunicate about verbal statements. Such metacommunication usually involves making

nonverbal "statements" which in some way comment on the verbal statements they accompany. Nonverbal behavior can also function as an expression of emotion or a display of unconscious attitudes about self and others. Finally, it can serve as a "leakage channel" through which deception can be recognized.

The first two functions could be classified as the interpersonal meanings of nonverbal behavior. In both cases, a nonverbal "statement" is being made about the relationship (Watzlawick, Beavin, and Jackson 1967). A nonverbal communication about the relationship is one which defines the nature of one person's association with another in that moment. Such a nonverbal communication might be verbally translated into something like "I feel relaxed with you and regard you as non-threatening; this is a relationship where you can be trusted and I am safe". A statement about the relationship is also being made in the following example of a nonverbal metacommunication: "I am not sure about what I just said or how you will receive it; this is a relationship where I am on uncertain ground and you are one I must be on my guard with". While controlling the process of interaction, the following nonverbal communication defines the nature of the relationship in that moment: "I want to cut off interaction with you now and disengage from this relationship".

The second two functions could be classified as the expressive meanings of nonverbal behavior. In both cases, a nonverbal "statement" is being made about the internal state or disposition of a person towards himself, another person, or thing. An example of a nonverbal communication reflecting an emotional state might be translated into "I am scared". The following are suggested verbal translations of

nonverbal "statements" of disposition toward self, other, and thing: "I'm proud of my physique", "You are a cold individual", and "I like your hat".

The last "leakage channel" function could be seen as a combination of both meanings. Its expressive meaning might be illustrated in a statement like "I am nervous". Its interpersonal meaning would be illustrated in a statement like "This is a relationship where I am not safe and you can expose my deception".

II FOCUS AND METHODOLOGY OF PREVIOUS RESEARCH

Cline (1956), Frijda (1958), Scheflen (1963), Charney (1966), and Watzlawick, Beavin, and Jackson (1967), among others, have suggested that the functions of nonverbal behavior must be assessed and understood in the context of an interaction between individuals. For example, even using static drawings of faces, Cline (1956) discovered that the interpretation of a smiling, glum, or frowning face varied with the face with which it was paired. A smile was seen as dominant, vicious, and gloating when paired with the glum expression, but was seen as peaceful, friendly, and helpful when paired with a frown.

Even so, a great deal of the research done on the expressive meanings of nonverbal behavior has taken the behavior out of context (Engen, Levy, and Schlosberg 1958; Abelson and Sernat 1962; Thompson and Meltzer 1964; Ekman 1964; Mehrabian and Ferris 1967; Shapiro 1968; Beakel and Mehrabian 1969; Bugenthal, Kaswan, and Love 1971). The methods used involved the isolation of a single voice, face, and/or body in the form of a drawing, photograph, film, tape, or live actor. This was followed by the evaluation of the stimulus by judges who had not interacted

with nor observed it in interaction.

The studies of nonverbal behavior in the context of interaction have usually employed some form of interview between two individuals and focussed on both the expressive and interpersonal meanings of nonverbal behavior. The expressive functions were usually evaluated in one of three ways. Some studies assessed an interviewee's reaction to an interviewer's nonverbal behavior using a post-interview inventory (Reece and Whitman 1961; Little 1965; Machotka 1965; Heller, Davis, and Myers 1966; Felipe and Sommer 1966; Sarason and Winkel 1966; Exline and Eldridge 1967; Mehrabian 1967; Pope and Siegman 1968). These inventories were composed of Likert-type scales along which the interviewer was rated from global positive dimensions, such as warmth and support, to negative ones, such as unfriendliness.

In other studies, the behavior of an interviewee was observed during his interaction with an attractive or unattractive interviewer (Exline, Gray, and Schuette 1965; Rosenfield 1965; Mehrabian 1968). Using a third method, judges observed an interview between an interviewer and interviewee in person or on video tape (Reece and Whitman 1962; Ganzer and Sarason 1964; Argyle and Dean 1965; Condon and Ogston 1966; Felipe and Sommer 1966; Sarason and Winkel 1966; Exline and Messick 1967; Exline 1968; Heller and Jacobsen 1971; Waldron 1973). In some cases, the judges noted the interviewee's verbal or nonverbal response to the interviewer's nonverbal or verbal style, respectively. In others, the pairing of the interviewee's verbal and nonverbal responses to the interviewer was observed. In both cases, inferences were drawn on the basis of data collected from the judges' observations.

Pairing of Interviewer + Interviewee Responses

Focus on the interpersonal meanings of nonverbal behavior usually centered on one of three functions. First, the regulatory function refers to the nonverbal control of verbal flow and content. For example, nonverbal cues have been shown to signal the beginning or end of a point and engagement or disengagement from interaction, as well as to encourage positive or negative self-disclosure and invite or discourage verbal activity (Reece and Whitman 1962; Heller, Davis, and Myers 1963; Ganzer and Sarason 1964; Argyle and Dean 1965; Schefflen 1965; Charney 1966; Condon and Ogston 1966; Felipe and Sommer 1966; Sarason and Winkel 1966; Exline and Messick 1967; Kendon 1967; Exline 1968; Pope and Siegman 1968; Heller and Jacobsen 1971; Sarason and Ganzer 1971; Waldron 1973).

Second, how nonverbal behavior reflects the state of a relationship has been investigated in studies which focus on the amount and kind of affiliation between interviewer and interviewee. Kinds of affiliation have included equal and unequal status, dependency, dominance, and degree of intimacy (Cline 1956; Mahl 1956; Hearn 1957; Argyle and Dean 1965; Rosenfield 1965; Schefflen 1965; Charney 1966; Heller 1966; Heller 1968; Mehrabian 1968; Mehrabian and Friar 1969; Tognali 1969; Reynolds 1973; Waldron 1973).

Third, the relationship between one nonverbal behavior and another has also been studied (Argyle and Dean 1965; Charney 1966; Heller 1968). For example, the angle at which one person faces another tends to increase as he gets closer to the other as demonstrated by Argyle and Dean (1965).

The interpersonal meanings of nonverbal behavior in the three classes of studies presented above were usually inferred from judges' assessments of video taped psychotherapeutic or constructed interviews using some kind of interaction and content analysis. This kind of analysis

involved the counting of verbal and nonverbal behaviors and the recording of the sequence in which they occurred in relation to one another. These inferences were sometimes corroborated by the interviewee's responses to a post-interview attitudinal questionnaire which assessed his positive and negative responses to the interviewer and the interview.

III PURPOSE OF THE PRESENT STUDY

As previously discussed in this chapter (Sec. I, p. 2), a sender's nonverbal behavior can be said to convey expressive and interpersonal messages to a receiver. Researchers have primarily inferred expressive and interpersonal meanings of nonverbal behavior within an interaction from the observations they have made of a receiver's verbal and nonverbal responses to a sender. In studies where the meanings of a sender's nonverbal messages were directly assessed by the receiver, they were usually evaluated along global dimensions, such as supportive-nonsupportive, or in terms of general attitudes and feelings elicited in the receiver by the sender's behavior such as like-dislike.

The question which inspired the present study was: could a participant in a relationship directly discriminate subtle disposition and relationship statements communicated by a particular set of nonverbal behaviors? Disposition and relationship statements were defined earlier in this chapter (Sec. I, p. 2).

The present study, therefore, had a dual purpose. First, the nature of the discriminations made by a receiver of nonverbal messages with regard to their meaning for and impact on the receiver was investigated. Second, the effectiveness of the instrument used in the present study to assess the experience of the receiver was evaluated.

IV SUMMARY OF THE PRESENT STUDY

In the present study, a short interview was set up between an interviewer and each subject. During each interview, the interviewer displayed one of two different sets of nonverbal behavior and a consistent verbal style. After her interview, each subject responded to a questionnaire designed to assess her perceptions of herself, the interviewer, and the relationship between them. This assessment was made around such issues as confusion, understanding, responsibility, and detachment. A short post-experimental survey was then administered to each subject to assess her general experience of the entire experimental situation.

V NONVERBAL INTERVIEWER BEHAVIOR SETS

Waldron (1973) recently demonstrated that two opposing sets of interviewer nonverbal behavior elicited significantly different verbal and nonverbal responses from the interviewee. The two sets of behaviors used in the present study were drawn from those used by Waldron. He labelled these sets of behaviors as "rapport encouraging" and "rapport discouraging" (see Appendix A).

The behaviors included in the "rapport encouraging" set of the present study were those which the literature supports as conveying positive regard. Positive regard reflects respect, liking, warmth, comfort, interest, and involvement.

Smiling, eye contact, and forward postural lean have been shown to have a positive impact (James 1932; Schefflen 1964; Argyle and Dean 1965; Exline and Winters 1965; Heller, Davis, and Myers 1966; Reece and Whitman 1966; Mehrabian 1969, 1970; Bayes 1970).

Also included in this set were comfortably close position distance (Schefflen 1963; Little 1965; Mehrabian 1968; Guardo 1969) and direct body orientation (Schefflen 1963; Mehrabian 1970). Asymmetry and openness of limbs (Schefflen 1963; Machotka 1965; Mehrabian 1970) and relaxed limbs and posture (Reece and Whitman 1962; Mehrabian 1969, 1970) completed the set of rapport encouraging behaviors.

In addition to conveying positive regard, behavior in the rapport encouraging set has been demonstrated to have the following positive impacts. Argyle and Dean (1965) have shown that these behaviors indicate that communication channels are open, and James (1932) has shown that they accompany the approaching of one person by another. They also convey support (Charney 1966), and understanding, acceptance, and responsiveness (Pope and Siegman 1968).

When employed by an interviewer, rapport encouraging behavior tended to elicit rapport (Waldron 1973), liking (Heller, Davis, and Myers 1966), independence (Heller and Jacobsen 1971), and less verbal anxiety (Waldron 1973) from the interviewee. Charney (1966) found that the interviewee displayed more awareness and clear thinking. Waldron (1973) demonstrated that the interviewee produced more genuineness, verbal productivity, self-consciousness, and positive self-disclosure. Positive self-disclosure refers to statements of adequacies, resolved conflicts, strengths, and absence of concerns.

The behaviors included in the "rapport discouraging" set were those which the same literature demonstrates as having the opposite overall impact on the interviewee. The set is composed of a serious face, lack of eye contact, backward postural lean, formal position distance, symmetry and closed limbs, indirect body orientation, and tense limbs and

posture. These behaviors convey more negative regard reflecting lack of respect, dislike, coolness, discomfort, apathy, and detachment.

In addition to conveying negative regard, behavior in the rapport discouraging set has been demonstrated to have the following impacts. Scheflen (1963) found these behaviors to indicate avoidance, passivity, disengagement, and ⁵⁸dissociation. Mehrabian (1970) found them to convey a negative attitude and higher status.

When used by an interviewer, rapport discouraging behavior has been found to elicit responses from dependent people and dependence, requests for feedback, and a desire to clarify one's own position from the interviewee (Heller, 1968; Heller and Jacobsen 1971). Charney (1966) demonstrated that interviewees produced self-contradictory, self-denigrating, and ambiguous statements. Other research has shown that rapport discouraging behavior elicits discussion of more personally meaningful problems, conflicts, weaknesses, concerns, unfavorable qualities, and difficult topics (Ganzer and Sarason 1964; Heller, Davis, and Myers 1966; Sarason and Winkel 1966; Waldron 1973). Waldron (1973) also found that interviewees produced more verbal anxiety than in the rapport encouraging set. Finally, Heller, Davis, and Myers (1966) found that dislike for the interviewer was elicited.

In addition, there is evidence to support that individuals tend to match intimacy level (Jourard 1959; Jourard and Landsman 1960; Resnick 1968; Tognali 1969) and the degree of warmth or liking of the other interactant (Heller 1963, 1966; Blumberg 1967; Mitchell 1971). Therefore, it is expected that the interviewees will have reciprocal responses to the interviewer. That is, they will respond positively when the interviewer

displays rapport encouraging behavior and negatively when she displays rapport discouraging behavior.

VI VERBAL INTERVIEWER STYLE

There is much research to support that an interviewer's verbal style has an impact on the interviewee's behavior and experience of the interviewer. Because the focus of the present study was on the impact of the sender's nonverbal behavior, the interviewer's verbal behavior was kept as consistent as possible over the two nonverbal treatments.

An attempt was made to select a verbal style for the interviewer which would provide the subject with considerably less information about the interviewer and the relationship than that provided by the interviewer's nonverbal behavior. Therefore, behaviors which would disclose unambiguous verbal information about the interviewer's feelings, attitudes, or point of view were not used. Examples of excluded behaviors were paraphrasing, interpreting, reflecting feelings, and self-disclosure (Ivey, Normington, Miller, Morrill, and Haas 1968; Ivey, Morrill, Phillips, and Lockhard 1969; Moreland and Ivey 1969).

At the same time, the verbal style used was also intended to keep the interviewee personally involved in the interview and her relationship with the interviewer. Therefore, the verbal behaviors chosen were demonstrated in the literature to be effective in eliciting open, spontaneous, personally meaningful, and productive verbal activity from the interviewee (Waldron 1973). Unlike the behaviors discussed above, these were intended to provide the subject with, at best, ambiguous information about the interviewer and the relationship (see Appendix B).

Single, open-ended questions allowed the interviewee to choose what she'd like to talk about within a defined topic area and required more than a one or two word response. For example, "What kinds of experiences did you have with your high school teachers?". (Richardson, Dohrenwend, and Klein 1965; Pope and Siegman 1968; Phillips, Lockhard, and Moreland 1969; Banaka 1971; Waldron 1973). Follow-up questions related to the interviewee's chosen topic and encouraged her to go further with it. For example, "How did that effect your experience in school?" (Ivey, Normington, Miller, Morrill, and Haas 1968).

Unstructured encouragements like "mm-hmm", "go on", and "I see" were one or two word statements which prompted the interviewee to continue talking (Phillips, Lockhard, and Moreland 1969a). Refocusing questions like "How did that make you feel?" were also used to get the interviewee to refocus on herself and her experiences when she went off on a less personal tangent.

Research has shown that low verbal interviewer activity elicits strain in the interviewee and high verbal interviewer activity curtails interviewee involvement (Heller, Davis, and Myers 1966). Therefore, the interviewer in the present study attempted to maintain a moderate level of verbal activity. This meant that using unstructured encouragements and refocusing questions when necessary, the interviewer allowed the subject to exhaust a topic before directing her on to the next one. When the subject appeared to be "hung up" on a topic by falling silent, repeating herself, or becoming intensely emotionally involved, the interviewer provided her with an open-ended or follow-up question.

The errors in the assumptions made about the impact of the verbal style described above are discussed in Chapter IV.

VII ASSESSMENT OF INTERVIEWEE PERCEPTIONS

The present study attempted to assess the subtlety of discrimination in the interviewee's perceptions of interviewer nonverbal behavior. As previously discussed in this chapter (Sec. I, p. 1-2), Ekman and Friesen (1968) have shown nonverbal behavior to communicate information concerning the state and process of relationship (interpersonal meanings) and unconscious attitudes about self and other (expressive meanings). In order to reflect these dimensions of the nonverbal behavior presented to the subject, an instrument was used which asked the interviewee to discriminate between issues stated in each of four relational phases. These issues and phases will be described below. The instrument used was referred to as the Interpersonal Experience Questionnaire or IEQ (see Appendix C).

The IEQ was drawn from one section of an instrument called the Interpersonal Perception Method or IPM. The IPM was designed by Laing, Phillipson, and Lee (1966) to assess the entire interpersonal experience of both members of an intimate, long-term dyadic relationship. It has been used successfully in clinical settings with married and divorced couples.

The relational phases used in both the IPM and IEQ reflected four dimensions of a person's experience of himself and the other within a dyadic relationship. The first dimension consisted of statements of self in relation to self, e.g. "I am responsible for myself". The second consisted of statements of self in relation to other, e.g. "I am responsible for her". The third included statements of other in relation to self, e.g. "She is responsible for me". The fourth contained statements of other in relation to other, e.g. "She is responsible for herself".

Each of these phases was stated in terms of an issue, such as "is responsible for" in the above examples (see Appendix D). Issues were defined by Laing et al (1966) as phrases that can be used to express interaction with self or with other. On the IPM and IEQ, each issue was stated in terms of each relational phase.

Laing, Phillipson, and Lee (1966) grouped the issues used in the IPM into six categories which they derived from their clinical experience with intimate dyads. Issues placed in the Interdependence and Autonomy category expressed genuine "mutuality" of relationships based on responsive acceptance of self and other as a human being and on each having a source of strength from within themselves. Issues placed in the Warm Concern and Support category expressed active caring for self and other without the explicit feeling of separateness reflected in the Autonomy category.

The issues in the Disparagement and Disappointment category represented an ample scope of items explicitly expressing negative viewpoints which indicate dissatisfaction with self and/or other. Issues in the Contention: Fight or Flight category focussed on open conflict and competition, and ways of coping with it based on aggression or withdrawal (Bion 1961). As opposed to the open warfare admitted to in the Contention category, issues in the Contradiction and Confusion category represented perceptions of masked conflict and ensuing confusion (Laing 1965). Finally, issues in the Extreme Denial of Autonomy category expressed the perception of being unwillingly engulfed or engulfing others or part of oneself.

The IPM has been used to investigate the dynamics of disturbed and nondisturbed marital relationships and the impact of short-term therapy

with disturbed couples (Laing et al 1966). No published evidence was found to indicate that the IPM has actually been employed in any other capacity than as a clinical and research tool with marital dyads in a clinical setting.

VIII THE INTERPERSONAL EXPERIENCE QUESTIONNAIRE

The instrument used in the present study, the IEQ, was drawn from the Interpersonal Perception Method because the IPM was set up to measure the kind of interpersonal and intrapersonal experience under investigation here. For the present questionnaire, some of the issues used on the IPM were eliminated on the basis of their inappropriateness for nonintimate, same-sex, short-term dyads. The remaining issues fell into five of Laing's six categories (see Appendix D). All the issues in the Extreme Denial of Autonomy category were eliminated. To determine whether or not the two sets of interviewer behavior had a differential impact on the experience of the interviewee, Laing's categories were used to group the issues according to content to facilitate data analysis.

