THE EFFECTS OF OPEN AND CLOSED INQUIRY MODES USED BY COUNSELORS AND PHYSICIANS IN AN INITIAL INTERVIEW ON INTERVIEWEE PERCEPTIONS AND SELF-DISCLOSURE

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ABSTRACT

THE EFFECTS OF OPEN AND CLOSED INQUIRY MODES
USED BY COUNSELORS AND PHYSICIANS IN AN INITIAL INTERVIEW
ON INTERVIEWEE PERCEPTIONS AND SELF-DISCLOSURE

By

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Health care is an area of concern for every person. This care includes treatment of body and mind and, therefore, both physicians and counselors can be considered health care providers. Because of parallel factors in training and practice across the disciplines of counseling and medicine, there is a need for collaborative research and an exchange of knowledge regarding productive teaching programs and effective interviewing techniques. There have been no reported studies which examine the effects of specific interview styles as they are used by different health professionals. The question of whether or not the occupational status of the interviewer affects interviewee perceptions and self-disclosure has not been investigated directly. The sex of the interviewer and the sex of the interviewee have been reported to have differential effects on interview outcomes but the research available is not conclusive.

The purpose of this research was to look at the effects of an open or closed inquiry style, as they are used by a male or a female counselor or physician in an initial, information-gathering interview, on the interviewee's perceptions and self-disclosure. The basic research

questions addressed were: 1) Does the inquiry style of the health professional in an initial interview affect either the amount of data disclosed by the patient or the patient's perceptions of the professional as a caring person? 2) Does the occupational status of the health professional influence either the amount of data disclosed by the patient or the patient's perceptions of the professional as a caring person? 3) Does the sex of the health professional, or of the patient, affect either the amount of data disclosed by the patient or the patient's perception of the professional as a caring person?

The independent variables were: 1) Inquiry Mode (open, closed or mixed); 2) Occupational Status (counselor or physician); 3) Sex of the Interviewer (male and female); and 4) Sex of the Interviewee (male and female). Two instruments measured the interviewee's perceptions of the interviewer as a caring person: the Counseling Evaluation Inventory which is a twenty-one item rating form with three subscales to measure interviewer comfort, counseling climate and interviewee satisfaction; and the Barrett-Lennard Relationship Inventory which has items covering the concepts of empathy, congruence, level of regard and unconditionality of regard. The interviewee's self-disclosure in the interview was measured by the Interviewee Productivity Measure which was a frequency count of the factual and attitudinal data the interviewee presented during the audio-taped interview. Trained tape reviewers made the count while listening to the playback of the interview.

Four Research Associates, two female and two male, were trained to present the following treatment conditions: 1) an Open Inquiry Mode

in which at least 80% of the inquiries were asked in a manner which allowed the interviewee wide latitude in response; 2) a Closed Inquiry Mode with at least 80% of the inquiries phrased so that they could be answered with a simple "yes," "no" or short factual answer; and 3) a Mixed Inquiry Mode with at least 40% open inquiries and 40% closed inquiries. The latter was considered the control condition. The Associates simulated the roles of physician and counselor on alternate days and presented the treatments in a randomly determined manner.

Seventy-two female and seventy-two male volunteer subjects were randomly assigned to the three treatment conditions that were spread across a four week period of time. The twenty minute audio-taped interview was an initial history-taking interview similar to an intake interview in any health clinic.

Hypotheses were tested for the main and interaction effects of the four independent variables. The dependent measures were the two inventories of the interviewee's perceptions of the interviewer and the one measure of the quantity of data gathered from the interviewee. Multivariate and univariate analyses of variance were performed using the Finn computer program and with the probability of a Type I error set at the .05 alpha level. The Inquiry Mode used in the initial interview, the Occupational Status of the interviewer and the Sex of the Interviewee were the hypotheses that had non-significant multivariate and univariate F's. These three variables had no differential effects on either the amount of data disclosed by the interviewee or on the interviewee's perceptions of the professional as a caring person.

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The hypothesis which tested for differences between male and female interviewers showed that the females received significantly higher ratings than the males. The Barrett-Lennard Relationship Inventory was the dependent measure on which the female interviewers were rated as having significantly more unconditional positive regard, a higher level of regard and more empathic understanding than the male interviewers. Additional analysis showed that between-male and between-female interviewer differences were also significant on the subscales of the Barrett-Lennard. Explanations considered included the possibility that these two female interviewers were quite different from the two male interviewers in their interpersonal approach to the interviewees or that the cultural stereotype of the female as the more nurturant and empathic person was influencing the interviewee's perception. Further research was suggested to test these hypotheses.

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CHAPTER I

IDENTIFICATION OF THE RESEARCH PROBLEM

Introduction

This study is an investigation of a patient's disclosure of personal information and the patient's perceptions of the interviewer in an initial interview conducted by a health professional using one of three inquiry styles. Because of parallel factors in interview training and practice across the disciplines of counseling and medicine, there is a need for collaborative research and an exchange of knowledge regarding productive teaching programs and effective interviewing methods (Matarazzo, 1971). This research is designed to further this exchange.

Initial patient interviews, whether conducted by counselors or physicians, have several common elements. Each is a dyadic interaction which is both asymmetrical and reciprocal. Asymmetrically, the interviewer has the higher status as defined by the occupational role and the service being offered to the requesting second party. Initially, the interviewer controls the manner, direction and content of the information-gathering first session. Sex differences and the individual frames of reference of each party are also asymmetrical factors.

Reciprocity within the dyad is evidenced in the interplay of verbal and non-verbal cues from one person which prompt the other's

response. Efficient use of time, empathic listening and response to information shared, ethical treatment as a human being with full rights and responsibilities, and effectiveness in attaining the ultimate goals of the encounter are the ideal mutual expectations of interviewer and interviewee. The outcome of such an asymmetrical yet reciprocal interview between adults affects all subsequent interactions. It is here that the first match between expectation and satisfaction is made.

Training programs in counseling and medicine teach that information is most effectively and efficiently gathered during the course of the interview if specific inquiry methods are used (Benjamin, 1969; Enelow & Swisher, 1972). These methods are judged adequate if they lead to accurate labeling of the interviewee's concerns and if they aid in developing an effective intervention plan. The interviewee's satisfaction and self-disclosure are alos measures of the effectiveness of the encounter (Truax & Carkhuff, 1967).

Rationale

The Dyad

An interest in the communication patterns between two or more persons provided the basis for the core of Harry Stack Sullivan's theory (1953) on the psychiatry of interpersonal relationships. One of his postulates pertinent to this study is that each person in any two person interaction is involved as a portion of the interpersonal field, rather than as a separate entity, in the total processes of that special field.

Each dyadic encounter creates a unique field which is finite and yet fluid. The patterns reflecting expectations and needs of both

parties emerge only when this interpersonal field is created. Individual personal histories, social roles, the limited set of learned behavioral responses that each person brings, the purpose of the interaction, the content covered in the interview, and the expectations of both parties help to define the specific nature of the interpersonal field. Enelow and Wexler (1966) label this continuing interplay between a physician and patient a "transactional process" and they indicate that it is influenced by the interpersonal histories and social roles of both the physician and patient. Kell and Mueller (1966) call the constant stimulation and consequent response between a counselor and client the "reciprocal impact."

Szasz and Hollender (1956) and Magraw (1966) elaborate on the nature of the physician-patient relationship and present three models to describe it. These models are styles of interacting which could occur in a variety of clinical or social settings. The model of activity-passivity presents the stance that one person in the dyad is active and the other is inactive or acted upon. The health professional does something to the patient. In the model of guidance-cooperation the professional tells the patient what to do and the patient obeys. The most powerful in the relationship does the leading and the other cooperates. The mutual participation model promotes the postulate of equality in power, need and activity. The health professional helps the patient to help himself. The authors hasten to point out that any one of the models may be entirely appropriate under certain circumstances.

In this research the model used is similar to the guidance-cooperation model in that the interviewer directs the information flow and the interviewee is instructed to respond to the inquiries. Since

this kind of relationship is like the beginning of a non-crisis encounter, the initial history-taking interview is selected as an analogous situation for this study.

"Problems in human contact between physician and patient often arise if, in the course of treatment, changes require an alteration in the patterns of the...relationship (Szasz and Hollender, 1956)." When the interpersonal field changes the professional must be able to recognize the nuances and adapt interpersonal behavior appropriately. In the interview this might mean a change in inquiry style, termination of the present encounter, or referral to another professional. The interview, as defined in this research, does not allow for such adaptive responses because the outcome of interest is the effect of specific inquiry styles on a patient's perceptions and self-disclosure. Maintaining one inquiry style throughout the interview and varying the style across interviews is the procedure used to test for differential effects.

The Initial Interview

The health professional has three basic goals for the first interview (Sullivan, 1949; Sheppe & Stevenson, 1963; Enelow & Wexler, 1966; Tyler, 1969): 1) to establish a positive relationship with the patient; 2) to determine the specific and immediate concerns of the patient at the time of the interview and to begin remedial treatment if that seems indicated; and 3) to elicit the pertinent personal history which will help to clarify the patient's frame of reference and provide clues for acceptable or threatening intervention programs. The patient, also, expects some specific intervention and a relationship with a professional who demonstrates an interest in this individual as a person and not just a list of symptoms (Snyder & Ware, 1974).

Daily (1960) suggested that a "life history" provides the framework for the ordering of all the other data collected about a patient. A content validity analysis of eighty video-taped interviews of Family Practice physicians indicated that inquiry into a patient's personal history is a significant part of the diagnostic workup (Cassata et al, 1974). The Sytematic Counselor Training Program at Michigan State University (Winborn et al, 1971) encourages collection and review of pertinent client data as a beginning step in the counseling process. For those who question the efficiency of a life history-taking procedure, Enelow and Wexler (1966) stated that they have demonstrated repeatedly that an informative personal history can be obtained in an initial interview of under thirty minutes.

The initial interview may be the only contact between the professional and patient or it may be the beginning of an extended relationship. First impressions are formed by both parties as each tests the skills and personal qualities of the other. An assumption made in this research is that the first impression may be a significant causal factor in: 1) the patient's willingness to be self-disclosing; 2) the nature of the information provided by the patient (Bird, 1955; Engel & Morgan, 1973); 3) the patient's return for further assistance; or 4) the manner in which the patient complies with the proposed intervention plan (Davis, 1968). The question then becomes; "What interactional variables influence this first impression?"

Inquiry Modes

In an information-gathering interview such as the initial session between a health professional and patient, a question and answer

format is generally used. The inquiry style of interest in this research can be represented by a continuum that has a relatively general question at one end and a very specific question at the other extreme. The dichotomous end points have been called "exploratory - non-exploratory" by Kagan (1972), "open - closed" by Benjamin (1969), "ambiguous - specific" by Siegman and Pope (1972), and "reflective - leading" by Ashby et al (1951). These researchers have theorized that the extreme ends of the continuum affect the quality and quantity of the data obtained in the interview in a different manner. The open mode of inquiry is said to create a warm, positive atmosphere and is an encouragement to the interviewee to respond with a wide variety of content. The opposite kind of inquiry may inhibit the interviewee, limit the response to a specific answer, and may be detrimental to establishing good rapport (Benjamin, 1969).

Enelow and Swisher (1972) proposed that the open style of questioning should be used first in an interview to set the patient at ease. Then the interviewer should proceed to a more specific and closed style to get the detailed information that is needed for further diagnosis and program planning. There are those professionals who would say that an open style can be used throughout the interview without diminishing pertinent information flow. Others (Enelow & Wexler, 1966), acknowledging the constraints of time, insist that direct questions are the most efficient and do not interfer with effectiveness. Of course, judgments about the adequacy of the data in terms of quality and quantity are relatively subjective decisions made by the professional as the diagnosis and intervention plans begin to crystalize.

In speaking about the medical interview, MacKinnon and Michels

(1971) pointed out that as long as the patient sees the physician as a potential source of help, the patient will volunteer, "more or less freely," as much information as seems pertinent to helping the professional deal with the concern. There are two questions which follow from this. Does the quality or quantity of data given by the interviewee depend upon the manner of inquiry? Does the quality or quantity of data depend on the kind of data which is pertinent to either the interviewer or the interviewee? In this research the pertinent data, from the interviewer point of view, is a constant in the interviewer role. The manner of inquiry is varied.

Occupational Status

The health professional, by virtue of specialized training, experience, and cultural stereotypes is assigned a certain social and professional status which has recognizable patterns of behavior and specific functions in society. The sum total of the cultural patterns associated with a particular status is called a role (Hollander, 1967). Ivey and Robin (1966) identified three basic elements of a role. It is: 1) a set of norms which arise from general social agreement; 2) a specific position or location in a social structure in relation to others; and 3) expectations for behavior that have been assigned by significant others and describe what the individual taking a position actually does.

The general norms which have been defined for the physician (Magraw, 1966) can be applied to other health professionals. There is an acceptance of the responsibility for caring for another person who is seeking help, a commitment to act in the patient's interest and not for the professional's own personal gain, and a sense of obligation to remain emotionally neutral, objective and non-judgmental with the

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patient. These three elements of the health professional's role are idealized postulates of behavior which are monitored by professional and legal statutes. Though physicians or counselors may think that their professional behavior is according to these idealized norms of caring, the patient may perceive the relationship quite differently. Malpractice suits are one manifestation of this variance (Dornette, 1971).

The specific position or status within the social structure depends on the occupational specialty of the health professional being considered. Each position in the hierarchy of the health professions has its own set of expectations about behavior based on ill-defined cultural generalizations and each person's past experiences. This research investigates whether or not these differences have any effect on the patient's perceptions of the interviewer or amount of self-disclosure.

Adler (1972), a sociologist, pointed out that "it is in the interview that the professional's role is established." Health professionals have been recruited mainly from the upper and middle classes. Therefore, part of their role behavior is a function of their cultural background. Reactions of patients to the professional have also been shown to follow class attitudinal patterns (Simmons, 1958). Higher status patients are less passive in the interview and offer much more of the requested information spontaneously. The lower class patient may defer to the professional and, yet, may demonstrate a hesitancy to follow interviewer leads.

Occupational status, as defined in this study, is manipulated to induce a mind set in the patient to expect behavior patterns associated with the status of physician or counselor.

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Sex Differences

Sex is considered to be a significant attribute of a social role and there are fairly fixed social expectations about sexual behavior (Hollander, 1967). Guttman (1974) reports that "in the counseling profession(s) women have been valued primarily for their nurturant and supportive functions." The male, conversely, is valued for his scientific expertise and an aggressive approach to problem-solving. If these views are the prevailing cultural stereotypes they are, then, likely to affect a patient's perceptions of and response to the interaction with a health professional. Of course, there may be real behavioral variations between male and female health professionals in their approach to patients because of their own socialization processes. One of the main purposes of this research is to see if the sex of the interviewer or of the interviewee is a differentiating factor in the initial interview encounter.

Expectations, Satisfaction and Self-Disclosure

Expectations regarding the quality of care are a reflection of the patient's personal needs, status, sex, age, professional expertise, past experiences, and a variety of values and attidues regarding health care. An extensive study of the health expectations of persons in several counties of southern Illinois has shown that attitudes toward caring (defined as the humanness of the physician) and curing (the quality of medical treatment and the competency of the health professional) "appear to reflect the same underlying attitudinal dimensions (Ware & Snyder, 1975)."

If the patient expects to be "cared for" and "cured" because of interaction with the health professional, then one measure of the

satisfaction for such care and cure might be the patient's perceptions of the professional as a caring person.

> The more that the client perceives the therapist as real or genuine, as empathic, as having an unconditional regard for him, the more the client will move away from a static, fixed, unfeeling, impersonal type of functioning, and the more he will move toward a way of functioning marked by a fluid, changing, acceptant experiencing of differentiated personal feelings. The consequence of this is alteration in personality and behavior in the direction of psychic health and maturity and more realistic relationships to self, others, and the environment (Rogers, 1961. p.66).

This perception of the professional as a caring person is vital to the physician-patient relationship as well as to that of the counselor and client. Bernstein and Dana (1970) have listed three ways that patients demonstrate dissatisfaction with the relationhsip with the health professional: 1) by non-payment of bills; 2) by non-compliance, conscious or unconscious, with treatment regimes; and 3) by filing malpractice suits. Dornette (1971), physician and lawyer, said that even though the physician has committed a negligent act that has injured the patient, "the physician who maintains sound rapport with that patient still may escape liability."