As in the IPM, the Interpersonal Experience Questionnaire made use of four statements corresponding to the four relational phases built around each of the issues employed. Each statement was scored by each subject on a true/false or false/true continuum from 1 to 4. Some of the items on the IEQ were stated in a positive direction, e.g. "She likes me". Others were stated in a negative direction, e.g. "She confuses me". Positive statements indicated perceptions of self, other, or relationship based on acceptance, warmth, concern, involvement, comfort, liking, respect, strengths, or lack of conflict. Negative statements reflected nonacceptance, coolness, apathy, distance, discomfort, dislike, lack of respect,

weakness, or conflict. The continuum on each IEQ items was scaled so that a low score would reflect endorsement of a positive or denial of a negative statement. A high score would reflect endorsement of a negative or denial of a positive statement. In this way, the item scores could be totalled and compared with other total scores along the positive-negative dimension as shown below.

	<u>Positive Issue</u> e.g. "She likes me"	<u>Negative Issue</u> e.g. "She confuses me"	
1	true	false	4
4	false	true	1

Figure 1. Scaling of items on the IEQ

IX HYPOTHESES

The nonverbal behaviors selected for the interviewer's rapport encouraging set were chosen for their positive impact as previously defined in this chapter (Sec. V, p. 7-10). The behaviors for the rapport discouraging set were chosen for their negative impact which was defined in the same section. The items on the IEQ were scaled so that low scores would reflect positive interviewee perceptions as described in the preceding section. High scores were scaled to reflect negative perceptions.

It was assumed that the subjects in the present study would experience the rapport encouraging set of nonverbal behaviors positively and the rapport discouraging set of behaviors negatively. It was further assumed that the subjects would be able to make the perceptual discriminations required by the IEQ. Finally, the assumption was made that these discriminations would reflect the difference in the subjects' experiences of the different behavior sets.

The hypotheses for the present study were based on the above assumptions. Therefore, the following hypotheses were made for the four relational phases and five issue categories on the IEQ.

1. The total score for the items within each relational phase will be significantly lower in response to the rapport encouraging behaviors than rapport discouraging behaviors.
2. The total score for the items within each issue category will be significantly lower in response to the rapport encouraging behaviors than rapport discouraging behaviors.

CHAPTER II

METHOD

Two female interviewers were trained in the presentation of two different sets of nonverbal behavior, one verbal style, and an interview format. Prior to the running of subjects, the interviewers' performance was checked out in pilot interviews by a panel of judges. Thirty-two female students were recruited as subjects within the context of an investigation of the feelings and experiences of Portland State University women. Prior to their participation in the study, each subject was administered an inventory to determine the extent of her need to make socially acceptable test responses.

Each female student was brought into a twenty minute interview with a female interviewer who was a stranger to them. During the interview in which the interviewer asked the interviewee questions about her high school and college experiences, the interviewer maintained one of the two different nonverbal styles and the single verbal style. At the end of the interview, the interviewee filled out a questionnaire designed to assess her experience of herself, the interviewer, and their relationship. The interviewee was then administered a follow-up poll to obtain her overall reactions to the experimental situation.

The data obtained from the questionnaire was analyzed using an analysis of variance on a three factor split plot factorial design with repeated measures on two factors. An analysis of covariance using the data from the preliminary inventory was made to account for the possible

influence of subject defensiveness on the results. Follow-up tests of significance were performed to explore significant main effects and interactions in the analysis of variance. The data from the post-experimental poll was reviewed and examined.

I SUBJECTS

The subjects interviewed in the present study were drawn from the female undergraduate students in communication, psychology, and sociology classes at Portland State University, Portland, Oregon. Each interviewee (EE) met several criteria. All EEs were Caucasian and between the ages of 18 and 25 years. All EEs volunteered to participate in response to the same recruiting speech (see Appendix E). At that time, each EE filled out a short demographic questionnaire and Crowne and Marlowe's (1960) Social Desirability Inventory (see Appendix F). None of the EEs were informed of the Inventory results prior to the interview.

All EEs were unaware of the purpose and design of the present study. Each EE agreed to have her interview taped, and all EEs were unacquainted with the interviewers prior to their participation in the present study. Sixteen EEs served as subjects in each of the two nonverbal interviewer behavior sets. A total of thirty-two subjects were used for the final data analysis.

II THE MARLOWE-CROWNE SOCIAL DESIRABILITY INVENTORY

The Marlowe-Crowne Social Desirability Inventory was a scale for the measurement of defensiveness and desire to look good according to cultural sanctions for behavior. According to Crowne and Marlowe (1960), the

effectiveness of previous scales for assessing the subject's need to make socially desirable responses in test situations was limited by the pathology implied in some item content. For example, subjects' denials of an item that states that their sleep is fitful and disturbed may be attributable to the absence of the symptom rather than the desire to look good.

The items on the inventory were drawn from current personality inventories according to a criterion of cultural approval and minimal pathological implications when endorsed in either direction. Significant correlations were found with the validity scales of the Minnesota Multiphasic Personality Inventory (MMPI). These scales assess test-taking attitude and tendency to fake bad or good. Correlations with the clinical scales of the MMPI which assess pathology were generally nonsignificant.

The internal consistency coefficient of .88 was obtained for thirty-nine undergraduate students between the ages of 19 and 46 years. A test-retest correlation of .89 was obtained for thirty-one of those students who retook the test one month later.

III INTERVIEWERS

Research has provided evidence that nonverbal behavior can be learned through training, and behavior thus learned can produce the same impact as the same behavior occurring "naturally" or spontaneously (Albert and Dobbs 1970; Cherry 1972; Kuhner 1972; Waldron 1973). Therefore, the nonverbal stimuli for the EEs' perceptions as assessed in the present study were provided by interviewers (ERs) trained in two specific and different behavioral sets.

One paid Caucasian female, 33 years old, and the experimenter, Caucasian and 24 years old, served as interviewers in both sets of nonverbal

treatments studied in the present experiment. Each ER interviewed eight of the sixteen subjects in each behavior set.

The paid ER had been previously trained in nonverbal behavior sets similar to those used in the present study (Waldron 1973). The experimenter had not. Neither ER had been trained to maintain the verbal style required for the present study. After training sessions in verbal and nonverbal skills, consistency between the ERs on each nonverbal behavior set was rated prior to the interviews (see Appendix A). Also rated were consistency within and between each ER on verbal style and differentiation within each ER between the two nonverbal behavior sets. The results of these ratings are discussed in Chapter III.

Both ERs were familiar with the purpose and design of the present study.

IV INTERVIEW FORMAT

The total interview lasted twenty-five minutes. The first five minutes were considered a "warm-up" period for the ER and EE. During this time, the ER asked the EE light conversational questions about herself and her current activities in and out of school (see Appendix G).

In the remaining twenty minutes, the ER introduced topics for the EE to respond to regarding her personal experiences in high school and college. Although the interview was based on a pre-determined list of topic areas (see Appendix G), the actual content of the interview depended on the EE and ER. The ER proceeded from one topic to the next as the EE exhausted her personal thoughts and feelings on the previous topic without becoming deeply emotionally involved.

The ER remained in role throughout the entire twenty-five minute interview. That is, she maintained the appropriate nonverbal behavior set and verbal style as trained.

V INTERVIEWER TRAINING

After being advised of the purpose of the present study, the paid ER trained the experimenter (E) in the rapport encouraging and discouraging nonverbal behavior sets used in Waldron's 1973 study. Behavioral congruence/incongruence between EE and ER, and relaxed natural/cold objective voice were eliminated as part of the sets used in the present study. Training was accomplished through explanation and demonstration by the paid ER, imitation by the E, and role-playing where one interviewer played the interviewee.

For the rapport encouraging treatment, the ER positioned her chair a "friendly" distance, between 4 and 5 feet, from the EE's chair. She smiled often and maintained frequent eye contact with the EE. She leaned slightly forward in her chair (no more than 25° from a straight-up position) and faced the EE almost directly with head and body (not exceeding 15° from a head-on position). The ER kept her face and body relaxed and open. This meant an absence of nervous gestures, like foot-shaking, and tightness in the muscles. She sat with her legs and arms uncrossed and positioned slightly differently from each other (see Appendix A).

For the rapport discouraging treatment, the ER placed her chair at a more "formal" distance from the EE, approximately 6 to 8 feet. She rarely smiled and established eye contact with the EE infrequently. She leaned slightly backward in her chair (between 10° and 30° from a

straight-up position) and turned away from the EE with her head and body at about a 45° angle. The ER allowed her face and body to appear tense and closed by maintaining tightness in her muscles. She sat with her arms and legs crossed in a symmetrical fashion (see Appendix A).

The two ERs also reviewed the interview format together and discussed the verbal style described in Chapter I (Sec. VI, p. 10-11). Through explanation and review of many examples, the ERs came to a mutual understanding and agreement on what verbal behaviors constitute a single open-ended question, a follow-up question, a refocusing question, and an unstructured encouragement (see Appendix B).

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needs to be
done

Through role-playing possible interviews using the interview format, the ERs also established decision rules for maintaining moderate verbal activity and keeping the interview focussed on the EE's personal experience, feelings, and ideas without her becoming deeply emotionally involved. A moderate level of verbal activity consisted of two aspects. First, the ER introduced and allowed the EE to exhaust a topic with unstructured encouragement before going on to a new one. Second, the ER provided some structure with one of the verbal behaviors listed above when the EE appeared to be "hung-up" on a topic. The cues for the EE's being hung-up were defined as her falling silent, repeating herself, going off on a less personal tangent, or becoming highly emotionally involved.

The ERs trained with each other until they had become skilled in the two nonverbal behavior sets, a consistent verbal style, and interview format. During the training sessions, they had also learned to control for possible confounding nonverbal and verbal behaviors. They did this by giving each other feedback during the role-playing practice interviews.

VI PILOT INTERVIEWS

Subsequent to the training sessions, it was necessary to assess whether or not the interviewer behaviors in the rapport encouraging and discouraging interview sets would be relatively equivalent between the two interviewers for both treatments. It was also important to establish that the interviewers would provide the intended nonverbal differences between the two treatments while maintaining the intended verbal style relatively consistently across the two treatments.

The interviewers, therefore, conducted four pilot interviews. Each ER attempted to conduct two in the encouraging nonverbal mode and two in the discouraging nonverbal mode, while holding her verbal behavior relatively constant for all four interviews. The interviewees were recruited from undergraduate communication classes and were not informed of the nonverbal interview conditions until the completion of their five minute interview. The content of each interview centered around the EEs' current college experience.

Three graduate students in communication were enlisted as raters. All three raters independently observed and rated each of the eight sets of interviewer behavior along eleven seven-point graphic scales (see Appendix A). Scales 1 and 2 pertained to the overall impact of the ER's verbal and nonverbal behavior. Scales 3 through 8 pertained to the different aspects of specific nonverbal behaviors which were described in the preceding section (Sec. V, p. 21-22). Scale 9 pertained to the overall impact of the ER's verbal behavior, while Scales 10 and 11 were addressed to the two specific aspects of verbal style--activity and structure--which were to be kept moderate and constant. The raters were not advised of the

treatment conditions until after the completion of the last of the eight interviews.

VII THE INTERPERSONAL EXPERIENCE QUESTIONNAIRE

The Interpersonal Experience Questionnaire or IEQ was formulated to assess the EE's perceptions of herself, the ER, and the relationship between them (see Appendix C). The format and items for the IEQ were derived from one section of Laing, Phillipson, and Lee's (1966) Interpersonal Perception Method (IPM) which was introduced in Chapter I (Sec. VI and VII).

The IPM was formulated and tested in a clinical setting using disturbed (D) and nondisturbed (ND) married couples as subjects. The subjects based their answers to the IPM items on their total experiences with their spouses. Retest reliability was assessed by giving the questionnaire to fourteen D couples and ten ND couples, then retesting them four to six weeks later. For the section from which the IEQ was drawn, there was retest agreement on at least fifty of the sixty items for 80% of the spouses from ND couples as opposed to 75% from the D couples.

Internal consistency was tested by comparing responses to seven pairs of issues similar in meaning. Responses to six pairs of issues opposing in meaning were also compared. "Consistency" on the pairs of items meant similar responses for synonyms and opposing responses for antonyms. For the section from which the IEQ was drawn, all seven synonyms were scored consistently for 85% of the spouses from the ND couples as opposed to 73% from the D couples. At least four out of six antonyms were scored consistently for 100% of the ND spouses as opposed to 73% from the D couples.

Laing made use of sixty issues from which four statements were built corresponding to the four relational phases. Reviewing from Chapter I, the

four relational phases were self in relation to self, self in relation to other, other in relation to self, and other in relation to other.

The issues Laing used were derived from a group of approximately two thousand words and phrases drawn from a standard dictionary. These phrases all expressed an experience which a person could have in relation to herself or another person in the context of interaction. The list of 2000 was reduced by eliminating redundancies, synonyms, antonyms, and the phrases that were the most difficult for the subjects to understand. The final sixty issues were chosen on the basis of test-retest studies and item analyses (Laing et al 1966).

Twenty of Laing's issues were eliminated from use on the IEQ. These issues were evaluated as inappropriate for non-intimate, same-sex, short term dyads by eight judges trained in psychology and interpersonal communication. At least 75% agreement among the judges was required to eliminate an item.

Therefore, there were forty issues on the IEQ around each of which were built four statements corresponding to the four relational phases. The questionnaire contained a total of 160 statements. As discussed in Chapter I (Sec. VIII, p. 14-15), each statement was scored by the subject on a true/false or false/true continuum from 1 to 4. For positive statements, 1 was true; for negative statements, 1 was false.

The format of the IEQ differed slightly from that of the IPM. On the IPM, the relational phases were presented in groups based on item content. For example, "I respect her", "She respects me", "I respect myself", and "She respects herself" were all presented together in that order. However, the pilot for another study (Bloom 1973) revealed that subjects tended to respond with a "response set" on each group of items.

That is, they gave all four statements the same score. To avoid this effect, all 160 statements on the IEQ were scrambled by being presented in a randomly assigned order.

VIII SETTING

Three adjacent interview rooms at Portland State University were used for the present study. The first room was used for the pre-interview briefing and final de-briefing, the second for the post-interview questionnaires, and the third for the main interview. The settings for the first and second rooms were similar to the room described below, except that they were furnished only with two or three classroom-type desk chairs and pencils.

The setting for the twenty-five minute interview was a twelve foot by fifteen foot room with one door, no windows, and posters on the walls. Two upholstered office chairs were set up facing each other diagonally on a rug. The EE's chair faced the closed door. In one corner of the room was placed a metal TV-tray with not water, cups, spoons, sugar, creamer, coffee, and tea for the use of the EE. To the side of the chairs within reach of the EE and ER was placed a similar tray with clock and tapere-corder for the ER and kleenex and ashtray for the EE. The room was moderately lit by an overhead light.

IX PROCEDURE

The ER sat waiting for the EE in the main interview room except when the experimenter (E) was to be the interviewer. When she reported at her assigned time, the EE was briefed in an adjacent room by the E who maintained

an efficient, business-like attitude with a cordial tone which was intended to be neither friendly nor cold. At that time, the EE was advised of the basic interview procedure, her rights of voluntary participation and confidentiality, and other ethical considerations (see Appendix H). Her questions concerning the instructions were answered as briefly as possible.

The EE was then asked to come with the E to the interview room. The ER assumed role as introductions were made by the E. When the E was to be the interviewer, she announced that she was to be the EE's interviewer and assumed role (see Appendix H). When she was not the interviewer, the E then left the room and closed the door. The ER then asked the EE to sit down and offered her coffee or tea. The taperecorder was started by the ER as she initiated the five minute warm-up interview. A different half hour tape, one side, was used for each EE. At the end of five minutes, the ER began the interview proper which continued for twenty minutes. At that time, the E knocked on the door, or checked the clock when she was the interviewer, which signalled the end of the interview. The interview was then terminated by the ER (see Appendix I).

The EE was then asked to follow the E who again maintained a cordial, business-like attitude to the adjacent room where the EE was asked to fill out the Interpersonal Experience Questionnaire (IEQ). The EE was again advised of ethical considerations and asked to read the instructions on the questionnaire carefully (see Appendix I). The EE was then left alone to take the time she needed to complete the questionnaire. When she finished the IEQ, she brought it to the E in the room where they initially met.

The IEQ was immediately filed in a folder and the EE given a very short post-experimental survey composed of a few Likert-type items to get

her overall reactions to the ER, the IEQ, and the experimental situation (see Appendix J). Upon completion of the survey which was also filed immediately, the EE was informed of the true purpose of the study. Any questions she had concerning it were answered. Before the EE left, she was asked to agree not to discuss the study with her peers until its completion.

X METHOD OF ANALYSIS

Pilot Data

The data from the pilot interviews was assessed initially in order to establish whether or not the two ERs were creating the intended treatment conditions of the independent variable and whether or not these conditions were comparable across ERs. Analysis of the pilot data began with the assessment of inter-rater reliability among the three raters through the computation of eleven Kendall's W Coefficients of Concordance, one coefficient for each scale. For each scale, four conditions were obtained from all possible combinations of the two ERs and the two treatments of the independent variable, interviewer nonverbal behavior. Rater scores were converted to ranks across the four conditions. Ranked data from the three raters was then arrayed in a 3 X 4 table and the concordance for each item computed. The coefficients were then corrected for tied ranks and their statistical significance assessed. The results of these computations are presented in Chapter III, Table I.

With inter-rater reliability established for each scale, comparability of ER behavior between the two interviewers was assessed over the total eleven scales by computations of two Pearson Product Moment Correlations, one correlation, r , for each treatment. For each of the eleven scales,

ratings pertaining to each ER were summed across raters. This was done separately for the interviews in the rapport encouraging treatment and the interviews in the rapport discouraging treatment. The Pearson r , correlating the two interviewers' overall behavior, was then calculated for each treatment and its statistical significance assessed.

Finally, to ascertain whether or not the interviewers were varying their nonverbal behavior and holding their verbal behavior relatively constant across the two interview conditions, three Fisher Exact Probabilities were computed, one for each category of scales--global, nonverbal, and verbal. The data given by the seven-point graphic scales was dichotomized using the interval between 3 and 4 as the randomly determined cut-off point for low and high scores. This was done because the scales on the rater questionnaire were set up so that low scores reflected encouraging impact and behavior, and high degree of verbal structure and activity. High scores reflected discouraging impact and behavior, and low degree of verbal structure and activity.

Within each treatment, Low scores (1 through 3) were summed across raters for each category of scales to provide three combined totals. There was one total for the two global scales, one for the six nonverbal scales, and one for the three verbal scales. The same was done for the High scores (4 through 7). For each category of scales, the combined totals were arrayed in a 2 X 2 contingency table obtained from the two treatments (Encouraging and Discouraging) and the two levels of data (Low and High). The Fisher Exact Probability was then computed from the table for each category to assess whether or not the treatments differed significantly in the proportion of low and high scale scores attributed to

them for that category. The results of these computations are presented in Chapter III, Table II.

Interviewer Effect

It was then necessary to determine whether or not there was a significant difference between EE responses to each of the ERs across treatments. This was done in order to assess whether or not variance due to interviewer effect was to be accounted for in the design for analysis of the dependent data. The scores given to all 160 items on the IEQ were totalled for each of the thirty-two subjects. The score totals were then ordered into two independent sets of data representing the EEs' responses to the two ERs, each set containing the totals for the sixteen subjects interviewed by the same ER. The difference between the means for each set was then tested for significance at the .05 significance level with 30 degrees of freedom using a t-test for independent means.

Homogeneity of Variance

Before an analysis of variance could be computed on the data, the assumption of homogeneity of variance needed to be tested for the selected design. The dependent data were put into a three factor, split plot, fixed model design with repeated measures on two factors. For the purpose of data analysis, the statements on the IEQ were grouped according to relational phase and issue category. Chapter I described the grouping of issues according to content into five categories drawn from Laing's (1966) research with the IPM (see Appendix D).

There were two sets of different subjects representing the two nonverbal interviewer treatments, sixteen subjects in each treatment (A).

Each subject (S) was repeated across the five issue categories (C) which were nested under each of the four relational phases (B) as shown below.

		B ₁	B ₂	B ₃	B ₄
		C ₁ C ₂ C ₃ C ₄ C ₅	C ₁ C ₂ C ₃ C ₄ C ₅	C ₁ C ₂ C ₃ C ₄ C ₅	C ₁ C ₂ C ₃ C ₄ C ₅
A ₁	S ₁	- - - - -	- - - - -	- - - - -	- - - - -
	S ₁₆	- - - - -	- - - - -	- - - - -	- - - - -
A ₂	S ₁₇	- - - - -	- - - - -	- - - - -	- - - - -
	S ₃₂	- - - - -	- - - - -	- - - - -	- - - - -

Figure 2. Three factor, split-plot design with repeated measures on phase and category.

Therefore, the three factors were treatment with two levels, phase with four levels, and category with five levels with subjects repeated across phase and category.

Each piece of data represented one treatment, one relational phase, one category, and one subject. This was done by totalling the scores on the IEQ items in each issue category for each relational phase in each treatment for each subject. Each total was then divided by the number of issues in the category to obtain a mean score for that category in that relational phase and treatment condition for that subject. This was done to equalize the discrepancies in number of issues in each of the five categories. For the analysis, eight items representing two issues were eliminated because each issue was split along relational phase into two categories. All four relational phases of each of the remaining thirty eight issues belonged to the same category. Since a cell of data represents only one level of each factor ($a_i b_j c_k$), each cell in the present design

contained sixteen mean scores for the sixteen subjects in the cell. There was a total of forty cells for the design (2 treatments X 4 phases X 5 categories).

To test for homogeneity of variance, the cell with the largest variance and the cell with the smallest variance were used to calculate Hartley's $F_{\max}$ statistic. The hypothesis of homogeneity of variance was retained if the calculated $F_{\max}$ was less than the critical value for an $F_{\max}$ determined at the .05 significance level with 40 and 15 degrees of freedom.

Analysis of Variance

Once the assumption of homogeneity of variance was confirmed, an analysis of variance could be made on the dependent data using the three factor design described above. A three way analysis of variance was performed to obtain an F ratio of variances for each possible source of variation. The source table for the design of the present study is given in Figure 3. An effect was considered significant if the F ratio obtained for that effect was equal to or greater than the critical F value determined at the .05 significance level.

Follow-up Tests of Significance

Following the analysis of variance, follow-up significance tests were performed to assess sources of variance between and among individual levels of the factors involved. To investigate main effects involving factors with over two levels, a follow-up analysis of orthogonal comparisons of differences between level totals for each factor was performed.

Source of Variation	SS	df	MS	F-ratio
<u>Between Subjects</u>		<u>31</u>		
Treatments (Trmt.)		1		
Subjects within groups (error term)		30		
<u>Within Subjects</u>		<u>608</u>		
Phase		3		
Treatment X Phase		3		
Phase X Subj. w/in grps. (error term)		90		
Category (Cat.)		4		
Treatment X Category		4		
Cat. X Subj. w/in grps. (error term)		120		
Phase X Category		12		
Trmt. X Phase X Cat.		12		
Phase X Cat. X Subj. w/in grps. (error term)		360		
<u>Total</u>		<u>639</u>		

Figure 3. Source table for a three way analysis of variance on a three factor, split plot fixed model design with repeated measures on phase and category.

Analysis of Covariance

In order to account for possible variation due to individual differences in defensiveness, the effects of the original analysis of variance were reassessed with each subject's Marlowe-Crowne Social Desirability Inventory score as a covariate. Through an analysis of covariance using the same design, the original sources of variance were adjusted to account for the covariate and new F-ratios calculated for each source. Again, an F-ratio equal to or greater than the critical value of F determined at the .05 significance level was considered significant.

Post-Experimental Survey

Finally, the subjects' responses to the first fourteen items on the

final post-experimental survey were represented by item in a summary table. Items 1 through 6 on the survey were scored along a seven point graphic scale assessing the subject's overall feelings toward herself, the interview, and the interviewer. Items 7 through 11 were scored along a two point graphic scale assessing the subject's attitude toward the interviewer. Items 12 through 14 were scored along a seven point graphic scale assessing the subject's reaction to the IEQ.

The means for the subjects' responses to each item were calculated for each treatment level. These means and the differences between them were arrayed in the summary table for examination. The modes for the subjects' responses on each item were also determined for each treatment level and presented on the table. Finally, for the items using a seven point graphic scale, the number of scores of 4 or over across subjects for each treatment level was determined. The two treatments were then compared on the table. This information was reviewed and discussed in relation to the results of the analysis of variance and follow-up tests. It was not tested for significant differences. The above information is presented in Chapter III, Table XII.

Items 15 through 18 were short answer questions inviting the subjects' comments on the interview, interviewer, and IEQ. These answers were summarized by content for each item. A rough content analysis was made to determine the percentage of subjects in each treatment level who made similar comments about particular aspects of their experience in the experiment. These percentages were not tested for significant differences between treatments. The information was examined so that overall comments could be made in relation to the dependent data.

CHAPTER III

RESULTS

The results of the raters' evaluation of the pilot interviews, the tests for interviewer effect and homogeneity of variance, the analysis of variance on the IEQ data, the follow-up tests of significance, the analysis of covariance with the Marlowe-Crowne scores, and the post-experimental survey are presented below.

I PILOT DATA

Assessment of inter-rater reliability was made through the computation of eleven Kendall's W Coefficients of Concordance, one coefficient for each of the eleven graphic scales. These eleven coefficients were then corrected for tied ranks. The sum of squares, S , used to calculate each coefficient, W , was used to assess the significance of each W from statistical tables. The uncorrected and corrected coefficients and the sum of squares for each scale are given in Table I. See Appendix A for item identification. A critical value for S was estimated at falling between 20 and 30 from the values given on the table since the critical value for a 3×4 matrix was not available. The starred items on Table I are, therefore, probably significant at the .05 significance level. Degree of nonverbal relaxation or tension, verbal activity, and verbal structure were not significant. Inter-rater reliability was therefore established for the overall global measures, four out of five nonverbal measures, and the global verbal measure.

TABLE I

KENDALL'S COEFFICIENT OF CONCORDANCE AMONG
THE THREE RATERS OF THE PILOT INTERVIEWS
FOR EACH ITEM OF THE RATER QUESTIONNAIRE

Item	Kendall's W uncorrected	Kendall's W corrected	S
1	.944	.977	42.5*
2	.800	1.000	36.0*
3	.944	.977	42.5*
4	.133	.143	6.0
5	.822	.949	37.0*
6	.811	.901	36.5*
7	.822	.949	37.0*
8	.800	.923	36.0*
9	.856	.951	38.5*
10	.278	.439	12.5
11	.422	.704	19.0

* significant at .05 level of significance

Two Pearson Product Moment Correlations, r , were computed to assess comparability of interviewers over all eleven scales within each nonverbal treatment level. In the Rapport Encouraging treatment, the interviewers correlated with an $r = .735$, significant at the .01 significance level. In the Rapport Discouraging treatment, the interviewers correlated with an $r = .859$, significant at the .001 significance level. The interviewers did, therefore, establish overall comparability of behavior within each treatment level.

Three Fisher Exact Probabilities were computed, one for each of the three categories of scales, to assess whether or not the interviewers were varying their nonverbal behavior between the two treatment levels and holding their verbal behavior constant. The contingency tables for each category of scales, the mode for each treatment within each category,

and the Fisher Exact Probability are presented in Table II. The Rapport Encouraging treatment is referred to as RE; the Rapport Discouraging treatment is referred to as RD. All three probabilities are significant beyond the .01 significance level and the probability for the nonverbal category of scales is highly significant at $p = .004 \times 10^{-9}$.

TABLE II
FISHER EXACT PROBABILITY CONTINGENCY TABLES
AND MODAL SCORES FOR THE THREE CATEGORIES
OF ITEMS ON THE RATER QUESTIONNAIRE

Category	Table		Fisher Exact Probability	Mode *
GLOBAL (1-2)	Low	High	$p = .003$	RE = 2 RD = 5
	RE	10 2		
	RD	0 12		
NONVERBAL (3-8)	Low	High	$p = .004 \times 10^{-9}$	RE = 2 RD = 6
	RE	30 6		
	RD	6 34		
VERBAL (9-11)	Low	High	$p = .003$	RE = 3 RD = 5
	RE	12 6		
	RD	3 15		

* Based on a seven point graphic scale where the median = 4.

Examination of the modes for each treatment within each category indicated that the scores for the nonverbal category tended to polarize between the treatments. The scores for the verbal category, however, tended to gravitate around the median of the scale for each treatment. The global scores tended to fall somewhere in-between the two behavior categories. A t-test for correlated means was performed on the differences between the total item scores for the RE and RD treatments across all three verbal items.

The calculated $t_{(2)} = 3.05$ was not significant at the .05 significance level ($t_{.05(2)} = 4.303$), suggesting that the rater responses to the two treatment levels were not significantly different.

II INTERVIEWER EFFECT

A t-test for independent means was used to test the significance of the difference between the means of the two sets of total IEQ scores across treatments for the sixteen subjects interviewed by each interviewer. The obtained $t_{(30)} = .117$ was definitely not significant at the .05 significance level ($t_{.05(30)} = 2.042$). The means obtained for each interviewer were almost identical at 268.8 and 266.5. Interviewer effect was therefore not counted as a source of variance in the design for the analysis of variance on the dependent data.

III HOMOGENEITY OF VARIANCE

Hartley's $F_{\max}$ statistic was calculated to test for homogeneity of variance within the design used for the present study. The data was arranged in a split plot factorial design with repeated measures on two factors as discussed in Chapter II (Sec. X, p. 30-31). The largest of forty cell variances was divided by the smallest cell variance to render an $F_{\max}(40,15) = 7.973$. The highest critical $F_{\max}$ determined at the .01 significance level given on the available tables was $F_{\max.99}(12,15) = 8.0$. $F_{\max.99}(40,15)$ would have been greater than $F_{\max.99}(12,15)$. The obtained value for $F_{\max}$, 7.973, was therefore less than the critical value for $F_{\max.99}(40,15)$ and the hypothesis of homogeneity was retained.

IV ANALYSIS OF VARIANCE

The completed source table for the three way analysis of variance performed on the above-named design is given below.

TABLE III
ANALYSIS OF VARIANCE RESULTS FOR TREATMENT,
PHASE, AND CATEGORY TOTALS ON THE IEQ(N=16)

Source of Variance	Sum of Sqs.	df	Mean Sqs.	F Ratio
<u>Between</u>				
Treatment (Trmt.)	5.728	1	5.728	2.414
Subjects within groups	71.194	30	2.373	
<hr/>				
<u>Within</u>				
Phase	15.084	3	5.028	104.750*
Treatment X Phase	0.280	3	0.093	1.938
Phase X Subj. w/in grps.	4.289	90	0.048	
Category (Cat.)	4.608	4	1.152	13.881*
Treatment X Category	1.110	4	0.278	3.349**
Cat. X Subj. w/in grps.	9.992	120	0.083	
Phase X Category	5.662	12	0.472	4.411*
Trmt. X Phase X Cat.	0.440	12	0.037	0.341
Phase X Cat. X Subj. w/in grps.	38.329	360	0.107	

* significant at $p < .001$

** significant at $p < .025$

The calculated $F = 2.414$ for a main effect between the two nonverbal treatments across phase and category was not significant at the .05 level of significance ($F_{.05}(1,30) = 4.17$). This would have suggested that the nonverbal treatments presented by the interviewers were not a significant source of variance in the data overall.

The two remaining factors and two out of four interactions reflected significant sources of variance in the data. The calculated $F = 104.75$

for a main effect between the four relational phases across treatments and categories was highly significant at the .001 significance level ($F_{.001}(3,90) = 5.98$). The calculated $F = 13.881$ for a main effect between the five issue categories across treatments and phases was also significant at the .001 significance level ($F_{.001}(4,120) = 4.95$). The calculated $F = 3.349$ for an interaction between treatments and categories was significant at the .025 significance level ($F_{.025}(4,120) = 2.89$). The calculated $F = 4.411$ for an interaction between phases and categories was also significant at the .001 significance level ($F_{.001}(12,360) = 3.02$).

The calculated $F = 1.938$ for an interaction between treatment and phase was not significant at the .05 significance level ($F_{.05}(3,90) = 2.72$). The calculated $F = 0.341$ for an interaction between all three factors was less than 1.0 and obviously not significant.

V FOLLOW-UP TESTS OF SIGNIFICANCE

Phases

An examination of the totals for each of the four levels of relational phases across treatments and categories revealed that the Self-Self (SS) total was much higher than the Self-Other (SO), Other-Self (OS), and Other-Other (OO) totals (see Table IV). The latter three totals were all approximately the same.

Using an F-test of significance on treatment sums, an individual comparison was made between the Self-Self phase total and the other three. The obtained $F = 316.896$ was highly significant at the .01 significance level ($F_{.01}(1,90) = 6.965$). This suggested that the sum of all the subjects' scores for items in the Self-Self phase was significantly higher

than the score sums for each of the other three phases. The latter sums did not differ significantly from each other.

TABLE IV

SUMMARY TABLE OF IEQ RESULTS FOR THE
TREATMENT-PHASE INTERACTION IN THE
ANALYSIS OF VARIANCE INCLUDING
TREATMENT AND PHASE TOTALS

T R E A T M E N T S	PHASES						T O T A L S
		SS	SO	OS	OO		
	RE	143.025	116.685	114.543	118.148	492.402	
	RD	160.844	131.165	132.864	128.072	552.945	
		303.869	247.850	247.407	246.220		
PHASE TOTALS							

Categories

Using Duncan's New Multiple Range Test determined at the .05 level of significance, multiple comparisons were made between the means for each of the five levels of issue category (see Table V). Two major differences were found between categories across treatments and phases. The mean for the item scores in the Warm Concern/Support (CNC) category was significantly higher than means for item scores in the other four categories. The mean for item scores in the Contention (CNT) category was significantly lower than means for item scores in three other categories. It did not differ significantly from the Discouragement (DIS) category mean. There were no significant mean differences between Interdependence/Autonomy (AUT), Discouragement (DIS), and Confusion (CNF).

TABLE V

DUNCAN'S MULTIPLE RANGE TEST RESULTS
FOR THE CATEGORY MAIN EFFECT IN
THE ANALYSIS OF VARIANCE

CNT	DIS	CNF	AUT	CNC	
--	.054	*	*	*	CNT
	--		.065	*	DIS
		--		*	CNF
			--	*	AUT
				--	CNC
* significant at $p < .05$					

Phase-Category Interaction

The main phase and category effects were qualified by the results of another Duncan Multiple Range Test, determined at the .05 significance level. This test compared means for the twenty levels of phase-category interaction (see Table VI).

While the main phase effect across categories and treatments showed the Self-Self phase total to be significantly larger than the other three phase totals, the Duncan Test results indicated that this relationship did not hold within the Autonomy and Concern categories. Looking down the Autonomy (AUT) column in Table VII, it was apparent that Self-Self (SS) did not differ significantly from the other three phases. In the Concern (CNC) column, it did not differ significantly from the Other-Self (OS) phase.

The main category effect across phases and treatments did not hold within every phase according to the Duncan Test results in Table VI. The main effect across phases showed Concern to be significantly higher than

TABLE VI

DUNCAN'S NEW MULTIPLE RANGE TEST RESULTS
FOR THE PHASE-CATEGORY INTERACTION
OF THE ANALYSIS OF VARIANCE

OO CNT	OO AUT	SO CNF	OS AUT	SO AUT	OO CNC	SS AUT	SO CNC	OS CNC	SS CNT	SS CNC	SS CNF	SS DIS	PHASE CATEGORY
.128	*	*	*	*	*	*	*	*	*	*	*	*	SO-DIS
	*	*	*	*	*	*	*	*	*	*	*	*	OS-CNT
	*	*	*	*	*	*	*	*	*	*	*	*	SO-CNT
		.158	*	*	*	*	*	*	*	*	*	*	OS-CNF
			*	*	*	*	*	*	*	*	*	*	OS-DIS
			*	*	*	*	*	*	*	*	*	*	OO-DIS
			*	*	*	*	*	*	*	*	*	*	OO-CNF
--				.173	*	*	*	*	*	*	*	*	OO-CNT
	--						.151	*	*	*	*	*	OO-AUT
		--						*	*	*	*	*	SO-CNF
			--						.177	*	*	*	OS-AUT
				--						*	*	*	SO-AUT
					--					*	*	*	OO-CNC
						--				*	*	*	SS-AUT
							--			*	*	*	SO-CNC
								--		.137	*	*	OS-CNC
									--		.147	*	SS-CNT
										--		.117	SS-CNC
											--		SS-CNF
												--	SS-DIS

* significant at $p < .05$

the other four categories. However, the Self-Self (SS) row in Table VII revealed the lack of significant difference between Concern (CNC) and three other categories--Discouragement (DIS), Confusion (CNF), and Contention (CNT). Looking across the Self-Other (SO), Other-Self (OS), and Other-Other (OO) rows, Concern (CNC) did not differ significantly from Autonomy (AUT).