Willingness to cooperate in the comprehensive disclosure of personal-social information during the initial interview, measured by the quantity and quality of data, is another indication that the interviewee is satisfied with the relationhsip (Jourard, 1971).

In summary, the variables of (1) inquiry style in an initial interview, (2) occupational status of the professional conducting the interview, (3) the sex of interviewer and interviewee, and (4) the interviewee's satisfaction with the relationship are the interacting elements which this research aims to test for differential effects. Interviewee satisfaction is defined operationally to include two separate

dimensions: 1) the interviewee's perceptions of the interviewer as a caring professional, and 2) the amount of personal information the interviewee is willing to disclose during the interview.

The Problem

Health care is an area of concern for every person. This care includes treatment of body and mind and, therefore, both physicians and counselors can be considered health-care providers. Since both medicine and counseling train persons to interview patients for various purposes, each could benefit from the findings that the other profession has verified through years of developing and evaluating training programs and techniques. But before transfering learning paradigms from one discipline to another, the effects in each setting should be examined. Do the inquiry styles used by counselors have the same effect when used by physicians? At present there are no such cross-discipline studies. Are male and female interviewers perceived to have the same relationship qualities by male and female interviewees? There is no definitive research which can answer this question.

Purpose

The purpose of this research is to test the effects of open, closed, and mixed inquiry modes, as they are used by male and female counselors and physicians in an initial, information-gathering interview. The inquiry modes are defined as follows:

1) The OPEN INQUIRY interview has leads which solicit opinions, feelings, facts...anything the interviewee would like to say.

2) The CLOSED INQUIRY interview has interviewer leads asked in a manner where "yes," "no," or a short, factual answer seems the most appropriate.

3) The MIXED INQUIRY interview has a combination of open and closed interviewer leads.

Two instruments measure the interviewee's perceptions of the interviewer as a caring person: The Counseling Evaluation Inventory (Linden, Shertzer & Stone, 1965) is a twenty-one item rating form with three subscales to measure interviewer comfort, counseling climate and interviewee satisfaction. The Barrett-Lennard Relationship Inventory Barrett-Lennard, 1962) , modified, has items covering the concepts of empathy, congruence, level of regard and unconditionality of regard. The interviewee's self-disclosure in the interview is measured by the Interviewee Productivity Measure. This is a frequency count of the factual and attitudinal data the interviewee presents during the audio-taped interview. Trained tape reviewers make the count while listening to the tapes.

Research Questions

There are three general questions to be addressed by this research:

1) Does the inquiry style of a health professional in an initial interview affect either the amount of data disclosed by the patient or the patient's perceptions of the professional as a caring person?

2) Does the occupational status of the health professional influence either the amount of data disclosed by the patient

or the patient's perceptions of the professional as a caring person?

3) Does the sex of the health professional, or of the patient, affect either the amount of data disclosed by the patient or the patient's perception of the professional as a caring person?

Overview

In this study the effects of four independent variables on the patient's perceptions and disclosure in an initial interview with a health professional are investigated. The independent variables are: 1) Inquiry Mode (open, closed or mixed); 2) Occupational Status (counselor or physician); 3) Sex of the Interviewer (male and female); and 4) Sex of the Interviewee (male and female). Subjects were asked to disclose personal-social and medical information in a twenty minute initial interview conducted by the health professional.

Chapter II contains a review of pertinent experimental literature related to the independent variables. In Chapter III, the experimental design, procedures, dependent measures and hypotheses are described. The analysis of the data is presented and interpreted for each hypothesis in Chapter IV. A discussion of results, implications for further research and a summary of the entire study can be found in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

The dyadic interview has been the subject of numerous research efforts which have been reviewed extensively elsewhere (Matarazzo, 1965; Bergin & Garfield, 1971). In this chapter those experimental studies which pertain specifically to the variables being tested in this research are presented. The review is arranged under the following headings: 1) Inquiry Styles in the Interview; 2) Occupational Status Effects in the Interview; 3) Sex Difference Effects in the Interview; 4) Client Satisfaction and Disclosure as Interview Outcomes; and 5) Audio-Recording Effects in the Interview.

Inquiry Styles in the Interview

Studies of inquiry style have been done using both naturalistic and experimental interviews, actual face-to-face interactions and paper-pencil interviews, recordings, transcripts of recordings and case notes done from memory after the interview was completed. Results reported are contradictory and replications are seldom presented in the literature. The outcomes of each of the experiments reviewed here provide evidence of the need for controlled laboratory testing which can be tested further in the natural setting.

Snyder (1945) analyzed therapist leads using some of the first

audio-recordings made of actual Rogerian therapy sessions. He identified 31.6 percent of the therapist leads as reflection and clarification of feelings, 27.6 percent as simple statements of acceptance of the interviewee, and only 5.7 percent as direct questions asked of the client. In 1964, Hopke determined that the most common verbal behaviors utilized by experienced school counselors were probing or interrogation (50 percent), interpretive leads (22 percent), supportive statements (13 percent), understanding (11 percent), and evaluative remarks (3 percent). No indication was given as to the theoretical orientation of the school counselors.

Whatever may be the interviewer's style, the consequences of the leads used bear investigation. Also using the recorded interviews of Rogerian therapists, Bergman (1951) found that reflection of feeling leads were followed by continued self-exploration on the part of the client. Structuring leads were succeeded by abandonment of self-exploration. Therapist leads requesting clarification of information also resulted in a decrease in self-exploration. An intensive analysis of psychotherapy procedures used by four therapists who recorded sessions with two patients each over a period of eight months was done by Lennard and Bernstein (1960). They showed that therapists compensate for high patient verbal output by reducing their own output and vice versa. This phenomenon, called the informational reciprocity model, means that when the patient is being highly productive in the amount of information being given, the therapist tends to use more ambiguous leads which allow the patient to respond with a number of alternative responses. When the patient is not being productive in the amount of information being volunteered, the therapists tend to

increase their own input by using more highly specific remarks which require specific responses from the clients. Siegman and Pope (1962) replicated the Lennard and Bernstein study using twelve initial psychiatric interviews. They did find a positive correlation between the therapist's ambiquity level in leads and subsequent patient productivity in responses. There was no support for the hypothesis that high interviewee productivity is followed by more ambiguous leads from the therapist. The question of whether or not twelve initial interviews can be compared to a series of therapy sessions over time might be answered in part by one of Lennard and Berstein's findings which postulated that the amount of therapeutic talk is relatively stable from interview to interview.

The reciprocal interaction effect mentioned above has been capitalized on as a research strategy for the study of dyadic interaction effects in experimental settings. Jones and Thibaut (1958) suggested that reducing the interaction to an "asymmetrical contingency" allows the standardization of the role behavior of one party while permitting the other's behavior to vary freely. The studies cited below attempted to control the interviewer role and then look at the consequences for the interviewee.

A series of four integrated studies by Ashby, Ford, Guerney and Guerney (1957) was one of the first attempts to specify therapist behavior prior to client contact. Two "families" of verbal responses were first identified. The reflective therapy family had leads such as "restatement of content, reflection of feeling, nondirective leads, and nondirective structuring responses." The leading therapy family emphasized "directive leads, interpretations, directive structuring, approval, suggestions, advice, information-giving, and persuasion." Ten

therapists were trained to a criterion level of using approximately two-thirds responses in the appropriate family for any one interview. Six of the ten could demonstrate the criterion consistently with a total of twenty-four clients seen over a period of several weeks. Differences between the client's pretherapy characteristics, the client's verbal behavior in the interview, the relationship between the therapist and client, and the changes which occurred in the client were investigated for each therapy family. No clear differences were found. There was some support for the hypothesis that predicted that the client's pre-therapy characteristics would influence how they reacted to each type of therapy. Also, the individual therapists seemed to elicit differential effects from the clients independent of the type of therapy they offered.

Baker (1960) used the same procedural format as Ashby et al (1957) to look at the effects of a leading and a reflective therapy on a client's "indiscriminate perceptions and on resistance to analyzing problems." The only significant finding suggested that a leading therapy might be more successful than a reflective therapy in helping the client reduce "personal overgeneralizations." That is, the leading therapy which used more direct questions elicited more direct answers that were free of global personal descriptions.

Counseling researchers Pallone and Grande (1965) refined the "family" of counselor leads to four, reflection, interrrogation, interpretation and confrontation, and analyzed their effects on client communication and the client's perception of interview rapport. Four counselors were trained to reach a treatment criterion where at least 70 percent of the interviewer leads occured in the appropriate mode.

Interviewers were assigned to present the treatment to actual clients. Highschool clients, whose area of concern for counseling was predetermined to be a vocational, educational, social or personal problem, participated in the audio-taped initial interviews. Following the interview the clients completed the Anderson and Anderson Rapport Rating Scale (1962). The audio-tapes were rated by independently trained judges to count the number of problem relevant statements the clients made and to check on the maintenance of the treatment conditions by the interviewers. The conclusions indicated that the inquiry style of the counselor does differentially affect the kinds of things the client talks about in the interview. 1) Interpretive leads fostered more discussion of educational and vocational problems. 2) Reflective leads were effective in eliciting talk about personal problems. 3) Social problems were talked about no matter what the inquiry style, although the interrogative style appeared to be the least effective. Neither the types of interviewer lead nor the problem discussed seemed to have significant effect on perceived rapport according to the clients.

All of the above research investigated therapeutic interactions in a natural clinic setting. Siegman and Pope (1972) did a series of experiments which set up the initial interview in the laboratory with a major objective of simply obtaining information from the interviewee. They were interested in two sets of variables which influence the flow of information between persons; communication variables and relationship variables. Two communication variables of interest were the differences between ambiguous interviewer leads (general probes which allow the client to respond with a number of alternative responses)

and specific interviewer leads (questions which demand a short yes, no or factual answer). Using a highly controlled interview situation with four interviewer leads of an ambiguous nature and four that were specific, they were able to demonstrate that ambiguous interviewer remarks, in contrast to specific ones, were associated with more productive interviewee responses. Productivity was measured by counting the number of words per response. The authors found that numbers of words per response correlated highly (.96) with the number of clause units per response and was an easier measure to make. Whether the interview was started with a specific or with an ambiguous inquiry did not affect the amount of interviewee productivity according to Siegman and Pope. The latter finding is in contrast to that of Hawes (1974) who said that order effect is significant for greater information sharing. Siegman and Pope also reported one study in which they demonstrated that interviewer warmth (defined by the manner in which questions were asked and the mind set given to interviewees prior to the encounter) did increase the verbal output of the interviewee.

Several researchers have tried to sort out the causes for differences in client productivity and in the quality of the relationship in the dyadic encounter. Natural settings do not allow for control of situational and relationship variables, and experimental settings have questionable application to real life interactions. There is no evidence from either avenue of investigation that is conclusive about the specific effects of certain interviewer leads on client verbal behavior or rapport. The effects of interrogative leads have been reported only by Siegman and Pope and they used a short eight inquiry protocol which is quite dissimilar to a longer clinical interview.

The question still remains. What is the effect of an open or closed inquiry style on a client's verbal behavior and perception of rapport?

Occupational Status Effects in the Interview

Studies on status effects in the interview have usually defined status as a difference in expertise between members of the same profession. One report does describe a paper-pencil simulation with confidentiality of data as one of the manipulated variables. Edelman and Snead (1972) hypothesized that mental health professionals (a psychiatrist, a psychologist, and a social worker) differ from personnel managers in the extent of the confidential information they avowedly elicit from interviewees. A tape-recorded message described the interaction of the interview and the client then completed a questionnarie that asked how much he or she would be willing to self-disclose in this situation. There were no differences between the three mental health workers, but clients were significantly hesitant to disclose confidential information to the personnel manager. The experiment may have been confounded by the kinds of information the interviewer was inquiring about in the interview. For example, female clients were reluctant to disclose personal sexual information to the personnel manager. Mental health workers seemed to have the right to certain personal information about clients because of the nature of their roles on the job.

Several counseling studies have manipulated the "expert-ness" of the counselor and examined the effects on client compliance with treatment, perceptions of the counselor, and the amount of client self-disclosure in the interview. Dell (1973) reported that the level

of expertise was not differentially effective in enducing subject compliance with a treatment plan that would help them overcome procrastination. Guttman and Haase (1972) found that non-experts were perceived as more helpful to college students discussing vocational plans; clients from the expert group remembered more information at a later time; and there were no differences between groups on ratings of counseling climate, counselor comfort or client satisfation using the Counseling Evaluation Inventory (Linden, Shertzer & Stone, 1965). Brooks (1974) looked at the effects of disclosing to a high or low status (expert) counselor. The status was manipulated by introductory statements given to the client and by the accoutrements of the interview setting. She found that status dimensions did not have a direct effect on the amount of self-disclosure. Interaction effects did show that high status males got more disclosure from males and females. The status of the female seemed to have no effect.

Differences between levels of expertise of medical students and staff physicians on attitudinal and behavioral aspects of the physician-patient relationship were studied by Davis (1968) as a part of a larger study on patient compliance. Attitudinal data was obtained from a mailed questionnaire. Tape recordings of actual patient interviews provided the behavioral data for analysis. The purpose for this part of the study was to characterize some physician role attributes that are specific to the relationship with the patient; to determine if physicians and students express the same attitudes and exhibit behavior that is consistent with these attitudes; and to trace the effects of these attitudes on the physician's own satisfaction and on the patient's adherence to medical advice. Attitudinally, staff physicians and students

differed on the amount of concern necessary for the doctor-patient interaction. Behaviorally they treated patients with the same difficulty in interpersonal communication. They asked for information and the patient gave it. The patient received little feedback in terms of explanation, diagnosis, or evaluation. Thirty-eight percent of both students' and physicians' patients failed to follow their doctor's advice. Davis contended that with less rapport there was greater likelihood that the patient would be non-compliant. Both students and staff physicians demonstrated the need for additional training in interactional skills.

All of the studies mentioned are rather tangential to the question of whether or not a particular occupational status has any effect on the data the patient is willing to disclose or the manner in which the professional is perceived. Status effects that have not been studied include the questions of whether certain kinds of information might be disclosed more willingly to one kind of professional than another; whether disclosure and compliance with recommended treatment plans may be related to perceived status differences either within the same profession or across professions; whether social stereotypes exist concerning the qualities of the counselor or the physician. This research will look at the amount of self-disclosure and perceived differences in the professionals' interpersonal qualities because of occupational status differences manipulated in the simulated interview.

Sex Differences in the Interview

Surprisingly few reported experimental studies have investigated systematically sex difference effects in the interview. What has

been done shows disparate results. Fuller (1963) assigned thirty-two college clients to four male and four female counselors to discuss vocational-educational problems in an initial interview. The intent was to look for differences in the expressions of feelings. The interviews were not taped so the analysis was done using data taken from case notes. Female clients generally expressed more feelings than males according to these notes. In fact, more feelings were expressed in all pairs with a female, either counselor or client, than were expressed in all male dyads. No difference in the amount of feeling expressed was due directly to the main effect of counselor sex. These results are questionable because of the potential inaccuracy, completeness and individual biases within each counselor's case notes.

Brooks (1974), using forty male and forty female undergraduates, assigned these clients to male or female counselors for an initial counseling interview. She hypothesized that females would be more self-disclosing than males. This was not supported. Pairs with females, either as counselor or client, showed greater self-disclosure than all male pairs and thus, partially substantiated Fuller's (1963) findings.

Thirty-seven black students participating in a special college program were interviewed initially by both male and female counselors in an investigation of the consequences of compatibility of race and sex (Grantham, 1973). Client satisfaction and depth of self-exploration were measured from taped interviews using Carkhuff's depth of self-exploration scale (1969). Generally, female counselors elicited more personally relevant material than their male counterparts.

McIlvaine (1972) looked at the differences between the way coached and non-coached clients evaluated the effectiveness of the

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counseling interaction. Counselor sex and the sex of the client were independent variables in the design. There were no significant main effects because of either manipulation. One interaction effect did show that uncoached female clients were "extremely lenient" in their ratings of the male counselors as compared to the rating patterns of other client groups. The author indicated that this might be a spurious effect, or, it might be an indication of an aculturated behavior of female deference to males.