TABLE VII
SUMMARY TABLE OF THE IEQ RESULTS FOR
THE PHASE-CATEGORY INTERACTION
OF THE ANALYSIS OF VARIANCE

		CATEGORIES						
		AUT	CNC	DIS	CNF	CNT		
P H A S E S	SS	54.551	61.750	65.500	63.400	58.668	303.369	P T O T A L S
	SO	53.365	55.000	43.750	50.400	45.335	247.850	
	OS	53.005	57.375	46.625	46.400	44.002	247.407	
	OO	50.186	54.125	46.875	47.200	47.834	246.220	
		211.107	228.250	202.750	207.400	195.839		
		CATEGORY TOTALS						

The main effect showed Contention to be significantly lower than three other categories with no significant difference between Contention and Discouragement. However, within the Self-Self row in Table VII, Contention did not differ significantly from Autonomy or Concern, and was significantly lower than Discouragement. Contention did not differ significantly from Confusion within any of the four phase rows.

The main effect showed no significant differences between Autonomy, Discouragement, and Confusion. Within the Self-Self row in Table VII,

however, Autonomy was significantly lower than Discouragement and Confusion. Within the Other-Self row, it was significantly higher than Discouragement and Confusion. Within the Self-Other row, both Autonomy and Confusion were significantly higher than Discouragement (see Table VII).

With the exceptions discussed above, the relationships between phases across categories also existed within categories, and the relationships between categories across phases also existed within phases.

Treatment-Category Interaction

The most important finding of the Duncan Multiple Range Test performed on the means for the ten levels of treatment-category interaction was the following. Within each of four issue categories, excluding Autonomy, the difference between the Rapport Encouraging (RE) and Rapport Discouraging (RD) treatments did exceed the least significant difference determined at the .05 significance level. The results given in Table VIII indicated that the difference ($d = .108$) within the Autonomy category was not significant. However, it was close to the critical value, W , with $W_{5.05} = .1098$. Within each category, the total score in response to the RE treatment was lower than the response to the RD treatment.

The main category effect across treatments and phases was again qualified by the results of this Duncan Test. The relationships between categories reviewed in the preceding section of this chapter were altered in the following ways within the two treatments.

Looking across the RE treatment row in Table IX, Concern (CNC) did not differ significantly from Autonomy (AUT). Autonomy was significantly higher than Discouragement (DIS) and Confusion (CNF). Contention (CNT) did not differ significantly from Confusion (CNF).

TABLE VIII

DUNCAN'S MULTIPLE RANGE TEST RESULTS FOR THE
TREATMENT-CATEGORY INTERACTION IN
THE ANALYSIS OF VARIANCE

RE DIS	RE AUT	RD CNT	RD DIS	RD AUT	RE CNC	RD CNF	RD CNC	TREATMENT CATEGORY
.038	*	*	*	*	*	*	*	RE-CNT
	*	*	*	*	*	*	*	RE-CNF
--	*	*	*	*	*	*	*	RE-DIS
	--			.108	*	*	*	RE-AUT
		--			.106	*	*	RD-CNT
			--			.105	*	RD-DIS
				--			*	RD-AUT
					--		*	RE-CNC
						--	.055	RD-CNF
							--	RD-CNC

* significant at $p < .05$

TABLE IX

SUMMARY TABLE OF THE IEQ RESULTS FOR THE
TREATMENT-CATEGORY INTERACTION IN
THE ANALYSIS OF VARIANCE

		CATEGORIES						T R O M T A L S
T R E A T M E N T S	RE RD	AUT	CNC	DIS	CNF	CNT		
		102.097	110.125	94.875	92.800	92.504	492.401	
		109.010	118.125	107.875	114.600	103.335	552.945	
		211.107	228.250	202.750	207.400	195.839		
		CATEGORY TOTALS						

Within the RD treatment row in Table IX, Concern did not differ significantly from Autonomy or Confusion. Contention did not differ significantly from Autonomy.

With the exceptions discussed above, the relationships between categories across treatments also existed within treatments.

Treatment-Phase Interaction

This interaction was not significant in the analysis of variance. However, the multiple comparisons made for the treatment-category interaction indicated that the Rapport Encouraging (RE) and Rapport Discouraging (RD) treatments did differ significantly from one another within the categories. In light of these results, the treatment-phase interaction was explored further using Duncan's Multiple Range Test (see Table X).

TABLE X
DUNCAN'S MULTIPLE RANGE TEST RESULTS FOR
THE TREATMENT-PHASE INTERACTION IN
THE ANALYSIS OF VARIANCE

RE 00	RD 00	RD S0	RD OS	RE SS	RD SS	TREATMENT PHASE
.045	*	*	*	*	*	RE-OS
	*	*	*	*	*	RE-S0
--	*	*	*	*	*	RE-00
	--		.060	*	*	RD-00
		--		*	*	RD-S0
			--	*	*	RD-OS
				--	*	RE-SS
					--	RD-SS

* significant at $p < .05$

The findings of the above multiple comparisons, determined at the .05 significance level, again indicated that the mean score for the RE

treatment was significantly lower than the mean for the RD treatment within each of the four levels of relational phase. Within each treatment, the Self-Self phase was again scored significantly higher than the other three phases which did not differ significantly from each other.

VI ANALYSIS OF COVARIANCE

Each subject's score on the Marlowe-Crowne Social Desirability Inventory was incorporated as a covariate into the original analysis of variance. This was done to account for the possible impact of a subject's need to give a socially sanctioned response on the direction in which responses on the IEQ were endorsed. The resulting analysis of covariance produced an adjusted $F = 2.082$ for the nonverbal treatment factor. This was a reduction of the already nonsignificant F ratio resulting from the analysis of variance. It was, therefore, not significant. The adjusted source table is presented below in Table XI.

TABLE XI

RESULTS OF ANALYSIS OF COVARIANCE OF
MARLOWE-CROWNE SOCIAL DESIRABILITY
SCORES WITH IEQ SCORES (N = 16)

Source of Variance	SS	df	MS	F
<u>Between</u>				
Treatment(A_x)	5.728	1	5.728	2.414
Marlowe-Crowne(A_y)	275.630	1	275.630	$F < 1$
A_{xy}	- 39.732	1		
Adjusted Treatment(A')	4.952	1	4.952	<u>2.082</u>
Subj. w/in groups(x)	71.194	30	2.373	
Subj. w/in groups(y)	17,398.750	30	579.958	
Subj. w/in groups(xy)	-191.240	30		
Adjusted Error(P')	68.952	29	2.378	

VII POST-EXPERIMENTAL SURVEY

The results of the post-experimental survey for items 1 through 14 are summarized in Table XII (see Appendix J for item identification). These results were not tested for significance. Observations of the data are presented below.

The first six items were scored on a scale from 1 (very positive) to 7 (very negative). The two items which produced the largest mean difference between the two nonverbal treatments were item 1, interviewer involvement vs. detachment ($d = 2.06$), and item 6, good vs. bad feelings about the interviewer ($d = 1.25$). The mean difference for the other four items was below 1.00.

The three items assessing the interviewee's feelings toward the interviewer and her warmth, involvement, and support had a mode of 1 for the rapport encouraging (RE) treatment and a mode of 3 for the rapport discouraging (RD) treatment. Both treatments shared a mode of 2 for the two items assessing interviewee openness, security, and feelings about self. For the item assessing interviewee relaxation and comfort, the treatments shared a mode of 3 out of a scale of 7.

Across subjects for most of these six items, five or more of the scores given in response to the RD treatment on each item exceeded 3. Two or less of the scores given on each item for the RE treatment exceeded 3. The item with the largest difference between scores for the two treatments was interviewer involvement/detachment. The items with the least difference between scores were interviewer support/criticality (item 2) and interviewee security/defensiveness (item 4).

Of the middle six items which assessed whether or not the interviewee would want the interviewer for a friend, counselor, etc. (see Appendix J), the means did not differ much. However, the mode for the RE treatment was "would want" and the mode for the RD treatment was "would not want".

The last three items assessed how representative the interviewee felt her responses on the IEQ to be of her feelings. The representativeness of the IEQ regarding the interviewer produced the largest mean difference between treatments which was only 0.566. On a seven point scale with 1 being "very representative", the modes grouped around 2 and the means around 2.5. However, representativeness regarding the interviewer (item 12) produced the largest number of scores of 4 or over across treatments. Representativeness regarding self (item 14) produced the least number of scores of 4 or more. Across these three items, the RD treatment produced five more responses exceeding 3 than did the RE treatment.

TABLE XII
SUMMARY OF RESULTS FOR POST-EXPERIMENTAL
SURVEY INCLUDING PER ITEM TREATMENT
MEANS AND MODAL SCORES

Item	RE		RD		RE		RD		# scores ≥ 4
	Mean	d	Mean		Mode	Mode	RE	RD	
1	1.94	2.06	4.00		1-2	3-4	2	9	
2	2.19	.94	3.13		1	3	3	5	
3	2.44	.94	3.38		3	3-4	2	6	
4	1.94	.87	2.81		2	2	1	3	
5	2.25	.88	3.13		2	2	1	5	
6	1.88	1.25	3.13		1	3	0	3	
7-11	1.10	.24	1.34		1	2			
12	2.50	.57	3.06		1	2	4	7	
13	2.44	.25	2.69		2	1	3	4	
14	1.82	.37	2.19		2	2	0	1	

In the section allowing for free comments about the interview, interviewer, and IEQ, the following comparisons were made. Within the RE treatment, 56% of the subjects described the interview as relaxed, pleasant, or open compared to 18.8% of the subjects within the RD treatment. On the other hand, only 18.8% of the subjects within the RE treatment reported feelings of confusion, bewilderment, or difficulty in expressing themselves compared to 50% of the subjects within the RD treatment.

Complaints of little interaction with the interviewer and a surface or one-sided interview were made by 37.5% of the RE subjects compared to 12.3% of the RD subjects. Wishes for more interviewer involvement were claimed by 18.8% of the RE subjects compared to 12.3% of the RD subjects.

Regarding the IEQ, 62.5% of the RE subjects found the questions hard to answer due to lack of information about the interviewer compared to 37.5% of the RD subjects. The IEQ items were identified as vague, confusing, or irrelevant by 25% of the RE subjects compared to 31.3% of the RD subjects. Subjects finding the IEQ items repetitious included 43.8% of the RE subjects compared to 18.8% of the RD subjects.

About 80% of the women thought the experiment was about themselves or the interview content. The remaining 20% had no idea or thought it might have to do with their responses toward the interviewer or their evaluation of her as an interviewer.

The above percentages were not tested for significant differences.

CHAPTER IV

DISCUSSION

The present study attempted to investigate how a participant in a dyadic relationship would discriminate subtle relationship and disposition statements conveyed by the nonverbal behavior of her partner in the dyad. The primary purpose of the study was to investigate the nature of the discriminations made directly by a receiver of nonverbal messages with regard to their meaning for and impact on that receiver. The secondary purpose was to evaluate the effectiveness of the instrument used in the present study to assess the experience of the receiver.

The results of the experimental manipulations were analyzed and presented in Chapter III. In this chapter, these results will be integrated and discussed in light of the purposes of the study, previous research, and the experimental paradigm. Interpretations will be offered along with a discussion of the limitations of the present study and the implications of the conclusions drawn in this chapter. Suggestions for further research will be followed by a summary of this discussion.

I ESTABLISHING THE NONVERBAL CONDITIONS

With significant Kendall's W Coefficients of Concordance of .90 or better for each behavior assessment during the pilot interviews, a high reliability was established between raters for five out of the six treatment behaviors (see Chapter III, Table I).

The lack of consistency in the raters' assessments of the relaxation/tension dimension may have been due to the fact that this dimension was not well-defined to the raters on their questionnaire (see Appendix A). As described in Chapter II (Sec. V, p. 21), the relaxation/tension dimension included such behaviors as presence or absence of nervous gestures and muscular tightness in face, body, and movement. On the rater's questionnaire, it was defined only as relaxed vs. tense posture. The rapport encouraging treatment had the interviewer leaning slightly forward and maintaining almost constant eye contact, while the rapport discouraging treatment involved a reclining body angle and lesser degree of eye contact. Some of the raters may have been responding to the apparent intensity of the rapport encouraging behavior set relative to the apparent casualness and familiarity of the rapport discouraging behavior set. This possibility was also taken into account in the discussion which follows of the IEQ results.

The highly significant Pearson Product Moment Correlations between the pooled ratings for each interviewer and treatment established that the interviewers were presenting comparable stimulus conditions within each set of nonverbal behavior. The raters' evaluations were supported by the almost identical means and nonsignificant t resulting from the t -test comparing the means of the subjects' IEQ scores in response to each interviewer across treatments.

Pooling the ratings for the two interviewers and the six behaviors across judges, comparisons were made between the two behavior sets. The highly significant Fisher Exact Probability calculated for the nonverbal items indicated that the difference in ratings between the two sets was

not due to chance (see Chapter III, Table II). These results provided further evidence that two different stimulus conditions were being presented by the interviewers.

These findings added to the evidence collected by Waldron (1973) and others that individuals can be trained to control and present certain kinds of nonverbal behavior which are already in their behavioral repertoire. It also provided support for the notion that certain kinds of nonverbal behavior can be incorporated into training programs for interviewers, clinicians, and anyone else interested in using the full potential of communication skills.

II ESTABLISHING THE VERBAL CONDITION

The raters also evaluated the interviewers along three verbal dimensions and two global ones determining overall behavioral impact. With significant Coefficients of Concordance of over .95, a high reliability was established between the raters for both global dimensions and for general verbal impact (see Chapter III, Table I). With nonsignificant Coefficients of Concordance, rater reliability was not established for the assessment of verbal structure and activity. Furthermore, the significant Fisher Exact Probability for the verbal items indicated that the difference between the two treatments was not due to chance. These results suggested that the interviewers did not maintain a consistent verbal style across treatments (see Chapter III, Table II).

The two global dimensions and the general verbal impact dimension were described on the raters' questionnaire in very general terms, such as warmth, involvement, support, and encouragement (see Appendix A).

The very small Fisher Exact Probability calculated for the nonverbal items on the questionnaire suggested that the two sets of nonverbal behaviors had very different impacts on the raters. It was probable, therefore, that the nonverbal dimensions had a powerful impact on the raters' general impressions of the interviewers and strongly influenced their assessments of the more general global and verbal dimensions. This notion was supported by the Fisher Exact Probability Contingency Tables which indicated that for all three categories of items--global, nonverbal, and verbal, the rapport discouraging treatment scores were significantly higher than the rapport encouraging treatment scores. The influence of the interviewers' nonverbal style on the global and general verbal dimensions may have accounted for the high rater reliability and significant differences between treatments for those items.

The remaining two verbal dimensions, structure and activity, were more specifically defined than the general verbal impact dimension (see Appendix A). Therefore, the raters' assessments of them were probably less influenced by the impact of nonverbal style. If these dimensions were assessed more independently, the high rater reliability for the nonverbal items would not have carried over into them.

The interviewers' verbal behavior was dependent on the verbal behavior of the interviewees. For example, a talkative subject who stayed with herself and did not often get "hung-up" on a topic, as defined in Chapter II (Sec. V, p. 22), would not require more than an occasional follow-up question and unstructured encouragement. On the other hand, a less talkative subject who strayed from herself and frequently became stuck with a topic might require more encouragement and open-ended,

follow-up, and refocusing questions from the interviewer. Unlike the nonverbal behaviors which remained the same throughout each interview, the interviewer's verbal activity and structure would have varied with the interviewee's responses to her. Therefore, the raters may have had more difficulty keeping track of the overall activity and structure provided each subject by the interviewer during each interview. This difficulty may have accounted for the low rater reliability for these verbal items.

The general verbal items were summed with the structure and activity items for the calculation which determined a significant difference for the verbal item category between the two treatments. If the assessment of the general verbal dimension was influenced by the interviewers' nonverbal style, then the general verbal dimension may have accounted for some of the difference found between the verbal item totals for each treatment. Some of the difference may also have been due to the impact of the interviewers' nonverbal style on the interviewees' verbal behavior which, in turn, influenced the interviewers' verbal style. For example, the interviewers were assessed as presenting less structure and activity in the rapport discouraging treatment than in the rapport encouraging treatment. If the subject responded to the interviewers' rapport discouraging behavior with more personal verbal activity, the interviewers would have been less structured and active. The interviewers also may not have had the opportunity to establish the consistency of their verbal style over the short five minute interviews with only eight different subjects.

The differences in verbal behavior found between the two nonverbal treatments were also qualified by other findings. The closeness of the modal scores (3 and 5) around the median (4) for the verbal items in the rapport encouraging and rapport discouraging treatments, respectively, suggested that the interviewers' verbal style was moderately active and semi-structured in both treatments (see Appendix A). Second, a McNemar's t-test for correlated means calculated for the three verbal items and determined at the .05 significance level showed no significant difference between the two treatments. This lack of significance further supported the notion that the interviewers did present a similar verbal style across nonverbal treatment conditions.

The Pearson Product Moment Correlation between interviewers over all eleven items evaluated by the raters in each treatment was highly significant, providing evidence that the interviewers were presenting comparable verbal styles.

III IMPACT OF INTERVIEWER NONVERBAL BEHAVIOR

The findings with regard to the impact of interviewer nonverbal behavior on the interviewee responses to the IEQ were mixed.

The hypotheses of the present study predicted that the total scores for items within each of the four relational phases and each of the five issue categories would be significantly lower in response to the Rapport Encouraging (RE) nonverbal behaviors than the Rapport Discouraging (RD) nonverbal behaviors. The results of the follow-up comparisons on the treatment-phase and treatment-category interactions confirmed these predictions for the four phases and four categories. The RE scores were not

significantly lower than the RD scores within the Autonomy category, but the difference was very close to significance as discussed in Chapter III (Sec. V, p. 45).

Items in the Self-Self phase, across categories, produced the largest difference between the two treatments, followed by the Other-Self phase, Self-Other, and Other-Other, respectively (see Chapter III, Table IV). Items in the Confusion category, across phases, discriminated the best between treatments, followed by the Discouragement category, Contention, Concern, and Autonomy (see Chapter III, Table IX).

The analysis of variance, however, indicated that the two nonverbal treatments did not produce a significant difference in the dependent data across phase and category. The difference obtained was further reduced by the analysis of covariance which incorporated the Marlowe-Crowne Social Desirability Inventory scores into the original analysis of variance. The increase in the error term within treatments and reduction of the mean-square between treatments suggested that some of the variance between treatments could have been attributed to differences in subject defensiveness. As discussed in Chapter II (Sec. II, p. 18-19), "defensiveness" refers to the need to behave in a culturally sanctioned manner or "look good" according to social standards for behavior. Therefore, defensive subjects would probably have been less willing to endorse items in a negative direction, resulting in lower scores on the IEQ than for less defensive subjects. A more defensive group of subjects in the RE treatment, then, would have increased the score differences between treatments. A higher mean for the subjects' Marlowe-Crowne scores did indicate that the RE treatment was presented to a more defensive group of subjects

than the RD treatment.

The nonsignificant main effect for nonverbal treatment may have been due, in part, to the treatment-phase and treatment-category interactions. Although the RE treatment scores were significantly lower than the RD scores within each phase and category, the relationships between categories and between phases within each treatment differed between treatments. Therefore, when the IEQ items were summed across phase and category for each treatment, the difference between treatments may have been reduced to nonsignificance overall. Examples of these differing relationships within each treatment are given below.

As seen in Table IX (Chapter III, p. 46), the Discouragement (DIS), Confusion (CNF), and Contention (CNT) categories were lower in relation to Autonomy (AUT) within the RE treatment than they were within the RD treatment. They differed more between treatments than did the Autonomy category. Therefore, while they differed significantly from Autonomy within the RE treatment, they did not differ significantly from it within the RD treatment.

Within the RE treatment, Confusion was significantly lower than Concern. Within the RD treatment, it was significantly higher than Contention. However, the Confusion scores differed more between treatments than did the Concern and Contention scores. This resulted in lack of significant differences between Confusion and Contention within the RE treatment, and between Confusion and Concern within the RD treatment.

Finally, the Other-Other phase (OO) differed less between treatments than did the Self-Other (SO) and Other-Self (OS) phases (see Table IV, p. 41). Therefore, while it was larger than the latter two phases within

the RE treatment, the Other-Other phase was smaller than they were within the RD treatment. Although these differences were not significant, they may have contributed to the lack of overall significant difference between treatments across phase and category.

IV WITHIN INSTRUMENT VARIATION

The qualifications of the main effects for phase and category discussed in Chapter III (Sec. V) were accounted for in the following ways.

An examination of each category column in Table VII (p. 44) revealed that the Self-Self (SS) phase totals were much higher than the other three phase totals in four categories excluding Autonomy (AUT). Comparing the Concern (CNC) column with the Discouragement (DIS), Confusion (CNF), and Contention (CNT) columns, the drop in phase totals from Self-Self to the other three phases was smaller within the Concern category than in the other three. Therefore, the relationship between Concern and the other three categories changed from relative equality in the Self-Self phase to exceeding them in the other three phases.

Across the Self-Self (SS) row in Table VII, Autonomy (AUT) was lower than all four other categories. Because the drop in phase total from Self-Self to the other three phases was smaller within the Autonomy category than in the other four categories, its relationship to them changed. Autonomy's relationship to Concern (CNC) changed from being lower in the Self-Self phase to relative equality in the other phases. With the other three categories, it changed from being lower in the Self-Self phase to being higher in the Self-Other (SO) and Other-Self (OS) phases and equal in the Other-Other (OO) phase.

The lack of change between phases within the Autonomy category accounted for the lack of significant differences between Self-Self and the other phases. Within the Concern category, the higher total in the Other-Self phase accounted for the lack of significant difference between that phase and Self-Self.

Since the Autonomy and Concern categories did not differ significantly from each other in three out of four phases, the pooled totals across phases revealed no significant difference between the two categories within each treatment. However, the differences between Autonomy and Concern were close to significance in the Other-Self and Other-Other phases. Therefore, when summed across phases and treatments, the Concern total was high enough to significantly exceed the Autonomy total overall.

The higher Confusion total in the Self-Other phase accounted for a couple of changes in relationship between phases and categories. Although the Confusion totals were lower than the Autonomy and Concern totals in the Other-Self and Other-Other phases, the higher total for Confusion in the Self-Other phase was not significantly lower than Autonomy or Concern. Relative to a lower Discouragement total, the difference between Confusion and Discouragement in the Self-Other phase increased to a significance not reached in the other phases.

Although the other categories were generally higher than Contention, the higher Contention total in the Self-Self phase accounted for the lack of significant differences between that category and Autonomy, Concern, and Confusion in that phase. The particularly high Discouragement total in the Self-Self phase accounted for the significant difference between Discouragement and Contention not found in the other phases. The lower

Autonomy total accounted for the lack of significant difference between Contention and Autonomy in the Other-Other phase. Although the differences between Contention and Confusion were not significant within each phase, the difference between the two categories was close to significance within the Self-Self and Self-Other phases. Therefore, when summed across phases, the Confusion total was high enough to significantly exceed the Contention total overall.

V INTERPRETATIONS

The Relationship Variables: Overview

The results of the present study seemed to indicate that the experimental context, interview format, and interviewer verbal style were in no way unobtrusive as erroneously assumed in the design of the experimental conditions. Rather than provide a backdrop for the nonverbal treatments, they appeared to interact significantly with the nonverbal behaviors presented. This interaction produced the complexity of variation seen in the data analysis. It could have been predicted if the nonverbal treatment conditions had been viewed in terms of the total context in which they appeared and to which the subjects would be responding on the IEQ.

The experimental context was a brief, one-time interview by an interviewer with whom the subject had not interacted before nor would again. The recruiting speech set up the study as an investigation of women's feelings in conjunction with the Speech Department, Counseling Center, and Women's Psychology Clinic. The subjects responding to the speech were likely to be interested in women themselves and probably

expected to come into contact with an interviewer who would be actively involved with them. The subjects entered the interview with the idea that the purpose of the study was collection of information about them and that the focus of the interview was on content. This expectation was verified by 80% of the subjects on the post-experimental survey.

The interview format was primarily a one-way interaction; the entire focus of the interview was on the interviewee. It was redirected there by the interviewer when the interviewee strayed from her personal feelings and experiences. The interviewer introduced open-ended questions about the interviewee's past feelings and experiences. She also allowed the interviewee to take them wherever she wanted to until she fell silent, became repetitive or highly emotional, or went off on a less personal tangent.

The interviewer's verbal style was one of minimal involvement. She did provide some structure for the interviewee through open-ended topic questions, follow-up questions on material introduced by the interviewee, and refocusing questions when the interviewee strayed from herself. She also provided impersonal feedback in the form of unstructured encouragement, and follow-up and refocusing questions. However, the interviewer provided neither personal feedback about the interviewee's impact on her nor personal responses to information shared by the interviewee. She was, for the most part, verbally detached, placing the burden and focus of the interaction on the interviewee.

The interviewer also kept the interview focussed on the past, or present experiences outside of the current interview. The interviewee's

experiences in response to the interviewer or the interview were not pursued by the interviewer. The interviewee was probably very aware of being the subject of an experimental inquiry rather than being involved in a person-to-person interaction with the interviewer.

It was suggested that the interviewees entered the interview expecting to be the focus of the interaction, but also expecting the interviewer to interact more personally with them than she did. The constant "spotlight" without personal feedback or a "break" from the interviewer may have elicited self-consciousness and/or cognitive confusion and anxiety in the interviewee. Heller, Davis, and Myers (1966) found that lower levels of interviewer activity elicit strain in the interviewee. Waldron (1973) found evidence of interviewee internal discomfort in both of his nonverbal conditions. On the basis of previous research, he suggested that this might have been an immediate reaction to interviewer verbal content calling for self-reflection by the interviewee. He also found interviewee behaviors in the rapport encouraging condition which he attributed to self-consciousness over the direct focus on the interviewee by the interviewer. The behaviors he found in the rapport discouraging condition were attributed to cognitive confusion or pressure. Although the verbal content of each of the interviews of the present study was not available for analysis, it was also possible that in reflecting on past experiences, interviewees became aware of unpleasant feelings or self-doubts as well as positive ones.

In light of the above, it was likely that the interviewee would be very aware of detachment and lack of support from the interviewer. The interviewee might have also had some dissonant feelings over the

disconfirmation of her expectations regarding the interviewer. She may have felt confused by the interviewer and a little disappointed in her because of their limited contact and the interviewer's apparent unwillingness to engage her personally in the "here and now". Comments and complaints about the limited and surface nature of the interviewee's interaction with the interviewer were made by approximately 25% of the subjects overall and 15% of the subjects expressed a desire for more interviewer involvement. At least 19% of the subjects in each treatment reported feelings of confusion or difficulty in expressing themselves.

The interviewee was required to focus on herself. She may have felt or assumed responsibility for the interaction and, particularly, for herself. She probably went into the questionnaire feeling that responsibility and relative isolation from the interviewer. The interviewer probably appeared more as a part of the experimental paradigm than a person with whom the interviewee had shared some kind of personal relationship. Approximately 50% of the subjects overall expressed difficulty in answering the IEQ items because of little interaction with or lack of information about the interviewer.

An erroneous assumption of the present study was that a personal relationship between interviewer and interviewee could be created instantly in isolation from the experimental context and the interviewee's expectations within that context. It was also simplistically assumed that the interviewee would respond exclusively to that relationship. It is now apparent that this was not and could not have been done. The subjects responded to the interviewer within the context in which she was presented as discussed above.

Another erroneous assumption of the present study was that the subjects would respond primarily, if not exclusively, to the nonverbal behavior presented by the interviewer. As conjectured above, the interviewer's verbal behavior within the interview format was not innocuous and appeared to have made a very definite impression on the interviewee. This seemed to be particularly true in light of her probable expectations concerning the interviewer. The powerful impact of verbal behavior on the experience of the interviewee has long been recognized by interviewer trainers who have focussed on verbal behaviors (Rogers 1951, 1975; Ivey 1971; Banaka 1971). Additionally, Laing, Phillipson, and Lee's (1966) work with confirmation and disconfirmation of expectations in a relationship has shown them to be a significant factor in a person's experience of that relationship.

The interviewer nonverbal behaviors did not have an independent impact of their own. Rather, as could have been predicted on the basis of previous research, they appear to have qualified the impact of experimental context and interviewer verbal style on the interviewee's experience of herself and the interviewer (Ruesch and Kees 1956; Ekman and Friesen 1964; Watzlawick, Beavin, and Jackson 1966; Ruesch and Bateson 1968; Knapp 1972).

If the interviewer's rapport encouraging behaviors did convey interest, involvement, acceptance, and warmth as predicted, they might have "softened the blow" of the interviewer's verbal noninvolvement. They would have provided the interviewee with some support and confirmation of her expectations about the interviewer. They also may have appeared incongruent with the interviewer's verbal detachment. The possible incongruency

may have elicited some confusion in the interviewee. It might also have been more difficult for her to dismiss the interviewer as simply part of the experimental paradigm. In addition, the interviewer's rapport encouraging behavior might have increased the intensity of focus on the interviewee and contributed to her self-consciousness.

If the rapport discouraging behaviors conveyed apathy, detachment, nonacceptance, and coolness as predicted, they might have enhanced the "blow" of the interviewer's verbal detachment. They would have further isolated the interviewee from the interviewer and disconfirmed her expectations. The nonverbal congruence with the interviewer's verbal detachment may have presented a consistent picture of the interviewer which could have been accounted for by her role in the experimental situation. The interviewer's nonverbal detachment might also have given the interviewee a break in the focus on her. Therefore, the tendency of rapport discouraging behaviors to increase the interviewee's confusion and anxiety may have been somewhat reduced in this context.

Phases

The interviewee's focus on herself and probable feelings of isolation from the interviewer may have resulted in her taking the primary responsibility for negative feelings aroused in her by the whole experimental situation. Trying to come up with meaningful material in response to the interviewer's requests for self-reflection may also have elicited stress in the interviewee as discussed in the preceding sub-section. These tendencies might have accounted for the generally higher totals in the Self-Self phase across treatments and categories. Waldron (1973) also

suggested that an interviewee may reduce cognitive dissonance by producing behaviors which "fit" the situationally expected reinforcers. If the interviewees in the present study were dealing with a disconfirmation of their expectations of the interviewer, they might have evaluated themselves more negatively to fit their perceptions of the interviewer's response--or lack of it--to them.

The interviewee's focus on herself and lack of person-to-person contact with the interviewer may also have given the interviewee difficulty in discriminating on items involving the interviewer on the IEQ. This difficulty might have accounted for the lack of significant differences between the overall totals for the Self-Other, Other-Self, and Other-Other phases. It also might have reflected a tendency of the interviewee to attribute the interviewer's behavior to her perceived role as data-collector in a study, rather than to an interviewer personality characteristic or personal response to the interviewee herself.

The Self-Self phase discriminated best between the two treatments, probably because the interviewees were able to make finer discriminations in their experience of and feelings toward themselves in the interview. The Other-Other phase differed least between treatments, perhaps reflecting the interviewees' difficulty and lack of willingness to make discriminations and evaluations regarding the interviewer.

The significant difference between treatments in each of the four phases suggested that the impact of the experimental context and interviewer verbal behavior on the interviewees' experiences of themselves and the interviewer was more negative in conjunction with rapport discouraging behaviors than with rapport encouraging behaviors as predicted.

Categories

Compared with the other categories, the generally higher Concern totals across treatments may have been reflecting interviewee response to experimental context and interviewer verbal style, indicating a general feeling of lack of support and involvement. The slightly elevated Concern total in the Other-Self phase would have been expected if the interviewee was particularly aware of the interviewer's lack of personal involvement with her. Involvement appeared to be more central to the interviewee than support. The post-experimental survey showed the nonverbal behaviors to have more of an impact on perceived involvement than perceived support from the interviewer.

The Autonomy scores were also generally higher than the Discouragement, Confusion, and Contention scores. Like Concern, the Autonomy category might have been particularly responsive to experimental context and interviewer verbal behavior. The interviewee might have been reticent to fully endorse feelings of respect, understanding, trust, and confidence in light of the lack of personal response and feedback from the interviewer. The interviewer's possible disconfirmation of interviewee expectations regarding her involvement might also have contributed to this possible reticence.

The slightly lower Autonomy total in the Other-Other phase might have reflected a response to the interviewer's status as interviewer-experimenter and/or her detachment, "poise", and control. The slightly higher total in the Self-Self phase might have reflected the interviewee's response to her own status as interviewee-subject and/or some negative feelings aroused by the experimental situation as discussed earlier in this

section. However, if the interviewee perceived her interaction with the interviewer in terms of the entire experimental context rather than a personal relationship, her experience of integrity would have been less likely to be intertwined with the interviewer's response to her and vice versa. Therefore, it would have been less vulnerable to experimental manipulation. The findings for the Autonomy category between phases and treatments supported these notions (see Chapter III, Tables VII and IX).

The tendency of the Discouragement, Confusion, and Contention items to be scored together could have been accounted for in a couple of ways. The item contents may have been similar enough between categories for the interviewees to be unable or unwilling to discriminate between them after their limited and contrived interaction with the interviewer. For the same reason, the interviewees may have been less willing to endorse the strongly negative items than to deny the positive ones. All of the items in these three categories were stated in the "negative" direction, while most of the Autonomy and Concern items were stated in the "positive" direction. "Negative" and "positive" item content was defined in Chapter I (Sec. VIII, p. 14-15).

It has been suggested that the interviewer's verbal style in the present study probably elicited feelings of ambivalence, responsibility, disappointment, and confusion in the interviewee. The interviewee did not tend, however, to endorse feelings of being disappointed in or confused by the interviewer. The low Self-Other total in the Discouragement category and the non-elevated Other-Self total in the Confusion category suggested that the interviewee may have been deferring to the interviewer. She may have been rationalizing the interviewer's behavior by attributing it to her

role. It appears that instead of directing those feelings toward the interviewer, the interviewee might have directed them toward herself as suggested by the higher totals in the Self-Self phase.

Blumberg's concept of "cognitive assymetry" also suggests that an interviewee will attempt to reduce any discrepancy between the interviewer's response to her and her response to the interviewer by making her response match the interviewer's (Mikawa 1963; Blumberg 1967). The high Confusion total in the Self-Other phase may have reflected the interviewee's attempt to account for the interviewer's confusing response to her by feeling that she was confusing the interviewer. The interviewee's attitude in response to isolated non-interaction and feelings of responsibility might have been reflected in a statement like, "I'm feeling confused (or disappointed or inadequate). She [the interviewer] is just trying to do her job. So either I'm doing something to her or I'm doing it to myself."

Although they did follow the general pattern of the Discouragement and Confusion totals between phases, the generally lower Contention totals suggested that feelings of flight or fight were not quite as strong as feelings represented by the other categories. The experimental context and nature of the interviewee-interviewer interaction in the present study probably did not arouse the intense or urgent emotional state which would produce these feelings strongly.

The Confusion category discriminated best between the two nonverbal treatments, followed by Discouragement, Contention, Concern, and Autonomy, respectively. The first three groups of feelings appeared to be the most responsive to the interviewer's nonverbal qualification of verbal style in the present study. The last two groups of feelings appeared to be responsive

to verbal behavior and experimental context, and sensitive but less responsive to nonverbal style. The relation of the first three categories to the last two within each treatment supported the following notion. The nonverbal behaviors appeared to confirm the verbal impact in the rapport discouraging treatment and qualify or diminish it in the rapport encouraging treatment (see Chapter III, Table IX). It seemed to make sense that the stronger negative statements were more sensitive to the combination of nonverbal, verbal, and contextual impacts in the present study. The "milder" positive feeling statements appeared to be more indicative of contextual and verbal impacts.