In a paper-pencil investigation of the sex effects between the quality of care given to male and female patients by male and female physicians, Singleton (1975) reported no statistically significant differences but she noted trend distinctions. Male physicians seemed not to be influenced by the gender of their patients in terms of the kind of treatment they would give; female physicians treated male patients more favorably; and both male and female medical students gave preferential treatment to patients of their own sex.

Not any of the above studies show definite conclusions regarding the sex effect in the interview. Only the amount of self-disclosure that results from various sex combinations has been addressed directly. Perceptions about male and female professionals and the interpersonal qualities they exhibit in the interview need to be tested.

Client Satisfaction and Disclosure in the Interview

Contentment with the relationship with a health professional is evidenced by the patient changing some significant function or attitude of life, returning for a second appointment, complying with a prescribed

treatment plan, paying the bill, trusting and liking the interviewer, and disclosing personal data to the interviewer. Indices of operationally defined measures of patient satisfaction include post-interview ratings of such factors as interviewer's comfort and the interview climate (Linden, Shertzer & Stone, 1965), empathic understanding, congruence and level of positive regard (Barrett-Lennard, 1962); third party ratings of the quality and quantity of information disclosed by the interviewee in response to specific interviewer leads (Hawes, 1974); self-reports of the amount of data disclosed (Jourard, 1971); measures of patient compliance to proposed treatment interventions (Davis, 1968).

Gladstein (1969), looking at client expectation, the counseling experience itself and consequent satisfaction found that client expectations were very diverse. Most of the time expectations were met. Even those who received only some help were as satisfied as those who had all expectations fulfilled. Fisher (1971) found that the same phenomenon was operating in an out-patient clinic where patients had to wait long periods of time to see the physician and at some discomfort to themselves. Most of the patients viewed the overall care as favorable and rated the clinic high on "interest in patients."

Jourard (1971) conducted the primary research on the concept of self-disclosure. Some of his findings are of interest in this research: female disclose more than males; females receive more disclosure than males; there are large individual differences in self-disclosure scores indicating that people differ widely in their willingness and readiness to be known.

All of Jourard's data is based on self-report information and its application to dyadic interaction situations is open to question.

Truax and Carkhuff (1964, 1965) looked at self-disclosure in the interpersonal interaction and found that the level of empathy, respect and genuineness offered by the counselor is directly related to the depth of self-exploration and constructive personality change evidenced by the client. Shapiro, Krauss and Truax (1969) used a modified Barrett-Lennard Relationship Inventory with undergraduates in psychology, men applying for jobs as policemen, and patients in a day psychiatric hospital. Subjects were asked to rate four of their closest friends on how much was disclosed to them and how much disclosure was received from them. Subjects reported engaging in more verbal than non-verbal self-disclosure and more disclosure with positive than negative affective tone. One of the conclusions was that similar interpersonal variables between persons are effective in leading to more open and full relationships in and out of therapy.

Heller (1972) stated that the context in which self-disclosure occurs seems to be an important determinant of its appearance. "Within the context of a private interview conducted in the name of science, a college student readily accedes and needs no further prompting than detailed instructions concerning what is expected of him." So, too, may be the case with any volunteer subject in any research project.

Using a controlled interview, Brooks (1974) looked at the interaction effects of sex and status on self-disclosure and found that females were not more self-disclosing than males, contrary to the findings of Jourard (1971).

There are three aspects of self-disclosure which need to be measured according to Cozby (1973); the amount or breadth of the disclosure, the intimacy or depth of the disclosure, and the length of

time taken in disclosing. Most measurements look only at one or the other of these factors. The interviewee's perceptions and self-disclosure have some precedent for use as measures of patient satisfaction.

Audio-Recording Effects in the Interview

When recording instruments are a part of the interview the possible effects on the interaction and outcomes becomes an area of concern. Roberts and Renzaglia (1965) investigated the differences between the presence and absence of recording instruments in the interview. There were three experimental conditions: taperecorder present and very visible, only the microphone visible, and the entire machine hidden. Outcomes showed that the clients made more favorable self-references when they knew they were being recorded and more unfavorable when they thought they were not being recorded. Tanney and Gelso (1972) also found that client's self-reports were affected by the recording. Non-recorded clients reported that the interview was more stimulating.

Early research by Covner (1942) and Lamb and Mahl (1956) showed that a sizeable portion of counselors and trainees, as well as psychiatrists and residents, believed that recording affected their own behavior and that of their clients. This was a subjective finding and may not reflect actual interview behavior. Harper and Hudson (1952) indicated that if clients really are affected by recordings it is hard to detect unless tape reviewers are specificlly trained to such an awareness. Covner (1942) compared the accuracy and completeness of written reports to the actual audio-tape data. He found a 70 percent accuracy but only a 30 percent completeness in the data on the written case notes.

Recent research reviewed by Gelso (1974) identified three variables which moderate the effects of recording in the interview: 1) the problem of concern--clients discuss personal problems with less inhibition than educational or vocational concerns; 2) personality patterns-Tanney and Gelso (1972) found that highly controlled, self-denying persons with strong inferiority feelings are most inhibited in an interview; and 3) sex of the interviewee--female clients expect to be more inhibited according to Van Atta (1971). Other conclusions that Gelso drew from his survey of the literature are that a client's consent to be interviewed does not dissipate the effect of being recorded, and the effects of recording do not seem to lessen upon repeated exposure to being recorded. The latter conclusion was made from research that compared only two consecutive sessions.

The effects of being recorded in an interview are inconclusive. But, there are reported differences of various sorts for both interviewer and interviewee. The implications for the use of audio-recording equipment in an interview are that the outcomes will, most likely, be affected and should be analyzed with an awareness of potential effects.

Summary

Studies of specific inquiry styles began with the analysis of the interviewer's verbal behavior as heard on recordings of actual therpy and counseling interviews (Snyder, 1945; Hopke, 1964). Interviewer leads were categorized and the client's responses were analyzed. The next step was to look at the effects of interviewer leads on patient behavior in the real setting and identify the patterns in the lead-response

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interactions (Bergman, 1951; Lennard & Bernstein, 1960; Siegman & Pope, 1962). These patterns were experimentally tested by standardizing the role behaviors of the interviewer in the therapy interaction and looking at the consequences for the interviewer (Ashby et al, 1957; Baker, 1960; Pallone & Grande, 1965). The initial,information-gathering interview using interrogative leads was studied in a series of laboratory manipulations by Siegman and Pope (1972). They investigated communication and relationship variables using a standardized interviewer role with four specific and four ambiguous interviewer leads. More naturalistic initial interviews which compare the effects of such interrogative leads have not been reported.

Occupational status effects on interview outcomes using across-discipline professionals as interviewers have, generally, not been investigated (Edelman & Snead, 1972). Level of expertise within the same profession has been studied and the outcomes show some differential effects on the interview (Dell, 1973; Guttman & Haase, 1972; Brooks, 1974; Davis, 1968). If within the same profession there are reported differences, then, across professions which each have culturally and professionally established norms and role behaviors but, sometimes, similar task responsibilities (i.e. history-taking) there will be differences which warrant investigation.

Research into the effects of the sex of the interviewer or of the interviewee on interview outcomes showed interaction effects such as; pairs with females as either counselor or client seemed to disclose more (Fuller, 1963; Brook, 1974), female counselors, generally, elicited more personally relevant material than male counselors (Grantham, 1973), female clients were more lenient in their ratings of male counselors

(McIlvaine, 1972), and female physicians treated male patients more favorably (Singleton, 1975). Though all of these studies indicate some differences because of sex, not any of them were able to show a main effect of significance. The client's perceptions of the male and female as a warm and caring professional have not been reported.

Satisfaction with the professional relationship has been measured with four basic indices: attitude measures (Gladstein, 1969; Fisher, 1971; Ware & Snyder, 1975); compliance with treatment programs (Davis, 1968); ratings of interviewer performance (Linden, Shertzer & Stone, 1965; Barrett-Lennard, 1962; Shapiro, Krauss & Truax, 1969); and the amount of client self-disclosure (Jourard, 1971; Truax & Carkhuff, 1964, 1965; Hawes, 1974; Brooks, 1974). When used in combination, these measures seem to validly illuminate some aspects of client satisfaction with the professional-client interaction.

The use of audio-recording equipment during an interview did have an effect on the client and the professional, at least in their stated attitudes. The measurable effect on the actual interaction was difficult to determine.

All of the variables considered in this review (inquiry style, occupational status, sex effects in the interview) need further investigation. In this research the interrogative, initial interview will be conducted by male and female health professionals, counselor and physician, with male and female clients. Two satisfaction indices (ratings of interviewer performance and client self-disclosure) will be used. The interviews will be recorded so that accurate and complete data will be available even though this recording might prompt the client to alter the data.

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CHAPTER III

DESCRIPTION OF METHODOLOGY AND DESIGN

The primary purpose of this research was to test the effects of open, closed, and mixed inquiry modes as they were used by male and female counselors and physicians in an initial, information-gathering interview. The dependent measures were two dimensions of patient satisfaction: the patient's perceptions of the interviewer as a caring person, and the amount of self-disclosure by the patient in the interview.

Selection and Training of Research Associates

Research Associates, who would be trained to deliver the treatment conditions, were recruited from two populations of new health professionals at Michigan State University; 27 master's level Rehabilitation Counselors in their last quarter of clinical internship, and 30 fourth year medical students in the last term of clinical experience (Appendix A). Each group had specific training in interviewing procedures as a part of their academic programs. They were asked to be available for ten hours on each of three consecutive weekends and would be reimbursed at the rate of three dollars per hour. Two male and two female Rehabilitation Counselors and no medical students were contracted to work as interviewers. Consequently, the decision was made to simulate the occupational roles using title changes, planned differences in

attire (suit or white lab coat) and instructions to the interviewee about the professional who would be conducting the interview.

Preliminary to the training, each Associate was asked to conduct a twenty minute interview with a volunteer interviewee so that a baseline measure of the interviewer's natural inquiry style could be obtained. The directions for this interview were similar to those used during the actual treatment phase. This provided an opportunity to pilot test procedures and instruments.

Training sessions were scheduled two days prior to each treatment presentation. The general procedure was; 1) to discuss the concepts being trained, 2) to practice identifying specific inquiries using printed transcripts of actual interviews, 3) to listen to an audio-tape demonstrating an inquiry style and discuss, 4) to practice the inquiry mode in an interview(s) until the trainer or assistant determined that the criterion level was met (see Appendix B for Training Procedures). All interviewers were able to reach criterion in a maximum of three practice interview attempts per treatment mode. Training aimed to have each interviewer demonstrate the minimum criterion level of at least 80 percent open inquiries for the Open Treatment Mode, at least 80 percent closed inquiries for the Closed Treatment Mode, and a combination of at least 40 percent open inquiries and 40 percent closed inquiries for the Mixed Treatment Mode (see Appendix C for sample Open and Closed Inquiries). The total number of inquiries used during the twenty minute interview varied depending on the flow of the individual interview. Periodic checks during the course of each treatment indicated that the criterion levels were maintained by each interviewer.

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Selection of Subjects

Population

The population of interest in this study was the average middle-class male and female adult of a moderately large (150,000) metropolitan area. A wide range of social, educational, occupational, economic and marital characteristics was preferred. It was assumed that this would represent a typical group who would regularly employ the services of a health professional.

Sample

The local Community College seemed the best source for such a variety of persons. With the permission of the chairman of the Social Science Department and the cooperation of several professors who allowed the researcher to visit their classes, 212 subjects initially agreed to participate (Appendix D). Approximately one third of those recruited did not show up for their interview appointments. Enough of these were able to be rescheduled so that the count of at least three subjects per cell could be maintained. Seventy-two male and seventy-two female subjects comprised the final sample.

Demographic characteristics for the sample showed an age range of 17 to 60 years with most persons in the mid-twenties. The majority, 92 percent, were Caucasian and 8 percent were Black or Mexican. Twenty-seven percent of the subjects were married, 10 percent divorced or separated, and 63 percent were single. The range in education was three years of highschool to graduate training or several years of vocational training. Occupations varied from the unskilled to the professional.

Income levels included subjects who lived with parents and those who gross over 25,000 per year. Half of the subjects had no previous contact with a counselor. One third had never seen a physician on a one-to-one interview basis. All demographic characteristics of the sample are detailed in Appendix E.

All of the volunteer subjects expressed a desire to have feedback on the experimental outcomes. This was a cooperative group of persons who were willing to give up one hour of a weekend to visit a strange campus to take part in the research of a person they did not know. About one third of the subjects were given a small portion of course credit for participating.

Generalizability of the Sample

This sample of persons had minimal contact with a physician over the last three years and even less contact with a counselor. They may, therefore, be typical of the general population of persons who never go to see such health professionals unless there is a crisis in their private lives. The results of this study might be generalized to any group of persons with similar demographic characteristics. However, the experimental conditions were such that this kind of one time contact with a health professional may never happen outside of a laboratory. Though, in some clinics, one professional collects the intake personal history and then transfers the patient to another professional for further tests and treatment.

Dependent Measures

Three instruments were used to gather the dependent data: the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, and the Interviewee Productivity Measure. The two inventories were completed by the interviewee immediately following the interview with the counselor or physician. The productivity measure was taken by trained tape reviewers who listened to audio-tapes of each interview.

The Counseling Evaluation Inventory

Linden, Shertzer and Stone (1965) developed the Counseling Evaluation Inventory (CEI) as a refinement and modification of the fifty item Interview Rating Scale of Anderson and Anderson (1962). Several hundred highschool students rated their master's level counselor trainees on the CEI following the termination of a counseling relationship. This initial data was factor analyzed and three factors with a total of twenty-one significant items emerged. The Counseling Climate subscale with nine items, the Counselor Comfort subscale with five items, and the Client Satisfaction subscale with seven items make up the shortened version of the CEI.

Each of the items was rated by the client on a five point Likert scale. The authors used a weighted factor scoring formula to obtain subscale and total scale scores. Gabbert (1965) further investigated this scoring system and suggested that scores based on the factor method typically assume a curvilinear form and may measure strength of attitude toward a counseling situation rather than direction of attitude. The Likert formula appears to measure direction of attitude according

to Gabbert. Strength of attitude was the more important consideration in this research so the factor scoring system of weighted values was used.

Test-retest reliability checks were done on both the preliminary sixty-eight item form and the twenty-one item short form at both fourteen day and one hundred day intervals. The median reliability coefficient reported for all of the subscale scores and for the total score was .72. Discriminative validity significant at or beyond the .05 level was demonstrated using the counselor trainee praticum grades as a provisional criterion. Haase and Miller (1968) indicated that item content and client comments suggested a high degree of face validity.

The Counseling Evaluation Inventory has been used as a dependent measure with highschool and college level clients. Haase and Miller (1968) showed that in the college setting a more general interpretation was appropriate rather than strict adherence to the factored subscale meanings. McIlvaine (1972) reported a difference between the manner in which coached or non-coached clients rate counselors on the CEI. Coached clients tend to rate counselors more nearly like the training supervisors rate them than non-coached clients do. When used to demonstrate differences between recorded and non-recorded counseling sessions (Tanney & Gelso, 1972) the scores on the CEI were not discriminating.

For this research the clients were non-coached, college level persons who were interviewed in a recorded session. All of the factor scores and the total score were analyzed.

The Barrett-Lennard Relationship Inventory

Barrett-Lennard (1962) built the Relationship Inventory (BLRI) around Rogers' formulations (1957) regarding the "necessary and sufficient conditions" for the therapy process; unconditional positive regard, empathic understanding, and the congruence or genuineness of the therapist. The client's experience of the therapist's response was considered to be the primary locus of therapeutic influence in the relationship according to Barrett-Lennard. Thus, his inventory is a series of statements on which the therapist is rated by the client. Five specific concepts provide the content focus for the original 92 item instrument: 1) Empathic understanding is defined as "the extent to which one person is conscious of the immediate awareness of another;" 2) Level of regard refers to "the affective aspect of one person's response to another," 3) Unconditionality of regard is "specifically concerned with how little or how much variability there is in one person's affective response to another;" 4) Congruence is the degree of integration or absence of inconsistencies between a person's "total experience, conscious awareness and over-communication;" 5) Willingness to be known is the factor which shows the degree "to which one person is willing to be known as a person, by another, according to the other's desire for this." The sixteen items of the latter scale were not used for this research study because the interviewer was trained to use only inquiry leads during the interaction with the patient, therefore, there was no self-disclosure on the part of the interviewer.