Treatments

The interaction of the nonverbal behaviors with the experimental context, interviewee expectations, and interviewer verbal style in the present study may have reduced their predicted impact as presented in Chapter I (Sec. V, p. 7-9). For reasons given early in this section, the impact of the rapport encouraging behaviors may have been more positive if they had not been incongruent with the interviewer's verbal behavior and increased the intensity of focus on the interviewee. For the same reasons, the impact of the rapport discouraging behaviors may have been more negative if they had not been congruent with the interviewer's verbal behavior and given the interviewee relief from the verbal focus on her.

This notion may have accounted for the mixed results on the post-experimental survey presented in Chapter II (see Table XII, p. 50). The predicted difference between nonverbal treatments was supported by more claims of anxiety, insecurity, bad feelings about self, confusion, tension,

bewilderment, and difficulty in expressing self in the rapport discouraging treatment. More claims were made of pleasantness, openness, and relaxation in the rapport encouraging treatment. However, this difference was qualified by the following results.

The modes for the Likert scale items measuring the feelings described above were the same for each treatment. Also, in response to the open-ended questions, these feelings were claimed by only half of the subjects in each treatment. This finding suggested that the interviewees' reactions to interviewer focus and congruence could have reduced differences in the interviewees' feelings between treatments.

Although not statistically significant, the relationship between the Other-Other totals and the Self-Other and Other-Self totals within categories and treatments was interesting. An examination of Table XIII revealed the following differences between the Other-Other totals and the Self-Other/Other-Self totals. In the rapport-encouraging treatment, the Discouragement/Confusion/Contention sum total for the Other-Other phase was higher than the totals for the other two phases. In the rapport discouraging treatment, the Autonomy/Concern sum total for the Other-Other phase was lower than the totals for the other two phases. This finding suggested the possibility that in the rapport encouraging treatment, the interviewees may have been responding to incongruency in the interviewer by endorsing feelings of discouragement, confusion, and contention in her more strongly. In endorsing the Autonomy and Concern items for the interviewer more strongly in the rapport discouraging treatment, the interviewee may have been responding to her congruency and perceived self-sufficiency and containment.

TABLE XIII

SUMMARY TABLE FOR THE IEQ RESULTS IN THE
SELF-OTHER, OTHER-SELF, AND
OTHER-OTHER PHASES OF THE
TREATMENT-PHASE-CATEGORY
INTERACTION

PHASES		SO		OS		OO	
CATEGORIES		AUT+CNC	DIS+ CNF+CNT	AUT+CNC	DIS+ CNF+CNT	AUT+CNC	DIS+ CNF+CNT
T R M T S	RE	53.193	63.492	52.900	61.643	50.764	67.384
	RD	55.172	75.993	57.480	75.384	53.547	74.525

The interviewee may have found it easier to dismiss the interviewer as part of the experimental paradigm in the rapport discouraging treatment than in the rapport encouraging treatment where the interviewer was non-verbally involved with her. She may have seen the interviewer as more of a person in the rapport encouraging treatment, partially confirming her expectations of the interviewer for this study. This notion may have accounted for some of the results of the post-experimental survey. The results of the survey did show that in the rapport encouraging treatment, more subjects complained about their limited interaction with the interviewer and expressed difficulty in answering questions about the interviewer on the IEQ. However, fewer subjects claimed that their responses on the IEQ were unrepresentative of their feelings toward the interviewer. In addition, most of the subjects claimed that they would want the interviewer as a friend or counselor while most of the subjects in the rapport

discouraging treatment did not. Subjects in the rapport encouraging treatment also claimed to feel better about the interviewer than those in the rapport discouraging treatment.

If the interviewer in the rapport discouraging treatment totally disconfirmed the interviewee's expectations about her and seemed to be more of a "non-person", the interviewee probably would have reacted in the following ways. She would have felt less good about the interviewer and had less desire to be involved with her. She might also have tried less hard to be discriminating on the IEQ and found it to be less appropriate to the impersonality of the experimental situation. The results discussed above suggested that this may have been the case.

VI LIMITATIONS, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

The present study sought to determine whether or not a participant in a relationship could directly discriminate subtle disposition and relationship statements conveyed by a set of nonverbal behaviors. It also sought to evaluate the effectiveness of the IEQ in assessing the experience of the participant. If subjects made these discriminations on the IEQ, it was assumed that they would score the IEQ items differently in response to different sets of nonverbal behavior. Thus, it was hypothesized that the IEQ scores would be significantly different between two nonverbal treatments. The direction in which they would differ was predicted on the basis of evidence collected through previous research.

Receiver Assessment of Nonverbal Statements

The hypotheses of the present study were confirmed for all four phases and four out of five categories on the IEQ. The difference between treatments in the fifth category was close to significance. These results supported previously cited research claiming a confusing, disengaging, critical impact for rapport discouraging behaviors as opposed to a supportive, involving, accepting impact for rapport encouraging behaviors. They also suggested that the receivers were able to make discriminations in their reaction to and assessment of the sender's nonverbal statements to them.

As discussed in the preceding section of this chapter, the impact of interviewer nonverbal behavior on the interviewee was not pure. The interviewee was at least responding to the interactions between her expectations, experimental context, interview format, and interviewer verbal and nonverbal styles. The subjects' perceptions of the contrived interviewer-interviewee relationship and its experimental context appeared to be reflected in the higher totals in the Self-Self phase. It was also reflected in the general lack of discrimination between the other three phases, between the two positively stated categories, and between the three negatively stated ones. Furthermore, the groupings of issues by category and phase did not respond uniformly to the experimental conditions. This finding suggested that the subjects were responding differently to different aspects of those conditions. Taken together, these results suggested that the subjects did respond accurately to the true relationship in which they were involved in the present study. They were not manipulated into a personal relationship with the interviewer as was initially assumed possible with the design of

the present study.

In addition to the experimental context, the nonverbal behaviors had meaning for the interviewees in relation to the verbal behavior they accompanied and the interviewees' expectations of the interviewer. This was suggested by the nonsignificant overall effect for nonverbal treatment, the specific results for the phases and categories, and the results of the post-experimental survey. The impact of nonverbal behavior on the subjects was not isolated with the design of the present study as was initially assumed possible.

With regard to the original purpose of the present study, then, the subjects did not make subtle discriminations on the IEQ on an item to item basis. However, the subjects did appear to make the discriminations that were possible and would be expected after their limited and contrived relationship with the interviewer. They did discriminate disposition and relationship statements that seemed appropriate to the situation. These statements, however, could not be ascribed to the nonverbal behaviors alone. The subjects did not discriminate the meanings of nonverbal behavior in isolation, but nonverbal behavior in conjunction with experimental context, verbal behavior, and their expectations concerning the relationship.

The present study added to evidence provided by previously cited research that the "meanings" of nonverbal behavior are more realistically studied in the context of relationship and in conjunction with other variables contributing to the definition of that relationship. It attempted to go one step further by using a participant in the relationship as a resource to determine what nonverbal messages were received and how they were received. The results suggested that the present study did not go

far enough toward this end.

Assessment and Context

The results did suggest that the receiver can be a valuable source of information about how nonverbal behavior functions within a relationship. In the present study, there appeared to be at least two possible reasons why the receivers were limited in their capacity and/or willingness to make subtle discriminations.

The IEQ appears to have given the subjects response options which were inappropriate for an experimentally contrived relationship. An appropriate assessment device would have provided response options which were somewhere between the gross Likert-scale items used to poll subjects in the studies cited in Chapter I (Sec. II) and the fine discriminations called for by the IEQ. One alternative for future studies would be to give the receiver directive questions which would allow her to write down her responses to the sender in her own words. Examples of such questions might be "What was the sender telling you about yourself?" or "How do you think the sender felt towards you? And what did she do that led you to believe this?". These responses could perhaps be content and factor analyzed across studies to produce some sort of questionnaire for use with an experimental relationship. Exploratory research directed toward this end would be necessary in order to use the receiver as an effective resource in experimental studies of human communication.

The receivers in the present study also appeared to have been limited by the context and nature of their interaction with the sender. The interviewees' responses suggested that when subjects know they are the subjects

of study within a relationship in an experiment, they may attribute their experience of that relationship to experimental roles. To avoid that possibility, it seems that the subjects would either have to be blind to the experimental purpose of the relationship or would have to be studied within the context of a naturally-occurring relationship.

For the first alternative, the experimental design would have to lead the subject to believe that she was not a subject in the relationship under actual study. That relationship would be given another context. For example, a subject might be waiting in a room to be called in to participate in the "experiment". A confederate "unexpectedly" enters, posing as a student who uses the room to study or relax before a class. He engages the subject in a brief two-way encounter during which he displays the treatment behaviors. The subject is then called in to participate in a "dummy" experiment such as associating to Thematic Apperception Test (TAT) cards. The subject comes every day for a week, waiting from five to twenty minutes before being called. The confederate might come three out of the five days. At the end of the week, the subject is given a questionnaire calling for her responses to the confederate.

Another possibility would be to use students in a class as subjects. Confederates, posing as students visiting to fulfill requirements for a class project, would be introduced into small group discussions during class. The confederates, displaying treatment behaviors, would engage students in the groups daily for a week. Subjects would then be asked to make their assessments of the visiting students.

The interactions in these two examples would probably appear more "natural" to the subjects than the interaction used in the present study.

The subjects would have more opportunity for personal exchange and involvement with the senders. They would, therefore, probably be more willing and able to make discriminations regarding the senders' communication. However, these interactions would still create limited and contrived relationships which run the risk of being attributed to an artificial or "special" situation. Subject expectations would still need to be taken into account and the IEQ would still be inappropriate for this kind of experimental study.

In a more developed, naturally-occurring relationship, a receiver could provide more specific information regarding the disposition and relationship statements being received from a sender. Exploratory, rather than experimental, studies could be made in which members of existing on-going dyads are observed in interaction with each other. For example, during each of three interactions for each dyad, the verbal and nonverbal behaviors of the members of the dyad would be catalogued according to previously determined criteria. At the conclusion of the three interactions to be rated, each member of the dyad could be given the IEQ. An additional questionnaire would be desirable to assess their perceptions of the context of the relationship and the interactions, their expectations of each other, and the extent to which those expectations were confirmed in the interactions. Examples of dyads that could be studied include counselor-client, business associates, close friends, a courting relationship, or a student debate team. Dyads could also vary and be homogeneous or heterogeneous with regard to sex, age, and status, for instance.

By collecting a body of catalogued behavioral data and IEQ responses, some kind of comparative analysis could perhaps be made. This analysis

would be directed toward discovering recurring relationships between the variables themselves and between the variables and the IEQ responses. Tentative conclusions might then be drawn as to how these variables function across and within various kinds of relationships and what kind of statements they tend to communicate.

Among others in this kind of study, the risk would be run of the observation interfering with the interaction. Even though the relationship exists naturally, the context again becomes artificial when the participants know or suspect they are being observed. However, the participants would be responding to the IEQ on the basis of their entire past experience in the relationship. Gestalt theory suggests that people reveal their patterns of dealing with themselves and others in everything they do (Perls, Hefferline, and Goodman 1951). If so, in the naturally-occurring relationship, even the behavior displayed under those unique conditions would probably tell us something about what the participants are responding to in each other.

Another difficulty with this kind of study would be lack of control over or knowledge of extraneous variables impacting on the relationships. Hopefully, the use of many dyads of each kind and more than one interaction for each dyad would result in the cancellation of variance due to these other variables. The IEQ could also be administered more than once to each dyad. Laing et al (1966) have shown, however, that the responses to their IPM were relatively stable over time and invulnerable to minor situational events. Since the IEQ is taken directly from the IPM, it is expected that this characteristic would apply to it, also.

The Relationship Variables

In day-to-day interaction, people rarely relate to one another totally nonverbally. The results of the present study further suggested that nonverbal behavior cannot and should not be isolated in the context of real interaction between two people. In the present study, its meanings were interpreted by the receivers in conjunction with the impact of other variables. The complexity of interaction among variables is difficult to study, but should not be ignored in the search for understanding their functions in human communication. How they interacted appeared to be very important to the receivers of the communications in the present study.

However, although the receivers made their assessments in response to the interaction of variables, those assessments did not include specific information as to what variables were interacting and how. The present study relied heavily upon supposition in the interpretation of the receivers' responses. This finding would suggest that information provided directly by a participant in the relationship appears to have limited usefulness in clarifying to what variables the participant is responding.

These results may, in part, have been a function of the instrument used in the present study to assess the receivers' experiences. The IEQ did not ask the receiver to indicate what variables she was responding to when she made her discriminations. Such a request could possibly incorporate with the IEQ or some other assessment instrument. These questions might take a form like "What happened in this interaction that led you to make this response?". Another example would be "What events in the interaction or behaviors in the other person were you most aware of in making

your choices on this questionnaire? What were you most aware of in yourself?". How fine these discriminations by the subjects would be would probably depend on the population from which they were drawn and remains to be discovered in future research. The subject might be shown to be a useful resource in clarifying to what variables she is responding.

Even with the subject's input, some kind of accompanying behavior analysis in both experimental and exploratory research would be essential to the investigator. This would enable her to make more meaningful interpretations about the aspects of the relationship to which the subject is responding.

A video tape recorder would be very useful for the purposes of behavior assessment. It would enable an investigator to catalogue behaviors more accurately and to see the relationships between the variables more closely, such as verbal with nonverbal behavior. The interactions under study could also be more conveniently observed and assessed by other raters. If a video tape recorder cannot be used, the interaction should be tape recorded and observed by more than one observer, if possible.

The following are suggested forms of behavior assessment, with or without the use of video tape equipment. In the exploratory studies mentioned earlier, each member of the dyad would be making an assessment in response to the other. In experimental studies, the subject would be involved in a two-way interaction with a confederate, for example. The behaviors of both participants in the interaction would again be needed. The confederate's behaviors would be needed to determine how the experimental conditions were presented and how they may have varied in response to the

subject. The subject's behaviors would be needed to determine to what behaviors the confederate was responding. In addition to the subject's self-report, they also would give the investigator data as to how the subject was responding to the conditions presented by the confederate.

Therefore, the verbal and nonverbal behaviors of both participants in the interaction would be catalogued. In addition to the criterion behaviors under study, established dependent behavioral measures such as those used in Waldron's 1973 study could be employed. Examples include verbal productivity, positive and negative self-statements, speech disturbances, nervous outbursts, gesture congruity with verbal content, smiling, and eye contact (Waldron 1973).

Some form of verbal and/or nonverbal interaction analysis would give the investigator the sequence of events between the participants. This would enable him to study more accurately the relationships between the behaviors of each person. Content analyses could also be made of the taped interactions to more accurately describe actual verbal content and explore its relationship to the other variables.

It is further suggested that the participants' expectations of each other and the interaction, and their perceptions of the context of the interaction and relationship also be assessed. These two variables appear to contribute to the participants' "set" which then influences their assessment of verbal and nonverbal messages received. In an experimental study, this would probably be done for the subject only since the confederate would not be making an assessment. Some form of short questionnaire administered after the interaction would be valuable. It could ask the

subjects to recall their feelings regarding these variables before the interaction began.

When the study is an experimental one, careful control for the major variables influencing the interaction would be needed. A design which incorporated these variables would help to sort out the complexity of variable interaction. A study in which all but two of the variables were held constant would give information about the relationship between those two variables within the context of the others. For example, context and expectations could be held constant. Verbal and nonverbal style could then be varied over two levels to make four conditions.

A set of two video tape monitors and cameras could also be used to investigate the relationship between verbal and nonverbal behavior. A two-way interaction would be set up between a subject and a partner in which the subject would not perceive himself as the subject of the study. Subject and partner would be filmed in different rooms and appear live to each other on monitors. The subject would be aware that he was to have two different partners on two different days. These partners would be similar to each other and would display the same verbal and nonverbal styles during their interactions with the subject. Half the subjects in the study would receive sound only with the first partner and sound and visual with the second. The other half of the subjects would receive sound and visual with the first, sound only with the second. After each interaction, subjects would answer a questionnaire designed for use in experimental studies as discussed earlier in this section. The questionnaire responses for the verbal trials and for the verbal plus nonverbal trials would then be compared to explore the qualifying impact of the

nonverbal behavior. This could be done for another set of subjects varying verbal or nonverbal style. This kind of study would have the limitations previously discussed for experimental studies, particularly with regard to the contrived nature of the interaction. The kinds of discriminations requested in the questionnaire would have to be appropriate to that context.

The impact of subject expectations might be explored as follows. Verbal and nonverbal styles would be held constant. The expectations set up in the subject regarding the interaction and the confederate would be varied so that they were either confirmed or disconfirmed by the confederate's behavior. Examples of kinds of expectations include task vs. social orientation, equal vs. unequal status, participant vs. observer/critic, and the like.

Another area of exploration suggested by the present study was the attribution of a person's behavior to his role in the interaction and the relationship. What behaviors are expected of and actually associated with certain kinds of social roles? An exploratory study might investigate the expectations, behaviors, and assessments of participants in dyads such as teacher/student, counselor/client, and employer/employee. An experimental study might set up expectations in the subject of a certain role for the confederate. The confederate would display behaviors which the subject would then assess as a "fit" or "misfit" for that role. The subject might also evaluate the confederate's behavior in terms of what he would attribute to role and what he'd attribute to personal characteristics.

The Interpersonal Experience Questionnaire

From the results of the present study, the IEQ shows potential as a means for assessing the perceptions of the receiver and the complex interaction among relationship variables. However, its effectiveness in its current form appeared to be limited by the context in which it was used and by its own length and complexity.

The IEQ appeared to be inappropriate for the experimental context of the present study. It asked for finer discriminations than the subjects could or would make after their limited and contrived contact with the interviewer. It did, however, reveal the extent to which the subjects could or would make those discriminations in the present situation. The results of the present study, therefore, appeared to be inconclusive with regard to the usefulness of the IEQ as a device for assessing a participant's experience of an interaction and relationship.