The questionnaire format used on the BLRI instructs the rater to indicate whether an item is correct or incorrect according to the individual's perception and, then, assign a weight to the feeling.

There are three degress of "yes" identified as +1, +2, +3 and three degrees of "no" weighted as -1, -2, -3. Items are grouped so that every fifth item represents another concept. A specific scoring technique yields "a possible scoring range of -3n to +3n, where n is the number of items used for the particular variable."

Five expert judges classified each of the Inventory items as either positive or negative indicators of the concept in question. Also, several drafts of the items and discussion and written comments from experts familiar with the Rogerian theory validated the accuracy of the content. Other types of validity were not directly reported. The internal consistency of the five scales of the Inventory was assessed using the Spearman-Brown formula for split-half reliability. The coefficients were reported to range from .82 to .93 for the client form of the instrument. A separate test-retest reliability check was done with thirty-six students who were asked to rate a long-term relationship outside of a therapy setting. The test-retest correlation data was; level of regard .84, empathic understanding .89, congruence .86, and unconditionality of regard .90. Intercorrelations between subscales suggested that each scale measured an independent variable. Unconditionality of regard seemed to be the most independent measure of the five. The congruence and empathic understanding measures, "though theoretically and operationally separate and distinct, are, in this instance, empirically indistinguishable." Other factor studies by Mills and Zytowski (1967) and Walker and Little (1969) disputed Barrett-Lennard's claim that each subscale is an independent measure. Mills and Zytowski reported a general component which accounts for two-thirds of the total variance in their analysis. Walker and Little obtained only three

factors which they interpreted as "nonevaluative acceptance, psychological insight, and likeability."

For this research each of the subscales was analyzed as if it was an independent measure. The Willingness to be Known scale was not used.

Interviewee Productivity Measure

The Interviewee Productivity Measure (IPM), a measure of the amount of personal data a patient discloses during the interview, was designed specifically for this research. Cozby (1973) suggested that breadth or amount of data was one of the three basic parameters of self-disclosure.

The four interviewers were trained to use a specific inquiry mode to ask about twelve aspects of the patient's life. Each of the twenty minute interviews was audio-taped. Three masters level counselor trainees, naive to the research, were then trained to review the tapes and tally the discriminate bits of information that had been volunteered by the interviewees. An "information bit" was defined as a noun phrase which gave new information to the interviewer (See Appendix F for the Training Program for Tape Reviewers, the IPM Form, and the Reliability calculations). Inter-reviewer reliability was calculated using an analysis of variance formula suggested by Ebels (1951). The reliability range was .69 to .92. The calculations were made during the training sessions and three times during the actual review of the experimental tapes. Each reviewer had approximately fifty audio-tapes assigned in a randon fashion.

The Interviewee Productivity Measure dealt only with the quantity of information provided by the interviewee and not with the quality

of information or appropriateness of the response. Affective and factual data were tallied together. Only the total IPM score was analyzed.

The tape reviewers were also trained to recognize and tally the interviewer inquiry as either open or closed. This was done as a check on the maintenance of the criterion in each of the treatment procedures.

Treatment Procedures

The procedures, including pre- and post-treatment activities, are presented in chronological order.

Phase I - Pre-Treatment

During this period the four Research Associates were hired and trained to deliver the experimental treatments. The specific interview procedures were pilot tested. Research subjects were recruited and randomly assigned to a treatment condition. One week prior to the scheduled interview each subject was phoned to confirm the appointment time. An appointment reminder and a campus map were then mailed (Appendix G).

Phase II - Treatment

On the day of the interview the subject was met at the entrance of the building and directed to the clinic area. A second receptionist checked the name and handed the subject a description of the interview situation and a release form which authorized the audio-taping of the interview and the use of the tape for research purposes (Appendix H). Each sheet had the interviewee's assigned code number at the top. This

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corresponded to the coded audio-tape and the instrument packet the interviewee would complete after the interview.

The setting. Since interviews were conducted on the weekend in a counseling center that was otherwise unoccupied, it was possible to create a setting similar to a general clinic. The clinic space consisted of a large reception room and several small offices. Those which faced an outer corridor were used as the interviewing offices. Each was equipped with a desk, two straight-back chairs, a lounge chair and a plant or two. The positioning of all furniture was standardized and the interviewee was always seated so the one-way window was to the back. On the desk each interviewer had a tape-recorder which was ready to begin when the receptionist knocked on the door bringing a new patient. Depending on the occupational role which was being simulated, a sign on the office door named the interviewer (i.e. Tony S..., M.A., Counselor; or Tony S..., M.D., Physician).

Six inner offices were used as individual testing rooms where the interviewee completed the CEI, the BLRI and the demographic questionnaire following the interview.

The interview. At the right time the receptionist took the interviewee to the office, knocked on the door and introduced the subject to the interviewer. Since the tape-recorder was already running, the interviewer proceded to structure the situation (repeating the name with the appropriate title, occupation, place of work, the general purpose of the interview, a statement about time limits, confidentiality and the responsibilities of each participant of the dyad, and giving the subject a chance to ask any initial questions). After this short introduction,

the interviewer, using the prescribed inquiry protocol, began seeking information about the interviewee's personal-social and medical history (Appendix I). Each interviewer followed an individual pace in proceeding through the content areas. The important directive was that the twenty minute interview should cover the content areas in the listed order and should use the assigned inquiry mode for that interview.

During the course of the interview the researcher monitored the non-verbal behaviors of the interviewers through the one-way windows of each office. This was done so that differences between interviewers could be kept at a minimum (See Appendix B for the behaviors that were standardized across interviewers).

When the audio cassettes (twenty minutes in length) clicked off the interviewer was instructed to terminate the interview, give the interviewee the instrument packet, and send the subject back to the general reception area. The interviewee was then shown to a private testing room and instructed, by the receptionist and by a cautionary note, to complete the instruments "as if your relationship with this counselor or physician is going to continue across time. Be as honest as possible. The interviewer will not see your individual response." The latter statement was added in an attempt to counter any guilt feelings a subject might have for rating a particular interviewer toward the negative end of the scale.

Occupation simulation. Status was simulated using changes of attire and different titles. The counselor wore professional business clothes and the physician wore a white lab coat. Title distinctions were introduced: 1) on the interview description sheet given to the subject prior to meeting the professional; 2) on the interview office door;

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3) by the receptionist as she introduced the patient; and 4) by the interviewer who repeated the name with title, job and place of work at the beginning of the interview. As counselors, the interviewers used their real life personal descriptors. As physicians, the family name was changed, the title "Doctor" was added, and the job became that of a medical resident with the Michigan State University Medical School.

Time. Interviews were scheduled over four consecutive weekends. The fourth Saturday and Sunday were used to reschedule missed appointments. The particular sequence of inquiry modes followed by any one interviewer was determined randomly to counteract possible order effects. Table 3.1 shows the treatment sequence for each interviewer.

Table 3.1

Sequence of Inquiry Modes for Each Interviewer

WEEK	Interviewer			
	#1 (male)	#2 (male)	#3 (female)	#4 (female)
1	OPEN	MIXED	OPEN	CLOSED
2	CLOSED	OPEN	CLOSED	MIXED
3	MIXED	CLOSED	MIXED	OPEN
4	VARIED	VARIED	VARIED	VARIED

Each interview itself was twenty minutes in length and timed by using tape cassettes of twenty minutes per side. The interviewer began the tape as the receptionist knocked on the door and terminated the interview after the cassette clicked off.

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The amount of time that each subject spent in the treatment situation varied from 60 to 90 minutes for the interview and 30 to 45 minutes for completion of the post-interview instruments.

As many as eight twenty minute interviews were scheduled for any one interviewer per day. Ample time between subject contacts was planned to assure that interviewers would not be fatigued.

Phase III - Post-Treatment

Following the conclusion of the series of interviews three graduate students in counseling were trained to review each audio-tape according to the Interviewee Productivity Measure.

After analysis the outcomes of this research were mailed to all of the persons who participated.

Design

A post-test only control group model was the design for this 3 x 2 x 2 x 2 x 2 study with a total of 48 cells and three subjects per cell (Table 3.2). Subjects, 72 male and 72 female, were randomly assigned to a treatment mode to be interviewed by one of four interviewers, two male and two female, over the course of four weeks. The same four interviewers presented all of the treatment conditions according to a predetermined random order. The Mixed Inquiry Mode was established as the control treatment. This was based on an examination of sample interviews taken from a pool of existing interviews conducted by medical students, practicum counseling students and practicing health professionals. This analysis showed that in interviews with patients,

Table 3.2

Summary of Design Characteristics

	TREATMENT CONDITIONS																			
	Open Inquiry Mode								Closed Inquiry Mode								Mixed Inquiry Mode							
	PHYSICIAN				COUNSELOR				PHYSICIAN				COUNSELOR				PHYSICIAN				COUNSELOR			
	male		female		male		female		male		female		male		female		male		female		male		female	
SUBJECTS	#1	#2	#3	#4	#1	#2	#3	#4	#1	#2	#3	#4	#1	#2	#3	#4	#1	#2	#3	#4	#1	#2	#3	#4
FEMALE	S_{1f}																							
																								S_{72f}
MALE	S_{1m}																							
																								S_{72m}

#1...#4 refer to the four interviewers

the professionals used approximately half open and half closed inquiries.

Differences between subjects wre identified by analyzing three dependent measures: the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, and the Interviewee Productivity Measure.

Hypotheses

The basic research questions of this study were broadly stated in Chapter I. Below is a more specific presentation of each experimental hypothesis.

Hypothesis One. There are no differences in the subjects' mean scores on the Counseling Evaluation Inventory. the Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure across the three treatments--the OPEN INQUIRY MODE, the CLOSED INQUIRY MODE, or the MIXED INQUIRY MODE.

Alternate Hypothesis One. The subjects' mean scores on the Barrett-Lennard will be higher for the Open Inquiry Mode than for either the Closed Inquiry Mode or the Mixed Inquiry Mode.

Hypothesis Two. There are no differences in the subjects' mean scores on the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure across the two occupational categories--COUNSELOR or PHYSICIAN.

Hypothesis Three. There are no differences in the subjects' mean scores on the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure given either a MALE or a FEMALE INTERVIEWER.

Hypothesis Four. There are no differences between MALE SUBJECTS or FEMALE SUBJECTS on the mean scores of the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure.

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Statistics Used

This study has four independent variables (inquiry mode, occupational status, interviewer sex, interviewee sex) and three dependent variables (the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, and the Interviewee Productivity Measure). The statistic of choice was the multivariate F, a ratio of the mean squares for between groups to the mean squares for the within groups. The Multivariate Analysis of Variance procedure (MANOVA) was chosen because it is likely to be more powerful than a univariate analysis since it is possible to obtain significant multivariate differences without significant univariate effects. The MANOVA analyzes relationships among several dependent measures simultaneously. In addition, MANOVA is less likely than ANOVA to occasion Type I error, or false rejection of the null hypothesis (Hummel & Sligo, 1971).

The assumptions of MANOVA are: 1) the dependent variables are multivariate normally distributed, 2) the dependent variables have homogeneous variances, and 3) the errors of measurement are normally distributed across the treatment population (Cooley & Lohnes, 1971). Equal numbers of observations in each design cell were maintained so that the test of hypotheses would be robust to possible violations of the assumptions. There were no indications that the assumptions required for MANOVA were not met.

The data was analyzed using the Univariate and Multivariate Analysis of Variance, Covariance and Regression computer program of Finn (1968) modified and adapted for use on the CDC 6500 by Scheifley and Schmidt (1973). Tests of hypotheses done using the Finn are univariate and step-down (using assigned weights) multiple correlation

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analysis to determine the relationship between the independent variables and the individual dependent measures. The order of independent and dependent variables was determined by the researcher prior to the computer run.

The MANOVA outcomes were evaluated with the probability of a Type I error for hypothesis testing set at .05 (p .05). MANOVA is a non-directional test, therefore, directionality of significant effects was determined by using a post hoc examination of significant variable mean scores.

Univariate analyses of variance were calculated separately for each dependent measure by the Finn program. By using a controlled alpha for each set of univariate analysis, these F's could be investigated without increasing the risk of a Type I error. The alpha level for each set of analysis was determined by dividing the .05 by the number of variables being tested in each set. Thus, when examining the univariate F's of the CEI, the BLRI and the IPM tested together, the alpha level was .05/3 or .017. When considering the univariate F's for the four subscales of the BLRI, the alpha level for the test of significance was .05/4 or .0125.

Summary

Seventy-two female and seventy-two male Community College students were randomly assigned to the forty-eight cells of the experimental conditions involving four independent variables (inquiry style, the occupational status of the interviewer, the sex of the interviewer and the sex of the interviewee).

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Two female and two male master's level counselors were trained to do an information-gathering interview as either a counselor or a physician. Each interview was done using one of three inquiry modes (open, closed, or mixed).

After the twenty minute tape recorded interview, the interviewee was asked to rate the interaction on the Barrett-Lennard Relationship Inventory and the Counseling Evaluation Inventory. The amount of interviewee self-disclosure was determined from the tapes by three trained tape reviewers using the Interviewee Productivity Measure.

With three dependent measures for each subject, the data was analyzed using the Multivariate Analysis of Variance.

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CHAPTER IV

PRESENTATION OF RESULTS

The analyses of four main effects hypotheses, using the multivariate analysis of variance program developed by Finn (1967), are presented in this chapter. These hypotheses test the effects of open, closed, and mixed inquiry modes as they are used by male and female counselors and physicians in an initial, information-gathering interview.

The first section in this chapter introduces the means, standard deviations and the results of the interaction tests. Section two reports the multivariate statistics for each of the main effects hypotheses. The following combinations of means scores were each tested; 1) the total scale means of the three measures--the CEI, BLRI, and IPM, 2) the three subscale means of the CEI--Client Satisfaction, Interview Climate, and Counselor Comfort, and 3) the four subscales of the BLRI--Unconditionality of Regard, Level of Regard, Empathic Understanding, and Congruence.

Tables of pooled means are given for each hypothesis tested so that directional trends can be seen. When univariate F's are significant they also are tabled near the hypothesis test data. Additional Univariate tables can be found in Appendix J. The chapter ends with a summary statement regarding the outcomes of each hypothesis test.

Preliminary Data

Table 4.1 identifies the scoring range for each of the dependent measures and their subscales. It also lists the range of mean scores for this group of research subjects. Cell mean scores and standard deviations for the three treatment groups are shown in Table 4.2. Each mean and standard deviation was calculated for a cell size of three subjects.

Table 4.1

Scoring Ranges for the Dependent Measures

Dependent Measures	Standardized Score Ranges[+]	Mean Scores Range
Barrett-Lennard Relationship Inventory (TOTAL)	-207 to +207	18.67 to 167.00
Unconditional Regard	- 54 to + 54	-5.33 to 41.00
Level of Regard	- 54 to + 54	12.00 to 45.00
Empathic Understanding	- 48 to + 48	2.33 to 35.33
Congruence	- 51 to + 51	9.67 to 45.67
Counseling Evaluation Inventory (TOTAL)	0 to 44	21.00 to 41.00
Client Satisfaction	0 to 14	4.67 to 11.00
Counseling Climate	0 to 18	10.67 to 18.00
Counselor Comfort	0 to 12	3.67 to 12.00
Interviewee Productivity Measure	0 to ----	204.00 to 380.33

[+]determined by the authors of the instruments

Table 4.2

Summary of Means[+] and Standard Deviations[+] for the Multivariate Analysis of Variance of Three Dependent Measures

DEPENDENT MEASURES	SUB-JECTS	OPEN INQUIRY MODE															
		Physician								Counselor							
		MALE				FEMALE				MALE				FEMALE			
		#1		#2		#3		#4		#1		#2		#3		#4	
		X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD
Barrett-Lennard Relationship Inventory (TOTAL)	M	58.67	67.26	93.67	77.02	87.33	22.81	69.33	41.28	55.67	43.82	73.33	60.37	104.00	31.80	75.67	53.16
	F	38.67	21.13	54.33	40.50	116.67	12.85	102.33	31.18	99.67	17.61	77.33	42.10	122.67	21.39	73.67	59.19
Unconditional Regard	M	8.33	12.50	22.33	27.65	8.67	14.19	9.33	10.97	14.67	15.31	9.00	19.05	18.00	14.73	16.33	21.08
	F	-3.00	1.00	4.33	12.58	20.67	12.42	17.67	7.77	14.33	8.33	8.00	15.72	29.67	9.29	18.67	11.37
Level of Regard	M	23.00	23.58	32.00	14.00	35.67	14.36	29.33	6.11	21.00	6.25	26.67	18.15	32.00	6.56	28.00	15.10
	F	21.33	6.43	27.67	9.61	38.33	4.16	30.33	7.64	34.33	8.74	25.00	4.36	36.33	4.93	35.00	2.65
Empathic Understanding	M	8.67	19.04	12.33	23.35	19.67	9.50	11.67	12.42	4.00	13.89	16.67	10.07	21.33	9.02	18.00	5.29
	F	2.33	9.45	9.67	7.23	26.67	4.51	23.00	11.36	23.00	1.73	14.67	14.50	26.33	.58	24.33	3.22
Congruence	M	18.67	13.32	27.00	15.72	23.33	30.55	19.00	12.49	16.00	11.14	21.00	14.80	22.67	6.51	16.00	10.58
	F	18.00	7.21	12.67	12.42	31.00	7.55	31.33	4.62	28.00	3.46	29.67	9.24	27.00	14.11	27.33	7.02
Counseling Evaluation Inventory (TOTAL)	M	30.00	12.77	27.33	11.02	28.67	8.33	26.33	11.02	25.33	8.39	27.00	7.81	34.33	8.74	21.00	4.58
	F	24.67	3.06	26.67	10.79	30.33	7.37	33.67	4.73	29.00	7.21	29.33	9.02	34.00	6.00	33.00	2.00
Client Satisfaction	M	7.67	4.16	8.00	4.00	7.33	2.31	4.67	4.73	7.00	3.00	5.33	1.16	9.00	4.36	5.33	2.52
	F	8.00	1.00	5.67	3.06	7.00	3.61	7.67	2.08	6.00	2.65	6.67	3.06	8.00	2.65	7.33	1.16
Counseling Climate	M	14.33	5.51	11.67	3.79	13.67	2.52	15.00	2.00	12.00	1.00	13.00	2.65	15.33	2.31	10.67	1.53
	F	10.33	1.15	15.33	3.06	15.67	1.15	16.00	1.73	14.33	1.53	14.00	4.36	16.67	1.53	17.00	1.00
Counselor Comfort	M	8.00	3.61	7.67	4.04	7.67	3.79	6.67	4.73	6.33	5.13	8.67	5.77	10.00	3.46	5.00	2.65
	F	6.33	1.53	5.67	5.69	7.67	4.51	10.00	2.65	8.67	3.51	8.67	3.51	9.33	3.06	8.67	3.51
Interviewee Productivity Measure	M	306.33	31.50	245.33	43.11	304.33	111.51	272.33	88.09	260.33	52.00	281.33	77.88	251.33	135.50	204.00	13.00
	F	249.67	32.65	229.67	30.01	234.67	27.32	342.33	48.91	256.00	28.16	327.67	64.83	277.67	100.83	247.00	1.73

[+]Each Mean and Standard Deviation is calculated for a cell size of 3 subjects

Table 4.2 continued

DEPENDENT MEASURES	SUB-JECTS	CLOSED INQUIRY MODE															
		Physician								Counselor							
		MALE				FEMALE				MALE				FEMALE			
		#1		#2		#3		#4		#1		#2		#3		#4	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Barrett-Lennard Relationship Inventory (TOTAL)	M	70.33	8.39	105.67	9.50	41.00	60.32	85.67	44.23	69.00	41.39	97.67	14.64	85.33	29.57	79.67	58.71
	F	49.67	15.70	104.33	42.34	106.00	25.53	102.33	31.34	18.67	75.24	113.33	60.86	121.00	30.05	167.00	28.84
Unconditional Regard	M	11.67	8.50	9.67	1.53	2.00	11.14	15.33	12.74	11.67	6.03	12.00	13.86	16.33	7.23	16.67	8.74
	F	-1.00	7.00	18.33	5.51	23.33	16.17	23.33	2.08	-1.67	11.67	26.33	25.54	20.67	7.02	41.00	8.89
Level of Regard	M	31.67	10.79	38.00	3.61	25.33	16.92	24.33	10.97	24.33	12.06	33.33	7.37	37.33	7.57	23.00	45.00
	F	25.67	4.51	34.67	13.32	31.67	7.23	30.33	14.05	12.00	22.52	40.00	11.53	38.33	6.66	18.03	6.08
Empathic Understanding	M	11.33	16.86	26.67	2.52	6.00	13.45	22.00	4.58	18.67	8.96	23.67	10.50	12.00	9.54	13.33	16.07
	F	9.67	2.52	22.00	8.89	23.33	4.73	23.00	8.19	2.67	16.65	23.00	14.53	27.00	6.56	35.33	10.97
Congruence	M	15.67	6.03	31.33	2.52	12.33	14.74	24.00	16.37	14.33	15.31	28.67	4.04	19.67	8.50	26.67	17.39
	F	17.33	4.62	29.33	15.01	27.67	3.52	25.67	8.33	22.33	2.52	24.00	17.35	35.00	10.15	45.67	4.73
Counseling Evaluation Inventory (TOTAL)	M	28.33	3.79	32.33	4.04	28.67	11.37	28.00	14.00	25.67	12.10	34.33	11.59	28.67	5.51	23.33	14.50
	F	21.33	4.04	32.67	6.11	31.33	9.07	31.00	8.54	26.67	6.03	28.33	5.86	37.67	2.89	41.00	1.73
Client Satisfaction	M	6.67	.58	8.67	.58	8.33	2.52	7.33	5.86	6.00	3.00	8.33	4.73	5.33	2.52	6.00	4.36
	F	5.67	1.53	7.00	1.00	7.67	3.51	9.00	4.00	5.67	2.08	5.33	3.21	8.67	2.08	11.00	1.73
Counseling Climate	M	12.33	3.21	15.33	.58	11.67	5.86	12.00	4.00	13.67	5.13	16.33	2.89	16.00	.00	12.00	6.93
	F	12.00	3.00	16.00	2.00	15.33	2.52	13.33	1.53	13.00	2.65	16.00	1.73	17.00	1.00	18.00	.00
Counselor Comfort	M	9.33	2.31	8.33	4.04	8.67	3.21	8.67	4.93	6.00	5.00	9.67	4.04	7.33	3.06	5.33	4.93
	F	3.67	.58	9.67	3.21	8.33	3.21	8.67	3.06	8.00	2.00	7.00	1.00	12.00	.00	12.00	.00
Interviewee Productivity Measure	M	380.33	63.44	282.00	43.14	367.00	122.23	304.00	86.13	284.00	70.93	256.00	62.45	259.67	67.30	255.00	67.73
	F	304.67	11.93	289.33	20.03	293.33	71.14	299.33	4.16	265.00	78.50	213.00	71.08	288.00	46.60	337.67	46.61

Table 4.2 continued

DEPENDENT MEASURES	SUB-JECTS	MIXED INQUIRY MODE															
		Physician								Counselor							
		MALE				FEMALE				MALE				FEMALE			
		#1		#2		#3		#4		#1		#2		#3		#4	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Barrett-Lennard Relationship Inventory (TOTAL)	M	74.67	17.79	50.33	57.24	91.00	39.40	56.33	31.37	65.00	26.21	99.67	16.65	100.00	15.13	124.33	50.80
	F	92.33	34.82	100.33	38.37	110.67	9.71	79.00	30.51	92.00	18.33	70.33	41.55	87.00	35.00	72.00	33.41
Unconditional Regard	M	10.33	7.02	-5.33	23.12	10.33	15.63	7.33	10.41	11.67	4.51	20.67	2.08	9.67	11.02	27.00	14.11
	F	9.67	9.45	23.67	5.77	13.67	5.03	14.00	9.17	12.67	8.33	8.67	5.13	16.00	9.54	9.67	8.39
Level of Regard	M	30.33	5.13	25.33	8.08	36.33	9.45	24.00	11.14	24.33	6.66	32.33	9.61	37.67	9.45	37.33	13.05
	F	37.67	5.51	33.33	10.69	42.67	8.14	25.33	13.32	29.00	7.55	27.00	8.72	36.00	9.64	26.33	9.71
Empathic Understanding	M	10.67	2.52	14.67	13.20	15.00	7.21	15.33	1.15	12.33	8.08	20.00	3.61	22.33	7.57	25.33	17.50
	F	16.33	14.36	21.33	13.43	23.33	4.73	15.33	6.81	21.33	3.22	15.67	12.06	13.67	8.39	15.00	4.00
Congruence	M	23.33	6.66	23.00	11.53	29.33	9.71	24.33	6.81	16.67	10.41	26.67	3.52	30.33	11.93	34.67	7.23
	F	28.67	6.81	22.00	20.66	31.00	10.02	9.67	10.02	29.00	7.00	22.33	15.18	21.33	16.07	21.00	12.77
Counseling Evaluation Inventory (TOTAL)	M	29.67	1.53	31.33	9.29	28.67	10.40	25.00	10.54	24.67	7.57	33.33	3.06	30.00	10.58	35.33	4.16
	F	32.33	4.16	31.33	6.66	27.67	10.02	26.33	9.61	28.67	1.15	33.33	10.97	29.67	6.66	27.33	11.50
Client Satisfaction	M	5.67	1.53	7.33	4.16	6.00	2.65	5.67	2.89	6.00	1.00	8.67	2.08	7.33	4.93	7.67	3.79
	F	6.00	1.73	7.67	1.53	7.33	2.08	6.00	2.65	4.67	2.52	10.00	2.65	7.33	2.52	7.00	4.00
Counseling Climate	M	15.00	1.73	16.00	1.73	14.00	4.58	11.00	6.25	12.67	2.52	13.67	2.52	15.33	2.08	17.33	.58
	F	15.33	3.06	15.00	1.73	13.33	4.16	12.67	5.03	14.33	2.52	16.00	3.46	14.33	3.79	14.00	3.46
Counselor Comfort	M	9.00	1.73	8.00	4.00	8.67	3.51	8.33	3.06	6.00	5.00	11.00	1.73	7.33	4.16	10.33	1.15
	F	11.00	1.73	8.67	5.77	7.00	4.58	7.67	4.04	9.67	1.15	7.33	5.03	8.00	1.00	6.33	4.93
Interviewee Productivity Measure	M	249.67	37.58	277.67	47.01	292.00	65.00	274.67	17.95	275.33	110.39	352.67	100.43	294.00	59.56	356.67	84.29
	F	270.33	68.09	242.00	57.82	316.00	40.26	288.33	7.37	259.67	73.11	297.67	125.44	264.67	51.73	286.00	22.34

No hypotheses were generated in relation to the interaction effects between the variables of this study. An analysis of possible interaction effects was computed, however, because of the importance of interpreting and limiting the generalizability of the main effects. All two-way, three-way, four-way and five-way interactions (a possible forty-one interactions for each main effects hypothesis test) did not reach significance. The multivariate F's for these interaction effects are reported in Tables 4.14, 4.15 and 4.16.

Tests of Hypotheses

Hypothesis One - Inquiry Mode Main Effect

> There are no differences in the subjects' mean scores on the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure across the three treatments--the OPEN INQUIRY MODE, the CLOSED INQUIRY MODE or the MIXED INQUIRY MODE.

For the main effect of Inquiry Mode the Multivariate F's did not reach significance at the .05 alpha level (Table 4.3). Investigation of the table of pooled means (Table 4.4) shows that the Closed Inquiry Mode had higher means on all indices, though there are no significant differences. The univariate F's did not reach significance (Appendix J).

The alternate hypothesis that subjects' mean scores on the Barrett-Lennard Relationship Inventory would be higher in the Open Inquiry Mode than in either the Closed Inquiry Mode or the Mixed Inquiry Mode was rejected.

The null hypothesis for the Inquiry Mode main effect was not rejected.

Table 4.3

Multivariate Analysis of Variance
between OPEN, CLOSED and MIXED INQUIRY MODES

Dependent Measures	df	Multivariate F	p
Barrett-Lennard Counseling Evaluation Interviewee Productivity	6, 188	.6923	.6561
Subscales of the CEI			
Client Satisfaction Counseling Climate Counselor Comfort	6, 188	.2742	.9486
Subscales of the BLRI			
Unconditional Regard Level of Regard Empathic Understanding Congruence	8, 186	.5903	.7852

Table 4.4

The Pooled Means for the INQUIRY MODE Main Effect

Dependent Measures	Inquiry Modes OPEN (n=48)	CLOSED (n=48)	MIXED (n=48)
Barrett-Lennard Relationship Inventory (TOTAL)	81.44	88.54	85.31
Unconditional Regard	13.56	15.35	12.48
Level of Regard	29.75	30.94	31.56
Empathic Understanding	16.40	18.73	17.35
Congruence	23.04	24.98	24.58
Counseling Evaluation Inventory (TOTAL)	28.79	29.96	29.67
Client Satisfaction	6.92	7.29	6.90
Counseling Climate	14.06	14.37	14.40
Counselor Comfort	7.81	8.29	8.40
Interviewee Productivity Measure	268.12	291.90	287.33

Hypothesis Two - Occupational Status Main Effect

> There are no differences in the subjects' mean scores on the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory or the Interviewee Productivity Measure across the two occupational categories--COUNSELOR or PHYSICIAN.

For the Occupational Status main effects the multivariate F's did not reach significance for any of the scale combinations (Table 4.5). The table of pooled means (Table 4.6) indicates that the Counselor Status was rated higher on all indices except the Productivity Measure. The univariate F's did not reach significance (Appendix J).

The null hypothesis for Occupational Status was not rejected.

Table 4.5

Multivariate Analysis of Variance
between COUNSELOR STATUS and PHYSICIAN STATUS

Dependent Measures	df	Multivariate F	p
Barrett-Lennard Counseling Evaluation Interviewee Productivity	3, 94	.8969	.4459
Subscales of the CEI Client Satisfaction Counseling Climate Counselor Comfort	3, 94	1.1893	.3182
Subscales of the BLRI Unconditional Regard Level of Regard Empathic Understanding Congruence	4, 93	2.1260	.0838

Table 4.6

The Pooled Means for the OCCUPATIONAL STATUS Main Effect

Dependent Measure	COUNSELOR (n=72)	PHYSICIAN (n=72)
Barrett-Lennard Relationship Inventory (TOTAL)	89.33	80.86
Unconditional Regard	16.15	11.44
Level of Regard	30.90	30.60
Empathic Understanding	18.72	16.25
Congruence	25.25	23.15
Counseling Evaluation Inventory (TOTAL)	30.00	28.90
Client Satisfaction	7.07	7.00
Counseling Climate	14.69	13.81
Counselor Comfort	8.24	8.06
Interviewee Productivity Measure	277.18	288.14

Hypothesis Three - Interviewer Sex Main Effect

> There are no differences in the subjects' mean scores on the Counseling Evaluation Inventory, the Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure given either a MALE or a FEMALE INTERVIEWER.

For the Interviewer Sex main effect the multivariate F for the total scores of the three dependent measures exceeded significance at the .0285 alpha level; the multivariate F for the four subscales of the BLRI also exceeded significance at the .0287 alpha level (Table 4.7).

Table 4.7

Multivariate Analysis of Variance
between MALE INTERVIEWERS and FEMALE INTERVIEWERS

Dependent Measures	df	Multivariate F	p
Barrett-Lennard Counseling Evaluation Interviewee Productivity	3, 94	3.1537	.0285*
Subscales of the CEI Client Satisfaction Counseling Climate Counselor Comfort	3, 94	.2888	.8334
Subscales of the BLRI Unconditional Regard Level of Regard Empathic Understanding Congruence	4, 93	2.8377	.0287*

*p less than .05

A post hoc investigation of the pooled means for each of the dependent measures and their subscales shows that the Female Interviewers were rated higher consistently on each of the measures (Table 4.8).

Table 4.8

The Pooled Means for the INTERVIEWER SEX Main Effect

Dependent Measures	MALE INTERVIEWER (n=72)	FEMALE INTERVIEWER (n=72)
Barrett-Lennard Relationship Inventory (TOTAL)	76.03	94.17*
Unconditional Regard	10.71	16.89*
Level of Regard	28.75	32.75*
Empathic Understanding	15.06	19.93*
Congruence	28.12	29.28
Counseling Evaluation Inventory (TOTAL)	28.90	30.04
Client Satisfaction	6.84	7.25
Counseling Climate	14.07	14.47
Counselor Comfort	8.01	8.32
Interviewee Productivity Measure	277.32	287.58

*p less than .05

Some of the univariate tests for this hypothesis were significant below the controlled alpha levels. A p less than .017 was set for the analyses which compared three variables (i.e., .05/3), and a p less than .013 was set for the analysis of the comparisons of four variables (i.e., .05/4).

Table 4.9

Univariate Analysis of Variance
of the Dependent Measures for INTERVIEWER SEX Main Effect

Dependent Measures	Mean Square	df	Univariate F	p
Barrett-Lennard	11844.6944	1, 96	7.4668	.0075[a]
Counseling Evaluation	46.6944	1, 96	.6783	.4123
Interviewee Productivity	3792.5069	1, 96	.8543	.3577
Subscales of the CEI				
Client Satisfaction	6.6736	1, 96	.7415	.3914
Counseling Climate	5.8403	1, 96	.5969	.4417
Counselor Comfort	3.3611	1, 96	.2550	.6148
Subscales of the BLRI				
Unconditional Regard	1375.1736	1, 96	9.2225	.0031[b]
Level of Regard	576.0000	1, 96	4.8782	.0296
Empathic Understanding	855.5625	1, 96	7.7436	.0065[b]
Congruence	473.0625	1, 96	3.2771	.0734

[a] p less than .017 [b] p less than .013

Differences between the two interviewers of each sex were also investigated using the multivariate test. The F for the four subscales of the Barrett-Lennard Relationship Inventory exceeded significance at the .0254 alpha level (Table 4.10).

Table 4.10

Multivariate Analysis of Variance
within Female Interviewers and within Male Interviewers

Dependent Measures	df	Multivariate F	p
Barrett-Lennard Counseling Evaluation Interviewee Productivity	3, 94	.3829	.7656
Subscales of the CEI			
Client Satisfaction Counseling Climate Counselor Comfort	3, 94	.2941	.8296
Subscales of the BLRI			
Unconditional Regard Level of Regard Empathic Understanding Congruence	4, 93	2.9186	.0254*

*p less than .05

The pooled means for each of the individual interviewers shows considerable differences within both the male and female interviewers on the Barrett-Lennard (Table 4.11). Despite the within interviewer differences the female interviewers consistently were rated higher than the male interviewers on all of the indices.

The null hypothesis for Interviewer Sex main effect was rejected.

Table 4.11

The Pooled Means for within Male and within Female Interviewer Effects

Dependent Measures	MALE INTERVIEWER		FEMALE INTERVIEWER	
	#1 (n=36)	#2 (n=36)	#3 (n=36)	#4 (n=36)
Barrett-Lennard Relationship Inventory (TOTAL)	65.36	86.69*	97.72	90.61
Unconditional Regard	8.28	13.14*	15.75	18.03
Level of Regard	26.22	31.28*	35.64*	29.86
Empathic Understanding	11.75	18.36*	19.72	20.14
Congruence	31.42*	24.81	25.89	32.67*
Counseling Evaluation Inventory (TOTAL)	27.20	30.61	30.81	29.28
Client Satisfaction	6.25	7.39	7.44	7.06
Counseling Climate	13.28	14.86	14.86	14.03
Counselor Comfort	7.67	8.36	8.50	8.14
Interviewee Productivity Measure	280.11	274.61	286.22	288.94

*p less than .05

Hypothesis Four - Subject Sex Main Effect

> There are no differences between the MALE SUBJECTS or the FEMALE SUBJECTS on the mean scores of the Counseling Evaluation Inventory, The Barrett-Lennard Relationship Inventory, or the Interviewee Productivity Measure.

For the Subject Sex main effects test the multivariate F's did not reach significance at the .05 alpha level (Table 4.12). The table of pooled means (Table 4.13) indicates that the females subjects had higher mean scores on all of the indices except the Productivity measure. The univariate F's did not reach significance (Appendix J). The null hypothesis for the Subject Sex main effect was not rejected.

Table 4.12

Multivariate Analysis of Variance
between MALE SUBJECTS and FEMALE SUBJECTS

Dependent Measures	df	Multivariate F	p
Barrett-Lennard Counseling Evaluation Interviewee Productivity	3, 94	1.1411	.3367
Subscales of the CEI			
Client Satisfaction Counseling Climate Counselor Comfort	3, 94	1.5277	.2125
Subscales of the BLRI			
Unconditional Regard Level of Regard Empathic Understanding Congruence	4, 93	1.3639	.2526

Table 4.13

The Pooled Means for SUBJECT SEX Main Effect

Dependent Measures	FEMALE SUBJECTS (n=72)	MALE SUBJECTS (n=72)
Barrett-Lennard Relationship Inventory (TOTAL)	90.47	79.72
Unconditional Regard	15.36	12.24
Level of Regard	31.81	29.69
Empathic Understanding	19.08	15.90
Congruence	26.32	22.08
Counseling Evaluation Inventory (TOTAL)	30.31	28.64
Client Satisfaction	7.18	6.89
Counseling Climate	14.79	13.75
Counselor Comfort	8.33	8.00
Interviewee Productivity Measure	277.99	286.92

Summary

Hypotheses were tested for the main and interaction effects of four variables: 1) the Inquiry Mode used in an initial interview; 2) the Occupational Status of the interviewer; 3) the Sex of the Interviewer; and 4) the Sex of the Interviewee. The dependent measures were two inventories of the interviewee's perceptions of the interviewer (the Counseling Evaluation Inventory and the Barrett-Lennard Relationship Inventory) and one measure of the quantity of data gathered from the interviewee. Multivariate and univariate analyses of variance were performed with the probability of a Type I error set at the .05 alpha level. Tables 4.14, 4.15 and 4.16 summarize the outcomes of these tests.

Of the four experimental hypotheses tested in this research, three had non-significant multivariate F's. The hypothesis which tested effects between male and female interviewers showed significant differences existed between the sexes (in the direction of the females) and, also, within the two interviewers of the same sex. The Barrett-Lennard Relationship Inventory was the dependent measure on which the female interviewers were rated as having more unconditional regard and more empathic understanding than the male interviewers.

A discussion of the results of the analysis of the data is presented in Chapter V.

Table 4.14

Summary of the Multivariate Analyses of Variance
for the Total Scores of the BLRI, the CEI, and the IPM

Sources of Variation	df	Multivariate F	p
INQUIRY MODE	6, 188	.6923	.6561
OCCUPATIONAL STATUS	3, 94	.8969	.4459
INTERVIEWER SEX	3, 94	3.1537	.0285*
REPLICATION within INTERVIEWER SEX	3, 94	.3829	.7656
SUBJECT SEX	3, 94	1.1411	.3367
2-WAY INTERACTIONS	42, 279.61	1.0321	.4236
3-WAY INTERACTIONS	48, 280.37	.8880	.6832
4-WAY INTERACTIONS	27, 275.17	.6994	.8671
5-WAY INTERACTIONS	6, 188	.5975	.7322

*p less than .05

The order for the step-down analysis of variance was BLRI, CEI and IPM.

Table 4.15

Summary of the Multivariate Analysis of Variance
for the Three Subscales of the Counseling Evaluation Inventory

Sources of Variation	df	Multivariate F	p
INQUIRY MODE	6, 188	.2742	.9486
OCCUPATIONAL STATUS	3, 94	1.1893	.3182
INTERVIEWER SEX	3, 94	.2888	.8334
REPLICATION within INTERVIEWER SEX	3, 94	.2941	.8296
SUBJECT SEX	3, 94	1.5277	.2125
2-WAY INTERACTIONS	42, 279.61	1.0168	.4488
3-WAY INTERACTIONS	48, 280.37	.8981	.6654
4-WAY INTERACTIONS	27, 275.17	.8699	.6554
5-WAY INTERACTIONS	6, 188	1.5227	.1728

The order for the step-down multivariate analysis of the three subscales of the CEI was Client Satisfaction, Counseling Climate and Counselor Comfort.

Table 4.16

Summary of the Multivariate Analysis of Variance
for the Four Subscales of the Barrett-Lennard Relationship Inventory

Sources of Variation	df	Multivariate F	p
INQUIRY MODE	8, 186	.5903	.7852
OCCUPATIONAL STATUS	4, 93	2.1260	.0838
INTERVIEWER SEX	4, 93	2.8377	.0287*
REPLICATION within INTERVIEWER SEX	4, 93	2.9186	.0254*
SUBJECT SEX	4, 93	1.3639	.2526
2-WAY INTERACTIONS	56, 363.92	1.2253	.1415
3-WAY INTERACTIONS	64, 366.36	1.0142	.4529
4-WAY INTERACTIONS	36, 350.25	1.1516	.2588
5-WAY INTERACTIONS	8, 186	.5593	.8103

*p less than .05

The order for the step-down multivariate analysis of variance of the four subscales of the BLRI was Unconditional Regard, Level of Regard, Empathic Understanding and Congruence.

CHAPTER V

SUMMARY AND DISCUSSION

Summary

The purpose of this study was to look at the effects of an open or closed inquiry style, used by a counselor or a physician in an initial interview, on the interviewee's perceptions and self-disclosure. Four Rehabilitation Counselors, two female and two male, were trained to interview using a specified inquiry style. They were to obtain personal-social and medical information such as might be asked of a patient during an intake interview at a psychological or medical clinic. Seventy-two female and seventy-two male interviewees were randomly assigned to three treatment conditions and were interviewed in a twenty minute audio-taped session. Following the interview the subjects completed two inventories, the Counseling Evaluation Inventory and the Barrett-Lennard Relationship Inventory, to indicate their perceptions of the interviewer. The amount of self-disclosure by the interviewee was measured by three trained tape-reviewers using the Interviewee Productivity Measure.

Hypotheses were tested for the main and interaction effects of four variables: 1) the Inquiry Mode as used in an initial interview, 2) the Occupational Status of the interviewer, 3) the Sex of the Interviewer, and 4) the Sex of the Interviewee. Three of these four

hypotheses had multivariate F's which did not reach significance at the .05 alpha level. The hypothesis which tested differences between male female interviewers showed significant differences between the sexes and, also, within each of the sets of interviewers of the same sex. The Barrett-Lennard Relationship Inventory was the dependent measure on which the female interviewers were rated as having significantly higher unconditional regard and empathic understanding than the male interviewers.

Discussion of Results

Inquiry Modes in the Interview

There were no differences which approached significance for the treatment effects of an initial interview conducted with open inquiries, closed inquiries or a mixture of open and closed inquiries. An examination of the table of pooled means (Table 4.4) showed that the Closed Inquiry Mode consistently had higher means on all of the measures than did the Open Inquiry Mode. Ashby et al (1957), Baker (1960) and Pallone and Grande (1965) reported a similar lack of results when they examined the differential effects of inquiry style. All of these experiments used a criterion level of 70 to 80 interviewer leads in the experimental category for any one treatment. It may be that this criterion was too low and that when, for example, an open lead was used with a closed lead they contaminated each other and the singular effect was dissipated.

Siegman and Pope (1972) do report differences in client productivity given an ambiguous or specific interviewer lead, but their experimental manipulation was much more rigorous and short (time-wise) than

this more naturalistic interview. Perhaps the time element averages out the effects of different inquiry styles.

Medical educators (Enelow & Swisher, 1971) have promoted the use of open inquiries to establish rapport with patients. The subjects of this experiment seemed to perceive similar levels of empathy, regard, warmth and congruence whether the interviewer used open or closed leads. There was some indication that the Closed Inquiry Mode produced more "information bits." In the Open Inquiry Mode the mean number of information bits collected in twenty minutes was 268.12 and in the Closed Mode it was 291.90. It is interesting to note that this occurred in spite of the fact that the total average of closed leads used by the interviewers was approximately twice as many as the number of open leads used in any one interview.

An investigation of the type of lead each interviewer began the interview with indicated a variation and yet the total output from the interviews was not significantly different. This calls into question Hawes (1974) claim that the beginning lead determines the amount of information obtained. It tends to support the findings of Siegman and Pope (1972). In actual clinical practice the issue might be when to use which type of lead. As Enelow and Swisher (1971) suggested, the interviewer should use the open lead when inquiring into new areas and the closed or direct question when attempting to get detailed information within a content area. The data from this research could be reviewed with the purpose of identifying the kind of information that was obtained by each type of interviewer lead.

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Occupational Status Effects in the Interview

There were no statistically significant differences between the occupational status dimensions of physician and counselor. The table of pooled means (Table 4.6) showed that the counselor was rated higher on all but the Interviewee Productivity Measure. A multivariate analysis of three of the Barrett-Lennard subscales (those which had the highest univariate F's) did reach the .05 alpha level. This analysis was done just as a trial. The Congruence subscale was the one left out of the analysis because this scale seemed to have considerably lower scores than the other subscales and it was, also, the scale that subjects indicated was hard to interpret. Since the lack of independence has been questioned (Mills & Zytowski, 1967; Walker & Little, 1969) these findings cannot be claimed to be significant. But they do indicate that, perhaps with a larger sample, the occupational status effect might be stronger.

All four of the interviewers were trained counselors by profession and assumed the physician role for the sake of this research. On the positive side, this controlled for personality differences and academic training effect differences between physicians and counselors. On the negative side, if there are subtle mannerisms and attitudes which affect the physician's approach to a patient in a way dissimilar to that of a counselor, these effects were washed out by the experimental simulation. Rehabilitation Counselors were used for this study because the rehabilitation professional is familiar with medical vocabulary and has worked with physically disabled persons as a part of the job.

The training in empathy skills that these four interviewers had may account for the higher ratings on the interpersonal dimensions.

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Each of them was working in a community mental health counseling center at the time of their participation and it can be assumed that much of their client contact time dealt with the client's personal-social concerns. This was what they were inquiring about in the research interviews also. This may be quite different from the daily tasks of the physician.

The fidelity of the simulation for the occupational status was at quite a low level (i.e. dissimilar to reality). The intent was to create a mind set in the subjects which would, in turn, surface their culturally and socially determined stereotypes of physician and counselor. Since the majority of the subjects had very little contact with physicians and even less with counselors, this initial mind set may not have been very strong.

Even though the experiment covered four weeks of time there seemed to be no communication between subjects about the dual role-playing by the interviewers. Subjects were from several community college classes and seemed not to know each other. They did not question the authenticity of either professional role. Several subjects asked what clinics the counselors and physicians were working in because they wanted further contact.

Sex Role Differences in the Interview

On all of the measures, the female interviewers received significantly higher ratings than the males. Additional analysis showed that the between-male and between-female differences were of considerable proportion, but the two females were rated higher on every measure.

One of the first explanations to consider is that the two female

interviewers, indeed, were quite dissimilar to the two males in their data gathering skills and in their interpersonal approach to clients. Age, current place of employment, a master's level training program, similar evaluations from clinical supervisors about interpersonal skills, and past job experiences did seem to indicate a good match. A personal interview with the researcher and a baseline screening interview did not show any obvious differences amoung the four.

The cultural stereotype of the female as the more nurturant person (Guttman, 1973) could have accounted for some of the differences, especially on the Barrett-Lennard measures of empathy and unconditionality of regard. Leary (1957) postulated that the nature of the affective exchange is a function of the personality patterns of the participants in an interaction and one may "draw out" certain responses from the other person. So, if the subjects were expecting the female interviewer to be nurturant and empathic, maybe this is what they evoked from her.

Sex role differences between the ratings of male and female subjects did not reach significant alpha levels. They both perceived the interviewers relatively the same and both sexes disclosed approximately the same amount of information. If the interview tapes had been analyzed for the quality of the data volunteered, affective and cognitive, the outcomes might show that females disclosed more affective information as Fuller (1963) suggested. The Interviewee Productivity Measure identified just the quantity of information given. With further training the tape-reviewers could be taught to discriminate between affective and cognitive bits of information.

The question of whether or not persons unfamiliar with the variables being measured can evaluate them accurately (McIlvaine, 1972)

might have been an issue if the interviewee ratings were being compared to those of supervisors or of the interviewers, but they were not. The important issue for this research was the strength of the perceptions and not the accuracy of them. Interviewees were also told that the interviewers were not going to see their individual ratings. This was done to encourage honesty, especially in giving negative ratings. Because this was a one time meeting there was no chance for future attitudinal retaliation by either party.

An interesting side effect of this research project was that it seemed to be the first chance for many of the subjects to have a contact of this nature with either a counselor or a physician. Several indicated that they thought this would help them when they eventually do begin a relationship with such a professional. Well over half of the subjects took the time to write comments on their experience with the research interview. These remarks were both positive and negative, but, in both cases, subjects were "glad to have been a part of the research project." This attitude of helpfulness may have affected the level of self-disclosure especially.

Limitations

There were several research design and instrumentation issues that limited this research. The Research Associates, all of one profession but simulating another, may have missed the subtle role differences that exist in reality. Using some physicians and some counselors as interviewers to carry out the same research would eliminate the effects of the low fidelity simulation. To see if the mind set of the interviewee

was the crucial factor in differentiating counselor and physician on the three subscales of the BLRI, the interviews could be done using all physicians and having them simulate counselors.

The number of subjects in each cell of the design was only three. More subjects per cell would have increased the power of the design by lowering the within cell variance and might have produced more definitive results.

The simulated interview situation may be completely atypical of the kind of initial interview these persons would experience if they visited the offices of a counselor or a physician. Subjects knew they were part of an experiment and that this would be their only contact with this professional. Whether these factors caused more or less self-disclosure in the interview, or more positive than negative ratings on the inventories, remains open to question.

The Counseling Evaluation Inventory and the Barrett-Lennard Relationship Inventory were designed, initially, for use with long-term client-counselor relationships. Though they have been used in several initial interview studies, there is still a question about the appropriateness of such use. Another question is whether or not the same variables are of as much interest and concern in the physician-patient relationship as in the counselor-client relationship.

Scores on the Congruence scale of the Barrett-Lennard were lower in every hypothesis tested than any of the other subscale scores. In reflecting on the actual interview situation, this was the scale that caused the subjects the most concern in interpretation. Since this is the scale that attempts to measure interviewer genuineness, it might be the one that is most affected by a simulated situation in which the

dyad members know that the situation is not "genuine."

The Interviewee Productivity Measure seemed to be too global to discriminate between self-disclosure under the treatment variables. Perhaps training the tape-reviewers to differentiate between affective and cognitive self-disclosure would produce the more powerful measure. Looking at frequency tallies for each discreet content area rather than using the total summed frequency would also produce a more refined measure.

An initial intent of this research was to be able to make recommendations regarding interview training programs of physicians and counselors. Inquiry techniques and the amount of data gathered by them will, most likely, always be a part of the concern of those training interviewers. This study indicated that the interpersonal dimensions may be the most significant aspect of such training. Perhaps, female professionals already have the interpersonal skills, or are perceived as having more than the male professional. This does not mean that the female professional can use the skills any more appropriately, but rather, that such professional qualities as empathic understanding and regard have been culturally ascribed or personally socialized.

Recommendations for Further Research

The major finding of this research, that females were perceived to have more of the "necessary and sufficient conditions" of a good interviewer than males, certainly needs to be examined again under other circumstances. Attitude measures concerned with sex stereotypes administered as part of the treatment would be helpful for identifying the

mind set of the sample being tested.

The occupational status issues need further investigation, especially in situations where various professionals perform similar tasks. This study could be redone using all physicians as interviewers to see if the results are similar. Or, this study could be planned using some physicians and some counselors. In the latter case, the question of personality differences and aculturated mannerisms of the profession would have to be addressed.

The setting for the interview is another area with research potential. Does it matter whether the office looks like a physician's office or a counselor's office?

The subjects for this research had no expectations about the professional, long-term nature of the relationship they were beginning. Would a real setting, with long term contacts between the professional and the interviewee affect the perceptions of the interviewee or the willingness to be self-disclosing? These comparisons need to be made?

Ultimately, the purpose of any research on the interview interaction is to discover those variables which will maximize the effects of the dyadic exchange to the benefit of both of the parties involved. In order to realistically do this, the research situation must be as close to the actual interviewer-interviewee relationship as possible. Or, if a laboratory model is investigated first, the finding should then be tested with field research.

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APPENDICES

APPENDIX A

LETTERS RECRUITING RESEARCH ASSOCIATES

APPENDIX A

LETTERS RECRUITING RESEARCH ASSOCIATES

Dear

Your name was given to me by Dr. James Engelkes when I asked for a list of persons in the Lansing area who had demonstrated a competence in interviewing skills. Since you are nearing the end of you internship experience, you, undoubtedly, have had much practice in interacting with clients.

I am a doctoral student in Counseling and, at present, I am planning a dissertation research project which compares the effects of certain interviewing skills of physicians and counselors. During the past three years I have been training MSU medical students in the skills of interviewing. I am interested in empirically testing some of the differences between the medical interview and the counseling interview.

Would you be interested in being a Research Associate? Ten to fifteen hours of your time would be required--evening(s) and/or weekend(s) in late January. I will monetarily reimburse you and you will enrich your professional competence as a result of this experience.

Please return the attached form as soon as possible. Then I will be in contact with you by phone to give you more details of the experiment.

Thank you. I appreciate your willingness to be of help.

Dolore Rockers
Doctoral Candidate, MSU

_____I am interested in being a Research Associate for this experiment.

_____I would like more information before I commit myself to the project.

_____I am not interested in participating in this experiment.

Name_____ Phone Number_____

125 Kenberry Drive, #9
East Lansing, Michigan 48823
February 2, 1976

Dear

Thank you for responding to my request for a Research Associate in the Health Professional Interview Research Project. As with most plans of this magnitude, things never run smoothly; so, the execution of this experiment has been delayed in time. Since your plans may also have changed, I would like to outline the tasks of the Research Associate as they are at this stage and then, on the weekend, I will call you to see if you are still interested in participating.

Tasks of the Research Associate:

1. Preliminary Interview: In the experiment the reactions of the person being interviewed are of primary interest. However, it is necessary to have some initial idea of the particular interviewing style of the professional who is conducting the interview.

    a. Come to Room 250, Erickson Hall, Campus, during the week of February 9-15, for a fifteen minute screening interview.

        1) Clients will be provided.
        2) The contents of the interview will cover the client's personal-social history.
        3) The interview will be audio-taped.

    b. Following the interview you will fill out an Interview Evaluation Form. So will the client. This is to check your perceptions of the interview and allows for a pre-test of the instruments.

    c. This will be about an hour of time and the remuneration will be $5.

2. Tape Coding: These tapes will then be coded anonymously to determine your interviewing style. Approximately eight interviewers with varying styles will be asked to participate in the actual research experiment (at three dollars per hour).

3. Research Interviews: There will be some flexibility depending on persons' schedules.

    a. Attend a three hour training seminar on one weekday evening for the weeks of February 16-20. 23-27 and March 1-5.

b. Conduct approximately 10 fifteen minute interviews per weekend for the three weeks above mentioned. In total you will be doing about thirty interviews if plans proceed as they are now set. The format for each interview remains the same in content and varies in questioning style.

Thank you. I realize that the remuneration does not equal your professional worth, but, such are the limits of graduate student research. When I call this weekend I will want to know: 1) if you are still interested in being a Research Associate, and 2) when next week you can come for a screening interview.

I am willing to share the procedures and outcomes of this research with you as we go along. This, in itself, might be a worthwhile learning experience.

Gratefully,

Dolore Rockers
Doctoral Candidate, MSU

APPENDIX B

TRAINING PROGRAM FOR RESEARCH ASSOCIATES

APPENDIX B

TRAINING PROGRAM FOR RESEARCH ASSOCIATES

I. The following format will be used for each of the three training sessions:

A. Discussion of the Concepts (reviewed each time)
1. Inquiry Modes
2. Initial Intake Interview
3. Information-Gathering Categories
4. Occupational Role Distinctions
5. Standardized Variables

B. Recognition of the Treatment Modes
1. Using Typed Transcripts (from the baseline interviews)
2. Using Audio-Taped Examples (from baseline interviews)

C. Practice Interviews to Reach Criterion
1. Playback One's own for Analysis
2. Playback or Review by Researcher to Assure Criterion

II. For this research the above mentioned concepts are defined as follows:

A. Inquiry Modes: Open Inquiry Mode--A twenty minute information gathering interview in which at least 80% of the inquiries are phrased in a manner which solicits the interviewee's thoughts, opinions, views, feelings, facts, etc.--anything the person would like to say.

Closed Inquiry Mode--A twenty minute information gathering interview in which at least 80% of the inquiries are phrased so as to elicit a "yes," "no" or short factual answer (under five words).

Mixed Inquiry Mode--A twenty minute information gathering interview in which at least 40% of the inquiries are open and at least 40% of the inquiries are closed.

B. Initial Intake Interview: This interview is to be conducted as if it is the first contact between the professional and the interviewee. The client understands that he or she is coming to a general clinic for some general tests. This interview is to begin the process of history-taking which both counselors and physicians use.

C. Information-Gathering Categories: The following are the content areas about which you will seek information:

Parents/Siblings
Family Values/Religion
Marital History
Personal/Social History
Friends/Significant Others
Education/Military Career
Occupation/Work History
Hobbies/Interests
General Medical History
Use of Alcohol/Drugs/etc.
Average Day/Weekend
Support Systems in Crisis
Other

Each of these categories should follow in order but the number of inquiries used in each is at your own pacing. All should be covered generally within twenty minutes.

The OTHER category is a time filler to be used only when necessary.

D. Occupational Role Distinctions: You will be simulating two professionals, counselor and physician, each weekend. Each role will be made distinct by variations in title, occupational role, place of work, attire, name tag on your office door, and directions that are given to the client before he or she sees you.

For example: On Saturday you will introduce yourself as Ms. Judy B_____, a Counselor with the Mason Mental Health Center. You will be attired in professional dress. The name tag on your office door will call you Ms. Judy B_____, M.A., Counselor. The client will be told that a female counselor, Ms. Judy B_____, will be doing the initial interview.

On Sunday you will introduce yourself as Dr. Judy C_____, a Resident Physician with the Michigan State Medical School. You will wear a white lab coat over your professional garb. The name tag on the door will call you Dr. Judy C_____, M.D., Physician. The client will be told that a female physician, Dr. Judy C_____, will be doing the initial interview.

E. Standardized Variables: In all of the interviews the following procedures should be as similar as possible:

Keep head nods, umhmms, etc. out of your responses.

Space your questions so that there are not periods of silence (more than 10 seconds) between the client's answer and the next question.

Position your body in a forward lean toward the client.

The interview chairs should be placed so that the client's back is to the window and so that only the corner of the desk is between interviewer and client.

Maintain consistent eye contact with the interviewee.

APPENDIX C

SAMPLE OF OPEN AND CLOSED INQUIRIES

APPENDIX C

SAMPLE OF OPEN AND CLOSED INQUIRIES

Open Inquiry

Definition: An inquiry phrased in a manner which solicits the interviewee's opinions, views, thoughts, feelings, facts, etc. ...anything the person would like to say.

Tell me something about what went into that decision to transfer.

What, in your mind, are the qualities that make an ideal nurse?

What kinds of things influenced you in the first place? (Using the plural makes this an open inquiry.)

How would you describe your eating habits?

What was it like having an attorney for a father?

You mentioned an interest in sports when you were growing up; what other things interested you?

What happened exactly?

Think back to when you were a child and tell me the things that stand out in your memory.

Tell me more about your brothers.

What can you tell me about your parents? (Tends toward a closed inquiry but was classified as open.)

How about your religious background? (Takes on the inquiry mode of the lead before it--when changing content areas so that there is no preceding lead of the same content, this is classified as OPEN.)

How do you feel about that? (Classified as open even though it could be answered with a short answer such as "fine.")

Closed Inquiry

Definition: An inquiry phrased so as to solicit a "yes", "no", or short factual answer (under five words).

Are both your parents living?

Are you working on those problems now?

Did that affect you adversely?

Do you find it really difficult to contact him?

Is school fairly easy for you?

When did they die?

Were you the only two in the family then?

Have you lived in Lansing all of your life?

How long has it been?

What did your father do when you were growing up?

How many of the regular childhood diseases have you had?

You said that you had...? (A clarification type of lead.)

But it is a surprise to you that all of a sudden it stopped. (reflective)

So then you're going to school more to enrich your own life than to get a degree. (restatement)

Was that uncomfortable for you?

Do you find that's a strain?

APPENDIX D

LETTER RECRUITING SUBJECTS

APPENDIX D

LETTER RECRUITING SUBJECTS

January 10, 1976

TO: The students in Introduction to Psychology, LCC

FROM: Dolore Rockers, Doctoral Candidate in Counseling, MSU

RE: Participation in an Experiment on Interviewing Skills

Hello! I am a graduate student at Michigan State and I am currently doing dissertation research on the interviewing styles of various health professionals. During the past ten years I have helped to train many such professionals in the art of interviewing. I have found that there are certain techniques that work well and other methods that do not. I am interested in empirically testing the effectiveness of certain interviewing approaches.

In the months of January and February I will be conducting this research and I wish that you would consider being a part of it. I have described below the experimental situation and the conditions which you would have to meet as a participant.

1. Come to MSU for approximately one hour on one Saturday or Sunday in February.

2. Participate in a short interview (about 15 minutes) with a designated health professional.
   a. The questions the interviewer will ask will cover topic areas such as family, education, occupation, hobbies, habits, etc. These will be general questions to which you may answer as much or as little as you wish.
   b. The interview will be audio-taped.
   c. After the interview you will be given a short form to complete. It asks your reactions to the interview.
   d. The information which you have given will be coded in such a manner as to assure the confidentiality of who you are. After the tapes have been analyzed they will be erased.

3. After the study has been completed (late March) you will be given detailed information as to the outcome of the experiment, if you wish.

4. There are some personal gains for participating in this study.
   a. In some cases, your professor of psychology has agreed to count this experience as part of your course credit for this term.
   b. This may be an interesting experience for you as a student of psychology.
   c. You may experience some self-reinforcement for being such a generous person.

Please fill out the attached questionnaire and return it to your instructor at the end of this class period.

_____I am interested in being a part of this research.

_____I need to think more about this before I make a decision.

_____I am not interested in participating in this research.

Name_____ Address_____

Phone_____ _____

The best time of day to call is_____

I prefer to participate on (indicate as many choices as you can)

_____Saturday FEBRUARY

_____morning _____7
_____afternoon _____14
_____evening _____21
_____anytime _____28

_____Sunday FEBRUARY

_____morning _____8
_____afternoon _____15
_____evening _____22
_____anytime _____29

I could come on a weekday evening _____YES _____NO

day of the week_____time of evening_____

I would like feedback about the experimental outcomes _____YES _____NO

Those of you who volunteer will be contacted personally within the next two weeks. Thank you. I am grateful. dolore

APPENDIX E

DEMOGRAPHIC QUESTIONNAIRE

SUMMARY TABLES OF DEMOGRAPHIC CHARACTERISTICS

APPENDIX E

DEMOGRAPHIC QUESTIONNAIRE

The following questions ask for basic information about you. The format parallels that used by the U. S. Census Bureau. As with all previous information you have provided, this data will be held in confidence. You do not need to indentify yourself by name.

Please check or fill in all of the appropriate spaces.

1. Sex: Female_____ Male_____

2. Date of birth: Month_____ Year_____ Present age_____

3. Color or race: White_____ Black/Negro_____

Japanese_____ Chinese_____

Mexican_____ Korean_____

Filipino_____ Hawaiian_____

American Indian (print tribe)_____

Other (identify)_____

4. Marital status: Now Married_____ Widowed_____

Divorced_____ Separated_____

Never Married_____ Other_____

5. Present home: Lansing_____ East Lansing_____

Other_____

6. Education: (Circle the level completed)

Highschool 9 10 11 12

College 1 2 3 4 5 6+
(academic year)

Vocational School (or similar training)
(number of years)

1 2 3 4 or more

7. Occupation: Job Title_____

Place of Work_____

Paid full-time_____ Paid part-time_____

Unpaid full-time_____ Unpaid part-time_____

8. Income level (yours or your source of support):

_____less than $2,000 _____$2,000 - 2,999

_____$3,000 - 4,999 _____$5,000 - 6,999

_____$7,000 - 9,999 _____$10,000 - 14,999

_____$15,000 - 24,999 _____$25,000 or more

9. Within the last three years I have been to see a physician

____not at all ____once ____2-5 times ____more than 5 times

10. I liked the physician (circle one)

VERY MUCH SOMEWHAT AMBIVALENT NOT MUCH NOT AT ALL

11. Within the last three years I have been to see a counselor

____not at all ____once ____2-5 times ____more than 5 times

12. I liked the counselor (circle one)

VERY MUCH SOMEWHAT AMBIVALENT NOT MUCH NOT AT ALL

Please list below any additional comments that you would like to make about your experience as an interviewee in this research.

_____

_____

_____

_____

_____

THANK YOU!

SUMMARY TABLES OF DEMOGRAPHIC CHARACTERISTICS

Table E.1

Number of Subjects by Years of Age

	YEARS OF AGE					
	16-20	21-25	26-30	30-39	40-49	50+
MALE SUBJECTS (n=72)	16	28	21	4	2	1
FEMALE SUBJECTS (n=72)	12	19	26	8	5	2

Table E.2

Number of Subjects by Years of Education Completed

	YEARS OF EDUCATION									
	Grade 12	College 1	2	3	4	5	6	Vocational 1	2	3
MALE SUBJECTS (n=72)	7	21	24	5	6	1	1	3	3	1
FEMALE SUBJECTS (n=72)	16	22	18	6	2	1	4	1	1	1

Table E.3

Marital Status of Subjects

	Number of Subjects
Married	39
Divorced	10
Separated	4
Never Married	91
	N=144

Table E.4

Income Level of Subjects or Their Source of Support

	Number of Subjects
Less than $2,000	28
$2,000 - 2,999	7
$3,000 - 4,999	19
$5,000 - 6,999	6
$7,000 - 9,999	15
$10,000 -14,999	25
$15,000 -24,999	20
More than $25,000	24
	N=144

Table E.5

Home Towns of Subjects

	Number of Subjects
Lansing	63
East Lansing	42
Small Towns around Lansing	39
	N=144

Table E.6

Race of Subjects

	Number of Subjects
White	133
Black	7
Mexican	3
American Indian	1
	N=144

Table E.7

Number of Subjects by Occupation (N=144)

Occupational Category	Paid Full-Time	Paid Part-Time	Not Paid
Student	-	-	55
Unskilled Laborer	17	23	-
Skilled Laborer	15	12	1
Business	13	1	-
Professional	6	1	-

Table E.8

Number of Subjects Who saw a Physician over the Last Three Years and Their Attitude toward the Physician (N=144)

I liked the physician	I have seen the physician			
	NOT AT ALL	ONCE	2-5 TIMES	MORE THAN 5 TIMES
----------	17	--	--	--
NOT AT ALL	--	--	2	1
NOT MUCH	--	2	5	3
AMBIVALENT	--	3	7	8
SOMEWHAT	--	7	32	8
VERY MUCH	--	4	23	21

Table E.9

Number of Subjects Who saw a Counselor over the Last Three Years and Their Attitude toward the Counselor (N=144)

I liked the counselor	I have seen the counselor			
	NOT AT ALL	ONCE	2-5 TIMES	MORE THAN 5 TIMES
----------	76	--	--	--
NOT AT ALL	--	--	2	1
NOT MUCH	--	2	5	3
AMBIVALENT	--	3	7	8
SOMEWHAT	--	7	32	8
VERY MUCH	--	4	23	22

APPENDIX F

INTERVIEWEE PRODUCTIVITY MEASURE

TRAINING PROGRAM FOR TAPE-REVIEWERS

RELIABILITY CALCULATIONS

APPENDIX F

INTERVIEWEE PRODUCTIVITY MEASURE

Tape Review Form

TAPE CODE_____ TAPE REVIEWER_____

DATE_____

INTERVIEW STRUCTURE
(Items should be transcribed verbatim.)

Name of Interviewer with Title:

Role of Interviewer:

Place of Work:

Purpose of Interview:

Content of Interview:

Time Limits:

Confidentiality:

Interviewee Responsibility to Answer Questions:

Interviewee Opportunity to Ask Questions:

Other:

REVIEWER COMMENTS:

TAPE REVIEW FORM

Tape Code_____ Tape Reviewer_____ Date_____

INTERVIEWEE PRODUCTIVITY	
Parents/Siblings	
Family Values/Religion	
Marital History	
Personal/Social History	
Friends/Significant Others	
Education/Military Career	
Occupation/Work History	
Hobbies/Interests	
Medical History	
Use of Alcohol/Drugs/etc.	
Average Day/Weekend	
Support Systems in Crisis	
Other (specify)	
TOTALS	

INTERVIEWER LEADS AND RESPONSES

Open	Closed	Information	TOTALS

TRAINING PROGRAM FOR TAPE-REVIEWERS

I. The following format will be used for each of the training sessions:

A. Discussion of the Concepts (reviewed each time)
1. Information Bits
2. Information-Gathering Categories
3. Inquiry Modes
4. Interview Structuring

B. Recognition of the Variables
1. Using Typed Transcripts (from baseline interviews)
2. Using Audio-Taped Examples (from baseline interviews)

C. Practice with the Interviewee Productivity Measure until an inter-reviewer reliability of at least .80 is reached

II. For this research the above mentioned concepts are defined as follows:

A. Information Bits: The factual and attitudinal data that the interviewee volunteers in response to the interviewer inquiry

Discriminations should be made according to the following guidelines:

1. One tally is made for each noun phrase even though it may not be a complete sentence.

"I work at Ford, but I go to school at night." This is 2 information bits.

2. One word answers such as "yes" or "no" are tallied as 1 information bit.

3. Utterances such as "you know," "OK," "umm," etc. are considered punctuations and not counted.

4. Repeated information is not tallied.

5. When the conjunction "and" connects two noun phrases each of the phrases are tallied separately.

When "and" connects two nouns in the same phrase both

nouns are counted as one information bit.

6. Prepositional phrases and adverbial phrases count as spearate information bits.

7. If there are other questions about what counts and what does not, the mutual consensus of the tape-reviewers will be the deciding factor. This consensus then becomes a guideline for use in judging the experimental tapes. It should be added to this list of guidelines.

B. Information -Gathering Categories: The second page of the Interviewee Productivity Measure lists the categories of information in which the interviewee's will be disclosing. Tally the information bits beside each and,where there is uncertainty about the category, put the tally under other.

C. Inquiry Modes: Open Inquiry--an interviewer lead phrased in a manner which solicits the interviewee's thoughts, opinions, views, feelings, facts, etc.--anything the person would like to say.

Closed Inquiry--an interviewer lead phrased so as to elicit a "yes," "no" or short factual answer (under five words).

Informational Lead--any information-giving or question-answering done by the interviewer.

D. Interview Structuring: The several statements made by the interviewer to structure the interview situation immediately before beginning the information-gathering (see Interviewee Productivity Measure--first page).

INTER-REVIEWER RELIABILITY*

SAMPLE CALCULATION

	Reviewer 1	Reviewer 2	Reviewer 3	Sum	Sum^2
Tape 1	440	480	400	1320	1742400
Tape 2	240	240	270	750	562500
Tape 3	350	300	360	1010	1020100
Tape 4	240	290	240	770	592900
SUM	1270	1310	1270	3850	3917900
SUM^2	1,612,900	1,716,100	1,612,900	4,941,900	

Sum of Squared Ratings = 1,313,500

Product of Sum and Mean $3850 \times \frac{3850}{12}$ = 1,235,195.50

SUM OF SQUARES

For Reviewers $\frac{4,941,900}{4} - 1,235,195.50 = 279.50$

For Tapes $\frac{3,917,900}{3} - 1,235,195.50 = 70,771.17$

For Total $1,313,500 - 1,235,195.50 = 78,304.50$

For Error $78,304.50 - 70.771.17 = 7,533.33$

MEAN SQUARE

For Tapes $\frac{70,771.17}{3} = 23,590.39$

For Error $\frac{7,533.33}{3} = 2,511.11$

RELIABILITY OF REVIEWS $\frac{23,590.39 - 2,511.11}{23,590.39 + (3-1)\ 2511.11} = .7367$

RELIABILITY OF AVERAGE REVIEWS $\frac{23,590.39 - 2511.11}{23,590.39} = .8936$

APPENDIX G

APPOINTMENT REMINDER FOR SUBJECTS

APPENDIX G

APPOINTMENT REMINDER FOR SUBJECTS

Dolore Rockers
125 Kenberry Drive, #9
East Lansing, Michigan
February 15, 1976

Dear

Thank you for being so willing to be a participant in my research project. The time for you interview at Michigan State is

_____

Attached is a map of the campus with Erickson Hall circled in red. This will be the building where the interview will take place. There are parking facilities directly in front of the Hall. Since this building is locked on the weekend, I will have a receptionist at the door to admit you. She will have a list of names and will ask you to identify yourself.

You will be directed to the Counseling Center on second floor--Room 250. The actual time of your involvement should be no longer than one hour.

My phone number is 351-0273. The phone number at the Counseling Center is 355-1755.

Gratefully,

Dolore Rockers
Michigan State University

APPENDIX H

SUBJECT'S INTRODUCTION TO INTERVIEW SITUATION

CONSENT TO BE TAPED FORM

APPENDIX H

SUBJECT'S INTRODUCTION TO INTERVIEW SITUATION

Hello!_____

The procedures for today's activities are listed below:

1. Please read the attached Consent to be Taped Form, sign it (ask anyone near you to witness your signiture), and return the form to Dolore or the receptionist before your interview.

2. You will be interviewed by_____,

   a Physician Counselor , in Room _____ at _____.

   The receptionist will take you to the office when the interviewer is ready.

**3. RESPOND TO THE INTERVIEW SITUATION AS IS YOU HAVE COME TO THIS CLINIC FOR SOME GENERAL TESTS. You will be asked personal information which will cover topics such as family, education, occupation, hobbies, habits, etc. This history-taking procedure is a practice in many clinics and is usually taken before any specific tests are scheduled. If there are any questions that you prefer not to answer, that is your right.

4. After the fiftenn minute interview, please return to this room to complete the Interview Evaluation Inventories which you will receive from the interviewer. Your job is finished when you have returned this questionnaire to the receptionist.

5. The audio-tapes and the Interview Evaluation Inventory will be coded (as on the tab at the top of this page) to protect your identity. The information will be used for research purposes only.

HELP YOURSELF TO THE BEVERAGES ON THE TABLE. They are a small token of thanks for your cooperation. Dolore

CONSENT TO BE TAPED FORM

I,_____, hereby agree to permit an audio-recording to be made of my interview with a designated health professional in cooperation with the interview research project of Ms. Dolore Rockers, a Michigan State University Doctoral Candidate. I authorize Ms. Rockers to use this tape and the data collected from the Interview Evaluation Inventory for research purposes only. I, also, consent to the publication of the results of this research as long as the information discussed remains anonymous.

I hereby expressly waive any possible claim on my part for remuneration or damages in any form in connection with this research.

Signed_____ Date _____

Witness_____ Date _____

APPENDIX I

INTERVIEWER'S PROMPT CARD

APPENDIX I

INTERVIEWER'S PROMPT CARD

1. Turn on the tape-recorded when the client knocks on the door.

2. Introduce yourself. Your client's name is_____.

3. Tell the client the purpose of this interview (according to the trained procedure.

   The client has been told that this is a preliminary procedure before other tests are conducted at this clinic.

4. Using the prescribed treatment mode, inquire into the following areas of the client's life:

Parents/Siblings	Occupation/Work History
Family Values/Religion	Hobbies/Interests
Marital History	Medical History
Personal/Social History	Use of Alcohol/Drugs/etc.
Friends/Significant Others	Average Day/Weekend
Education/Military Career	Support Systems in Crisis

Other

5. When the tape runs out terminate the interview and ask the client to return to the reception area.

6. Make certain that the tape number corresponds to the number on the Interview Evaluation Form that you hand to the interviewee.

APPENDIX J

ADDITIONAL UNIVARIATE TABLES

Table J.1

Univariate Analysis of Variance
of the Dependent Variable for INQUIRY MODE Main Effect

Dependent Measures	Mean Square	df	Univariate F	p
Barrett-Lennard	607.2986	2, 96	.3828	.6830
Counseling Evaluation	17.6944	2, 96	.2570	.7739
Interviewee Productivity	7638.6319	2, 96	1.7206	.1845
Subscales of the CEI				
Client Satsfaction	2.3819	2, 96	.2647	.7681
Counseling Climate	1.5625	2, 96	.1597	.8527
Counselor Comfort	4.6458	2, 96	.3525	.7039
Subscales of the BLRI				
Unconditional Regard	101.1944	2, 96	.6787	.5098
Level of Regard	40.6875	2, 96	.3446	.7094
Empathic Understanding	66.0278	2, 96	.5976	.5522
Congruence	19.0903	2, 96	.1322	.8763

Table J.2

Univariate Analysis of Variance
of the Dependent Measures for OCCUPATIONAL STATUS Effect

Dependent Measures	Mean Square	df	Univariate F	p
Barrett- Lennard	2584.0278	1, 96	1.6290	.2050
Counseling Evaluation	46.6944	1, 96	.6783	.4123
Interviewee Productivity	4658.0625	1, 96	1.0493	.3083
Subscales of the CEI				
Client Satisfaction	.1736	1, 96	.0193	.8899
Counseling Climate	25.8403	1, 96	2.6409	.1075
Counselor Comfort	1.7778	1, 96	.1349	.7143
Subscales of the BLRI				
Unconditional Regard	798.0625	1, 96	5.3521	.0229
Level of Regard	3.3611	1, 96	.0285	.8664
Empathic Understanding	222.5069	1, 96	2.0139	.1592
Congruence	115.5625	1, 96	.8005	.3732

Table J.3

Univariate Analysis of Variance
of the Dependent Measures for the within Male and within Female Effect

Dependent Measures	Mean Square	df	Univariate F	p
Barrett-Lennard	1820.4444	1, 96	1.1476	.2868
Counseling Evaluation	32.1111	1, 96	.4665	.4963
Interviewee Productivity	73.6736	1, 96	.0166	.8978
Subscales of the CEI				
Client Satisfaction	5.0625	1, 96	.5625	.4417
Counseling Climate	5.8403	1, 96	.5696	.4417
Counselor Comfort	1.0000	1, 96	.0759	.7836
Subscales of the BLRI				
Uncondtitional Regard	458.6736	1, 96	3.0761	.0827
Level of Regard	4.6944	1, 96	.0398	.8424
Empathic Understanding	444.5069	1, 96	4.0232	.0477
Congruence	193.6736	1, 96	1.3417	.2497

Table J.4

Univariate Analysis of Variance
of the Dependent Variables for the SUBJECT SEX Main Effect

Dependent Measures	Mean Square	df	Univariate F	p
Barrett-Lennard	4160.2500	1, 96	2.6226	.1087
Counseling Evaluation	100.0000	1, 96	1.4526	.2311
Interviewee Productivity	2871.1736	1, 96	.6467	.4233
Subscales of the CEI				
Client Satisfaction	3.0625	1, 96	.3403	.5611
Counseling Climate	39.0625	1, 96	3.9922	.0486
Counselor Comfort	4.0000	1, 96	.3035	.5830
Subscales of the BLRI				
Unconditional Regard	351.5625	1, 96	2.3577	.1280
Level of Regard	160.4444	1, 96	1.3588	.2467
Empathic Understanding	364.1736	1, 96	3.2961	.0726
Congruence	620.8403	1, 96	4.3008	.0408