Laing et al (1966) have proved their IPM questionnaire to be effective for long-term marital dyads. The IEQ was drawn from the IPM. Thus, it is probable that the four relational phases and five issue categories on the IEQ would have discriminative value in a two-way on-going relationship in which the members were more involved with each other. It would probably be most effective when used with naturally-occurring, as opposed to experimentally-contrived, relationships. The participants would then have some backlog of experience with one another on which to draw.

How developed the relationship would have to be in order for the participants to make the fine discriminations on the IEQ remains to be discovered. The IEQ might be investigated by administering it to members of existing dyads of varying quality, frequency, intensity, and duration of

contact. Examples of on-going dyads differing along all of these dimensions include a short-term casual business relationship, a moderate-term counseling relationship, and a long-term close friendship. Homogeneity or heterogeneity of age, sex, or status could also be varied to investigate what influence those factors might have on the usefulness of the content of the IEQ items. The results of such studies could be compared to determine the limits of the IEQ's effectiveness.

The IEQ's complexity appeared to be responsive to the subjects' experience of the combined impact of all the relationship variables, rather than nonverbal behavior alone. However, the complexity of the results also required quite a bit of conjecture to sort out these variables and how they interacted. The verity of the interpretations made was limited by the lack of additional corroborative data in the present study. The need for simultaneous behavior assessment and inquiry into subject expectations and perceptions of context has been discussed in the preceding sub-section. Also discussed was the option of asking the subjects to what behaviors or events they were responding when answering items on the questionnaire. It is recommended that the IEQ not be used alone when investigating the relationship between sender behavior and receiver response. It is also suggested that the investigator control or account for the major variables influencing the relationship and interaction he is studying.

In the present study, each of the issue categories on the IEQ appeared to have a differing sensitivity to the variables affecting the interaction. The relations of categories to variables and the relationships between the categories found in the present study may have been specific to these

experimental conditions. Whether or not they would hold up under other conditions remains to be investigated.

Discussed in the preceding sub-section were investigative studies which would compare behavioral analyses of interaction between members of existing relationships with their responses on questionnaires. These questionnaires would assess their experience, expectations, and perceptions of context. The variables influencing the members' experience would include verbal and nonverbal behavior, expectations, and perceptions of context. If the IEQ were used for such studies, the relationships between categories, and between categories and variables, could be explored across dyads. For example, did Autonomy and Concern items vary more than the other three categories with differences in verbal style? Did Discouragement, Confusion, and Contention items vary more with changes in nonverbal style, other variables being comparable? Did the latter three categories still tend to be scored together? Answering these kinds of questions would help to determine whether or not the categories on the IEQ have consistent sensitivities to particular variables and/or consistent relationships with each other. The responses to the issues on the IEQ could also be factor analyzed across dyads to determine whether or not some other grouping of issues would be more accurate than Laing's categories?

These studies could also be used to improve the IEQ in the following ways. In the present study, about 30% of the subjects complained that the instrument was repetitious. They may have been reflecting a reaction, in part, to their difficulty and reluctance in making the required discriminations within the present experimental context. However, many of the issues

on the IEQ were similar in meaning, such as "is good to" vs. "is kind to". It is probable that some of the issues could be consolidated or eliminated for the use of the instrument with dyads other than long-term intimate ones such as Laing's married couples. The IEQ results of the exploratory studies mentioned above could be examined to determine which issues had the least discriminative value across relationships. Those issues could be eliminated. Issues which were scored similarly across relationships could perhaps be consolidated. Categories would then need to be adjusted accordingly.

The discriminative values of the four phases could also be assessed across relationships with corresponding adjustments, if any. It is possible that the IEQ could be adjusted in this way for maximally appropriate use with different kinds of relationships. One set of issues and/or phases may be useful in long-term relationships and not useful in short-term ones, for example. This process would help to correct the limitations of length and unnecessary complexity in the IEQ.

After the IEQ has been improved and the special sensitivities of its categories discovered, if any, variations on its use are suggested as follows. It is possible that only part of the IEQ would be needed to assess the impact in which an investigator is interested. For example, he might be interested in the relationship between certain behaviors and the subjects' perceptions of concern and support in a dyad. He then would need only the Concern category from the IEQ.

Or, it might be useful for the investigator to administer part or all of the IEQ to both participants in the relationship. For example, an experimenter might be studying how one member of a dyad projects onto the other.

He might use the Other-Self and Other-Other phases for the subject member and the Self-Other and Self-Self phases for the other member to make his comparisons. Any combination of phases and/or categories could be used. Using only part of the IEQ would render it less unweildy to administer and analyze.

VII SUMMARY ✓

The primary purpose of the present study was to investigate the use of the receiver as a resource for assessing the disposition and relationship statements communicated by a sender's nonverbal behavior. As assessment instrument for use by the receiver was suggested and evaluated.

The confirmation of the hypotheses of the present study suggested that the receivers were evaluating two different sets of nonverbal behavior differently and in the direction predicted by previous research. The interpretation of the results suggested that the receivers were responding to the combined impact of experimental context and paradigm, their own expectations of what would happen in the interview, and the sender's verbal and nonverbal styles. >

They further suggested that context and receiver expectations created a "set" in the receiver within which she evaluated the sender's behavior. The amount of consistency between sender behavior and receiver set may have strongly influenced the receiver's experience of the interaction. The sender's nonverbal style appeared to reinforce or qualify her verbal style according to the receiver's frame of reference.

The results also suggested that the receivers were unable or unwilling to make fine discriminations in their assessments of the sender's impact. >

Their limited and contrived contact with the sender and/or the inappropriateness of the instrument used for the assessment may have accounted for this finding.

Generalization of these interpretations was limited to the specific conditions of the present study. These conditions included the populations from which the subjects and interviewers were drawn, the experimental paradigm, the interview format, and the interviewers' verbal and nonverbal styles. They also included the characteristics of the instrument used to assess receiver experience. Generalization was further limited by the lack of corroborative data clarifying behavioral variables, receiver expectations, and perceptions of context.

The effectiveness of the IEQ, the assessment instrument used in the present study, appeared to be limited by the nature of the relationship for which it was used. Its usefulness also appeared to be limited by its complexity and length.

The implications of the present study included the following. Receiver assessment of sender communication appears to be a potentially valuable source of information concerning the meaning and function of that communication within the relationship. The receiver would probably make the most subtle discriminations in response to a sender with whom she has an existing on-going relationship. The more intense and long-term the relationship, the finer the possible discriminations would be.

The receiver might also be able to provide some useful information in an experimentally contrived relationship. However, she would have to perceive the definition of that relationship as something other than one in which she is the subject and the other is part of the experimental paradigm.

The present study also implied that the device used to assess the receiver's experience would have to be appropriate for the kind of relationship in which the sender and receiver are involved. The receiver assessment instrument should include requests for the receiver's expectations and perceptions of context. It might also ask the receiver to include to what events or behaviors she was responding in making her choices on the questionnaire. Behavioral data for both members of the relationship should be taken in addition to receiver assessment data.

The present study provided further evidence for the following assertion. It is not possible to isolate nonverbal communication from the verbal behavior it accompanies in the context of live human interaction. It was suggested that the function and meaning of nonverbal behavior in that context are most realistically studied in terms of their total context. This would include the relationships between the nonverbal behaviors under study and the other major variables contributing to the participant's experience of the interaction. These other variables would have to be controlled or accounted for in the design of such a study. It was further suggested that the subtlety of nonverbal communication could be studied in more depth if its function and meaning in naturally-occurring, on-going dyads were explored.

The present study implied that the IEQ has potential value as a receiver assessment device. It appeared, however, that it is not appropriate for use with experimentally contrived relationships or to assess the impact of an isolated variable. It would probably be most effective when used in existing relationships to evaluate the combined impact of variables influencing each member's experience of her relationship with

the other. The results implied that the categories on the IEQ might have particular sensitivities to certain variables. These results may have been specific to the present experimental conditions, however. In research into the communicative function and impact of behavior, behavioral data taken during the interactions would be correlated with IEQ data.

Further research was suggested in the following areas. "Blind" experimental studies using video tape and/or confederates were suggested. "Blind" refers to studies in which the subject does not experience the relationship under actual study as the experimenter-subject relationship being investigated. The necessary characteristics of that relationship were discussed. Examples of how the relationship variables could be manipulated were also given. Relationship variables included verbal and nonverbal behavior, expectations, and context, among others. Suggestions were made for the development of a receiver assessment device appropriate for use in the experimental context. Suggestions were also made for taking behavioral data on the sender and receiver.

Exploratory research with various kinds of existing dyads was encouraged. Examples of how these dyads would differ were given. In this kind of investigation, the relation of the relationship variables to each other and to each member's assessment of their experience of the relationship would be explored. Comparative analyses would be made across dyads to explore recurring correlations between variables and between variables and member assessments.

Suggestions were made for taking data on the relationship variables and their interaction with each other. The use of sound and video tape

recordings was recommended. It was also recommended that the receiver assessment instrument include requests for expectations and perceptions of context. Requests for listing the behaviors or events to which the receiver was reacting when making his responses were also suggested.

It was suggested that the IEQ be used in such studies to assess the limits of its effectiveness with various dyads and to make the necessary modifications for its improvement. Suggestions for these modifications were discussed. It was also recommended that the existence of consistent relationships between categories and their particular sensitivities, if any, be explored through comparative analyses as suggested above. Finally, studies were suggested in which partial use of the IEQ and/or use of the IEQ with both members of a dyad would be advantageous.

The meanings and functions of specific nonverbal behaviors have been shown to be dependent upon the context in which they are displayed and received. The receiver and his unique history with the sender would seem to be an essential part of that context (Bateson, Jackson, Haley, and Weakland 1956; Ruesch 1957; Hall 1959; Bandler, Grinder, and Satir 1976). Therefore, the receiver appears to have potential beyond that used in previous studies for shedding light on how meanings of nonverbal behavior are determined in relation to other variables. The IEQ suggests a new form of tapping that potential in the investigation of existing relationships. Exploration into these areas is strongly encouraged in order to better understand how specific nonverbal behaviors function in relation to other variables in human relationships.

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APPENDICES

APPENDIX A

RATER QUESTIONNAIRE

The following instrument was used by the three judges observing the interviewers' pilot interviews to evaluate their overall impact, nonverbal behavior, and verbal behavior. Overall impact was evaluate along generally positive-negative dimensions. The nonverbal behavior was evaluated along dimensions defining rapport encouraging and rapport discouraging behaviors. The verbal behavior was evaluated along dimensions designed to assess quantity and quality of interviewer verbal activity.

Rater Questionnaire

Rater:

Interviewer:

Interview No.:

Please observe and rate the interviewer ONLY. Remember that you are rating the interviewers' verbal and nonverbal BEHAVIORS, not the interviewers as persons. Also, please do not talk with the other raters until the fifty minute session is over.

You will be observing two interviewers, each in 4 five minute interviews. You will observe each five minute session, then place your ratings on this questionnaire, i.e., you will rate after each interview. There will be two twenty-five minute rounds of four interviews each.

PART I

Please circle the number which best represents the overall impact of the interviewer's verbal and nonverbal behaviors.

1.	1	2	3	4	5	6	7
	very warm			neutral			very cold
	and involved						and distant
2.	1	2	3	4	5	6	7
	very supportive			neutral			very critical
	and "with" the						and "against"
	interviewee						the interviewee

PART II

Please circle the number which best represents the interviewer's nonverbal behavior.

3. 1 2 3 4 5 6 7
smiled all the time $\frac{1}{2}$ & $\frac{1}{2}$ never smiled
4. 1 2 3 4 5 6 7
posture very relaxed posture very tense
5. 1 2 3 4 5 6 7
leaning far forward straight up reclining far backward
6. 1 2 3 4 5 6 7
limbs open $\frac{1}{2}$ & $\frac{1}{2}$ limbs closed
7. 1 2 3 4 5 6 7
body direct body wide
8. 1 2 3 4 5 6 7
never broke eye contact moderate never established eye contact

(Assume interviewee looked at interviewer for the entire five minute period)

PART III

Please circle the number which best represents the interviewer's verbal behavior.

9. 1 2 3 4 5 6 7
very supportive & encouraging neutral very nonsupportive and discouraging
10. 1 2 3 4 5 6 7
provided lots of structure (e.g. "Did that make you feel angry?") semi-structured (e.g. "How did that make you feel?") provided no structure (e.g. "Tell me more." "uh-huh")

11. 1 talked all the time
2
3
4 moderate
5
6
7 said hardly a word

APPENDIX B

INTERVIEWER VERBAL BEHAVIORS

Given below are examples of each of the acceptable verbal behaviors which made up the interviewers' verbal style.

Semi-structured, single, open-ended questions

"What kinds of experiences did you have with your high school teachers?"

"How did you feel about your parents then?"

"What did you most care about in high school?"

"What big issues have arisen in college, if any?"

"How have you handled them?"

Follow-up questions

"How did that affect your academic performance?"

"What, in particular, seemed to cause problems?"

"What do you think made that so important?"

"What did you like about it?"

"Can you think of any other experience that you'd like to share?"

Unstructured encouragements

"Uh-huh."

"Go on."

"Anything else?"

"I see."

Refocusing questions

"How did that make you feel?"

"How did that experience affect you?"

"What did you think about that?"

"Can you relate that to yourself?"

"What made that important to you?"

APPENDIX C

THE INTERPERSONAL EXPERIENCE QUESTIONNAIRE (IEQ)

The following instrument was given to each subject immediately after her interview with the interviewer to assess her perceptions of herself, the interviewer, and the relationship between them.

IEQ

S: _____

It is not necessary for you to put your name on this questionnaire.

The following 160 statements refer to you (as "I", "me") and the interviewer you just talked with (as "She", "her"). Please read each statement carefully. On the basis of your 25 minute interaction with the interviewer, indicate how true you think each statement is by placing an "X" over one of the numbers from 1 (very true, v.t., or very false, v.f., as indicated) to 4 (very false, v.f., or very true, v.t., as indicated). Feel free to indicate just how you feel.

Now please look over the questionnaire and ask any questions you may have.

1.	very 1	2	3	4 very	She understands me.
	true			false	
2.	v.t. 1	2	3	4 v.f.	I took her seriously.
3.	very 1	2	3	4 very	I can't stand myself.
	false			true	
4.	v.f. 1	2	3	4 v.t.	She would like to get away from herself.
5.	v.t. 1	2	3	4 v.f.	She took good care of me.
6.	v.t. 1	2	3	4 v.f.	She depends on herself.
7.	v.t. 1	2	3	4 v.f.	I took responsibility for her.
8.	v.f. 1	2	3	4 v.t.	I couldn't come to terms with her.
9.	v.f. 1	2	3	4 v.t.	She is afraid of me.

10. v.t. 1 2 3 4 v.f. I let her be herself.
11. v.f. 1 2 3 4 v.t. She tried to outdo me.
12. v.f. 1 2 3 4 v.t. She fights with herself.
13. v.f. 1 2 3 4 v.t. I analyzed her.
14. v.f. 1 2 3 4 v.t. She finds fault with herself.
15. v.t. 1 2 3 4 v.f. I am honest with her.
16. v.f. 1 2 3 4 v.t. She couldn't care less about herself.
17. v.f. 1 2 3 4 v.t. She made contradictory demands on me.
18. v.f. 1 2 3 4 v.t. She doubts herself.
19. v.t. 1 2 3 4 v.f. I am good to myself.
20. v.f. 1 2 3 4 v.t. She expects too much of herself.
21. v.f. 1 2 3 4 v.t. I blame her.
22. v.t. 1 2 3 4 v.f. She thinks a lot of herself.
23. v.t. 1 2 3 4 v.f. I like her.
24. v.t. 1 2 3 4 v.f. She readily forgives herself.
25. v.f. 1 2 3 4 v.t. I belittle myself.
26. v.f. 1 2 3 4 v.t. I bewilder her.
27. v.t. 1 2 3 4 v.f. She believes in me.
28. v.f. 1 2 3 4 v.t. She humiliated me.
29. v.f. 1 2 3 4 v.t. I got myself into a false position.
30. v.t. 1 2 3 4 v.f. I was kind to her.
31. v.t. 1 2 3 4 v.f. I depended on her.
32. v.t. 1 2 3 4 v.f. She takes herself seriously.
33. v.f. 1 2 3 4 v.t. She can't stand me.
34. v.f. 1 2 3 4 v.t. I was mean with her.
35. v.t. 1 2 3 4 v.f. She took responsibility for me.

36. v.f. 1 2 3 4 v.t. I find fault with myself.
37. v.f. 1 2 3 4 v.t. She doubts me.
38. v.f. 1 2 3 4 v.t. I got on her nerves.
39. v.t. 1 2 3 4 v.f. I can face up to my own conflicts.
40. v.f. 1 2 3 4 v.t. I blame myself.
41. v.f. 1 2 3 4 v.t. I deceived her.
42. v.t. 1 2 3 4 v.f. She likes herself.
43. v.t. 1 2 3 4 v.f. I like myself.
44. v.f. 1 2 3 4 v.t. She created difficulties for me.
45. v.f. 1 2 3 4 v.t. I belittled her.
46. v.f. 1 2 3 4 v.t. She humiliated herself.
47. v.t. 1 2 3 4 v.f. She was kind to me.
48. v.t. 1 2 3 4 v.f. I understand myself.
49. v.t. 1 2 3 4 v.f. She depended on me.
50. v.f. 1 2 3 4 v.t. She is disappointed in herself.
51. v.f. 1 2 3 4 v.t. I can't stand her.
52. v.t. 1 2 3 4 v.f. I took good care of myself.
53. v.t. 1 2 3 4 v.f. She respects me.
54. v.f. 1 2 3 4 v.t. She was mean with me.
55. v.f. 1 2 3 4 v.t. I try to outdo myself.
56. v.f. 1 2 3 4 v.t. She finds fault with me.
57. v.t. 1 2 3 4 v.f. She lets herself be herself.
58. v.f. 1 2 3 4 v.t. I make contradictory demands on myself.
59. v.f. 1 2 3 4 v.t. I let her down.
60. v.t. 1 2 3 4 v.f. She is good to herself.

61. v.f. 1 2 3 4 v.t. She deceived me.
62. v.f. 1 2 3 4 v.t. She has a warped view of me.
63. v.f. 1 2 3 4 v.t. I created difficulties for her.
64. v.f. 1 2 3 4 v.t. I create difficulties for myself.
65. v.f. 1 2 3 4 v.t. I am detached from myself.
66. v.f. 1 2 3 4 v.t. I got her into a false position.
67. v.f. 1 2 3 4 v.t. She couldn't come to terms with me.
68. v.t. 1 2 3 4 v.f. She took me seriously.
69. v.f. 1 2 3 4 v.t. I am disappointed in her.
70. v.t. 1 2 3 4 v.f. She takes good care of herself.
71. v.f. 1 2 3 4 v.t. I would like to get away from myself.
72. v.f. 1 2 3 4 v.t. I fought with her.
73. v.f. 1 2 3 4 v.t. I fight with myself.
74. v.t. 1 2 3 4 v.f. I take responsibility for myself.
75. v.f. 1 2 3 4 v.t. She couldn't care less about me.
76. v.f. 1 2 3 4 v.t. I doubt her.
77. v.t. 1 2 3 4 v.f. She likes me.
78. v.f. 1 2 3 4 v.t. She has a warped view of herself.
79. v.f. 1 2 3 4 v.t. She bewilders me.
80. v.f. 1 2 3 4 v.t. I humiliated myself.
81. v.f. 1 2 3 4 v.t. I am afraid of myself.
82. v.f. 1 2 3 4 v.t. I let myself down.
83. v.f. 1 2 3 4 v.t. She deceives herself.
84. v.t. 1 2 3 4 v.f. I readily forgive her.
85. v.t. 1 2 3 4 v.f. I understand her.

86. v.f. 1 2 3 4 v.t. I tried to outdo her.
87. v.t. 1 2 3 4 v.f. She takes responsibility for herself.
88. v.t. 1 2 3 4 v.f. I let myself be myself.
89. v.f. 1 2 3 4 v.t. She expected too much of me.
90. v.t. 1 2 3 4 v.f. I could face up to her conflicts.
91. v.f. 1 2 3 4 v.t. She blames me.
92. v.f. 1 2 3 4 v.t. I have a warped view of her.
93. v.t. 1 2 3 4 v.f. She readily forgives me.
94. v.t. 1 2 3 4 v.f. I readily forgive myself.
95. v.f. 1 2 3 4 v.t. She is detached from herself.
96. v.f. 1 2 3 4 v.t. She bewilders herself.
97. v.f. 1 2 3 4 v.t. I doubt myself.
98. v.f. 1 2 3 4 v.t. She got on my nerves.
99. v.f. 1 2 3 4 v.t. She belittles herself.
100. v.f. 1 2 3 4 v.t. She creates difficulties for herself.
101. v.f. 1 2 3 4 v.t. I bewilder myself.
102. v.f. 1 2 3 4 v.t. I humiliated her.
103. v.t. 1 2 3 4 v.f. I respect myself.
104. v.f. 1 2 3 4 v.t. I couldn't care less about myself.
105. v.f. 1 2 3 4 v.t. I get on my own nerves.
106. v.t. 1 2 3 4 v.f. She is honest with herself.
107. v.f. 1 2 3 4 v.t. She let me down.
108. v.f. 1 2 3 4 v.t. She got me into a false position.
109. v.t. 1 2 3 4 v.f. She is kind to herself.
110. v.f. 1 2 3 4 v.t. She fought with me.

111. v.f. 1 2 3 4 v.t. I analyze myself.
112. v.f. 1 2 3 4 v.t. She let herself down.
113. v.f. 1 2 3 4 v.t. I expected too much of her.
114. v.t. 1 2 3 4 v.f. I was good to her.
115. v.t. 1 2 3 4 v.f. She could face up to my conflicts.
116. v.t. 1 2 3 4 v.f. I think a lot of her.
117. v.f. 1 2 3 4 v.t. I deceive myself.
118. v.f. 1 2 3 4 v.t. She was detached from me.
119. v.f. 1 2 3 4 v.t. She couldn't come to terms with herself.
120. v.f. 1 2 3 4 v.t. She is disappointed in me.
121. v.f. 1 2 3 4 v.t. She can't stand herself.
122. v.t. 1 2 3 4 v.f. I took good care of her.
123. v.f. 1 2 3 4 v.t. I wanted to get away from her.
124. v.f. 1 2 3 4 v.t. I find fault with her.
125. v.f. 1 2 3 4 v.t. I couldn't care less about her.
126. v.f. 1 2 3 4 v.t. I made contradictory demands on her.
127. v.t. 1 2 3 4 v.f. She thinks a lot of herself.
128. v.f. 1 2 3 4 v.t. I was detached from her.
129. v.t. 1 2 3 4 v.f. I believed in her.
130. v.t. 1 2 3 4 v.f. She believes in herself.
131. v.t. 1 2 3 4 v.f. I take myself seriously.
132. v.t. 1 2 3 4 v.f. She understands herself.
133. v.f. 1 2 3 4 v.t. I am disappointed in myself.
134. v.f. 1 2 3 4 v.t. She is afraid of herself.
135. v.f. 1 2 3 4 v.t. She is mean with herself.

136. v.f. 1 2 3 4 v.t. She wanted to get away from me.
137. v.t. 1 2 3 4 v.f. I depend on myself.
138. v.f. 1 2 3 4 v.t. I am mean with myself.
139. v.t. 1 2 3 4 v.f. She was honest with me.
140. v.f. 1 2 3 4 v.t. She analyzes herself.
141. v.f. 1 2 3 4 v.t. She blames herself.
142. v.t. 1 2 3 4 v.f. She was good to me.
143. v.t. 1 2 3 4 v.f. She can face up to her own conflicts.
144. v.f. 1 2 3 4 v.t. She got herself into a false position.
145. v.f. 1 2 3 4 v.t. I was afraid of her.
146. v.t. 1 2 3 4 v.f. She let me be myself.
147. v.f. 1 2 3 4 v.t. She analyzed me.
148. v.t. 1 2 3 4 v.f. I think a lot of myself.
149. v.f. 1 2 3 4 v.t. I couldn't come to terms with myself.
150. v.t. 1 2 3 4 v.f. I respect her.
151. v.f. 1 2 3 4 v.t. She gets on her own nerves.
152. v.t. 1 2 3 4 v.f. I believe in myself.
153. v.t. 1 2 3 4 v.f. She respects herself.
154. v.f. 1 2 3 4 v.t. I expect too much of myself.
155. v.f. 1 2 3 4 v.t. I have a warped view of myself.
156. v.f. 1 2 3 4 v.t. She makes contradictory demands on herself.
157. v.f. 1 2 3 4 v.t. She belittled me.
158. v.t. 1 2 3 4 v.f. I am kind to myself.
159. v.f. 1 2 3 4 v.t. She tries to outdo herself.
160. v.t. 1 2 3 4 v.f. I am honest with myself.

APPENDIX D

LAING'S CLASSIFICATION OF THE FORTY ISSUES USED ON THE IEQ

Interdependence and Autonomy

Positive

understands
takes seriously
respects
lets be self
is honest with
can face conflicts
thinks a lot of
readily forgives
believes in
depends on
(self-self and other-other phases only)
takes responsibility for
(self-self and other-other phases only)

Negative

is afraid of
has a warped view of

Warm Concern and Support

Positive

takes good care of
is good to
likes
is kind to
depends on
(self-other and other-self phases only)
takes responsibility for
(self-other and other-self phases only)

Negative

is mean with
couldn't care less about
analyzes
is detached from

Disparagement and Discouragement

Disparagement

finds fault with
blames
belittles
humiliates

Discouragement

is disappointed in
doubts
lets down
expects too much of

Contradiction and Confusion

makes contradictory demands on
deceives
creates difficulties for
bewilders
gets into a false position

Contention: Fight/Flight

can't come to terms with
would like to get away from
can't stand
tries to outdo
gets on nerves
fights with

APPENDIX E

RECRUITING SPEECH

The following speech was made in psychology, sociology, and communication classes to undergraduate female students to encourage them to volunteer to participate in the present study. It was presented efficiently in a cordial, sincere manner.

Speech

"We are interested in studying the feelings, perceptions, and experiences of women. We will be interviewing thirty-two women about their high school and college experiences. We will also be asking them to fill out a questionnaire. The total session will take approximately one and a half hours maximum early in the term. The results will be written up for the fulfillment of my masters' thesis requirements. If they are significant, they may be offered for publication as well as distributed to the Counseling Center and the Women's Psychology Clinic here at PSU. They will also be made available to participants who are interested."

"I really need your help as I'm to have my thesis completed by mid-May. Without you, there is no study. Also, once in awhile an opportunity comes up to make a contribution. I think this is one of them. May I see a show of hands for those who would be willing to help me out?"

APPENDIX F

INITIAL QUESTIONNAIRE

The following questionnaire was given to each subject at the time she volunteered to participate in the present study. It includes the Marlowe-Crowne Social Desirability Inventory (Part II) and a short demographic survey (Part III).

Initial Questionnaire

PART I

Please give below the times during the weeks of April 9th and April 16th when you would be able to donate a 1½ hour block of time to participate in this study:

Monday

Tuesday

Wednesday

Thursday

Friday

PART II

Stated below are a number of statements concerning personal attitudes and traits. Read each one and indicate whether the statement is TRUE or FALSE as it pertains to you personally.

- _____ 1. Before voting, I thoroughly investigate the qualifications of all the candidates.
- _____ 2. I never hesitate to go out of my way to help someone in trouble.
- _____ 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- _____ 4. I have never intensely disliked anyone.
- _____ 5. On occasion, I have had doubts about my ability to succeed in life.

- ___ 6. I sometimes feel resentful when I don't get my way.
- ___ 7. I am always careful about my manner of dress.
- ___ 8. My table manners at home are as good as when I eat in a restaurant.
- ___ 9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
- ___ 10. On a few occasions, I have given up doing something because I thought too little of my ability.
- ___ 11. I like to gossip at times.
- ___ 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- ___ 13. No matter who I'm talking to, I'm always a good listener.
- ___ 14. I can remember "playing sick" to get out of something.
- ___ 15. There have been occasions when I took advantage of someone.
- ___ 16. I'm always willing to admit it when I make a mistake.
- ___ 17. I always try to practice what I preach.
- ___ 18. I don't find it particularly difficult to get along with loud-mouthed obnoxious people.
- ___ 19. I sometimes try to get even rather than forgive and forget.
- ___ 20. When I don't know something, I don't mind at all admitting it.
- ___ 21. I am always courteous, even to people who are disagreeable.
- ___ 22. At times I have really insisted on having my own way.
- ___ 23. There have been occasions when I felt like smashing things.
- ___ 24. I would never think of letting someone else be punished for my wrong-doings.
- ___ 25. I never resent being asked to return a favor.
- ___ 26. I have never been irked when people expressed ideas very different from my own.
- ___ 27. I never make a long trip without checking the safety of my car.
- ___ 28. There have been times when I was quite jealous of the good fortune of others.
- ___ 29. I have almost never felt the urge to tell someone off.
- ___ 30. I am sometimes irritated by people who ask favors of me.

- ___ 31. I have never felt that I was punished without cause.
- ___ 32. I sometimes think when people have a misfortune, they only got what they deserved.
- ___ 33. I have never deliberately said something that hurt someone's feelings.

PART III

In order to know how far we can generalize our findings, we would like to have the following information. However, you may omit any items you care not to answer (except your name, of course, and phone number).

1. Name _____ 2. Age _____
3. Phone Number _____ 4. Address _____
5. Are you single____, married____, divorced____, or widowed____?
6. What is your year in school? _____
7. What is your major? _____
8. What is your goal (e.g., Ph.D., teaching credential, secretary, artist, housewife, etc.)? _____
9. How many years have you attended college? _____
From _____ to _____, From _____ to _____, From _____ to _____
10. If transfer student, previous college(s) attended: _____

11. During what years did you attend high school? From _____ to _____
12. What high school(s) did you attend? _____
Were these schools rural____, suburban____, urban____?
13. What city(ies), town(s), or area(s) have you grown up in? _____

14. Are you currently living in an apartment____, with your parents____, in your own home____, or other____?
15. Are you currently working? No _____
Part-time _____ Occupation _____
Full time _____ Occupation _____
16. What is(was) your parents' occupations? Father _____
Mother _____
17. I am American Indian____, Black____, Mexican-American____, Oriental____, White____, Other____.

Thank you for your cooperation and assistance. We will be in touch with you by phone to arrange a time for you to come in.

APPENDIX G

INTERVIEW FORMAT

Introductions

(Interviewee enters interview room and is introduced.) "Please sit down, EE's name. (ER motions to EE's chair.) Would you like some coffee or tea? Cream or sugar?" (ER gets refreshment for EE if she wants it.)

Warm Up: First five minutes

(ER sits down, turns on tape recorder, and notes time on clock. She then leads "chit-chat" in role.) The topic areas which follow were acceptable:

- A. Reasons for participating in the study.
"How did you happen to volunteer for this study?"
- B. Casual conversation.
"How have things been for you?"
"What classes are you taking? How do you like them?"
"Did you do anything special over vacation?"
- C. Fact requests.
"What year are you here? What are you studying?"
"Where did you go to high school?"
"Have any brothers or sisters?"

Twenty-minute Interview

"Let's go on to the things we asked you here to talk about." (ER leads the interview along the following lines, depending on where the EE goes with them.)

- A. "What was your experience like in high school?"
"Any particular likes or dislikes about it?"
- B. "What was your experience like with the kids in high school?"
"What kinds of things did you do together?"
"What did you like or dislike about your experiences with them?"
"Any differences between your feelings with men or women?"
- C. "How did you get along with your family in high school?"
"Were you close to anyone in particular?"
"How did you feel about your parents?"
"What went well; what caused problems?"
- D. "How did you feel about yourself in your high school years?"
- E. "What were the crisis points, if any, you reached and went through in high school?"
"What were the milestones?"
"Any big issues? How did you handle them?"
- F. "What kinds of things were important to you then?"
"What did you care most about?"
- G. "What areas in school did you get the most/least excited about?"
"What led you to feel that way?"
- H. Same topics as above pertaining to college instead of high school.

Termination of the Interview

(ER turns off the tape recorder after noting time on clock or hearing a knock on the door from the E.) "Looks like out time is up, EE's name. Thank you for your cooperation." (E asks the EE to follow her to the adjacent room to take the IEQ.)

APPENDIX H

INTERVIEWEE BRIEFING AND ADVICE OF ETHICAL CONSIDERATIONS

The following briefing was given to the interviewee by the experimenter when she first arrived at her assigned time.

Briefing

"We are studying the feelings, perceptions, and experiences of women. In a few minutes, you will be interviewed by a woman who is a graduate student and an experienced interviewer. She will talk with you about your experiences in high school and college. You will have five minutes to 'warm-up'. Then the interview will begin and last about twenty minutes. As your participation is voluntary, you may leave the interview at any time if you feel the need to do so."

"The interview will be taped for research purposes only and will be numerically coded so that no name is identified with it. It will be kept confidential and will be destroyed after we have recorded the data we need. You may listen to your tape and/or have it erased after today's session if you desire to do so."

"Your participation in this study and the content of your interview will be kept confidential by the interviewer and myself. After the interview is over, you will receive further instructions. Do you have any questions?" (EE's questions are answered briefly, if possible, without providing additional information.)

"Would you come with me, please?" (EE is taken to the interview room.)

"This is Jan Hattenhauer. She will be your interviewer. Jan, this is EE's name." OR (if E is to be the interviewer) "I will be your interviewer, EE's name."

APPENDIX I

INTERVIEWEE INSTRUCTIONS FOR THE IEQ

The following briefing was given to the interviewee by the experimenter upon termination of the twenty-five minute interview.

Instructions

"Now, would you come with me, please?" (EE is taken to the adjacent room where the IEQ is to be filled out.)

"We're asking you to fill out this questionnaire to give us some additional information. It will take about forty-five minutes. Again, your responses are for research purposes only and will be numerically coded so that you remain anonymous. The questionnaire will be kept confidential and destroyed after we have collected our data. Your responses will not be seen by the interviewer/me until they are in the form of coded data."

"Now, please read the instructions on the questionnaire and let me know if you have any questions." (Questions are answered, if possible.)

"Take as much time as you need and return the questionnaire to me in the room next door where we first met when you're finished, please."

APPENDIX J

FINAL POST-EXPERIMENTAL SURVEY

The survey below was given to the interviewee upon her completion of the IEQ. It was presented with the following instructions:

"We have one more short form for you to fill out, if you will, please. Like the questionnaire you just completed, your responses will be kept anonymous and confidential. Please answer each question as briefly and honestly as you can."

Final Survey

S _____

Please circle the number which seems most appropriate for you.

1.	The interviewer was:	1	2	3	4	5	6	7
		very warm and involved.					very cold and distant.	
2.	The interviewer was:	1	2	3	4	5	6	7
		very supportive and "with" me.					very critical and "against" me.	
3.	During the interview, I felt:	1	2	3	4	5	6	7
		very relaxed, comfortable.					very anxious, uncomfortable.	
4.		1	2	3	4	5	6	7
		very open & secure.					defensive & insecure.	
5.		1	2	3	4	5	6	7
		very good myself.					very bad about myself.	
6.		1	2	3	4	5	6	7
		very good about the interviewer.					very bad about the interviewer.	

7. (Check the appropriate word.)

I liked _____ the interviewer.
disliked _____

8. I would _____ want to have her as my parent.
would not _____

9. I would _____ want to have her as my teacher.
would not _____

10. I would _____ want to have her as my professional counselor.
would not _____

11. I would _____ want to have her as my friend.
would not _____

12. My responses on the questionnaire were:

1	2	3	4	5	6	7
very						very
representative						unrepresentative

of my feelings toward the interviewer.

13. My responses on the questionnaire were:

1	2	3	4	5	6	7
very						very
representative						unrepresentative

of my feelings toward the interview.

14. My responses on the questionnaire were:

1	2	3	4	5	6	7
very						very
representative						unrepresentative

of my feelings toward myself.

PLEASE GIVE THE FOLLOWING:

15. Overall reactions to the interview:

16. Overall reaction to the questionnaire following the interview:

17. Your ideas of what the experimenter was trying to find out in this experiment:

18. Any other comments or continuation of replies to the above questions: