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VIDEO PROGRAMMED INSTRUCTION IN ELEMENTARY PSYCHOTHERAPEUTIC
AND RELATED CLINICAL SKILLS

A Dissertation Presented

BY

JOHN ROGERS MORELAND

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 1971

Clinical Psychology

VIDEO PROGRAMMED INSTRUCTION IN ELEMENTARY PSYCHOTHERAPEUTIC
AND RELATED CLINICAL SKILLS

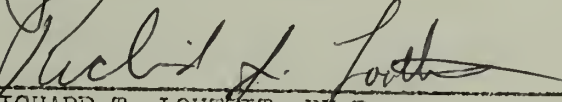
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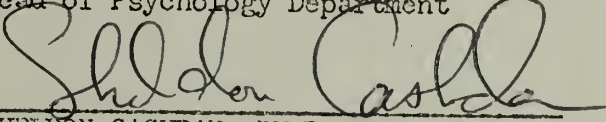
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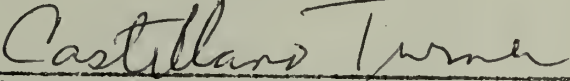
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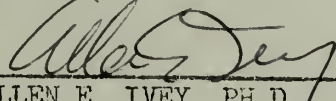
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ABSTRACT

A new method for teaching interviewing skills was evaluated. Microcounseling involves the isolation of positive interviewer skills, and the utilization of written manuals describing each skill, video-taped models demonstrating good and bad examples of each skill, and the video-taping of the students' practice interviews which are immediately played back to them in the presence of a supervisor who further helps them discriminate each skill and differentially reinforces the students' good and bad attempts to utilize the new behaviors. Microcounseling is "micro" in two ways: during a given training session, the student is only expected to learn one skill, and the practice interview is only six to eight minutes in duration.

Twenty-four second year medical students at the University of Oregon Medical School who were concurrently enrolled in an introductory psychiatry course were subjects in the study. Each subject was randomly assigned to one of two training conditions. The twelve students in the microcounseling group received microcounseling training for Attending Behavior, Open-Ended Questions, Minimal Activity, Paraphrases, Reflections of Feeling, and Summarizations. The twelve subjects in the control condition received training by whatever method their supervisors considered most effective. Prior to training, four patients from the psychiatry department outpatient clinic were interviewed by three experimental and three control subjects. Two weeks following the end of the training program, the patients were again interviewed by the same students.

Following each interview, the interviewees completed the Counselor Effectiveness Scale, the Therapist-Patient Relationship Questionnaire, and the Self-Disclosure Questionnaire. Ten minutes of each pre- and each post-training interview were videotaped for later analysis. After these tapes had been randomly inter-mixed, two trained judges scored them on the various dependent measures.

The results showed that the microcounseling subjects had demonstrated some generalization for each of the skills following training, while the control subjects had only improved on the Close-Ended Questions, Open-Ended Questions, and Summarization dimensions. The microcounseling group improved significantly more than the control group on the Attending Behavior and Reflection of Feeling skills. Analysis of the Therapist Error Check List data revealed that the microcounseling subjects had improved significantly more than the controls in the percentage of the statements classified as GOOD and POOR, while both groups improved in the percentage of their statements categorized as FAIR. There were no significant differences over time between the two groups for their ratings on the Empathy Rating Scale, the Respect Rating Scale, the Genuineness Rating Scale, the Confrontation Rating Scale, and the Concreteness Rating Scale. However, the microcounseling group demonstrated greater improvement, quantitatively, on each of these scales than the control group. The interviewees gave the students significantly higher ratings following the post-training interviews on each of the questionnaires, regardless of their training condition. Considering the twenty-two dependent measures on which differential amounts of improvement had

been predicted for the two training groups, the microcounseling group demonstrated improvement on twenty of them, while the control group only improved on eleven. This distribution was significant at the .005 level. In summary, both groups learned something about interviewing, but the microcounseling subjects became better interviewers as a result of their training experience.

ACKNOWLEDGMENTS

To successfully complete a project as complex as the present one requires the help of more people than the author can possibly mention here. Dr. Jeanne Phillips, the chairman of my dissertation committee, was responsible for many of the ideas expressed in this thesis. Perhaps more importantly, her encouragement, support, and the tactful manner in which she criticized the author's work helped make the execution of this research exciting from beginning to end. The author is also especially indebted to Dr. Allan Ivey for his constant encouragement and intellectual stimulation. The contributions of the remaining members of my dissertation committee, Dr. Sheldon Cashdan and Dr. Cass Turner, were also deeply appreciated.

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This study is dedicated to my wife,
Barbara,
and to my children,
Robert James and Scott Russell.

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CHAPTER I

A REVIEW OF THE INTERVIEW TRAINING LITERATURE

Instruction in basic psychotherapeutic and interviewing skills is carried out in educational institutions with students preparing for many professions, including psychological and educational counseling, personnel, medicine, nursing, psychiatry, clinical psychology and the ministry. Further, because of the constantly increasing demand for mental health workers, more and more "lay therapists", "indigenous helpers", and other sub-professionals are being trained each year for therapeutic roles formerly occupied exclusively by professional therapists (Carkhuff and Truax, 1965; Appleby, 1963; and Mendel and Rapport, 1963). Unfortunately more often than not, this instruction is of a hit-or-miss apprentice sort, with intuition or clinical art stressed over precise and defined behaviors, and trial-and-error learning over systematic teaching. In a rather uncomfortable analogy, Christine McQuire (in Wolberg, 1967) compared a psychotherapy supervisor with a football coach who sends his team out to play several games, after which they report back to him how they have done and what they intend to do in the next few games. Fortunately for the sport of football, such coaches would not be around long. However, in psychotherapeutic and interviewing training, such procedures are much more frequently the rule, rather than the exception.

Well over ten years ago, Rogers (1957) decried the state of training procedures in psychotherapy when he commented:

"Considering the fact that one-third of present-day psychologists have a special interest in the field of psychotherapy, we would expect that a great deal of attention might be given to the problem of training individuals to engage in the therapeutic process... For the most part, this field is characterized by a rarity of research and a plentitude of plattitudes." (pg. 76)

The situation today is no better than it was then. Matarazzo, Wiens, and Saslow (1966), after their extensive review of the literature concluded:

"From the studies cited, and from our review of the literature, we have concluded that there is essentially no published research regarding the teaching of psychotherapy, the supervisory process, how learning of effective psychotherapy takes place and how to teach psychotherapy efficiently. Many reports of training programs are available and it is evident that many psychotherapists talk about teaching, but few report systematic innovations, comparison of methods, and/or student skill before and after a course of instruction." (pg. 608)

More recently, Whitley (1969) reviewing the counselor education literature reached much the same conclusion.

There are several factors responsible for this paucity of research. The supervisory process has traditionally been viewed as a private interaction between the supervisor and the trainee, removed from any form of public scrutiny. However, Matarazzo, Wiens, and Saslow (1966) have reviewed ways in which knowledge of this process might be acquired by opening the supervisory situation and the student's interviewing and therapy experiences to observation. Because until recently, researchers and other observers have been excluded from the therapist's inner office, relatively little is known about what actually occurs in the therapy interview situation, itself. This has made it exceedingly difficult to reach any kind of agreement about what student-therapists should learn

during their training experiences. As a consequence, various schools of training have tended to emphasize the acquisition of conceptual-strategical skills and the resolution of the trainee's counter-transference feelings as the proper content of the supervisory process. Recent studies have demonstrated that there are specific behavioral skills which the interviewer can utilize to facilitate the client's self-exploration. Although these skills, by serving as a bridge between the trainee's classroom learning and his actual applied training experiences, may facilitate the kind of learning which the traditional schools have emphasized, traditional therapeutic trainers have neglected explicitly teaching their students these facilitative-behavioral skills.

Recent articles have suggested that helping novice counselors bridge the gap between the classroom and the live interview situation may be of more importance than previously thought. Truax (1961), Truax (1963), Truax and Wargo (1966), and Truax and Carkhuff (1967) have asserted that counseling may lead to client deterioration as well as client improvement. If novice interviewers can be better prepared to facilitate the client's self-exploration by utilizing facilitative-behavioral skills, perhaps the warnings of these authors can be better heeded. Supplementing traditional training programs with an early emphasis on the acquisition of facilitative-behavioral interviewer skills may also be a means of taking into account Strupp's (1970) observation that the patient's reactions to the early stages of therapy are crucial in determining his outcome. Before entering into a discussion of these facilitative-behavioral interviewer skills, it seems useful to review

the various traditional models of therapeutic training.

Traditional Training Programs in Psychotherapeutic Skills

In this section a number of traditional counselor and therapist training models will be presented so the proposed supplementation of these programs with an emphasis on the early acquisition of facilitative-behavioral interviewer skills can be placed in proper historical perspective. Each of these training models could be enhanced with supplementary behavioral training which could help many student counselors, regardless of their orientation, experience a smoother transition from their classroom to their initial practicum or internship activities.

Psychoanalytic model. Students trained under this model are expected to possess a highly developed and refined conceptual grasp of psychoanalytic theory. Only after he has read widely and attended innumerable lectures and seminars on psychoanalysis and psychoanalytic psychotherapy is the student assigned his first control patient. Using Ekstein and Wallerstein's (1958) model of supervision, the trainee's self-report of what occurred between himself and the patient plus the student's behavior with his supervisor serve as the exclusive data upon which the trainee's learning within the supervisory process is based. As Reivich and Geertsma (1969) point out, proponents of this model rely exclusively upon this process notes orientation to supervision, not in spite of the student's conscious or unconscious tendencies to distort what actually occurred in therapy, but because of this very factor. In essence the trainee's supervision experiences are quasi-

therapeutic in nature, as they aim to help the student work through his difficulties in describing his sessions with his patients spontaneously, clearly, and cogently.

The learning problems which the student is expected to master during this process are to expand and refine his conceptual-strategical skills and to learn to recognize and resolve counter-transference feelings elicited by his patient. To accomplish these goals, the trainee must first work through the transference feelings toward his supervisor (problems about learning) which inhibit his mastery of the learning problems. The learning products within this model appear to be primarily internal, conceptual entities which are somehow reflected in the trainee's actual therapy behavior. Just what the mechanisms for this transformation are, or what the behavioral end products are, have not been explicitly stated. At no point in this process is there an attempt to observe or modify the student-therapist's actual behavior with the patient, despite the fact that any therapist will attest the fact that the leap from reading about psychotherapy to conducting psychotherapy is a large and awkward one.

Client-centered model. Just as Rogers' theory of personality and personality change was revolutionary when compared with psychoanalytic models which preceded it, the modifications that he recommended in the training of future therapists were equally daring. Rogers suggested opening both the therapeutic and supervisory relationships up to public observation. Rogerians were the first to decry the lack of objective data about what occurs in psychotherapy and the complete

absence of evaluations of training techniques for student-therapists.

In an attempt to make training procedures more systematic and more amenable to assessment, Rogers (1957) presented what were, at that time, the most explicitly formulated suggestions for teaching psychotherapy techniques to novices. He suggested that initially students should listen to recordings of experienced and inexperienced therapists doing live therapy. In this way, they could learn to discriminate good and bad techniques. The next recommended step had both vicarious and experiential components. He suggested that students obtain a direct acquaintance with psychotherapy by observing a series of interviews conducted by experienced therapists, participate in group therapy and/or undergo personal individual therapy. During the final stage of the student's training, Rogers suggested that the trainee be allowed to actually carry on psychotherapy, himself, under the direct supervision of an experienced therapist. He also recommended that such teaching devices as tape-recorded interviews and multiple-therapist therapy cases could be utilized as beneficial learning vehicles for the novice.

The first two steps in Rogers' training program can be viewed as one of the first attempts to establish a formal training bridge between what the novice has learned in the classroom and what he is supposed to do in actual therapy or interview situations. He was the first to recommend a means for helping novices acquire facilitative interview behaviors and this represents a major improvement over the psychoanalytic model of training.

Whether or not Rogers' innovations actually accomplished their goal is questionable. While the first two steps in this training model are designed to provide novice interviewers with ample vicarious opportunities to acquire counseling skills, the specific behaviors which they successfully discriminate and internalize are left up to their own ingenuity and creativity. For example, if a student-interviewer listens to a therapy tape or observes a live session, and then discriminates whether it was a good or bad session, it does not mean that he has successfully discriminated what the therapist did or did not do to make it a successful or unsuccessful session.

Didactic-experiential model. Truax and Carkhuff (1967) have developed a training program which, while still reflecting a Rogerian influence, represents a substantial departure. They selected as training goals those therapist qualities which differentiated successful and unsuccessful therapists in the Wisconsin Schizophrenia Project (Rogers et. al., 1967). A substantial number of studies coming from this project demonstrated that patients of therapists who were rated high on warmth, empathy, and genuineness had positive therapeutic outcomes, while patients whose counselors were rated low on these dimensions either did not improve or deteriorated (Truax, 1961; Truax, 1963; Truax and Carkhuff, 1965; Truax, Carkhuff and Kodman, 1966).

Truax and Carkhuff, assuming that warmth, empathy and genuineness were both the necessary and sufficient conditions for therapeutic change, outlined a training program which emphasized the development of these

therapist characteristics. They suggested that, initially, students should listen to selected positive and negative audiotaped interviews conducted by counselors rated high on these characteristics. After the students have learned to identify high and low warmth, empathy, and genuineness, they should be taught to further discriminate these qualities by learning to rate the tapes they are listening to on seven or nine point scales.

The assumption of the Truax-Carkhuff program is that if students can learn to recognize the presence or absence of these qualities in other therapists, then they will automatically incorporate these qualities into their own interview behavior. Because they assume that all therapists should have insight into their own behavior and its impact on others, Truax and Carkhuff suggest that all student-therapists should have a group therapy experience. In addition, once the trainee has actually begun doing therapy, the supervisor should relate to the student in a highly warm, empathic, and genuine manner. In this way, the supervisor not only provides the trainee with an appropriate role-model, but establishes the conditions under which the novice can most easily engage in his own self-exploration. This model is similar to the previous two in its emphasis on establishing means for the trainees to develop ways of dealing with their own feelings and conflicts which are elicited by their training experiences. However, Truax and Carkhuff have emphasized, more than either Ekstein and Wallerstein or Rogers, the acquisition of specifiable facilitative interviewer skills prior

to the trainee's involvement in actual counseling situations.

While Truax and Carkhuff have succeeded in developing a training program which is aimed at helping students acquire certain specifiable skills which previous research has shown are correlated with therapeutic change, they have failed to explicitly define exactly what the behaviors are which constitute empathic, warm, or genuine behavior. Such a training program, based on the acquisition of positive facilitative interview behaviors would be a real boon to the area of counselor training.

More recently, Carkhuff (1969) has refined and elaborated the training model. In this most recent work, he has presented an elaborate conceptual schema for counselor training, based upon the many studies he has been involved with, either directly or indirectly. But Carkhuff's most significant contribution is probably his emphasis on evaluating the results of counselor training programs, and then modifying and changing training programs so as to produce more effective counselors.

Recent Training Innovations

Over the last several years, a number of interview training techniques have evolved which may be good supplements to professional counselor and therapist training programs. Reivich and Geertsma (1969) reviewed the literature dealing with the use of observational media in the training of student therapists. They described a training model based on the use of video tape and incorporating such features as

video-taped demonstrations of desired behaviors, self-observation by the novice, and supervision utilizing videotapes of the novice as the focal point of the supervisory session. They stressed that this model was not meant to replace the traditional emphasis on helping students acquire conceptual-strategical skills, but rather would facilitate and elaborate on this important area. They feel that by utilizing observational media, the trainees will be better able to translate behavioral events into theoretical concepts, and conceptions of therapists activities into behavioral events. Kagan and Krathwohl (1967) have also discussed the use of video tape to help novice interviewers learn to counsel by observing their own sessions. More recently, Kagan (1969) has utilized this method to teach medical students how to effectively interview patients while conducting a medical history.

Implicit in the work of Reivich and Geertsma and that of Kagan and his associates is the assumption that by utilizing video tapes of the novice's counseling sessions, the trainee and his supervisor can identify and strengthen positive facilitative behaviors and change the novice's non-facilitative behaviors. However, Whitely (1969) and others have pointed out that we currently are unable to adequately define what constitutes effective counseling behavior. Reivich and Geertsma confronted this issue and suggested that the use of video tape may serve to facilitate the study, both of criterion performance and of the process of learning to be a psychotherapist.

Microcounseling is a new method for teaching novice interviewers

facilitative-behavioral skills. It emphasizes teaching trainees only one skill per training session. Before a student practices a particular skill, he first reads a manual describing that behavior and views a video-tape of an interviewer performing good and bad examples of the skill. The novice's practice interview is video-taped, and a supervisor immediately views this tape with him pointing out good and bad attempts to perform the skill. This new training method will be discussed in more detail in Chapter II. This approach to interview training allows us to relate changes in the novice interviewer's behavior to events within the microcounseling situation. Thus microcounseling appears to maximize the value of video tape as a teaching and research instrument.

Evaluations of Present Training Programs

Having reviewed major programs for training in basic psychotherapeutic skills, it seems appropriate to ask whether or not these programs are effective. It quickly becomes obvious that studies evaluating current training practices are few and far between. Whitely (1969), while reviewing the literature dealing with effectiveness of existing counselor education programs concluded:

"Despite the importance of this topic, and its centrality to the profession, very little was available in the literature. Published work was of generally low quality, superficial, and so narrowly defined as to be misleading in the implications which might be drawn from it. Regrettably, evaluation as currently (practiced) does not appear to be a term with any substance in counselor education programs." (pg. 35)

Although few in number, those few studies evaluating the effectiveness of current professional training programs which have been conducted have uncovered some controversial findings. Among other things, these studies point out the need to incorporate into traditional training programs, techniques for helping students acquire facilitative-behavioral interviewer skills.

Bergin and Solomon (1963) evaluated the level of accurate empathy in tape recorded therapy sessions performed by eighteen post-internship students from programs in clinical psychology approved by the American Psychological Association. The best of these students received only intermediate ratings on this measure. Perhaps their most interesting finding was that the students' level of accurate empathy correlated $-.17$ with their previous practicum grades and $-.16$ with their academic grades. Mellon (in Truax and Carkhuff, 1967) assessed the level of accurate empathy in tape recorded sessions performed by twenty-eight post-practicum counselor trainees in counseling programs. He reported a correlation of $-.008$ between the students' level of accurate empathy and their grades for their practicum performance. If one accepts the assumption that accurate empathy is an important therapist quality, then these two training programs appear not to be rewarding those few students who develop this important counselor quality.

Carkhuff, Kratochvil, and Friel (1968) had clinical and non-clinical, first-and fourth-year graduate students in psychology perform forty-five minute interviews which were then rated for the level of the interviewers' warmth, empathy, and genuineness. They found that first-year clinical

students functioned at a higher level on all three of the measures than first-year non-clinical students. However, this difference "washed out" by the fourth year. Recognizing the difficulties of interpreting cross-sectional data, such as that above, these same investigators had clinical graduate students at a different school perform forty-five minute interviews at the beginning of their first year and again at the end of their second year. After rating these interviews on the three measures of accurate empathy, warmth, and genuineness, they found that by the end of their second year, the clinical students had deteriorated in their functioning levels of warmth, empathy, and genuineness.

These two studies suggest that not only are two APA-approved graduate training programs in clinical psychology unable to help students develop certain psychotherapeutic skills which are considered essential by virtually all schools of psychotherapy, but they are also unable to help the students maintain their initial levels of functioning on these measures. Carkhuff, Kratochvil and Friel imply one possible explanation for this deficiency in graduate training. They also evaluated the level of functioning of nine professors of clinical psychology at one of the universities on each of the three measures. They found that their level of functioning was well below average. Anthony and Carkhuff (1969), in an evaluation of a rehabilitation counseling program, found that the trainees acquired only those skills which were explicitly emphasized by the counselors in charge of the training program. Given that the faculty of professional training programs communicate only low levels of those therapist qualities which appear to be related to important outcome criteria, it is not surprising that professional training programs appear

to have so little success in producing students who can communicate high levels of these conditions.

These studies suggest that current professional training programs emphasize the development of conceptual abilities and the mastery of content areas, to the exclusion of helping students acquire behaviors, which in therapy can facilitate self-exploration on the patient's part and consequent therapeutic change. In the next section we will look at actual novice interviewer behavior and its impact on interviewee's. From such a review we can then begin to define positive facilitative interviewer behaviors which can be taught to novice interviewers.

Studies of Novice Interviewer Behavior

Unfortunately, most studies which have attempted to assess the nature of the novice interviewer's behavior have relied almost exclusively on the novice's ability to recall retrospectively what his interaction with the patient was like. Porter (1950, in Matarazzo, Wiens, and Saslow, 1966) reported developing a questionnaire which he used to assess modifications in beginning counselors' attitudes by collecting pre- and post-training questionnaire data. Heine, Aldrich, Draper, Meuser, Tippet, and Trosman (1962) attempted to evaluate the effectiveness of a program for teaching psychotherapy to fourth-year medical students. They assessed the students' learning through their responses on a self-report questionnaire.

The utilization of retrospective, self-report data in formulating an idea of a novice's actual interview behavior can lead to a distorted, inaccurate picture of what the novice actually does with a

patient. Blocksma and Porter (1947), in a now classic study, presented the results of their evaluation of an interview skills training program conducted at the University of Chicago Counseling Center. They obtained both questionnaire data and observational data from actual interviews conducted by the trainees. In a pre-training questionnaire, trainees reported that they would respond 89% of the time by reflecting the feeling of the client. However, only 11% of the trainees' responses in the live interview were reflective in nature. There appears to have been very little relationship between what the students reported they would say, and what they actually did in the interview. In addition, there was no relationship between a trainee's post-training questionnaire responses and his supervisors' ratings of his skill one year later. However, there was such a relationship between the trainee's actual use of client-centered techniques in the post-training interview, and his subsequent on-the-job performance. The Blocksma and Porter study suggests the importance of obtaining actual observational measures of the interviewers' behaviors, rather than relying on the interviewers' reports of their behavior.

Phillips and Matarazzo (1962) analyzed the content of novice interviewers' interview behavior before and after training. After pre-training measures were obtained, the six students in Group A were assigned two therapy cases whom they saw once a week for ten weeks. During supervision, the students reported their interviews to their supervisors, and on the basis of their reports, received conceptual and technical suggestions. The four students in Group B were observed

by their supervisor as they performed an interview once a week. Following each observation, the supervisor and the student would discuss the student's actual interview behavior with the supervisor making recommendations for specific behavioral changes. Group B students, in addition to increasing in their use of non-directive, communication-facilitating techniques, also became more active and influence oriented during their interviews than did Group A students. It is of interest that those students whose training was primarily behavioral in substance developed interviewer behaviors which more closely resemble the behaviors of Strupp's (1960) more experienced therapists.

Matarazzo, Phillips, Wiens, and Saslow (1965) attempted to measure actual novice behaviors and to relate changes in these behavior patterns to the students' training. The trainees were six second year medical students who had just completed a six month introductory course in psychiatry which had included lectures and demonstrations of general interviewing methods. Each trainee conducted 35 minute interviews with each of six patients before they began a summer clerkship in psychiatry. After pre-training data were obtained, each trainee was assigned two newly admitted psychiatric patients whom they saw for eight weeks in intensive individual psychotherapy. Each student received traditional supervision as described above.

At the end of the summer clerkship, each trainee again interviewed each of the six patients he had interviewed during the pre-training data collection. The pre- and post-training interviews were

then analyzed behaviorally using the Chapple Interaction Chronograph (Matarazzo, Saslow, and Matarazzo, 1956), and qualitatively, using the Check List of Therapist "Errors" Behavior, which was formulated by the authors. Each therapist utterance was rated as GOOD, FAIR, or POOR. Each response that was classified as either FAIR or POOR was then categorized in terms of the type of error it represented. The check list had three main types of errors: Errors of Focus, Faulty Role Definition, and Faulty Facilitation of Communication..

The investigators found that there was a significant decrease in errors in all the categories from pre- to the post-training interviews. In the pre-training interviews, most of the errors were in the Faulty Facilitation of Communication category, while in the post-training interview the most frequent errors were in the Errors of Focus category. For example, during the pre-training interviews, the student-therapists frequently interrupted the patients, asked closed questions and made long, awkward speeches. During the post-training interviews, the interviewers were more inclined to focus on irrelevant aspects of significant material or to make non-contributory statements or questions which neither aided nor impeded the progress of the interview. One of the things the trainees appeared to learn from their experience was how to get a patient to talk, although they still were not too clear about what he should be discussing. By using the Chapple Interaction Chronograph data, the investigators discovered that the greater the number of errors made by the student-therapists, the shorter was the patient's actual talk time. When the trainee's

errors were minimized, both the patient's average utterance time and the patient's percent talk time increased significantly. The authors concluded:

"...the students had learned a few simple rules about what not to do but they had substituted some other poor behaviors, and still did not know what to listen for or what to do in regard to responding sensitively to significant cues."
(pg. 52)

This study was important because it was among the first to actually utilize pre- and post-training behavioral measures in the evaluation of a psychotherapy training program. However the authors' conclusions indicate that while the trainees learned not to do certain things, they had been unable to acquire more appropriate behaviors. This is strongly suggestive of the possibility that a more behavioral approach to training in psychotherapeutic skills, where specific interview behaviors are taught to the trainees, could be beneficially integrated as a central part of the trainee's early training experiences.

Matarazzo, Wiens, and Saslow (1966) reported a more thorough analysis of the Interaction Chronograph data which was used in the Matarazzo, Phillips, Wiens, and Saslow (1965) study. They found that the behavior of each patient was affected relatively little by differences among students. However, the frequency and duration of the trainees' utterances in the pre-training interviews was determined largely by the patient they happened to be interviewing. The authors interpreted this as an indication that the students had not yet developed a stable interviewing style. During the post-training

interviews, the students had established a more stable, individual style for themselves.

There are a number of conclusions which can be reached about novice interviewer behavior. In general beginning interviewers do not possess a stable repertoire of behaviors or techniques, and their behavior is largely determined by the patient they happen to be interviewing. Beginning interviewers spend too much time talking, interrupt the patient, ask close-ended questions, make long awkward speeches, and lapse into long unplanned silences.

Following their initial training experiences, beginning counselors spent less time talking, interrupted the patient less, asked more open-ended questions, made fewer irrelevant comments, asked for more specific examples and inquired why patients behaved and felt as they did. They also used paraphrases and feeling reflections not only as perception checks, but also as communication facilitators and as techniques for emphasizing recurrent patterns and themes. These more active, newly acquired behaviors were more prevalent among students who were trained by supervisors who utilized a concrete behavioral analysis of the trainee's interview behavior during supervision.

While these studies illustrate the possibility of isolating, defining, and teaching concrete behaviors which are basic to a novice's acquisition of clinical interviewing skills, and the advantages of fitting such instruction to the natural stages in the acquisition process, they have some problems as an instructional approach. Some aspects of the beginner's behavior were unchanged (e.g., faulty role definition) and others ignored (especially non-verbal affective and

motoric behaviors). No model of good interview behaviors was available to the students. Feedback to the students was delayed and relatively abstract, frequently being in the form of frequency counts of each error with perhaps a few examples recalled or transcribed, assuming that the supervisor had observed the interview session.

CHAPTER II

MICROCOUNSELING AND THE PRESENT STUDY IN PERSPECTIVE

One new approach to instruction in basic clinical skills which overcomes the defects described in the previous chapter is that of microcounseling, first reported by Ivey, Normington, Miller, Morrill, and Haase (1968). Microcounseling is an instructional technique related to microteaching (Allen, 1967) which provides a scaled down version of the counseling situation in which beginning counselors talk with volunteer clients during brief five-minute counseling sessions which are video-recorded. This first five-minute session provides a baseline for the behavior to be learned. The skill to be developed is then defined and discussed, and the student observes a series of video-taped models which display both positive and negative portrayals of the skills as well as his own taped session in which positive and negative instances are identified. The student then conducts another five-minute session in which he practices the skill in question, with a video-tape again made available for observing his changes. For each of these steps, a supervisor assists the student in discriminating the behaviors required, reinforces appropriate responses, points out missed opportunities for demonstrating the skill, and, in general, fills guiding and reinforcing functions. The training procedures involve cue discrimination in the form of video models and self-observation, written materials (manuals describing each skill), supervisor comments, and operant techniques whereby appropriate trainees

behavior is rewarded by the supervisor.

This instructional technique has the advantage of dividing interviewer behavior into small units and making possible direct feedback to the trainee, thus facilitating the students' behavior change. It should perhaps be stated explicitly at this point that the author views interviewing as more complex than merely emitting discrete, "canned" or mechanical behaviors at the appropriate moment. Microcounseling just provides the vehicle for the student to learn necessary, discrete skills, which, once delineated and acquired, can be internalized and spontaneously emitted. While discussing good attending behavior, Ivey and Rollin (1970) conclude that true listening and communicating cannot occur unless the person who is attending forgets his deliberate behavioral acts and at some point finds himself attending naturally without being aware of the behaviors he first engaged in artificially. The basic assumption of microcounseling proponents is that because interviewer behavior is extremely complex, it can best be taught by breaking it down into discrete behavioral units, until the student has so internalized each individual skill that it can be emitted spontaneously and without premeditation.

Ivey, Normington, Miller, Morrill, and Haase (1968) utilized the microcounseling technique to teach three different groups of beginning counselors one of three different interviewer skills: attending behavior, reflection of feeling, or summarization of feeling. The communication of attentiveness is a potent reinforcer in any counselor-client interaction, and Ivey et. al. defined attending behavior in terms

of three highly reliable easily identifiable component behaviors: eye contact, relaxed postural position with appropriate gestures, and accurate verbal following behavior. Accurate reflection of feeling was seen as a focused aspect of attending behavior in which the interviewer selectively attended to the feeling component of the client's communication and then reflected this empathic understanding back to him. Summarization was very similar to reflection, except that it covered a longer temporal period and was more integrative than was the reflection. Using this paradigm in two hour periods, Ivey et. al. found that beginning prepracticum counseling students showed significant changes in attending behavior, reflection of feeling, and summarization of feeling. The changes in counselors' behaviors were measured by independent judges' ratings, using scales developed by the authors. Inter-judge reliabilities for attending behavior were .84, for reflection of feeling, .64, and for summarization of feeling, .75.

Ivey et. al. obtained the clients' reactions to both the pre- and the post-microcounseling interviewers by requiring them to complete the Counselor Effectiveness Scale (Ivey, Miller, Morrill, and Normington, 1967). The validity of the specific skills taught via the microcounseling program is attested to by the fact that every pre- and post-training comparison of the clients' reactions was positive and significant. As Cartwright (1968) has reminded us, the effectiveness of various counselor behaviors should ideally be determined by certain therapy outcome criteria. However, such standards are beyond the scope of most projects. Therefore, the development of intermediate measures such as

those mentioned above takes on increasing importance. In addition to the Counselor Effectiveness Scale developed by Ivey et. al., and Truax and Carkhuff's Relationship Questionnaire, Jourard's (1964) Self-Disclosure Questionnaire appears to be another potentially excellent research instrument which may be used to assess the nature of the patient-therapist relationship.

While the Ivey et. al. study was the first to demonstrate the efficacy of microcounseling training both as an instructional medium for the acquisition of basic psychotherapeutic skills and as an excellent research paradigm, recent studies by Miller, Morrill, and Uhleman (1969) and Haase & DiMattia (1969) have confirmed both of these potentialities. However, all three of these studies have suffered from two methodological inadequacies: none of the clients in these studies were real clients, and measures of trainee behavior change have been restricted to the training situation itself, thus leaving unanswered the question of whether the new, rapidly acquired skills were retained and transferred to actual clinical settings with people actively seeking help. Utilization of microcounseling training in a therapy instruction model such as that described by Matarazzo, Phillips, Wiens and Saslow (1965) and Matarazzo, Wiens, and Saslow (1966) could provide such a test of generalization. One of the primary functions of the present study is to attempt to demonstrate that the basic interview skills acquired by novice interviewers in microcounseling training sessions do indeed generalize to actual clinical situations.

The Present Study

Microcounseling was originally designed to bridge the gap between theory and practice, between classroom and interview session, between what is said and what is actually done. To satisfy these goals, the skills to be taught should be essentially a-theoretical; they should be skills which the students could use regardless of their theoretical orientation or the context in which they perform their interviews. Training in the specific skills of microcounseling should give the beginning interviewer a series of specific behaviors which may be drawn upon to facilitate the interviewer-client interaction. Ivey and Rollin (1970) have pointed out that microcounseling is concerned with introducing trainees to a variety of skills in the expectation that each individual will ultimately develop his own set of preferred behaviors which best facilitate his own interviewer-client interactions. Therefore, the present study will attempt to demonstrate that micro-counseling procedures can produce the acquisition of six fundamental, component skills of interviewing, and that these skills generalize to actual, live, interview situations. Each of these individual behavioral skills have been selected because they are skills which are important in all counseling or interview contexts. In addition, each skill to be used in the present study can be easily defined, observed, practiced, and evaluated.

The studies of novice interviewer behavior performed by Phillips and Matarazzo (1962), Matarazzo, Phillips, Wiens, and Saslow (1965) and Matarazzo, Wiens, and Saslow (1966) have all revealed that novice

interviewers tend to make many communication facilitation errors. Most notably, these beginners frequently cut off interaction with their patients by asking them close-ended questions or by making long, awkward speeches to their patients. If students can be taught to rely upon open-ended questions, rather than close-ended ones, and to utilize ways of encouraging clients to speak with minimal activity on the interviewer's part, then they could be that much more effective in their initial real life counseling experiences. Therefore, two of the six skills taught by microtraining in the present study were "open invitations to talk", and "minimal encouragers to speak".

Ivey, Normington, Miller, Morrill, and Hease (1968) have demonstrated that skills of attending behavior, reflection of feeling, and summarization of feeling can be acquired in microtraining by novice interviewers. However, generalization of these skills to live interview situations has not been demonstrated. In order to do this, the present study incorporated each of these behaviors into its group of six skills to be taught in the microcounseling program.

The sixth skill to be included in this study was paraphrasing. It was defined as that interviewer behavior in which the counselor feeds back to the client the content of what he has just said in a restated form. This skill serves a number of functions: it can serve as a perception check for the interviewer, pull a number of recent comments together, or high-light particular issues by stating them more concisely.

The principle data of the present study consisted of ratings from the video tapes of the various interviewer skills just described. These

data provided an estimate of the amount of generalization from the training lab to the live interview situation. A number of other measures were included to assess whether the acquisition of these six basic interviewer skills resulted in changes in the interviewer-interviewee relationship. The interviewee's perceptions of this relationship were assessed with Ivey's Counselor Effectiveness Scale, Truax and Carkhuff's Relationship Questionnaire, and a short form of Jourard's Self-Disclosure Questionnaire. Objective measures of this interviewer-interviewee relationship were obtained with Carkhuff's Empathy, Respect, and Genuineness Rating Scales. Finally, the Therapist-Error Checklist provided information about whether the interviewer's behavior changed in areas in which they did not receive specific training. These data were utilized to test the following hypotheses:

1. Subjects in the experimental group were expected to demonstrate greater generalization, after training, of each of the six microcounseling skills than were subjects in the control group.
2. Subjects in the experimental group were expected to show a greater decrease in interviewer errors, pre to post, than were those in the control group.
3. It was predicted that experimental subjects would demonstrate a greater acquisition of warmth, empathy, and genuineness, pre to post, than would control group subjects.

4. Experimental subjects were expected to show a greater decrease in both the frequency and duration of their utterances than were the control subjects.
5. It was predicted that there would be a greater positive improvement in the interviewees' ratings of the experimental subjects than in those for the control subjects.
6. Patients interviewed by experimental subjects were expected to demonstrate a greater increase in both frequency and duration of utterance, pre- to post-training, than when interviewed by control subjects.

CHAPTER III

METHODOLOGY

Subjects: Subjects in this experiment were 24 male second year medical students at the University of Oregon Medical School, who were randomly selected from a larger group of 51 volunteers. All the subjects were concurrently enrolled in an introductory psychiatry course. Each subject was randomly assigned to one of two experimental conditions, with the only stipulation on assignment being that there was an equal number of subjects in each group.

Procedure:

A. Selection of Pre- and Post-Training Interviewees:

Four female patients were selected from the outpatient services of the Department of Psychiatry at the University of Oregon Medical School. They ranged in age from thirty-two to fifty-six. Because of time requirements for interviewees in this study, patients were reluctant to volunteer for this study. The interviewees could not be matched on the basis of either their standardized interview behavior or psychiatric diagnosis. All of the patient-interviewees had been on drug maintenance therapy for at least five years. During this time they had received neither individual nor group therapy from members of the Department of Psychiatry.

B. Baseline Interviews:

Prior to receiving any interview training, all twenty-four subjects conducted a twenty minute interview with one of the

four volunteer patient-interviewees. Just before this interview, each subject was told:

"The woman you are about to interview is currently an out-patient in the psychiatric department. She has a lengthy psychiatric history. Your task is to find out what types of problems she had that first necessitated her seeking psychiatric help and how these difficulties affected her daily functioning. Because she is still under a psychiatrist's care, you are to find out also what types of problems she is currently experiencing which makes it necessary for her to continue seeking psychiatric help, and how these difficulties affect her present daily functioning."

The middle ten minutes of each interview were videotaped for later analysis. The assignment of interviewers to interviewees was completely randomized except for the one requirement that each patient be interviewed by three control subjects and three microcounseling subjects. The order in which the students interviewed each patient was also randomized. Immediately after each baseline interview, the interviewees completed Ivey's (1968) Counselor Effectiveness Scale, Jourard's (1964) Self-Disclosure Questionnaire and Truax and Carkhuff's (1967) Patient-Therapist Relationship Questionnaire to assess the interviewer's effectiveness from the patient's perspective.

C. Training Sessions for the Microcounseling Subjects:

The twelve subjects in the microcounseling group were randomly assigned to one of three training groups. Each group of four students was led by an advanced psychiatric resident in the Department of Psychiatry at the University of Oregon Medical School. These twelve experimental subjects received five training sessions in accordance with the microcounseling principles

described earlier. During any given training session, the four microcounseling students in each group observed a good and bad videotaped model for a particular skill, were provided with a written manual describing that skill, conducted training interviews in which they attempted to utilize that particular skill, and received a supervised viewing of the video tape of their practice interviews. Because both the experimental and the control subjects had viewed the videotaped models for the attending behavior skill, during the first meeting of the psychiatry class, the microcounseling instructors were requested to include feedback to the students on this skill as part of the supervision on the remaining skills. It was not the subject of any given training session, alone. Each session was devoted to the acquisition of one of the five remaining basic skills: Minimal Activity (see Appendix B), Open-ended Questions (see Appendix C), Paraphrases (see Appendix D), Reflections of Feeling (see Appendix E), and Summarizations (see Appendix F). The practice interviews for the first two skills were five minutes long, while those for the remaining skills were seven to eight minutes in length. At any given time during a training session, only one student was doing a practice interview. However, the other students in the group observed this attempt and participated in the critique with the supervisor. Interviewees during the training sessions were volunteer patients from the various medical

wards at the hospital. The sixth and seventh training sessions were devoted to helping the students better integrate these skills into their repertoires so that they could more spontaneously utilize these desired behaviors. During these two training periods, each microcounseling subject performed a seven to eight minute interview which was again videotaped. During the play back of this interview, the students received feedback, from both their supervisor and their peers, designed to strengthen the skills which they had acquired in the earlier training periods. In addition to learning a new skill each week, the context in which the subjects practiced them varied each training session. For example, the microcounseling students practiced the Open-ended Questions skill within the context of obtaining a medical history, Minimal Activity while performing a social history, and Paraphrasing while obtaining a vocational history.

D. Training Sessions for the Control Subjects:

Each of the twelve subjects in the control condition were randomly assigned to one of three training groups. One of these groups was taught by an advanced psychiatric resident, while the remaining two were headed by faculty members in the Department of Psychiatry at the University of Oregon Medical School. The instructors of each of these groups were told to teach their students whatever they felt was important for beginning interviewers to learn with whatever format they felt

was most effective. Students in these groups were observed by their instructors as they practiced obtaining medical, social, and vocational histories from volunteer medical patients at the University of Oregon Medical School. After each training interview the control subjects were given feedback concerning their practice interview. This feedback consisted of making such recommendations as asking more open questions, talking less, summarizing more frequently, and attending more to feelings. However, instruction in these skills was less systematic and specific than that given the microcounseling subjects. The length of time for these training sessions was the same as those for the microcounseling students. While an attempt was made for the duration of the control subjects' interviews to parallel those of the experimental subjects', the controls may have actually obtained more interviewing experience and more direct supervision because the first part of their training periods was not spent discussing the microcounseling manuals and viewing the model video tapes.

E. Post-Training Interviews:

After completion of all training sessions, each subject again interviewed the same patient whom he had seen during the baseline interview. When a patient was to be interviewed by an experimental or a control subject was randomly determined. Each interview was twenty minutes long and the middle ten

minutes was again videotaped. The pre- and post-training interviews were separated by approximately nine weeks. The instructions to the subjects prior to this interview were the same as those they had received immediately before the pre-training interviews. Following each post-training interview, the interviewee again completed each of the three paper and pencil instruments assessing the interviewer's effectiveness. At this time each subject also completed three questionnaires assessing their perceptions of their interview instructors. The Interview Instructor Evaluation Questionnaire developed by Dr. George Saslow, a short form of the Relationship Questionnaire by Truax and Carkhuff, and a semantic differential, the Instructor Effectiveness Scale, were included in the study in an attempt to ascertain whether there were instructor differences in addition to the methodological differences which might account for differences between experimental and control groups.

F. Dependent Variables:

The pre- and post-training tapes were randomized prior to presenting them to the two raters who were then unaware of the temporal sequence each tape represented. Both raters were doctoral students at the University of Portland in clinical psychology. Both had previously completed masters degrees in psychology. During the semester preceding their participation in the study, they had both done exceedingly well in a course on behavioral observations. Inter-rater reliabilities

were calculated for each of the following scales.

1. Therapist Verbalization Classification Sheet (see Appendix G):

Utilizing the definitions of the six microcounseling skills which were taught in this study (see appendix), the raters classified each interviewer verbalization into one of the following categories: Open-Ended Question, Close-Ended Question, Minimal Activity Response, Paraphrase, Reflection of Feeling, Summarization, and Other. The frequencies in each of these categories by each rater for each interview were then tabulated and converted to percentage of total utterance figures. These percentage figures were then used in the subsequent statistical analyses. Prior to this conversion, the percent of inter-rater agreement in each category for each interview was calculated according to the following formula: $\% \text{ agreement} = 100 - 2(\text{difference between rater A and rater B}) / \text{sum for rater A plus the sum for rater B}$. To have transformed these percentages into logarithms would not have produced a marked increase in power. Failure to perform the transformation biased against the investigator. The median percent inter-rater agreement for each category was as follows: Open-Ended Questions - 72%; Close-Ended Question - 83%; Minimal Activity Responses - 82%; Paraphrase - 72%; Reflection of Feeling - 100%; Summarization - 100%; and Other - 82%.

2. Interviewer Frequency and Duration of Utterance:

One of the raters counted the frequency and using a stop watch, timed the duration of each therapist utterance during each of the interviews. This same rater then randomly selected eight interviews and repeated these same measurements. Pearson's r for the test-retest reliability for interviewer frequency of utterance was .98 ($p < .01$), and for duration of interviewer utterances, it was .99 ($p < .01$).

3. Patient Frequency and Duration of Utterance:

One of the raters counted the frequency and timed the duration of each patient utterance during each of the interviews. The same rater then randomly selected eight interviews and repeated these same measurements. Pearson's r for the test-retest reliability for patient frequency of utterance was .87 ($p < .01$), and for duration of patient utterance it was .99 ($p < .01$).

4. Check List of Therapist Error Behavior: (see Appendix H)

Both raters classified each interviewer verbalization as GOOD, FAIR, or POOR. A GOOD statement was defined as one which fit none of the error categories described below, while a FAIR statement embodied only one such error. A POOR statement was one in which two or more errors in any of the error categories below were evident. The frequencies in each of these categories by each rater for each

interview were then tabulated and converted to percentage of total utterance figures. These percentage figures were used in subsequent statistical analyses. Prior to this conversion, the percent of inter-rater agreement in each category for each interview was calculated according to the formula presented in part one of this section. The median percent inter-rater agreement for each category was as follows: GOOD - 71%; FAIR - 86%; and POOR - 83%. Each therapist statement which was classified as FAIR or POOR was then classified as an Error of Focus, a Faulty Role Definition Error, an Error of Facilitation, or an Other Error. The frequencies in each of these categories by each rater for each interview were then tabulated and converted to percentage of total error figures. These percentage figures were used in the subsequent statistical analyses. Prior to this conversion, the percent of inter-rater agreement in each category for each interview was calculated in the same manner as previously described. The median percent inter-rater agreement for each category was as follows: Errors of Focus - 84%; Errors of Faulty Role Definition - 60%; Errors of Facilitation - 84%; and Other Errors - 100%.

5. Attending Behavior (see Appendix I):

The raters rated each interviewer's attending behavior using the five point scales developed by Rollins in 1970.

Although this scale had a reported inter-rater reliability of .84 using naive raters, the judges in the present study were only able to obtain an inter-reliability of .61 ($p < .01$) using Pearson's Product Moment Correlation equation.

The judges also rate each interviewer's performance on five five-point rating scales reported in Carkhuff (1969). The inter-rater reliabilities reported for each of these scales was computed using Pearson's Product Moment Correlation equation.

6. Empathy Scale (see Appendix J):

The inter-judge reliability obtained with this scale was .66 ($p < .01$).

7. Respect Scale (see Appendix K):

The inter-rater reliability on this scale was .42 ($p < .01$).

8. Genuineness Scale (see Appendix L):

The inter-rater reliability obtained on this scale was .35 ($p < .05$).

9. Relevant Concreteness Scale (see Appendix M):

The inter-judge reliability on this scale was .51 ($p < .01$).

10. Confrontation Scale (see Appendix N):

The inter-rater reliability obtained on this scale was .54 ($p < .01$).

In an attempt to further assess the validity of the specific skills used in this training program, the patients, immediately after each pre- and post-training interview, completed each of the following scales.

11. Counselor Effectiveness Scale (see Appendix O):

This was a semantic differential designed and utilized by Ivey et. al. (1968) in an attempt to assess the interviewee's opinion of the interviewer.

12. Relationship Questionnaire (see Appendix P):

This scale was adapted by Ivey et. al. (1968) from Truax and Carkhuff (1967). It was purported to assess the interviewer's ability to establish and maintain a relationship with the interviewee.

13. Self-Disclosure Questionnaire (see Appendix Q):

All interviewees completed a short form of Jourard's (1964) Self-Disclosure Questionnaire.

CHAPTER IV

RESULTS

The results of this study have been organized around four fundamental questions. Did those subjects who received microcounseling training demonstrate greater generalization of the six basic interviewer skills than those subjects who received more traditional training? Did the generalization of these skills result in differences in the interviewees' perceptions of the interviewers? Did the novice interviewers improve in areas other than those in which they received specific training? Finally, were there changes in the interviewer-interviewee relationship following training, as assessed by external objective raters?

Data Pertaining to the Generalization of the Basic Interviewer Skills

After the two raters had classified each interviewer utterance during each pre- and post-training interview as an Open-Ended Question, Close-Ended Question, Minimal Activity Response, Paraphrase, Reflection of Feeling, Summarization, or Other, the frequencies in each category by each rater for each interview were tabulated and converted into percent of total utterance figures. Attending Behavior was assessed on a twenty-point rating scale, and the analysis of that data was performed directly on those scores. The data for each of these categories was analyzed separately using an analysis of variance for a mixed design with two between- and two within-subject variables. Training Condition and Patients were the between-subject variables,

while the within-subject variables were Time and Raters.

Attending behavior. Table 1 shows the summary of the analysis of variance for attending behavior. As predicted, the microcounseling subjects demonstrated greater improvement from the first to the second set of interviews than did the control subjects. The Training Condition

Insert Table 1 and Table 2 about here

X Time Interaction was significant ($F=7.41$, $df = 1/16$, $p < .025$).

Inspection of the cell means for this interaction in Table 2 reveals that the microcounseling subjects' attending behavior ratings increased pre to post (14.21 to 15.21) while those for the control subjects decreased (13.67 to 13.17). The analysis of variance for attending

Insert Figure 1 about here

behavior also revealed a significant Patient X Time Interaction ($F = 5.14$, $df = 3/16$, $p < .05$) and a significant Training Condition X Time Interaction ($F = 6.26$, $df = 3/16$, $p < .01$). Figure 1 shows that both of these interactions are due to the fact that the control subjects who interviewed patients number one and number four received higher attending behavior ratings during their pre-training interviews than during their post-training interview.

Open- versus close-ended questions. The subjects in both the microcounseling and the control groups showed a significant decrease

TABLE 1

SUMMARY OF ANALYSIS OF VARIANCE FOR ATTENDING BEHAVIOR RATINGS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	40.0417	40.0417	4.30	< .10
B (Patients)	3	43.3750	14.4583	1.55	
AB	3	54.5417	18.1806	1.95	
S/AB	16	149.1655	9.3228		
Within-Subjects	72				
C (Time)	1	1.5000	1.5000	1	
AC	1	13.5000	13.5000	7.41	< .025
EC	3	28.0833	9.3611	5.14	< .05
ABC	3	34.2500	11.4167	6.26	< .01
CS/AB	16	29.1641	1.8228		
D (Raters)	1	1.5000	1.500	< 1	
AD	1	2.6667	2.6667	< 1	
BD	3	2.2500	.7500	< 1	
ABD	3	10.5833	3.5278	1.21	
DS/AB	16	46.4980	2.9061		
CD	1	3.3750	3.3750	1.99	
ACD	1	.0417	.0417	< 1	
BCD	3	3.2083	1.0694	< 1	
ABCD	3	.7083	.2361	< 1	
CDS/AB	16	27.1615	1.6976		

TABLE 2
GROUP MEANS FOR ATTENDING BEHAVIOR RATINGS

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	14.33	12.67	13.50	14.00	12.67	13.33	13.42
2	14.67	15.00	14.83	16.67	16.00	16.33	15.58
3	13.67	13.33	13.50	14.33	13.33	13.83	13.67
4	14.67	15.33	15.00	17.67	17.00	17.33	16.17
Rater \bar{x}	14.33	14.08		15.67	14.75		
Time \bar{x}			14.21			15.21	14.71

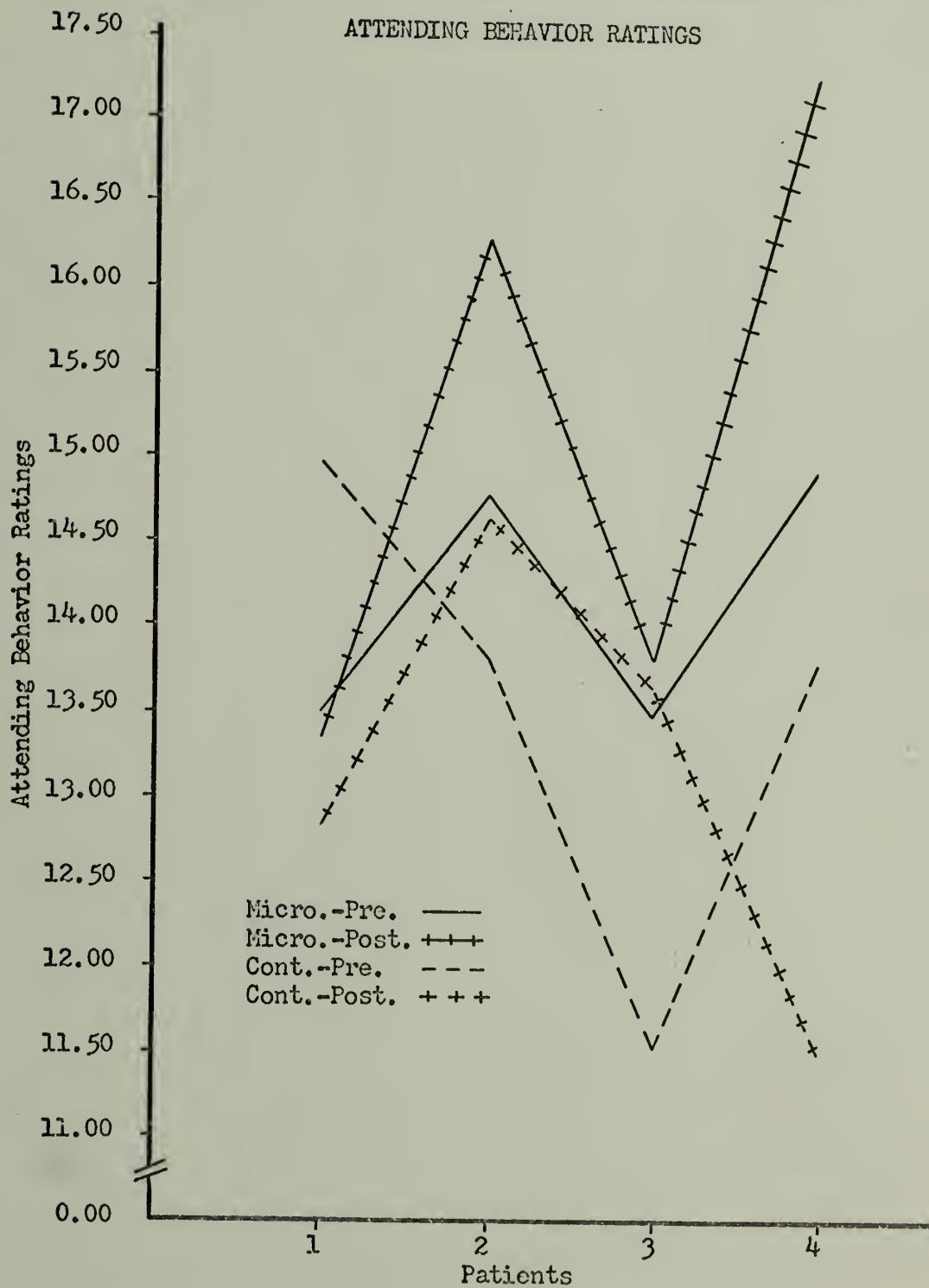
CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	15.33	15.67	15.50	12.33	13.33	12.83	14.17
2	13.33	14.33	13.83	15.00	14.33	14.67	14.25
3	10.67	12.33	11.50	13.67	13.67	13.67	12.58
4	14.33	13.33	13.83	12.33	10.67	11.50	12.67
Rater \bar{x}	13.42	13.92		13.33	13.00		
Time \bar{x}			13.67			13.17	13.42

Across Groups
& Patients

Rater \bar{x}	13.88	14.00		14.50	13.88		14.06
Time \bar{x}			13.94			14.19	

FIGURE 1
 TRAINING CONDITION X PATIENT X TIME INTERACTION FOR
 ATTENDING BEHAVIOR RATINGS



in their use of close-ended questions during the post-training interviews (see Table 3), relative to their use of this technique during the pre-training interviews ($F = 13.50$, $df = 1/16$, $p < .005$). It can

Insert Table 3 and Table 4 about here

be seen from Table 4 that the experimental subjects demonstrated a greater decrease than did the control subjects. This interaction was not significant ($F = 2.89$, $df = 1/16$). The significant Training Condition X Time X Rater Interaction ($F = 4.62$, $df = 3/16$, $p < .05$) can be seen graphically in Figure 2. It is due to two factors, First, the

Insert Figure 2 about here

microcounseling subjects demonstrated a greater pre- to post-training decrease in their utilization of close-ended questions than did the control subjects. Second, rater number one classified, relative to rater number two, a smaller proportion of the control subjects' utterances during the pre-training interviews and a greater proportion of their utterances during the post-training sessions as close-ended questions.

Insert Table 5 and Table 6 about here

TABLE 3
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CLASSIFIED AS CLOSE-ENDED QUESTIONS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.01843	.01843	< 1	
B (Patients)	3	.06901	.02300	< 1	
AB	3	.18196	.06065	2.42	
S/AB	16	.40165	.02510		
Within-Subjects	72				
C (time)	1	.55966	.55966	13.50	< .005
AC	1	.11972	.11972	2.89	
BC	3	.17007	.05669	1.37	
ABC	3	.08255	.02752	< 1	
CS/AB	16	.66339	.04146		
D (Raters)	1	.00683	.00683	2.18	
AD	1	.00013	.00013	< 1	
ED	3	.00452	.00151	< 1	
ABD	3	.00356	.00119	< 1	
DS/AB	16	.05028	.00314		
CD	1	.00526	.00526	3.39	
ACD	1	.00716	.00716	4.62	< .05
ECD	3	.00600	.00200	1.29	
ABCD	3	.00584	.00195	1.26	
CDS/AB	16	.02481	.00155		

TABLE 4
 GROUP MEANS FOR PERCENT OF TOTAL UTTERANCES CLASSIFIED AS
 CLOSE-ENDED QUESTIONS

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	72	71	71	38	39	38	55
2	44	41	42	41	35	38	40
3	52	48	50	32	28	30	40
4	59	58	59	25	28	27	43
Rater \bar{x} Time \bar{x}	57	55	56	34	32	33	44

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	49	49	49	39	36	38	43
2	41	43	42	49	40	45	43
3	62	62	62	41	41	41	52
4	50	54	52	53	45	49	51
Rater \bar{x} Time \bar{x}	50	52	51	45	41	43	47

Across Groups
& Patients

Rater \bar{x} Time \bar{x}	54	53	54	40	37	38	46
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FIGURE 2
TRAINING CONDITION X TIME X RATER INTERACTION FOR
CLOSE-ENDED QUESTIONS CATEGORIZATION

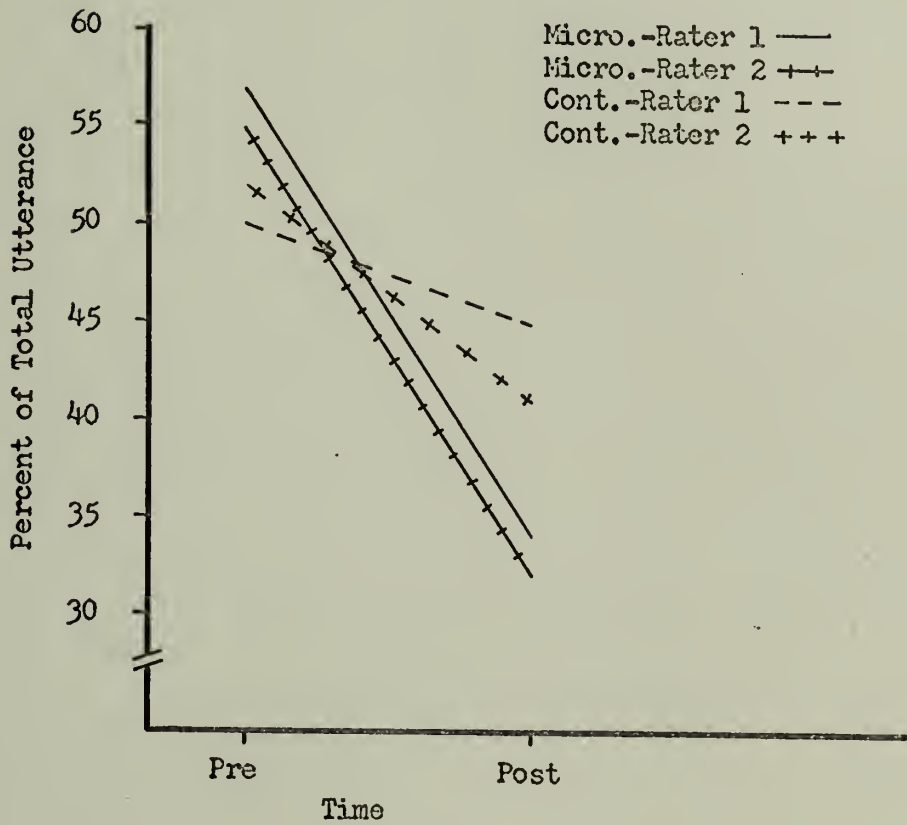


TABLE 5
CELL MEANS FOR PERCENT OF TOTAL UTTERANCES CLASSIFIED AS
OPEN-ENDED QUESTIONS

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	07	04	06	06	06	06	06
2	06	07	06	08	11	09	08
3	07	12	10	12	14	13	12
4	06	10	08	20	18	19	14
Rater \bar{x}	08	07		11	12		
Time \bar{x}			07			12	10

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	08	08	08	10	13	12	10
2	10	07	09	09	16	13	11
3	05	05	05	13	07	10	08
4	12	12	12	13	11	12	12
Rater \bar{x}	09	08		11	12		
Time \bar{x}			08			12	10

Across Groups
& Patients

Rater \bar{x}	08	08		11	12		
Time \bar{x}			08			12	10

TABLE 6
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CLASSIFIED AS OPEN-ENDED QUESTIONS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.00034	.00034	< 1	
B (Patients)	3	.03102	.01034	1.06	
AB	3	.02494	.00831	< 1	
S/AB	16	.15575	.00973		
Within-Subjects	72				
C (Time)	1	.03375	.03375	3.76	< .10
AC	1	.00082	.00082	< 1	
BC	3	.00474	.00158	< 1	
ABC	3	.01696	.00565	< 1	
CS/AB	16	.14348	.00897		
D (Raters)	1	.00060	.00060	< 1	
AD	1	.00107	.00107	< 1	
BD	3	.00099	.00033	< 1	
ABD	3	.00764	.00255	1.76	
DS/AB	16	.02315	.00145		
CD	1	.00004	.00004	< 1	
ACD	.1	.00094	.00094	< 1	
BCD	3	.01102	.00367	2.62	
ABCD	3	.00264	.00088	< 1	
CDS/AB	16	.02241	.00140		

Table 5 shows that the subjects in both the microcounseling and the control groups increased their utilization of open-ended questions from the pre- to the post-training interview situations. However, Table 6 reveals that this trend was only minimally significant ($F = 3.76$, $df = 1/16$, $p < .10$), and was not more pronounced for either of the two groups.

Minimal activity measures. There were three different dependent variables in the present study which pertained to the interviewer's level of activity. Interviewer responses such as repeating the last

 Insert Table 7 and Table 8 about here

word of a patient's utterance, or saying "Tell me more" or "For example" were classified as minimal activity responses. The experimental group was expected to show a greater increase, from the first to the second set of interviews, in the percentage of their responses in this category than the control group. Table 7 shows that the percentage of the interviewers' total responses defined in this manner increased for the microcounseling subjects from 15% in the pre-training sessions to 19% in the post-training interview, while there was no change at all for the control subjects. However, Table 8 shows that this interaction was not significant ($F < 1$, $df = 1/16$).

There were two other dependent measures included in this study which deserve mention here. The analysis of variance for the frequency

TABLE 7
CELL MEANS FOR PERCENT OF TOTAL UTTERANCES CATEGORIZED AS
MINIMAL ACTIVITY RESPONSES

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	17	17	17	30	32	31	24
2	16	17	17	15	14	15	16
3	16	22	19	22	19	20	19
4	07	07	07	10	09	10	08
Rater \bar{x}	14	16		19	18		
Time \bar{x}			15			19	17

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	12	20	16	13	14	13	15
2	05	07	06	05	06	05	06
3	17	20	19	18	19	19	19
4	12	11	12	11	16	13	13
Rater \bar{x}	12	15		12	14		
Time \bar{x}			13			13	13

Across Groups
& Patients

Rater \bar{x}	13	15		15	16		
Time \bar{x}			14			16	15

TABLE 8
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CATEGORIZED AS MINIMAL ACTIVITY RESPONSES

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.03721	.03721	1.07	
B (Patients)	3	.17792	.05931	< 1	
AB	3	.08214	.02738	< 1	
S/AB	16	.55631	.03477		
Within-Subjects	72				
C (Time)	1	.00650	.00650	< 1	
AC	1	.01193	.01193	< 1	
BC	3	.01360	.00453	< 1	
ABC	3	.03024	.01008	< 1	
CS/AB	16	.32404	.02025		
D (Raters)	1	.00496	.00496	4.21	
AD	1	.00271	.00271	2.30	
ED	3	.00211	.00070	< 1	
ABD	3	.00050	.00017	< 1	
DS/AB	16	.01885	.00118		
CD	1	.00175	.00175	1.59	
ACD	1	.00030	.00030	< 1	
BCD	3	.00337	.00112	1.02	
ABCD	3	.00575	.00192	1.75	
CDS/AB	16	.01764	.00110		

Insert Table 9 and Table 10 about here

of the interviewers' utterances (see Table 9) revealed no significant within-subject effects. However, there was a significant Patient Main Effect ($F = 9.20$, $df = 3/16$, $p < .001$) as well as a significant Training Condition X Patient Interaction ($F = 3.38$, $df = 3/16$, $p < .05$). Table 10 shows that the significant Patient Main Effect was due to the extremely low frequency of utterance emitted by control and micro-counseling subjects who interviewed patient number one. The significant Training Condition X Patient interaction is primarily attributable to the fact that microcounseling subjects who interviewed patient number two made approximately twelve more responses than did the control subjects who interviewed this same patient. The last dependent variable reflecting the level of interviewer activity was the duration of interview talk time. It has been predicted that the experimental subjects

Insert Table 11 and Table 12 about here

would exhibit a greater decrease than the controls in the duration of their talk time during the second set of interviews. As Table 11 indicates, the duration of talk time decreased for the microcounseling subjects and increased for the control (pre- 88.75 and post- 79.42 versus pre- 93.92 and post- 100.25). However, this Training Condition X Time interaction (see Table 12) was non-significant ($F = 1$, $df = 1/16$).

TABLE 9
 SUMMARY OF ANALYSIS OF VARIANCE FOR INTERVIEWER
 FREQUENCY OF UTTERANCE DATA

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	20.021	20.021	< 1	
B (Patients)	3	1435.292	478.410	9.20	< .001
AB	3	526.729	175.576	3.38	< .05
S/AB	16	831.986	51.999		
Within-Subjects	24				
C (Time)	1	25.521	25.521	< 1	
AC	1	17.521	17.521	< 1	
BC	3	54.229	18.076	< 1	
ABC	3	56.229	18.743	< 1	
CS/AB	16	618.009	38.626		

TABLE 10
CELL MEANS FOR INTERVIEWER FREQUENCY OF UTTERANCE

<u>EXPERIMENTAL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	10.33	17.00	13.67
2	31.67	37.33	34.50
3	23.00	22.67	22.83
4	30.67	29.33	30.00
Time \bar{x}	23.92	26.58	25.25
<u>CONTROL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	16.33	18.00	17.17
2	23.33	22.33	22.83
3	29.67	26.67	28.17
4	26.00	29.33	27.67
Time \bar{x}	23.83	24.08	23.96
Time \bar{x}	23.88	25.33	24.60

TABLE 11
 CELL MEANS FOR TOTAL DURATION OF INTERVIEWER
 UTTERANCES IN SECONDS

<u>EXPERIMENTAL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	28.33	45.33	36.83
2	90.00	105.67	97.83
3	130.67	65.67	98.17
4	106.00	101.00	103.50
Time \bar{x}	88.75	79.42	84.08
<u>CONTROL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	54.67	65.67	60.17
2	113.33	102.33	107.83
3	115.33	93.66	104.50
4	92.33	139.33	115.83
Time \bar{x}	93.92	100.25	97.08
Time \bar{x}	91.33	89.83	90.58

TABLE 12
 SUMMARY OF ANALYSIS OF VARIANCE FOR TOTAL DURATION OF
 INTERVIEWER UTTERANCES IN SECONDS

SOURCE OF VARIANCE	df	SS	MS	F	P
Between-Subjects	23				
A (Training Cond.)	1	2028.000	2028.000	1.98	
B (Patients)	3	2880.966	960.322	9.40	< .001
AB	3	482.000	160.667	< 1	
S/AB	16	16353.770	1022.111		
Within-Subjects	24				
C (Time)	1	27.000	27.000	< 1	
AC	1	736.333	736.333	< 1	
BC	3	7533.668	2511.223	2.97	
ABC	3	3260.332	1086.777	1.29	
CS/AB	16	13528.410	845.526		

There was a significant Patient Main Effect ($F = 9.40$, $df = 3/16$, $p < .001$). Again this was attributable to patient number one. Subjects interviewing this patient talked for a much shorter duration than subjects interviewing either of the other three patients.

Paraphrases. Table 13 reveals that a greater percentage of the microcounseling subjects' responses were paraphrases in the second

 Insert Table 13 and Table 14 about here

interview than in the first session. The control subjects demonstrated no change. However, Table 14 shows that this Training Condition X Time Interaction was not significant ($F = 1.99$, $df = 1/16$). The Training Condition X Patient Interaction was significant ($F = 3.42$, $df = 3/16$, $p < .05$). Microcounseling subjects who interviewed patient number one used fewer paraphrases than subjects interviewing any of the other patients, while control subjects who interviewed patient number one emitted more paraphrases than subjects who interviewed any of the other patients.

Reflections of feeling. As can be seen from Tables 15 and 16, the experimental subjects showed a significantly greater increase from

 Insert Table 15 and Table 16 about here

their first to second interviews in the percent of their responses classified as reflections of feelings than did the control group

TABLE 13
CELL MEANS FOR PERCENT OF TOTAL UTTERANCES CATEGORIZED AS
PARAPHRASE

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	04	04	04	05	01	03	04
2	09	15	12	13	11	12	12
3	07	04	06	13	16	15	10
4	07	09	08	18	16	17	12
Rater \bar{x} Time \bar{x}	07	08	07	12	11	12	10

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	09	16	13	20	12	16	14
2	12	19	16	09	12	11	13
3	05	05	05	07	06	07	06
4	06	08	07	07	07	07	07
Rater \bar{x} Time \bar{x}	08	12	10	11	09	10	10

Across Groups
& Patients

Rater \bar{x} Time \bar{x}	07	10	09	12	10	11	10
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TABLE 14
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CLASSIFIED AS PARAPHRASE

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.00076	.00076	< 1	
B (Patients)	3	.02881	.00960	1.04	
AB	3	.09454	.03151	3.42	< .05
S/AB	16	.14755	.00922		
Within-Subjects	72				
C (Time)	1	.01021	.01021	1.64	
AC	1	.01238	.01238	1.99	
BC	3	.02258	.00753	1.21	
ABC	3	.01618	.00539	< 1	
CS/AB	16	.09958	.00622		
D (Raters)	1	.00076	.00076	< 1	
AD	1	.00076	.00076	< 1	
BD	3	.00726	.00242	2.99	
ABD	3	.00123	.00041	< 1	
DS/AB	16	.01292	.00081		
CD	1	.00980	.00980	4.30	
ACD	1	.00175	.00175	< 1	
BCD	3	.01130	.00377	1.65	
ABCD	3	.00572	.00191	< 1	
CDS/AB	16	.03655	.00228		

TABLE 15
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CATEGORIZED AS REFLECTION OF FEELING

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.02071	.02071	4.85	< .05
B (Patients)	3	.04161	.01387	3.25	< .05
AB	3	.00672	.00224	< 1	
S/AB	16	.06828	.00427		
Within-Subjects	72				
C (Time)	1	.00586	.00586	4.22	
AC	1	.01680	.01680	12.09	< .005
BC	3	.00794	.00265	1.91	
AEC	3	.00846	.00282	2.03	
CS/AB	16	.02222	.00139		
D (Raters)	1	.00001	.00001	< 1	
AD	1	.00001	.00001	< 1	
BD	3	.00535	.00178	2.87	
ABD	3	.00395	.00395	6.37	< .005
DS/AB	16	.00985	.00062		
CD	1	.00088	.00088	4.63	< .05
ACD	1	.00001	.00001	< 1	
BCD	3	.00322	.00107	5.63	< .01
ABCD	3	.00019	.00006	< 1	
CDS/AB	16	.00298	.00019		

TABLE 16
CELL MEANS FOR PERCENT OF TOTAL UTTERANCES CATEGORIZED AS
REFLECTION OF FEELING

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	00	04	02	00	04	02	02
2	09	05	07	08	10	09	08
3	00	00	00	10	09	10	05
4	05	03	04	11	07	10	07
Rater \bar{x}	04	03		07	08		
Time \bar{x}			03			08	05

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	01	01	01	00	01	01	01
2	09	05	07	05	06	06	06
3	02	02	02	01	02	01	02
4	02	02	02	00	00	00	01
Rater \bar{x}	03	03		02	02		
Time \bar{x}			03			02	

Across Groups
& Patients

Rater \bar{x}	03	03		04	05		
Time \bar{x}			03			05	02

subjects ($F = 12.09$, $df = 1/16$, $p < .005$). This difference was so great that there was also a significant Training Condition Main Effect ($F = 4.85$, $df = 1/16$, $p < .05$). Patient number two's interviewers utilized so many more reflections than subjects who interviewed patient number one that there was a significant Patient Main Effect ($F = 3.25$, $df = 3/16$, $p < .05$). The significant Training Condition X Patient X Rater Interaction ($F = 6.37$, $df = 3/16$, $p < .05$) may be seen graphically

 Insert Figure 3 and Figure 4 about here

in Figure 3. The significant Time X Rater Interaction ($F = 4.63$, $df = 1/16$, $p < .05$) can be seen in Figure 4 which is the graphic representation of the significant Patient X Time X Rater Interaction ($F = 5.63$, $df = 3/16$, $p < .01$).

Summarization. The analysis of variance summarized in Table 17 shows that subjects in both the microcounseling and control groups increased in their use of summarizations from their pre- to their post-

 Insert Table 17 and Table 18 about here

training interviews ($F = 18.84$, $df = 1/16$, $p < .001$). The control subjects demonstrated a greater tendency to utilize summarizations (see Table 18) in both the pre- and post-training interviews. The Training Condition Main Effect was significant ($F = 5.53$, $df = 1/16$, $p < .05$). The Time X Rater Interaction ($F = 8.07$, $df = 1/16$, $p < .025$)

FIGURE 3
TRAINING CONDITION X PATIENT X RATER INTERACTION FOR
REFLECTION OF FEELING DATA

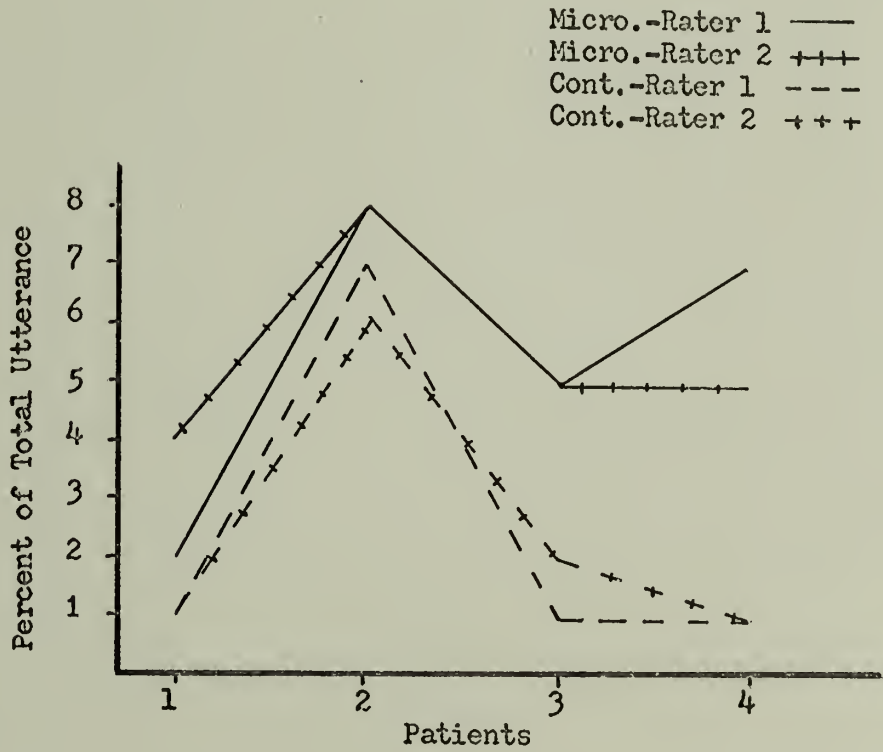


FIGURE 4
PATIENT X TIME X RATER INTERACTION FOR
REFLECTION OF FEELING DATA

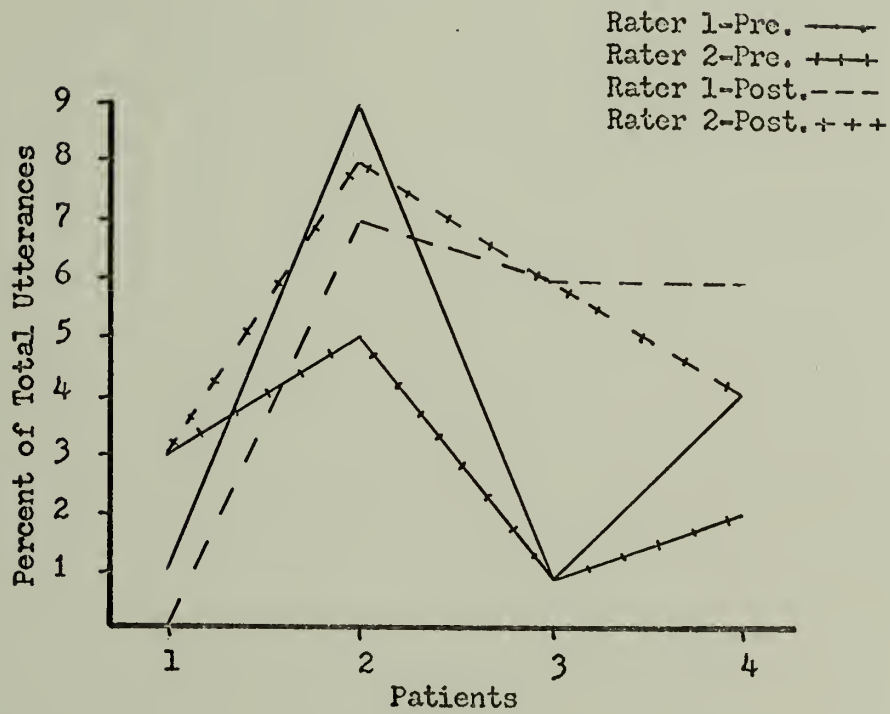


TABLE 17
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CATEGORIZED AS SUMMARIZATIONS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.00293	.00293	5.53	< .05
B (Patients)	3	.00114	.00038	< 1	
AB	3	.00064	.00021	< 1	
S/AB	16	.00853	.00053		
Within-Subjects	72				
C (Time)	1	.01733	.01733	18.84	< .001
AC	1	.00175	.00175	1.90	
BC	3	.00426	.00142	1.54	
ABC	3	.00426	.00142	1.54	
CS/AB	16	.01476	.00092		
D (Raters)	1	.00018	.00018	1.20	
AD	1	.00008	.00008	< 1	
BD	3	.00059	.00020	1.33	
ABD	3	.00026	.00009	< 1	
DS/AB	16	.00247	.00015		
CD	1	.00113	.00113	8.07	< .025
ACD	1	.00030	.00030	2.4	
BCD	3	.00004	.00001	< 1	
AECD	3	.00016	.00005	< 1	
CDS/AB	16	.00223	.00014		

TABLE 18
CELL MEANS FOR PERCENT OF TOTAL UTTERANCES CATEGORIZED AS
SUMMARIZATIONS

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	00	00	00	03	04	03	02
2	00	00	00	03	03	03	02
3	02	01	02	01	01	01	01
4	00	00	00	01	02	02	01
Rater \bar{x}	01	00		02	02		
Time \bar{x}			00			02	01

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	00	00	00	04	07	06	03
2	03	01	02	02	03	03	03
3	00	00	00	02	04	03	02
4	00	00	00	05	06	05	03
Rater \bar{x}	01	00		03	05		
Time \bar{x}			01			04	02
Across Groups & Patients							
Rater \bar{x}	01	00		03	04		02
Time \bar{x}			01			03	

is attributable to the fact that rater number one classified more responses as summarizations in the pre-training interviews, while rater number two counted more responses in that category in the post-training sessions.

"Other" responses. The analysis of variance for the proportion of responses categorized as "other", and summarized in Table 19, revealed only one significant effect. This was the Training Condition X Patient X Time Interaction ($F = 3.44$, $df = 3/16$, $p < .05$). The cell means may

 Insert Table 19 and Table 20 about here

be seen in Table 20.

Summary of interviewer verbalization categorization data. With two of these dependent variables, Attending Behavior and Reflection of Feeling, the microcounseling subjects demonstrated a significantly greater change in the predicted direction from the first to the second interviews than did the control subjects. On six of the other seven measures, Close-Ended Question, Open-Ended Question, Minimal Activity, Duration of Response, Paraphrase, and Summarization, the experimental subjects changed in the predicted direction. However, the magnitude of these changes was not sufficient to obtain significance. Only on the Interviewer Frequency of Response measure did the experimental subjects show no improvement at all. There were no measures on which the control subjects showed a significantly greater pre- to post-training change in the predicted direction than did the microcounseling subjects. Indeed,

TABLE 19
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF TOTAL UTTERANCES
 CATEGORIZED AS "OTHER"

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.01378	.01378	< 1.00	
B (Patients)	3	.03345	.01115	< 1	
AB	3	.01854	.00618	< 1	
S/AB	16	.21987	.01374		
Within-Subjects	72				
C (Time)	1	.02905	.02905	3.64	
AC	1	.00005	.00005	< 1	
BC	3	.04514	.01505	1.88	
ABC	3	.08245	.02748	3.44	< .05
CS/AB	16	.12783	.00799		
D (Raters)	1	.00023	.00023	< 1	
AD	1	.00008	.00008	< 1	
BD	3	.00160	.00053	< 1	
ABD	3	.00427	.00142	1.95	
DS/AB	16	.01173	.00073		
CD	1	.00315	.00315	3.54	
ACD	1	.00013	.00013	< 1	
BCD	3	.00344	.00115	1.29	
ABCD	3	.00168	.00056	< 1	
CS/AB	16	.01423	.00089		

TABLE 20
CELL MEANS FOR PERCENT OF TOTAL UTTERANCES
CATEGORIZED AS "OTHER"

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	00	00	00	19	16	17	09
2	17	15	16	11	15	13	15
3	14	16	15	11	13	12	13
4	16	14	15	16	19	18	16
Rater \bar{x}	12	11		14	16		
Time \bar{x}			12			15	13

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	13	14	14	14	17	16	14
2	19	17	18	19	18	19	18
3	09	08	09	21	23	22	15
4	17	14	16	12	14	13	14
Rater \bar{x}	14	13		17	18		
Time \bar{x}			14			18	16

Across Groups
& Patients

Rater \bar{x}	13	12		15	17		
Time \bar{x}			13			16	14

the control subjects demonstrated no change at all in the predicted direction on the Minimal Activity, Paraphrase, Reflection of Feeling, Attending Behavior, Interviewer Frequency of Utterance and Interviewer Duration of Utterance measures. Table 21 shows that when these nine

Insert Table 21 about here

dependent variables were entered in a two x two contingency table with Training Condition being one factor and Improvement and Non-improvement being the other, the probability of such a distribution was significant ($p < .025$). Therefore, when these nine dependent variables are considered together, the microcounseling subjects demonstrated significantly greater acquisition and generalization of the basic interviewer skills than did the control subjects.

Patient Validity Measures

Following the conclusion of each pre- and each post-training interview, the patients completed three questionnaires designed to assess the nature of the interviewer-interviewee relationship. The data from each of these instruments was analyzed separately with an analysis of variance for a mixed design with two between- and one within-subject variables. Training Conditions and Patients were the between-subject variables, while Time was the within-subject dimension. For each of these questionnaires, it was predicted that the microcounseling subjects would demonstrate greater improvement in the ratings they

TABLE 21
 TWO X TWO CONTINGENCY TABLE FOR INTERVIEWER
 VERBALIZATION CATEGORIZATION DATA*

		IMPROVEMENT	NO IMPROVEMENT
EXPERIMENTAL		Attending Behavior Close-ended Questions Open-ended Questions Minimal Activity Responses Interviewer Duration of Utter- ance Paraphrase Reflection of Feeling Summarization	Interviewer Frequency of Utter- ance
	CONTROL	Close-ended Questions Open-ended Question Summarization	Attending Behavior Minimal Activity Response Paraphrase Interviewer Frequency of Utter- ance Interviewer Duration of Utter- ance Reflection of Feeling

*significant at .025 level

received than would the control subjects.

The Therapist-Patient Relationship Questionnaire. The greater a subject's score on the Therapist-Patient Relationship Questionnaire, the greater were the patient's perceptions of the interviewer's qualities

 Insert Table 22 and Table 23 about here

of warmth, empathy and genuineness. Although Table 22 shows that both the microcounseling and the control subjects received higher scores on this instrument following training, the Time Main Effect in Table 23 was non-significant ($F = 3.56$, $df = 1/16$). Only the Patient Main Effect attained significance ($F = 8.78$, $df = 3/16$, $p < .005$). This was due to the fact that patients number one and four consistently rated subjects higher than patients number two and three.

Self-Disclosure Questionnaire. The Self-Disclosure Questionnaire (Jourard, 1964) was composed of a list of topics which might be discussed between two people. The patients were asked to check any topic which they would feel comfortable talking about with the subject who had just interviewed them. Table 24 shows that in both the microcounseling

 Insert Table 24 and Table 25 about here

and control groups received higher scores on this instrument following training. The Time Main Effect, shown in Table 25, was significant ($F = 25.45$, $df = 1/16$, $p < .001$). Again there was a significant Patient

TABLE 22

CELL MEANS FOR THERAPIST--PATIENT RELATIONSHIP QUESTIONNAIRE SCORES

<u>EXPERIMENTAL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	22.67	20.00	21.33
2	13.67	15.67	14.67
3	11.67	19.33	15.50
4	18.33	20.00	19.17
Time \bar{x}	16.58	18.75	17.66
<u>CONTROL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	21.33	20.00	20.66
2	15.67	15.67	15.67
3	8.00	14.00	15.50
4	16.00	20.67	19.17
Time \bar{x}	15.25	17.58	16.42
Time \bar{x}	15.92	18.17	17.04

TABLE 23
 SUMMARY OF ANALYSIS OF VARIANCE FOR THERAPIST-PATIENT
 RELATIONSHIP QUESTIONNAIRE

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	18.750	18.750	1.13	
B (Patients)	3	437.750	145.917	8.78	< .005
AB	3	48.417	16.139	< 1	
S/AB	16	265.998	16.625		
Within-Subjects	24				
C (Time)	1	60.750	60.750	3.56	
AC	1	.083	.083	< 1	
BC	3	124.417	41.472	2.43	
ABC	3	13.084	4.361	< 1	
CS/AB	16	272.658	17.041		

TABLE 24
CELL MEANS FOR SELF-DISCLOSURE QUESTIONNAIRE SCORES

<u>EXPERIMENTAL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	10.33	14.67	12.50
2	9.67	7.67	8.67
3	10.33	16.33	13.33
4	19.00	19.00	19.00
Time \bar{x}	12.33	14.42	13.38
<u>CONTROL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	11.67	15.00	13.33
2	9.33	10.33	9.83
3	10.33	17.00	13.67
4	16.67	19.00	17.83
Time \bar{x}	12.00	15.33	13.67
Time \bar{x}	12.17	14.88	13.52

TABLE 25

SUMMARY OF ANALYSIS OF VARIANCE FOR SELF-DISCLOSURE QUESTIONNAIRE

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	1.021	1.021	< 1	
B (Patients)	3	510.896	170.299	68.12	< .001
AB	3	9.562	3.187	1.27	
S/AB	16	40.000	2.500		
Within-Subjects	24				
C (Time)	1	88.021	88.021	25.45	< .001
AC	1	4.687	4.787	1.38	
BC	3	81.229	27.076	7.83	< .005
ABC	3	7.292	2.410	< 1	
CS/AB	16	55.327	3.458		

Main Effect ($F = 68.12$, $df = 3/16$, $p < .001$). Table 24 reveals that patient number two consistently checked very few topics, while patient number four expressed a willingness to discuss nearly every item. The Patient X Time Interaction was also significant ($F = 7.83$, $df = 3/16$, $p < .005$). Patient number two indicated a greater reluctance to discuss topics with her interviewers following the post-training interviews, than she had expressed after the pre-training sessions. The opposite was true for all the other patients.

Counselor Effectiveness Scale. This scale was designed to assess the favorability of the patients' opinions of the person by whom she had just been interviewed. Table 26 shows that the patients expressed a more favorable opinion toward subjects in both the microcounseling and control groups following interview training. The Time Main Effect (see Table 27) was significant ($F = 8.31$, $df = 1/16$, $p < .025$). Patients number one and number three consistently gave subjects higher ratings on this scale than did patients number two and number four. The Patient Main Effect was also significant ($F = 6.23$, $df = 1/16$, $p < .01$).

Insert Table 26 and Table 27 about here

The frequency and duration of patient utterances. Within certain limits, the more effective an interviewer, the greater the amount of talking done by the patient. Therefore it had been predicted that when the patients were interviewed by microcounseling subjects following training, they would talk more frequently and for a longer duration than

TABLE 26

CELL MEANS FOR COUNSELOR EFFECTIVENESS SCALE SCORES

<u>EXPERIMENTAL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	145.00	152.00	148.50
2	138.33	134.33	136.33
3	155.00	164.00	159.50
4	127.33	142.33	134.83
Time \bar{x}	141.47	148.17	144.79
<u>CONTROL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	147.00	149.67	148.33
2	135.33	139.67	137.50
3	129.33	171.67	150.50
4	122.67	145.33	134.00
Time \bar{x}	133.58	151.58	142.58
Time $\bar{\bar{x}}$	137.50	149.88	143.69

TABLE 27

SUMMARY OF ANALYSIS OF VARIANCE FOR COUNSELOR EFFECTIVENESS SCALE

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	58.521	58.521	< 1	
B (Patients)	3	3385.563	1128.521	6.23	< .01
AB	3	190.729	63.576	< 1	
S/AB	16	2896.931	181.058		
Within-Subjects	24				
C (Time)	1	1837.688	1836.688	8.31	< .025
AC	1	379.687	379.687	1.72	
BC	3	1272.895	424.298	1.92	
ABC	3	563.892	187.964	< 1	
CS/AB	16	3534.295	220.893		

Insert Table 28, Table 29, Table 30 and Table 31 about here

when interviewed by control subjects. Analysis of variance for the frequency of patient utterance and the duration of patient utterance revealed no significant effects (see Table 28 and Table 30). The cell means may be seen in Table 29 and Table 31.

Summary of patient validity measures. The patients rated subjects, regardless of their training condition, higher following the post-training interviews than they had after the pre-training sessions on the Self-Disclosure Questionnaire and the Counselor Effectiveness Scale. The other three measures revealed no significant time effects. On the basis of the instruments used in this study, there were no indications that the patients felt any more positively toward the micro-counseling subjects following training than toward the control subjects.

Objective Rater Validity Measures

Novice interviewers who have acquired positive, facilitative interviewing skills should make fewer errors than interviewers who do not possess these skills. If microcounseling was really more effective than traditional methods for teaching interviewing, the microcounseling subjects should have made fewer interviewer errors during the post-training sessions than the control subjects. They should have also demonstrated a greater increase in statements judged as FAIR or GOOD from the pre- to the post-training interviews than should the control subjects. In order to test these hypotheses, the raters classified

TABLE 28

SUMMARY OF ANALYSIS OF VARIANCE FOR FREQUENCY OF PATIENT UTTERANCE

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	481.333	481.333	1.68	
B (Patients)	3	766.417	255.472	< 1	
AB	3	679.500	226.500	< 1	
S/AB	16	4571.957	285.747		
Within-Subjects	24				
C (Time)	1	70.083	70.083	< 1	
AC	1	1.333	1.333	< 1	
BC	3	57.417	57.417	< 1	
ABC	3	51.166	17.055	< 1	
CS/AB	16	1293.912	80.869		

TABLE 29
CELL MEANS FOR FREQUENCY OF PATIENT UTTERANCE

<u>EXPERIMENTAL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	28.00	31.67	29.83
2	45.67	44.67	45.17
3	42.00	35.33	38.67
4	32.66	28.33	30.50
Time \bar{x}	37.08	35.00	36.04
<u>CONTROL</u>			
<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	28.33	25.66	27.00
2	27.67	24.00	25.83
3	39.67	35.00	37.33
4	28.67	28.67	28.67
Time \bar{x}	31.08	28.33	29.71
Time \bar{x}	34.08	31.67	32.88

TABLE 30
 SUMMARY OF ANALYSIS OF VARIANCE FOR TOTAL DURATION OF
 PATIENT UTTERANCES IN SECONDS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	1963.521	1963.521	< 1	
B (Patients)	3	60617.060	20205.690	2.70	
AB	3	4772.855	1590.952	< 1	
S/AB	16	119620.200	7476.262		
Within-Subjects	24				
C (Time)	1	6792.520	6792.520	1.49	
AC	1	3622.684	3622.684	< 1	
BC	3	19064.170	6354.723	1.39	
ABC	3	2235.773	745.258	< 1	
CS/AB	16	73010.190	4563.137		

TABLE 31

CELL MEANS FOR TOTAL DURATION OF PATIENT UTTERANCES IN SECONDS

EXPERIMENTAL

<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	551.33	542.00	546.67
2	377.67	480.00	428.83
3	474.33	500.00	457.17
4	465.33	451.33	458.33
Time \bar{x}	452.17	493.33	472.75

CONTROL

<u>Patients</u>	<u>Pre</u>	<u>Post</u>	<u>Across Time</u>
1	538.67	527.33	533.00
2	452.33	488.33	470.33
3	460.00	489.00	474.50
4	478.33	450.33	464.33
Time \bar{x}	482.33	488.75	485.54
Time \bar{x}	467.25	491.04	479.15

each interviewer utterance during the pre- and the post-training interviews into one of the three categories in the Therapist Error Check List, GOOD, FAIR, or POOR. The frequencies in each category by each rater for each interview were tabulated and converted into percent of total utterance figures. The data for each of these categories was analyzed separately using an analysis of variance for a mixed design with two between- and two within-subject variables. The between-subject variables were Training Condition and Patient, while the within-subject factors were Time and Raters.

GOOD statements. Table 32 shows the summary of the analysis of variance for the interviewer statements classified as GOOD. As predicted, there was a significant Training Condition X Time Interaction

 Insert Table 32 and Table 33 about here

($F = 5.09$, $df = 1/16$, $p < .05$). From Table 33 it can be seen that the microcounseling subjects more than doubled the percentage of their GOOD statements from their pre- to their post-training sessions, while the control subjects demonstrated no change at all. The magnitude of the microcounseling interviewers' post-training improvement was so great as to help create a significant Time Main Effect ($F = 5.81$, $df = 1/16$, $p < .05$). In addition there was also a significant Patient X Time Interaction ($F = 5.77$, $df = 3/16$, $p < .01$) as well as a significant Patient

 Insert Figure 5 about here

TABLE 32

SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF INTERVIEWER RESPONSES

CLASSIFIED AS GOOD STATEMENTS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.00007	.00007	< 1	
B (Patients)	3	.10817	.03606	1.96	
AB	3	.08596	.02865	1.56	
S/AB	16	.29493	.01843		
Within-Subjects	72				
C (Time)	1	.03604	.03604	5.81	< .05
AC	1	.03154	.03154	5.09	< .05
BC	3	.03577	.03577	5.77	< .01
ABC	3	.02832	.00944	1.52	
CS/AB	16	.09923	.00620		
D (Raters)	1	.00107	.00107	< 1	
AD	1	.00027	.00027	< 1	
BD	3	.00156	.00052	< 1	
ABD	3	.00248	.00083	< 1	
DS/AB	16	.01933	.00121		
CD	1	.00120	.00120	1.26	
ACD	1	.00304	.00304	3.20	
BCD	3	.01472	.00491	5.17	< .025
ABCD	3	.00087	.00029	< 1	
CDS/AB	16	.01517	.00095		

TABLE 33

CELL MEANS FOR PERCENT OF INTERVIEWER RESPONSES CLASSIFIED AS

GOOD STATEMENTSEXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	00	00	00	06	05	05	03
2	05	04	04	10	11	11	08
3	03	07	05	18	11	14	10
4	13	16	14	24	23	23	19
Rater \bar{x} Time \bar{x}	05	07	06	14	12	13	10

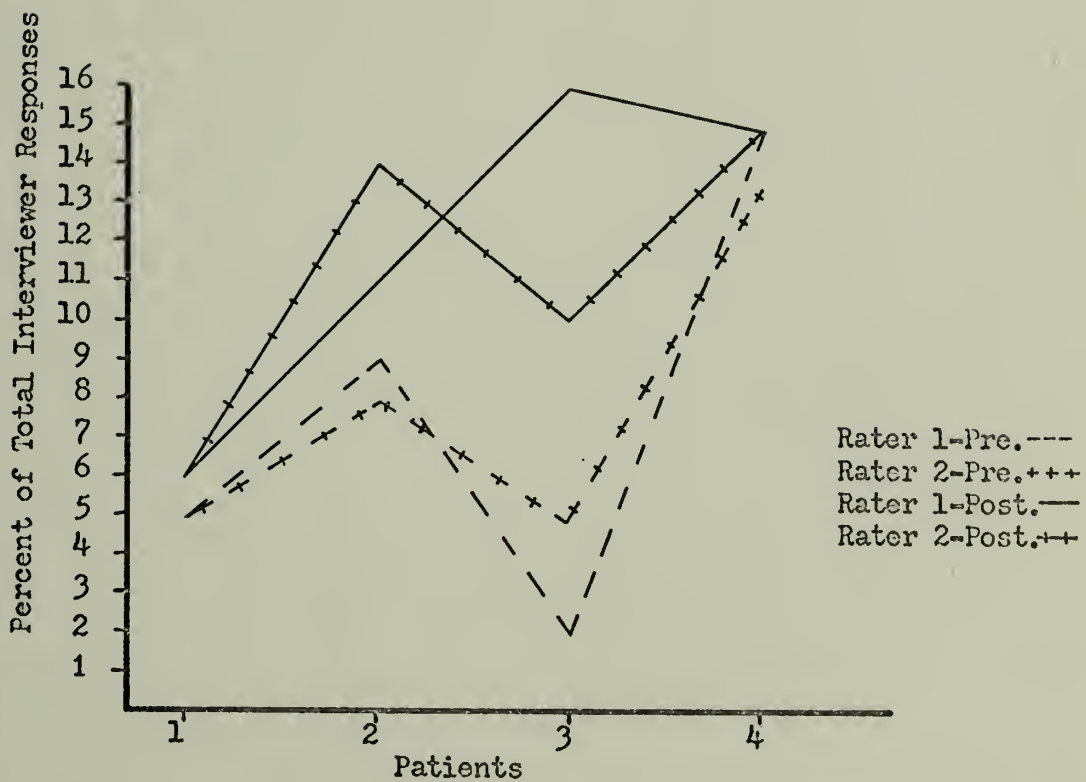
CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	10	10	10	07	07	07	09
2	14	11	12	12	17	15	13
3	00	02	01	14	09	12	07
4	17	12	15	07	06	06	11
Rater \bar{x} Time \bar{x}	10	09	10	10	10	10	10

Across Groups
& Patients

Rater \bar{x} Time \bar{x}	08	08	08	12	11	12	10
-----------------------------------	----	----	----	----	----	----	----

FIGURE 5
PATIENT X TIME X RATER INTERACTION FOR
PERCENT OF INTERVIEWER RESPONSES
CLASSIFIED AS GOOD STATEMENTS



X Time X Rater Interaction ($F = 5.17$, $df = 3/16$, $p < .025$). Both of these interactions may be seen graphically in Figure 5.

FAIR statements. The analysis of variance summary in Table 34 reveals that subjects in both the microcounseling and the control groups increased significantly in the proportion of their statements classified

 Insert Table 34 and Table 35 about here

as FAIR from the first to the second interviews. Although experimental subjects demonstrated a greater increase than did the control subjects (see Table 35), this difference was not large enough for the Training Condition X Time Interaction to be significant ($F = 2.49$, $df = 1/16$). The subjects, whether microcounseling or control, who interviewed patient number one made fewer statements which were rated as FAIR than subjects who interviewed any of the other three patients. This caused the Patient Main Effect to be significant ($F = 5.16$, $df = 3/16$, $p < .025$).

POOR statements. The analysis of variance summary in Table 36 of the interviewers' statements which were judged as POOR revealed that the microcounseling subjects exhibited a significantly greater decrease in this category than did subjects who received traditional interviewing instruction ($F = 4.59$, $df = 1/16$, $p < .05$). As can be seen in Table 37, both groups showed a pre- to post-training decrease in POOR statements

 Insert Table 36 and Table 37 about here

TABLE 34
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT
 OF INTERVIEWER UTTERANCES CATEGORIZED AS
FAIR STATEMENTS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.05133	.05133	2.32	
B (Patients)	3	.34145	.11382	5.15	<.025
AB	3	.02815	.00954	< 1	
S/AB	16	.35296	.02206		
Within-Subjects	72				
C (Time)	1	.09375	.09375	4.80	<.05
AC	1	.04861	.04861	2.49	
BC	3	.04929	.01643	< 1	
ABC	3	.01009	.00336	< 1	
CS/AB	16	.31221	.01951		
D (Raters)	1	.00027	.00027	< 1	
AD	1	.00027	.00027	< 1	
BD	3	.01057	.00352	1.23	
ABD	3	.00183	.00061	< 1	
DS/AB	16	.04572	.00286		
CD	1	.00004	.00004	< 1	
ACD	1	.00260	.00260	< 1	
BCD	3	.00348	.00116	< 1	
ABCD	3	.00762	.00254	< 1	
CDS/AB	16	.05810	.00363		

TABLE 35
CELL MEANS FOR PERCENT OF INTERVIEWER RESPONSES CLASSIFIED AS
FAIR STATEMENTS

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	11	14	13	31	23	27	20
2	23	26	24	38	41	40	32
3	35	38	37	43	43	43	40
4	36	31	33	41	40	40	37
Rater \bar{x}	26	27		38	37		
Time \bar{x}			27			37	32

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	27	23	25	33	33	33	30
2	37	36	36	39	43	41	39
3	37	40	39	40	43	41	40
4	43	43	43	36	35	35	39
Rater \bar{x}	36	36		37	38		
Time \bar{x}			36			38	37

Across Groups
& Patients

Rater \bar{x}	31	31		37	38		
Time \bar{x}			31			37	34

TABLE 36

SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF INTERVIEWER RESPONSES
CLASSIFIED AS POOR STATEMENTS

SOURCE OF VARIANCE	df	SS	MS	F	P
Between-Subjects	23				
A (Training Cond.)	1	.05462	.05462	1.04	
B (Patients)	3	.69057	.23019	4.40	< .025
AB	3	.19799	.06600	1.26	
S/AB	16	.83653	.05228		
Within-Subjects	72				
C (Time)	1	.24502	.24502	7.07	< .025
AC	1	.15925	.15925	4.59	< .05
BC	3	.08245	.02748	< 1	
ABC	3	.06730	.02243	< 1	
CS/AB	16	.55493	.03468		
D (Raters)	1	.00001	.00001	< 1	
AD	1	.00005	.00005	< 1	
BD	3	.01379	.00460	1.21	
ABD	3	.00273	.00091	< 1	
DS/AB	16	.06067	.00379		
CD	1	.00114	.00114	< 1	
ACD	1	.01576	.01576	3.20	
BCD	3	.02207	.02207	4.49	< .025
ABCD	3	.00633	.00211	< 1	
CDS/AB	16	.07875	.00492		

TABLE 37
CELL MEANS FOR PERCENT OF INTERVIEWER RESPONSE CLASSIFIED AS
POOR STATEMENTS

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	89	86	87	63	72	68	78
2	74	69	72	52	47	50	61
3	62	55	59	39	47	43	51
4	52	54	53	36	37	37	45
Rater \bar{x}	69	66		48	51		
Time \bar{x}			68			49	58

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	63	67	65	62	59	61	63
2	50	53	51	49	40	45	48
3	63	57	60	46	48	47	54
4	40	45	42	57	59	58	50
Rater \bar{x}	54	55		54	52		
Time \bar{x}			55			53	54

Across Groups
& Patients

Rater \bar{x}	61	61		51	51		
Time \bar{x}			61			51	56

so that the Time Main Effect was significant ($F = 7.07$, $df = 1/16$, $p < .025$). Subjects who interviewed patient number one made more POOR statements than subjects who interviewed any of the other patients causing the PatientMain Effect to be significant ($F = 4.40$, $df = 3/16$, $p < .025$). The Patient X Time X Rater Interaction was also significant

 Insert Figure 6 about here

($F = 4.49$, $df = 3/16$, $p < .025$). This interaction may be seen graphically in Figure 6.

Distribution of errors. Any statement which the raters judged to be either FAIR or POOR was classified as an Error of Focus, Error of Faulty Role Definition, Error of Facilitation, or Other Error. In an attempt to ascertain whether there was a shift in the types of errors the subjects made after training, the frequencies in each of the categories were tabulated for each rater for each interview and converted to percent of total error figures. The data for each of these categories was analyzed separately using an analysis of variance for a mixed design with two between- and two within-subject variables.

 Insert Table 38 and Table 39 about here

The summary of the analysis of variance for the data in the Errors of Facilitation category may be seen in Table 38, while the cell means are presented in Table 39. There was no shift in the percentage of

FIGURE 6
 PATIENT X TIME X RATER INTERACTION FOR
 PERCENT OF INTERVIEWER RESPONSES
 CLASSIFIED AS POOR STATEMENTS

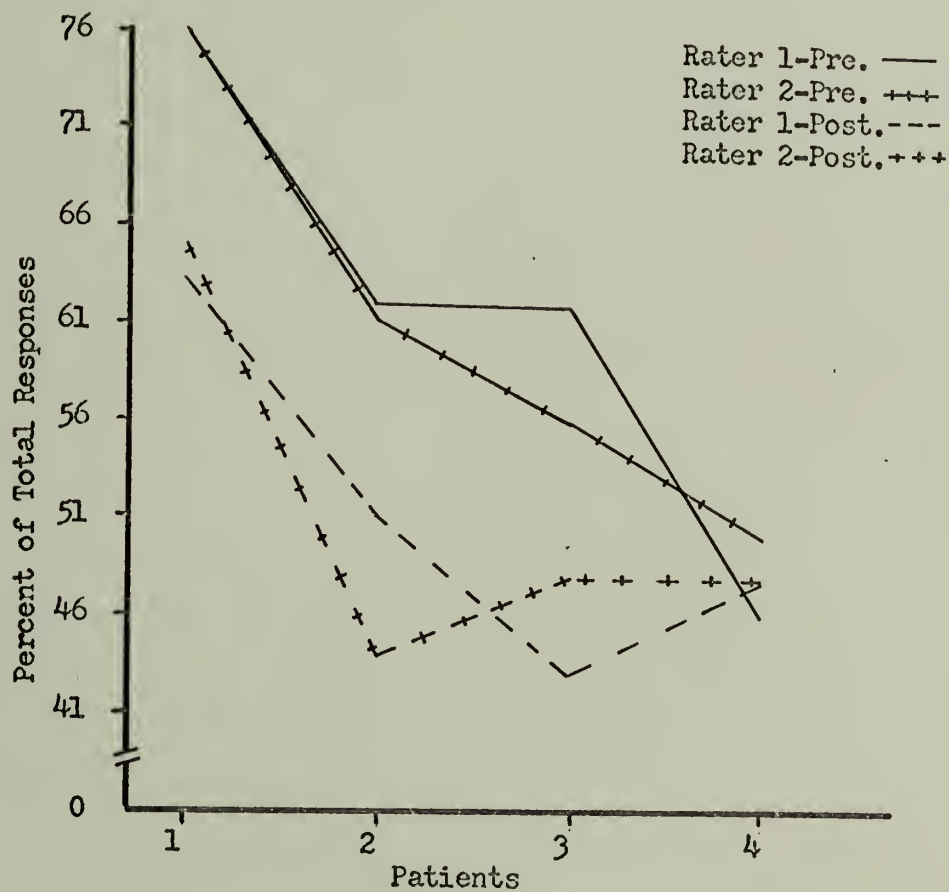


TABLE 38
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF INTERVIEWER ERRORS
 CATEGORIZED AS ERRORS OF FACILITATION

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	.1	.00200	.00200	< 1	
B (Patients)	3	.34117	.11372	9.67	< .001
AB	3	.02974	.00991	< 1	
S/AB	16	.18820	.01176		
Within-Subjects	72				
C (Time)	1	.00770	.00770	< 1	
AC	1	.00070	.00070	< 1	
BC	3	.01255	.00418	< 1	
ABC	3	.00309	.00103	< 1	
CS/AB	16	.26389	.01649		
D (Raters)	1	.00570	.00570	2.04	
AD	1	.00020	.00020	< 1	
BD	3	.00440	.00147	< 1	
ABD	3	.01647	.00549	1.96	
DS/AB	16	.04477	.00280		
CD	1	.00120	.00120	< 1	
ACD	1	.02600	.02600	6.74	< .025
BCD	3	.00752	.00251	< 1	
ABCD	3	.00942	.00314	< 1	
CDS/AB	16	.06180	.00386		

TABLE 39
CELL MEANS FOR PERCENT OF INTERVIEWER ERRORS CATEGORIZED AS
ERRORS OF FACILITATION

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	38	34	36	35	34	35	35
2	53	52	53	55	45	50	51
3	40	52	46	48	44	46	46
4	52	56	54	53	46	50	52
Rater \bar{x}	46	99		47	42		
Time \bar{x}			48			45	46

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	43	37	40	39	37	38	39
2	57	58	58	52	55	53	55
3	48	41	44	48	49	48	46
4	52	46	49	46	45	45	47
Rater \bar{x}	50	45		46	47		
Time \bar{x}			48			46	47

Across Groups
& Patients

Rater \bar{x}	48	47		47	44		
Time \bar{x}			48			46	46

errors in this category over time for either group of subjects. However, there was a significant Patients Main Effect ($F = 9.67$, $df = 3/16$, $p < .001$). Subjects who interviewed patient number one made fewer errors of facilitation than those who interviewed any of the other patients. The significant Training Condition X Time X Rater Interaction ($F = 6.74$, $df = 1/16$, $p < .025$) may be seen graphically in

 Insert Figure 7 about here

Figure 7.

There was also no shift over time in the percent of the subjects errors falling in the Errors of Focus category. However, as Table 40

 Insert Table 40 and Table 41 about here

shows, there was again a significant Patient Main Effect ($F = 8.44$, $df = 3/16$, $p < .005$). A greater percentage of the errors made by subjects who interviewed patient number one were errors of focus (see Table 41) than was true for subjects who interviewed any of the other patients. The Training Condition X Time X Rater Interaction was significant ($F = 4.55$, $df = 1/16$, $p < .05$) and may be seen graphically

 Insert Figure 8 about here

in Figure 8.

FIGURE 7
 TRAINING CONDITION X TIME X RATER INTERACTION FOR
 PERCENT OF INTERVIEWER ERRORS CATEGORIZED AS
 ERRORS OF FACILITATION

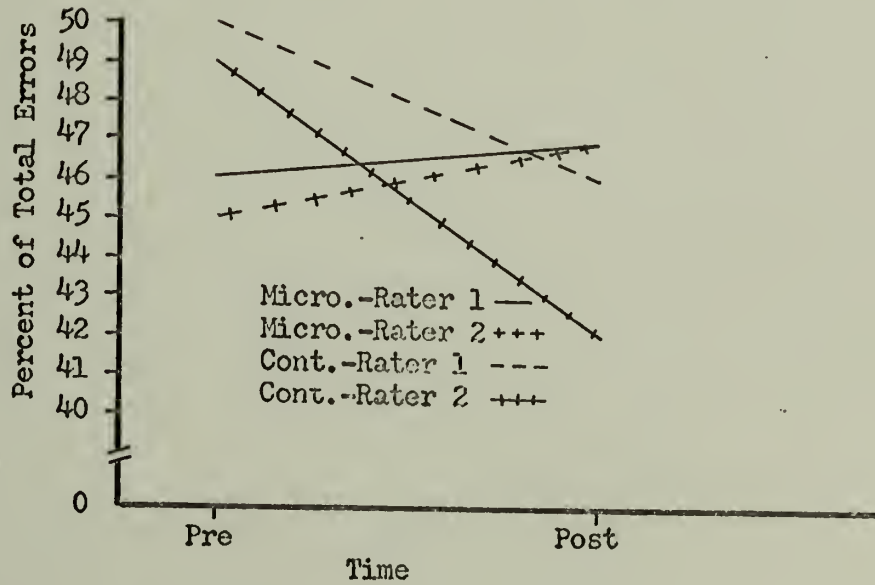


TABLE 40
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF INTERVIEWER ERRORS
 CATEGORIZED AS ERRORS OF FOCUS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.00023	.00023	< 1	
B (Patients)	3	.37458	.12486	8.44	< .005
AB	3	.02404	.00801	< 1	
S/AB	16	.23666	.01479		
Within-Subjects	72				
C (Time)	1	.00650	.00650	< 1	
AC	1	.00650	.00650	< 1	
BC	3	.00503	.00503	< 1	
ABC	3	.01680	.00560	< 1	
CS/AB	16	.33883	.02118		
D (Raters)	1	.00315	.00315	1.41	
AD	1	.00158	.00158	< 1	
BD	3	.01072	.00357	1.60	
ABD	3	.01265	.00422	1.89	
DS/AB	16	.03566	.00223		
CD	1	.00000	.00000	< 1	
ACD	1	.02313	.02313	4.55	< .05
BCD	3	.00534	.00178	< 1	
ABCD	3	.00358	.00119	< 1	
CDS/AB	16	.08123	.00508		

TABLE 41
CELL MEANS FOR PERCENT OF INTERVIEWER ERRORS CATEGORIZED AS
ERRORS OF FOCUS

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	59	65	62	56	61	59	60
2	41	38	39	39	43	41	40
3	51	41	46	46	44	45	45
4	46	41	43	43	50	46	45
Rater \bar{x}	49	46		46	49		
Time \bar{x}			48			48	48

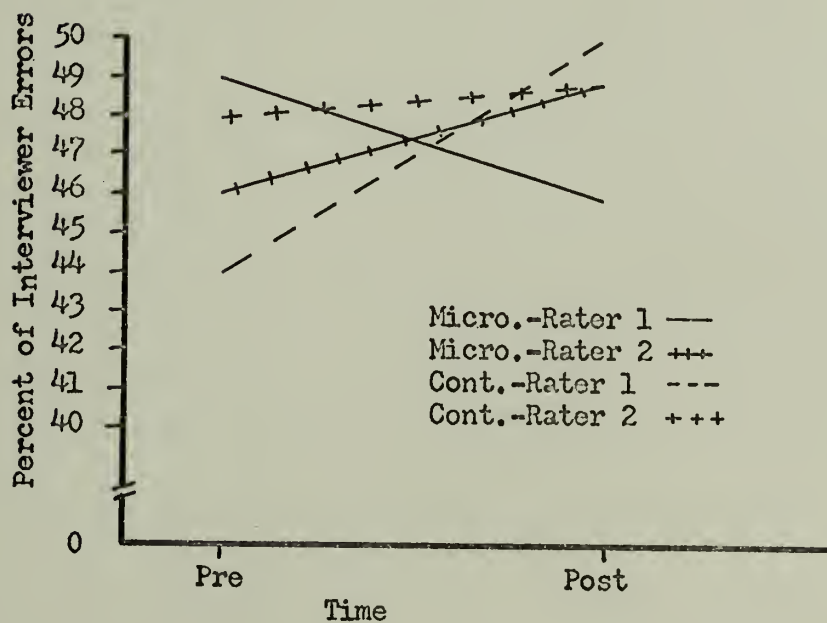
CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	48	54	51	61	59	60	55
2	39	41	40	44	39	41	41
3	45	49	47	47	48	47	47
4	43	51	47	50	50	50	48
Rater \bar{x}	44	49		50	49		
Time \bar{x}			46			50	48

Across Groups
& Patients

Rater \bar{x}	46	48		48	49		
Time \bar{x}			47			49	48

FIGURE 8
 TRAINING CONDITION X TIME X RATER INTERACTION FOR
 PERCENT OF INTERVIEWER ERRORS CATEGORIZED AS
 ERRORS OF FOCUS



The analysis of variance for Faulty Role Definition Errors revealed no significant sources of variance. The only significant source of

Insert Table 42, Table 43, Table 44 and Table 45 about here

variance for the Other Error data was the Time X Rater Interaction ($F = 7.58$, $df = 1/16$, $p < .025$). The analysis of variance summaries and cell means for these categories are presented in Tables 42 - 45.

Summary. The analysis of the Therapist Error Check List data revealed that subjects in the microcounseling group decreased the percentage of their POOR statements and increased the percentage of their GOOD statements significantly more than subjects in the control group from the pre- to the post-training interviews. The experimental group also demonstrated a greater increase in FAIR statements, but this was not significant. Although both groups decreased their number of error statements following training, there was no shift in the types of errors from the pre- to the post-training sessions.

Relationship ratings. Truax and Carkhuff (1967) have cited numerous studies demonstrating that therapy performed by warm, empathic and genuine therapists was more successful than that done by persons who did not possess these qualities. Carkhuff (1968) presented rating scales for these three dimensions plus two others, concreteness and confrontation. It was hypothesized that after training the subjects would increase their ability to be warm, empathic, genuine, concrete, and confrontative.

TABLE 42

SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF INTERVIEWER ERRORS
 CATEGORIZED AS FAULTY ROLE DEFINITION

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.01084	.01084	4.44	
B (Patients)	3	.00928	.00309	1.27	
AB	3	.00788	.00263	1.08	
S/AB	16	.03900	.00244		
Within-Subjects	72				
C (Time)	1	.00034	.00034	< 1	
AC	1	.00735	.00735	3.22	
BC	3	.00131	.00044	< 1	
ABC	3	.01048	.00349	1.53	
CS/AB	16	.03647	.00228		
D (Raters)	1	.00167	.00167	2.14	
AD	1	.00020	.00020	< 1	
BD	3	.00210	.00070	< 1	
ABD	3	.00228	.00076	< 1	
DS/AB	16	.01250	.00078		
CD	1	.00010	.00010	< 1	
ACD	1	.00107	.00107	< 1	
BCD	3	.00158	.00053	< 1	
ABCD	3	.00643	.00214	< 1	
CDS/AB	16	.00936	.00312		

TABLE 43
CELL MEANS FOR PERCENT OF INTERVIEWER ERRORS CATEGORIZED AS
FAULTY ROLE DEFINITION

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	00	01	01	00	01	06	03
2	04	10	07	06	07	06	07
3	06	06	06	07	08	07	07
4	02	02	02	04	05	05	03
Rater \bar{x}	03	05		06	06		
Time \bar{x}			04			06	05

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	05	04	05	00	03	02	03
2	01	01	01	02	04	03	02
3	02	08	05	03	02	03	04
4	04	02	03	01	02	02	02
Rater \bar{x}	03	04		01	03		
Time \bar{x}			04			02	03

Across Groups
& Patients

Rater \bar{x}	03	04		04	04		
Time \bar{x}			04			04	04

TABLE 44
 SUMMARY OF ANALYSIS OF VARIANCE FOR PERCENT OF INTERVIEWER ERRORS
 CATEGORIZED AS "OTHER" ERRORS

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.00143	.00143	< 1	
B (Patients)	3	.00122	.00041	< 1	
AB	3	.00105	.00035	< 1	
S/AB	16	.01132	.00707		
Within-Subjects	72				
C (Time)	1	.00008	.00008	< 1	
AC	1	.00030	.00030	< 1	
BC	3	.00498	.00166	1.37	
ABC	3	.00361	.00120	< 1	
CS/AB	16	.01935	.00121		
D (Raters)	1	.00065	.00065	< 1	
AD	1	.00143	.00143	1.96	
BD	3	.00026	.00009	< 1	
AED	3	.00330	.00110	1.51	
DS/AB	16	.01168	.00073		
CD	1	.00250	.00250	7.58	< .025
ACD	1	.00128	.00128	3.88	
ECD	3	.00241	.00080	2.42	
ABCD	3	.00119	.00040	1.21	
CDS/AB	16	.00525	.00033		

TABLE 45
CELL MEANS FOR PERCENT OF INTERVIEWER ERRORS CATEGORIZED AS
"OTHER" ERRORS

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	04	00	02	01	01	01	01
2	02	01	01	01	05	03	02
3	03	01	02	00	05	03	02
4	01	02	01	00	00	00	01
Rater \bar{x}	02	01		01	03		
Time \bar{x}			02			02	02

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	04	05	05	01	00	00	02
2	03	00	02	03	03	03	02
3	05	02	03	03	01	02	03
4	03	01	01	04	03	03	02
Rater \bar{x}	02	02		03	02		
Time \bar{x}			03			02	02

Across Groups
& Patients

Rater \bar{x}	03	01		02	02		
Time \bar{x}			02			02	02

It was further predicted that these gains would be greater for the microcounseling subjects than for those in the control condition. The data for each of these dimensions was analyzed separately using an analysis of variance for a mixed design with two between- and two within-subject variables. Training Condition and Patients were the between-subject variables while Time and Raters were the within-subject factors.

Empathy ratings. Tables 46 and 47 show the analysis of variance summary and the cell means for the subjects' empathy ratings. The

 Insert Table 46 and Table 47 about here

microcounseling subjects were consistently more empathic than the control subjects during both the pre- and the post-training sessions. The Training Condition Main Effect was significant ($F = 4.52$, $df = 1/16$, $p < .05$). Although the experimental subjects increased on the empathy dimension more than the control subjects from the first to the second interview, the Training Condition X Time Interaction was non-significant. ($F = 1.43$, $df = 1/16$).

Respect ratings. As can be seen from Table 48 and Table 49, the microcounseling subjects consistently received higher ratings on the respect dimension than did those in the control group. The Training Condition Main Effect was significant ($F = 12.02$, $df = 1/16$, $p < .005$). The experimental group again exhibited greater improvement than the controls, but the Training Condition X Time Interaction was non-significant ($F = 1.22$, $df = 1/16$). Subjects who interviewed patient number one

TABLE 46

SUMMARY OF ANALYSIS OF VARIANCE FOR EMPATHY RATING SCALE SCORES

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	5.0417	5.0417	4.52	< .05
B (Patients)	3	5.7083	1.9028	1.71	
AB	3	7.3750	2.4583	2.21	
S/AB	16	17.8332	1.1146		
Within-Subjects	72				
C (Time)	1	1.5000	1.5000	1.43	
AC	1	1.5000	1.5000	1.43	
BC	3	9.2500	3.0833	2.93	
ABC	3	.9166	.0355	< 1	
CS/AB	16	16.8332	1.0521		
D (Raters)	1	.1667	.1667	< 1	
AD	1	.0000	.0000	< 1	
BD	3	1.2500	.4167	< 1	
ABD	3	1.0833	.3611	< 1	
DS/AB	16	8.5000	.5312		
CD	1	.3750	.3750	< 1	
ACD	1	.0417	.0417	< 1	
BCD	3	2.0417	.6806	1.59	
ABCD	3	1.7083	.5694	1.33	
CS/AB	16	6.8325	.4270		

TABLE 47
CELL MEANS FOR EMPATHY RATING SCALE SCORES

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	2.33	2.00	2.17	1.67	1.67	1.67	1.92
2	2.67	3.00	2.83	3.33	3.67	3.50	3.17
3	2.33	2.00	2.17	3.33	3.33	3.33	2.75
4	2.33	3.00	2.67	4.00	2.67	3.33	3.00
Rater \bar{x} Time \bar{x}	2.42	2.50	2.46	2.08	2.83	2.96	2.71

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	3.00	2.67	2.83	2.00	2.00	2.00	2.42
2	2.33	2.00	2.17	2.67	2.67	2.67	2.42
3	1.00	2.00	1.50	2.33	2.33	2.33	1.92
4	2.67	2.33	2.50	2.33	1.67	2.00	2.25
Rater \bar{x} Time \bar{x}	2.25	2.25	2.25	2.33	2.17	2.25	2.25

Across Groups
& Patients

Raters \bar{x} Time \bar{x}	2.33	2.38	2.35	2.71	2.50	2.60	2.48
------------------------------------	------	------	------	------	------	------	------

Insert Table 48 and Table 49 about here

received lower ratings on the respect dimension during the post-training interviews than during their first sessions. The Patient X Time Interaction was significant ($F = 3.96$, $df = 3/16$, $p < .05$). In addition, the Training Condition X Patient X Time X Rater Interaction was also significant ($F = 6.97$, $df = 3/16$, $p < .005$).

Genuineness ratings. On the genuineness ratings, the micrcounseling subjects again received consistently higher ratings during both interview sessions (see Table 50). The Training Condition Main Effect

Insert Table 50 and Table 51 about here

was significant ($F = 14.77$, $df = 1/16$, $p < .005$). The experimental subjects exhibited greater improvement on these ratings from the pre- to the post-training interviews. Table 51 shows that the Training Condition X Time Interaction was non-significant ($F = 1.33$, $df = 1/16$). However, the Training Condition X Patient X Time Interaction was significant ($F = 4.00$, $df = 3/16$, $p < .05$). The control subjects who interviewed patients number one and number four received lower genuineness ratings during the post-training sessions than they did during the pre-training interviews. The opposite was true for those subjects interviewing patients number two and three.

TABLE 48
CELL MEANS FOR RESPECT RATING SCALE SCORES

EXPERIMENTAL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	3.00	2.67	2.83	2.33	2.67	2.50	2.67
2	2.33	3.67	3.00	3.33	3.67	3.50	3.25
3	2.67	2.67	2.67	3.00	3.00	3.00	2.83
4	3.33	2.67	3.00	3.67	3.33	3.50	3.25
Rater \bar{x}	2.83	2.92		3.08	3.17		
Time \bar{x}			2.88			3.13	3.00

CONTROL

Patients	<u>Pre</u>			<u>Post</u>			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	2.67	3.00	2.83	1.67	2.00	1.83	2.33
2	2.67	2.33	2.50	2.00	3.33	2.67	2.58
3	2.00	2.33	2.17	2.67	3.00	2.83	2.50
4	2.33	2.67	2.50	2.33	2.67	2.50	2.50
Rater \bar{x}	2.42	2.58		2.17	2.75		
Time \bar{x}			2.50			2.46	2.48

Across Groups
and Patients

Rater \bar{x}	2.63	2.75		2.63	2.96		
Time \bar{x}			2.69			2.79	2.74

TABLE 49

SUMMARY OF ANALYSIS OF VARIANCE FOR RESPECT RATING SCALE SCORES

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	6.5104	6.5104	12.02	< .005
B (Patients)	3	2.6979	.8993	1.66	
AB	3	.8646	.2882	< 1	
S/AB	16	8.6666	.5417		
Within-Subjects	72				
C (Time)	1	.2604	.2604	< 1	
AC	1	.5104	.5104	1.22	
EC	3	4.9479	1.6493	3.96	< .05
ABC	3	.8646	.2882	< 1	
CS/AB	16	6.6665	.4167		
D (Raters)	1	1.2604	1.2604	4.32	
AD	1	.5104	.5104	1.75	
ED	3	1.7813	.5938	2.04	
AED	3	1.0312	.3437	1.18	
DS/AB	16	4.6665	.2917		
CD	1	.2604	.2604	2.08	
ACD	1	.2604	.2604	2.08	
BCD	3	.1146	.0382	< 1	
AECD	3	2.6146	.8715	6.97	< .005
CDS/AB	16	1.9995	.1250		

TABLE 50

CELL MEANS FOR GENUINENESS RATING SCALE SCORES

EXPERIMENTAL

Patients	<u>Pre</u>		\bar{x}	<u>Post</u>		\bar{x}	Across Time & Raters
	R 1	R 2		R 1	R 2		
1	2.67	2.33	2.50	3.33	2.67	3.00	2.75
2	3.33	3.00	3.17	3.33	3.33	3.33	3.25
3	3.33	3.00	3.17	3.00	3.33	3.17	3.17
4	2.67	3.33	3.00	3.33	3.00	3.17	3.08
Rater \bar{x}	3.00	2.92		3.25	3.08		
Time \bar{x}			2.96			3.17	3.06

CONTROL

Patients	<u>Pre</u>		\bar{x}	<u>Post</u>		\bar{x}	Across Time & Raters
	R 1	R 2		R 1	R 2		
1	3.00	3.00	3.00	2.00	2.33	2.17	2.58
2	2.33	2.67	2.50	2.33	3.33	2.83	2.67
3	2.00	2.00	2.00	2.67	2.67	2.67	2.33
4	3.00	2.67	2.83	2.67	2.33	2.50	2.67
Rater \bar{x}	2.58	2.58		2.42	2.67		
Time \bar{x}			2.58			2.54	2.56

Across Groups
& Patients

Rater \bar{x}	2.79	2.75		2.83	2.88		
Time \bar{x}			2.77			2.85	2.81

TABLE 51

SUMMARY OF ANALYSIS OF VARIANCE FOR GENUINENESS RATING SCALE SCORES

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	6.0000	6.0000	14.77	< .005
B (Patients)	3	1.2083	.4028	< 1	
AB	3	1.4167	.4722	1.16	
S/AB	16	6.5000	.4062		
Within-Subjects	72				
C (Time)	1	.1667	.1667	< 1	
AC	1	.3750	.3750	1.33	
BC	3	1.0833	.3611	1.28	
ABC	3	3.3750	1.1250	4.00	< .05
CS/AB	16	4.5000	.2812		
D (Raters)	1	.0000	.0000	< 1	
AD	1	.3750	.3750	1.57	
BD	3	.5833	.5833	2.43	
ABD	3	1.7083	.5694	2.38	
DS/AB	16	3.8332	.2396		
CD	1	.0417	.0417	< 1	
ACD	1	.1667	.1667	< 1	
ECD	3	.8750	.2917	1.22	
AECD	3	.5833	.1944	< 1	
CDS/AB	16	3.8323	.2396		

Concreteness ratings. Both groups of subjects tended to make the patients become more specific during the post-training sessions. The significant Time Main Effect for the Concreteness Rating Scale can be seen in Table 52 ($F = 12.52$, $df = 1/16$, $p < .005$). Table 53 shows that subjects who interviewed patients number one and number three received lower concreteness ratings, and the Patient Main Effect was significant

 Insert Table 52 and Table 53 about here

($F = 7.29$, $df = 1/16$, $p < .005$). The Patient X Training Condition Interaction was also significant ($F = 10.90$, $df = 3/16$, $p < .001$) because the microcounseling subjects who interviewed patients number two, three, and four received higher concreteness ratings than the control subjects. However, this relationship was reversed for patient number one. Also significant was the Training Condition X Time X Rater Interaction ($F = 4.83$, $df = 3/16$, $p < .05$).

Confrontation ratings. Analysis of the data from the Confrontation Rating Scale are presented in Table 54 and Table 55. Both groups of subjects became more confrontative during the second set of interviews. The Time Main Effect was significant ($F = 6.13$, $df = 1/16$, $p < .025$).

 Insert Table 54 and Table 55 about here

Experimental subjects who interviewed patient number one were seen as substantially less confrontative than their counterparts in the control

TABLE 52

SUMMARY OF ANALYSIS OF VARIANCE FOR CONCRETENESS RATING SCALE SCORES

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.2604	.2604	< 1	
B (Patients)	3	11.6146	3.8715	7.29	< .005
AB	3	17.3646	5.7882	10.90	< .001
S/AB	16	8.5000	.5312		
Within-Subjects	72				
C (Time)	1	11.3438	11.3438	12.52	< .005
AC	1	1.7604	1.7604	1.94	
BC	3	3.2812	1.0937	1.21	
ABC	3	1.8646	.6215	< 1	
CS/AB	16	14.4998	.9062		
D (Raters)	1	.5104	.5104	< 1	
AD	1	.0938	.0938	< 1	
BD	3	.1146	.0382	< 1	
ABD	3	1.1979	.3993	< 1	
DS/AB	16	9.8331	.6146		
CD	1	.5104	.5104	1.40	
ACD	1	1.7604	1.7604	4.83	< .05
ECD	3	3.4479	1.1493	3.15	
ABCD	3	.1979	.0660	< 1	
CDS/AB	16	5.8326	.3645		

TABLE 53

CELL MEANS FOR CONCRETENESS RATING SCALE SCORES

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	1.67	1.33	1.50	1.33	2.00	1.67	1.58
2	2.33	2.33	2.33	3.67	3.67	3.67	3.00
3	1.67	2.00	1.83	3.00	2.67	2.83	2.33
4	2.00	3.33	2.67	4.00	4.00	4.00	3.33
Rater \bar{x}	1.92	2.25		3.00	3.08		
Time \bar{x}			2.08			3.04	2.56

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	3.33	2.33	2.83	2.33	3.33	2.83	2.83
2	2.67	2.67	2.67	2.67	3.33	3.00	2.83
3	1.33	1.33	1.33	2.33	2.67	2.50	1.92
4	2.33	2.00	2.17	2.33	2.33	2.33	2.25
Rater \bar{x}	2.42	2.08		2.42	2.92		
Time \bar{x}			2.25			2.67	2.46

Across Groups
& Patients

Rater \bar{x}	2.17	2.17		2.71	3.00		
Time \bar{x}			2.17			2.85	2.51

TABLE 54

SUMMARY OF ANALYSIS OF VARIANCE FOR CONFRONTATION RATING SCALE SCORES

SOURCE OF VARIANCE	df	SS	MS	F	p
Between-Subjects	23				
A (Training Cond.)	1	.0417	.0417	< 1	
B (Patients)	3	2.9167	.9722	< 1	
AB	3	9.5417	3.1806	9.54	< .001
S/AB	16	5.3332	.3333		
Within-Subjects	72				
C (Time)	1	2.0417	2.0417	6.13	< .025
AC	1	.6667	.6667	2.00	
BC	3	2.5417	.8472	2.54	
ABC	3	.9167	.3056	< 1	
CS/AB	16	5.3332	.3333		
D (Raters)	1	1.0417	1.0417	5.00	< .05
AD	1	.0000	.0000	< 1	
BD	3	.0417	.0139	< 1	
ABD	3	.0833	.0278	< 1	
DS/AB	16	3.3333	.2083		
CD	1	.6667	.6667	4.00	
ACD	1	.3750	.3750	2.25	
BCD	3	1.0833	.3611	2.17	
ABCD	3	.7083	.2361	1.42	
CDS/AB	16	2.6662	.1666		

TABLE 55

CELL MEANS FOR CONFRONTATION RATING SCALE SCORES

EXPERIMENTAL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	2.33	2.33	2.33	2.33	2.00	2.17	2.25
2	2.67	2.33	2.50	3.00	3.00	3.00	2.75
3	2.33	2.00	2.17	3.00	2.67	2.83	2.50
4	3.00	2.67	2.83	3.67	3.67	3.67	3.25
Rater \bar{x}	2.58	2.33		3.00	2.83		
Time \bar{x}			2.46			2.92	2.69

CONTROL

Patients	Pre			Post			Across Time & Raters
	R 1	R 2	\bar{x}	R 1	R 2	\bar{x}	
1	3.67	3.00	3.33	3.00	3.00	3.00	3.17
2	2.67	2.33	2.50	3.00	3.00	3.00	2.75
3	2.00	2.00	2.00	2.67	2.33	2.50	2.25
4	3.00	2.00	2.50	2.00	2.67	2.33	2.42
Rater \bar{x}	2.83	2.33		2.67	2.75		
Time \bar{x}			2.58			2.71	2.65

Across Groups
& Patients

Rater \bar{x}	2.71	2.33		2.83	2.71		
Time \bar{x}			2.52			2.81	2.67

group. Likewise, the control subjects who interviewed patient number four were less confrontative than the microcounseling interviewers. The Training Condition X Patient Interaction was significant ($F = 9.54$, $df = 3/16$, $p < .001$). In addition, the Rater Main Effects was also significant ($F = 5.00$, $df = 1/16$, $p < .05$). It is of interest that this was the only analysis in which the Rater Main Effect was significant.

Summary of Carkhuff rating scales. There were a number of interesting trends when these five scales are viewed together. The microcounseling subjects consistently received higher ratings on respect, empathy and genuineness, both prior to and following training. Given their initially higher level of functioning on these dimensions, the experimental group demonstrated improvement, while the control group showed either no improvement or deterioration. On the Concreteness and Confrontation Rating Scales, the microcounseling group also exhibited greater improvement than the control group. Thus the experimental group received higher ratings on all five scales following the

 Insert Table 56 about here

post-training interviews, while the control improved only on the Concreteness and Confrontation Rating Scales. When the dependent variables were placed in a two x two contingency table with Training Condition and Improvement or Non-improvement being the two dimensions on the table, the distribution was significant ($p < .06$).

TABLE 56
 TWO X TWO CONTINGENCY TABLE FOR FIVE
 CAR KHUFF RATING SCALES*

	IMPROVE	NOT IMPROVED
Experimental	Empathy Respect Genuineness Concreteness	Confrontation
Control	Concreteness Confrontation	Empathy Respect Genuineness

*significant at .06 level

The Nature of the Student-Supervisor Relationship

In an attempt to ascertain whether there were student-supervisor relationship differences between the two groups, in addition to those relating to teaching techniques, each student completed three questionnaires following completion of the training program. The data for each of these dependent variables was analyzed separately using an analysis of variance for a completely randomized one factor design. This design was chosen because there was a confounding between Training Condition and supervisors created by the fact that there were different instructors for the subjects in the different training conditions.

Supervisor Effectiveness Scale. The first form completed by the students was a semantic differential, the Supervisor Effectiveness Scale, designed to assess the favorability of the students attitude toward their

 Insert Table 57 and Table 58 about here

instructors. The analysis of variance summary in Table 57 revealed a significant Supervisor Main Effect ($F = 6.06$, $df = 5/18$, $p .005$). Turkey's multiple comparison method (Myers, 1966) for all possible contrasts revealed that this significance was attributable to the fact that all three groups of microcounseling students viewed their supervisors in a more favorable manner than the control subjects who were instructed by supervisor number six (see Table 58).

Student-Supervisor Relationship Questionnaire. The second form completed by the students, The Student-Supervisor Relationship Question-

TABLE 57

SUMMARY OF ANALYSES OF VARIANCE FOR THE THREE
STUDENT-SUPERVISOR QUESTIONNAIRES

SOURCE OF VARIANCE	df	SS	MS	F	P
SUPERVISOR EFFECTIVENESS SCALE					
A (Supervisor)	5	6119.83	1223.97	6.06	.005
S/A	18	3633.50	201.86		
STUDENT-SUPERVISOR RELATIONSHIP QUESTIONNAIRE					
A (Supervisor)	5	44.88	9.18	2.59	
S/A	18	63.75	3.54		
INTERVIEW INSTRUCTOR EVALUATION QUESTIONNAIRE					
A (Supervisor)	5	1464.50	292.90	4.09	.025
S/A	18	1288.00	71.56		

TABLE 58

CELL MEANS FOR THE THREE STUDENT-SUPERVISOR QUESTIONNAIRES

	SUPERVISOR NUMBER					
	1 *	2 *	3 *	4	5	6
SUPERVISOR EFFECTIVENESS SCALE						
	157.00	152.00	141.75	137.25	145.50	107.50
STUDENT-SUPERVISOR RELATIONSHIP QUESTIONNAIRE						
	15.25	15.25	16.00	13.25	15.75	12.25
INTERVIEW INSTRUCTOR EVALUATION QUESTIONNAIRE						
	62.50	66.25	61.25	44.50	58.00	45.75

* microcounseling supervisors

naire, was a short form of the Therapist-Patient Relationship Questionnaire (Truax and Carkhuff, 1967). Analysis of this data failed to reveal a Supervisor Main Effect ($F = 2.59$, $df = 5/18$).

Interview Instructor Evaluation Questionnaire. The last form was the Interview Instructor Evaluation Questionnaire developed by Dr. George Saslow (1970). Analysis of this data revealed a significant Supervisor Main Effect ($F = 4.09$, $df = 5/18$, $p = .025$). Tukey's multiple comparison method (Myers, 1966) for all possible contrasts revealed that this was attributable to the very high ratings received by microcounseling instructor number two and the rather low ratings received by control instructors number four and number six.

CHAPTER V

DISCUSSION OF RESULTS

General summary of results. Generally both groups appeared to improve their levels of functioning in an interview situation as a result of training. There were ten dependent measures on which both the microcounseling and the control subjects demonstrated significant improvement over time. Both groups of subjects decreased significantly on the percent of their total utterances classified as Close-Ended Questions and the percent of their total utterances categorized as POOR statements on the Therapist Error Checklist. The experimental and control groups not only showed significant improvement in the percent of their total responses classified as Summarizations and the percent of their total statements categorized as GOOD and FAIR on the Therapist Error Checklist, but they also demonstrated significant increases during their post-training interviews in their ratings on the Concreteness Rating Scale, the Confrontation Rating Scale, the Therapist-Patient Relationship Questionnaire, the Self-Disclosure Questionnaire, and the Counselor Effectiveness Scale. During the post-training interviews, the patients talked for a longer duration to both groups of subjects, but analysis of the data for this measure failed to yield a significant Time Main Effect.

Although both groups of subjects appeared to profit from their training experiences, the microcounseling subjects apparently became more proficient interviewers than the control subjects. Considering just the dependent measures on which both groups demonstrated significant

improvement, the amount of pre- to post-training change was greater for the microcounseling group on seven of these eleven dependent variables: the percent of the interviewers' utterances classified as Close-Ended Questions and Open-Ended Questions, the percent of the interviewers' statements categorized as FAIR and POOR, the ratings on the Concreteness and Confrontation Rating Scales, and the total duration of the patients' utterances.

In addition, the analyses of variance revealed that the micro-counseling subjects improved significantly more than the students in the control group, from the pre- to the post-training interviews, on the Attending Behavior Rating Scale, on the percent of their responses classified as Reflections of Feeling and as GOOD statements and POOR statements on the Therapist Error Checklist. There were no measures on which there was a significant Training Condition X Time Interaction favoring the control group. There were also seven other measures on

 Insert Table 59 about here

which the microcounseling subjects improved during the post-training interviews, while the control subjects either demonstrated no change or deteriorated. However, none of these seven interactions were significant. Disregarding significance, a tabular summary of the results may be seen in Table 59. There were twenty-two dependent variables for which Training Condition X Time Interactions favoring the microcounseling group had been predicted. The microcounseling subjects improved on twenty of

TABLE 59

TWO X TWO CONTINGENCY TABLE FOR ALL DEPENDENT VARIABLES FOR WHICH
 A TRAINING CONDITION X TIME INTERACTION
 HAD BEEN PREDICTED*

EXPERIMENTAL	Close-ended Questions Opened-ended Questions Minimal Activity Interviewer Duration of Utterance Paraphrase Reflection of Feeling Summarization Attending Behavior Interviewer GOOD Statements Interviewer FAIR Statements Interviewer POOR Statements Therapist-Patient Relationship Questionnaire Self-Disclosure Questionnaire Counselor Effectiveness Questionnaire Patient Duration of Utterance Empathy Respect Genuineness Concreteness Confrontation	Interviewer Frequency of Utterance Patient Frequency of Utterance
CONTROL	Close-ended Questions Open-ended Questions Summarization Interviewer FAIR Statements Interviewer POOR Statements Therapist-Patient Relationship Questionnaire Self-Disclosure Questionnaire Counselor Effectiveness Scale Patient Duration of Utterance Concreteness Confrontation	Minimal Activity Interviewer Duration of Utterance Interviewer Frequency of Utterance Paraphrase Reflection of Feeling Attending Behavior Interviewer GOOD Statements Patient Frequency of Utterance Empathy Respect Genuineness

*significant at the .005 level

these measures, while the control subjects improved on only eleven. Neither group demonstrated improvement on either the frequency of interviewer utterance or the frequency of patient utterance dimensions. As Table 59 shows, this distribution was significant at the .005 level. In summary, both groups of subjects appeared to benefit from their interview training experiences, but those subjects who received microcounseling training apparently learned more which they were able to generalize to their post-training interviews.

Interviewer verbalization categorization data. Although the micro-counseling students received specific instruction on Attending Behavior, Open- versus Close-Ended Questions, Minimal Activity Responses, Paraphrases, Reflections of Feeling, and Summarizations, they only exhibited significantly greater improvement than the control subjects on the Attending Behavior and Reflection of Feeling skills. That the two groups differed on their Attending Behavior ratings speaks to the importance of continually re-emphasizing to students the various components of this skill. Since this study was integrated into an introductory course in Psychiatry, all second year medical students including the control subjects, viewed the Attending Behavior model tape during the first meeting of the class. Because of this the microcounseling instructors did not devote the entire training session to the acquisition of this skill. Instead, they were asked to explicitly include as part of their supervision on the remaining skills, feedback to the students concerning their performance on the components of Attending Behavior (varied eye-contact, verbal following behavior, relaxed posture, and verbal-variety

appropriateness).

Considering the five remaining microcounseling skills that the experimental group differed significantly from the control group only on the Reflection of Feeling dimension was initially disappointing. However, all interviewer utterances were classified into a finite number of categories, and the dependent measures were the percent of the interviewer's utterance for each interview in a given category. Therefore, for the percentage of responses in one category to increase from the pre- to the post-training interviews decreased the probability that such an increase could occur in another category.

Therapist Error Checklist data. Perhaps the strongest support for the proposition that the microcounseling students became more proficient interviewers than the controls is to be found in the data from the Therapist Error Checklist. The microcounseling subjects decreased significantly more than the control subjects in the percentage of their responses that were judged to be POOR statements during the second set of interviews. In place of these errors, the experimental subjects substituted significantly more statements which were rated as GOOD. In addition, both groups of subjects demonstrated a significant increase from the pre- to the post-training interviews in the percentage of their responses rated as FAIR. Matarazzo, Phillips, Wiens, and Saslow (1965) showed a significant, inverse relationship between the number of interviewer errors on the Therapist Error Checklist and the amount of the patient's talk time. The data from the present study are in agreement with the observations of these investigators. Although there was neither a significant Time Main Effect nor a significant Training Condition X Time Interaction in

the analysis of the patient duration of utterance data, the interviewees did increase their amount of talk time in the second set of interviews. This increase was substantially greater when the patients were interviewed by microcounseling subjects. Out of a possible 600 second of talk time, the interviewees talked to the microcounseling subjects an average of 452.17 seconds and the control interviewers an average of 482.33 seconds during the pre-training interviews. During the post-training sessions, the patients talked to the microcounseling students an average of 493.33 seconds and to the controls for 488.75 seconds.

Findings in the present study deviate from those of Matarazzo, Phillips, Wiens, and Saslow (1965) in one important respect. Although the number of interviewer errors decreased following training for both microcounseling and control subjects, the distribution of these errors between the four error categories (Errors of Facilitation, Errors of Focus, Errors of Faulty Role Definition, and Other Errors) remained the same for both sets of interviews. That there was not a decrease in the percentage of the microcounseling subjects' Errors of Facilitation is interesting in that the six microcounseling skills incorporated into the present study have previously been conceptualized as facilitative interviewer behaviors. There are several possible explanations for this discrepancy between the present study and that of Matarazzo, Phillips, Wiens, and Saslow. In the Matarazzo et. al. study the students conducted a thirty-minute interview, while in this study the subjects only conducted a twenty-minute interview, and all the data was collected from minutes six through fifteen. Had the data been collected over a full

thirty minute session, perhaps a shift in the types of interviewer errors would have been observed. In addition, both groups of subjects in the present study had an opportunity to observe an exceptionally good interviewer conduct a series of interviews during their introductory psychiatry course sessions. Observation and discussion of these interviews with the interviewer may have helped both groups of students focus on more relevant topics during their post-training interviews than was true for the students in the Matarazzo et. al. study.

Carkhuff scales. Studies reported by Truax (1961), Truax, Carkhuff, and Kodman (1965), Truax and Carkhuff (1967) and Carkhuff (1969a, 1969b) have suggested that patients seen by counselors who possess high levels of empathy, respect, and genuineness experience more successful therapy outcomes than patients seen by therapists possessing low levels of these qualities. Therefore, the importance of the microcounseling skills taught in this study would have been enhanced had the subjects ratings on these dimensions been higher following training than prior to their instruction. The microcounseling subjects' ratings on each of these dimensions improved non-significantly following training, (empathy - 2.46 to 2.96; respect - 2.88 to 3.13; genuineness - 2.96 to 3.17) while those for the control subjects remained the same or decreased (empathy - 2.25 to 2.25; respect - 2.50 to 2.46; genuineness - 2.58 to 2.54). Carkhuff (1969a) stated that the minimum level of facilitative functioning on each of these dimensions was a rating of three. Prior to training, neither group of subjects received ratings of this magnitude on any of these rating scales. Following training, the microcounseling

students were functioning slightly above this minimum level on the respect and genuineness dimensions and were within four one-hundredths of a point of attaining this level on the empathy scale. The control subjects, on the other hand, were no closer to functioning at this minimally facilitative level following training than they were prior to it.

These results must be tempered by several considerations. The analyses of variance did not reveal any of these interactions to be significant. Perhaps more important than this, the inter-rater reliability co-efficients were surprisingly low for each of these three scales. The judges performance on the Empathy Rating Scale was considerably more reliable ($r = .66, p < .01$) than that on the Respect Rating Scale ($r = .42, p < .01$) and the Genuineness Rating Scale ($r = .35, p < .05$). Although each of these reliabilities were significant, their magnitudes were much smaller than that which one would ideally desire. The implications of this fact for the present study are that the results from these scales must be interpreted with caution. However, the failure to obtain significant differences on these scales may have been the result of this poor inter-rater reliability.

The implications of the present low reliabilities for the Didactic-Experiential training program described by Truax and Carkhuff (1967) are far more extensive. These authors suggested that novice interviewers should spend a large portion of their early training experiences listening to tapes of good and bad interviewers and rating the interviews with these three scales. Only after the trainees become more able to use

these scales discriminately, would they perform interviews of their own. These interviews would be rated and the novices would receive feedback on the basis of their scores on these scales. However, if the rating scales can not be used any more reliably than they were in the present study, it is questionable whether the students will ever be able to discriminate behaviors which they can transfer into a live interview situation.

Matarazzo and Phillips (1962) found that students who had received behavioral-oriented supervision became more active and influencing during their post-training interviews than students who received process-oriented supervision. Insofar as Carkhuff's Concreteness Rating Scale and his Confrontation Rating Scale are similar to Matarazzo and Phillips use of the words, "more active" and "more influence oriented", this finding holds up in the present study. The concreteness ratings improved for the microcounseling subjects from 2.08 to 3.04, while for the control subjects the improvement was only from 2.25 to 2.67. Likewise, on the confrontation ratings, the experimental group improved from 2.46 to 2.92, while the control group only improved 2.58 to 2.71. Again, neither of these interactions were significant, and the inter-rater reliabilities were low (Concreteness - $r = .50$, $p < .01$; Confrontation - $r = .54$, $p < .01$). Therefore, these results must be interpreted with caution.

Patient questionnaires. Following each pre- and each post-training interview, the patients, themselves, completed the Therapist-Patient Relationship Questionnaire and the Counselor Effectiveness Scale. Both groups of subjects received significantly higher ratings on each of these

scales following training. Ivey, Normington, Miller, Morrill, and Haase (1968), in the first microcounseling study, found that students received higher ratings on these scales following microcounseling training in Attending Behavior, Reflection of Feeling, and Summarization of Feeling. Ivey et. al. interpreted these results as attesting to the validity of the microcounseling method of instruction. However, in light of the present findings and because Ivey et. al. did not have a control group which received training by another method, it appears as if this conclusion may have been somewhat spurious. Both groups of subjects in the present study were able to initiate relationships which the patients viewed as more empathic, warm, and genuine during the post-training interviews. Generally, the patients were more favorably disposed toward their interviewers during the post training sessions regardless of the type of training the students had received. This same conclusion is equally true of the results of the Self-Disclosure Questionnaire which the patients completed after each interview. The interviewees indicated a greater willingness to discuss more emotion-laden topics with their interviewers following the post-training interviews, than following the pre-training interviews. The method of training which the students had received was insignificant in the interviewees' willingness to disclose facts about themselves.

Some alternative explanations. Psychoanalytic (Ekstein and Wallerstein, 1957), Rogerian, and Didactic-Experiential (Truax and Carkhuff, 1967) writings discuss the importance of the student-supervisor relationship as a major factor in the novice therapist's learning process.

Although these three conceptualizations of this relationship differ from each other, their writings all imply that novices who experience a good relationship will become better therapists than trainees who experience a poor relationship. An implication of these writings for the present study is that post-training differences in interviewing skills between subjects may be the result of differences in the types of relationships which the experimental and control subjects experienced with their respective instructors. In an attempt to ascertain whether there were student-supervisor relationship differences between these two groups, each student completed three questionnaires immediately after his post-training interview.

The Student-Supervisor Relationship Questionnaire was adapted from the Patient-Therapist Relationship Questionnaire (Truax and Carkhuff, 1967). It was composed of items from the warmth, empathy, and genuineness scales which appeared to have at least face validity as pertaining to the student-supervisor relationship. Analysis of the students' responses to this questionnaire revealed that there were neither significant supervisor differences nor differences between the groups. Therefore, the supervisors apparently did not differ from each other in terms of the warmth, empathy and genuineness of the relationships they established with their students.

Each subject also evaluated his instructor on the Supervisor Effectiveness Scale, which was an adaptation of the Counselor Effectiveness Scale used in another part of this study. On this measure there was a significant supervisor effect which was attributable to the

fact that all three microcounseling instructors were viewed more favorably than one particular control instructor. The ratings received by the other two control supervisors did not differ significantly from those which their counterparts in the microcounseling group received.

The last form completed by the subjects was the Interview Instructor Evaluation Questionnaire. This form was composed of fifteen items on which the students were asked to rate their supervisors on a one to five scale. Analysis of this data revealed that there were significant instructor differences attributable to the high ratings given to one of the microcounseling supervisors by his students and the relatively low ratings received by two of the control instructors. Although this scale was included in the present study in an attempt to assess the student-supervisor relationship, it is very likely that differences on this questionnaire were due to differences in the method of instruction and not to relationship factors. Following training, the microcounseling subjects spoke very highly to the experimenter of the microcounseling method of instruction, saying that it helped them know what they were supposed to learn, that they found it very helpful to watch the video tape of their practice interviews, and that the immediacy of their feedback was an important learning factor. A number of control subjects, on the other hand, commented that even after completing all their training, they were unsure of what they were supposed to have learned. In addition, some control subjects complained that their supervision consisted of too much case conceptualization and not enough feedback about their interviewing skills. None of the control and experimental sub-

jects' comments suggested that there were any affective differences in the manner in which the two groups viewed their relationships with their supervisors. An item analysis was performed on each of the questions included in this scale. Each item on which there were

Insert Table 60 about here

significant differences between the responses of the microcounseling and the control subjects may be attributed to the greater clarity with which learning tasks were defined and the more systematic application of learning principles which the microcounseling students experienced in their training sessions. The items on which there were significant differences may be seen in Table 60.

Truax and Carkhuff (1967) mentioned a number of unpublished studies which suggested that supervisor differences on warmth, empathy, and genuineness were related to student differences on these measures during their training therapy sessions. The Student-Supervisor Relationship Questionnaire was the only one of these three forms which directly tapped any of these three dimensions, and analysis of the students' responses to this form failed to reveal significant instructor differences. Only on the Supervisor Effectiveness Scale were there significant differences between the perceptions of the microcounseling and control subjects toward their relationship with their supervisor. One explanation for this difference is that it is really a halo effect resulting from the experimental subjects very positive experiences with the micro-

TABLE 60
 ITEMS FROM THE INTERVIEW INSTRUCTOR EVALUATION QUESTIONNAIRE
 ON WHICH THE MICROCOUNSELING AND CONTROL SUBJECTS
 SIGNIFICANTLY DIFFERED

ITEM	F	p
1. The instructor makes clear to me what I am expected to learn.	15.13	< .001
3. The teacher can demonstrate for me applications of these concepts.	7.35	< .025
4. The instructor is aware of what stage I am at in the learning process.	9.22	< .01
5. The instructor gives me prompt feedback and constructive criticism.	5.86	< .025
6. The instructor helps me move on to the next higher step in the learning process in a way that makes good sense.	22.93	< .001
7. The instructor allows me to make a try at the material to be learned with a minimum fear of penalty for making a mistake.	5.79	< .01
10. The instructor involves himself - his skill, his knowledge, his feelings, in the learning process with his group.	7.48	< .025
14. The instructor seems to fit naturally into the teaching role.	12.69	< .005
15. Rate the overall effectiveness of this teacher for you.	20.76	< .001

counseling method of instruction. Any differences between the experimental and control subjects during their post-training interviews can logically be attributed to differences in the method of their training.

There is one other alternative explanation of the results which deserves some mention. Each microcounseling training session was structured around teaching the students a particular interview skill. The control sessions, on the other hand, were structured around acquainting the students with different types of interviews which they would be expected to perform in their role as physicians. Therefore it could be argued that the generalization measures were weighted in favor of the microcounseling group. However, this criticism was taken into account prior to the execution of this study. In addition to learning a new microcounseling skill each training session, the students in the experimental condition were told to practice this skill within the context of obtaining a general medical history, a social history, an avocational history, or a mental status examination. Each instructor spent some time each session discussing with his students the components of each of these types of interviews. In addition, the control group supervisors considered part of their function as also teaching the students good listening skills, efficient ways of asking questions, and utilizing perception checks. There was considerable agreement in the goals of the two training conditions.

Interviewee characteristics. Although an attempt was made prior to the execution of this study to obtain interviewees who were similar to each other in the frequency and duration of their utterances during

a standard interview, this criterion for patient selection turned out to be unfeasible. As a result there were a number of consistent patient differences throughout the entire study. There were twenty-seven analyses of variance in this study which included patients as a source of variance. On only eight of them was there neither a significant patient nor patient interaction term. Across all the analyses, there were twenty-nine such significant terms. Thirteen of these twenty-nine significant patient or patient interaction terms were attributable to those students in both groups who interviewed patient number one. This patient's interview behavior consisted of extremely long utterances with very short latencies between them, relative to the other three interviewees. Patient number one appeared to be depressed during both sets of interviews and tended to ramble, frequently tangentially, on numerous occasions. Inclusion of the data for those subjects who interviewed this patient resulted in increasing the variance in the various data analyses, and thereby decreased the probability of obtaining statistical significance. Future microcounseling or interviewing studies should attempt to utilize interviewees who are as homogenous as possible in their interview behavior.

Implications for training. While interviewee homogeneity is desirable for research purposes, it is definitely undesirable for training purposes. One goal of basic interview training is to equip novice interviewers with skills such that they will be able to relate facilitatively to a wide range of patient types. If trainees receive all of their pre-practicum or pre-internship training experiences with one

type of interviewee, they will be ill prepared to deal with reticent, hostile, emotional, or rambling patients who they encounter in their initial patient contacts. Microcounseling presents several possibilities for preparing students to deal with a wide range of patients responsibly during their initial patient contact experiences. Microcounseling equips novices with the cognitive skills to discriminate various interviewer behaviors. With this ability, students and their supervisors can discuss various microcounseling skill combinations which may be useful in dealing with different types of patients, prior to the time in the students training when he has placed himself on the line as a professional helper. With very emotional patients, an interviewer may rely on close-ended questions and paraphrases to help the patient regain his cognitive grasp of a situation, so that constructive alternative behaviors can be more realistically considered. With a more rigid, denying patient, the interviewer may want to utilize many more reflections and summarizations of feeling in an attempt to help the patient get more in touch with his feelings. When interviewing patients who are reluctant to talk, beginning interviewers must be particularly careful to ask their questions in an open-ended manner. With patients who frequently ramble and are tangential, an interviewer may have to rely more upon paraphrases or summarizations which can be paired with open-ended questions. In this way he can convey to the patient that he has heard him, and at the same time help him to refocus on the pertinent topic. Not only does microcounseling provide novices with the capabilities to cognitively consider such skill combinations, but the

microcounseling paradigm provides them with opportunities to practice them with role-playing interviewees.

Truax (1961), Truax and Wargo (1966), and Truax and Carkhuff (1967) have demonstrated that counseling, even when practiced by experienced counselors or therapists who possess low levels of warmth, empathy, and genuineness, may lead to client deterioration. Patterson (1968) pointed out that patients who were seen by trainees deteriorated, as well as improved or remained at the same level of functioning. Strupp's (1970) data suggested that the patient's reactions to the initial stages of therapy were crucial in determining its outcome. Consideration of these studies can only lead one to the ethical conclusion that those of us involved in training must do everything in our power to help prepare our students to handle as many different situations as possible, prior to their accepting patient responsibility in their initial practicum or internship experiences. Developing more fully the potentialities of microcounseling appears to be one very viable alternative for solving this very serious ethical question.

Methodological considerations. An attempt was made in this experiment to meet Cartwright's (1968) criterion for counseling research. She reminded us that the goal of research was to connect studies of effective instruction to specified clinician behaviors, which were associated with specified client behavioral changes both within treatment, and outside of and after treatment. Our current state of knowledge prohibits satisfactorily meeting this goal. However, it was possible to include in the microcounseling skill package six clinician behaviors

which had an abundance of theoretical and a paucity of empirical support. Insofar as the Therapist Error Checklist, the five Carkhuff scales and the three patient questionnaires validly tapped successful therapist qualities, the microcounseling program described in this project can be assumed to have successfully approximated Cartwright's criterion.

Carkhuff (1969b) has presented us with an excellent discussion of the methodological components for a well-designed research project assessing the effectiveness of an original training program. There should be pre- and well as post-training assessments of relevant indices. There should also be at least three training conditions: a group receiving the new training program, a control group receiving a traditional training program, and a no-treatment condition. In addition, individuals in the different groups should be equivalent on the relevant dimensions prior to training. The instructors or trainers should also be matched on their level of functioning on the relevant dimensions. In terms of meeting these criteria, the present evaluation of microcounseling comes out with a fairly high rating.

An attempt was made to ensure that the two groups of subjects were functioning at equivalent levels prior to training by randomly selecting twenty-four students for inclusion in the project from a larger group of fifty-one volunteers. These twenty-four subjects were then randomly assigned to one of the training conditions. Although it was not possible to match microcounseling and control instructors on the basis of their interview proficiency, an attempt was made to bias the trainer skill level in favor of the control group. Two of the three control

supervisors were faculty members in the psychiatry department, while all of the experimental instructors were psychiatry residents. In addition, pre- and post-training measures on all the dependent variables were obtained. Care was taken to ensure that the raters were unaware of which tapes were pre- and which were post-training interviews. Discussions with the raters suggested that this manipulation was effective.

The one inadequacy in the present study, on the basis of Carkhuff's criteria, was that there was not a no-treatment control group. Because all the students in this introductory psychiatry course were expected to attain a certain level of interview proficiency by the end of the semester, it was not feasible to include this group. Previous studies have demonstrated that students trained in microcounseling acquire these skills more than no-treatment control groups. Therefore the crucial issue which this study addressed itself to was whether or not microcounseling was more effective than another form of training. Generally, the results of this project indicate that it was. This was the first study which compared microcounseling to another form of interview training.

The present study showed that the skills which the microcounseling subjects learned generalized out of the training lab and to a live interview with a psychiatric patient. Although the microcounseling group appeared to be better interviewers following training than the control group, there are no indications as to how long this advantage will last. Haase, DiMattia, and Guttman (1970) conducted a one-year

follow-up study of para-professional trainees. These novices had received training in attending behavior, expression of feeling, and reflection of feeling. One year after training, these investigators found that the non-verbal aspects of attending behavior and the expression of feeling skill were still high. The verbal following component of attending behavior and the reflection of feeling skill were at a lower level than immediately following training, although the ratings were still high. The verbal following component of attending behavior and the reflection of feeling skill were at a lower level than immediately following training, although the ratings were still higher than those prior to the microcounseling experience. The authors concluded that the para-professionals had failed to maintain those skills for which they had not received on-the-job reinforcement. However, there was no control group in this study against which to compare this partial regression over time. Future studies which meet the design requirements outlined by Carkhuff need to extend the follow-up period so that an assessment over time of the microcounseling groups apparent post-training advantage can be made.

As more microcounseling studies begin to appear in the literature, the need for more effective methods of measuring the impact of the interviewer's behavior change on the client becomes more apparent. The objective ratings of the interviewers' behaviors in the present study suggested that the microcounseling subjects had become more effective interviewers than the controls as a result of their training experiences. The data from the three questionnaires completed by the patients follow-

ing each interview failed to reveal any significant differences in the improvement demonstrated by the experimental and control groups. The differences between the pre- and post-training ratings which did exist between the two groups of subjects appeared to favor the control group. These results run contrary to all the other measures included in the study. One possible explanation for this discrepancy, which appears on all three of the patient completed questionnaires, is that the experimental subjects became more concrete and confrontative than the controls, and this change threatened the interviewees. A comparison of the magnitude of change for each of the groups on the Concreteness Rating Scale and the Confrontation Rating Scale provides some support for this hypothesis.

Microcounseling entails considerably more preparation if it is to be incorporated into an interview training program than is true of other training methods. Previous microcounseling studies have demonstrated that this method could be used to teach novice interviewers basic interviewing skills. The results of the present study have suggested that this new method may actually be more effective and result in more learning than more traditional hit-or-miss approaches to interview training. In addition, there are two other sources of support for the microcounseling approach to interview training which the present study was not designed to accurately assess. The full enthusiasm of the students who participated in the microcounseling training condition was lost in the objective rating scales. Their responses to the explicitness and structure of this method were extremely favorable. The three

psychiatric residents who participated as supervisors in the micro-counseling condition were also enthusiastic about their experiences. All three of these instructors reported to the investigator on several occasions that they were learning new things along with their students.

While this research demonstrated that the microcounseling method of teaching interviewing was more effective than a traditional approach, it did not address itself to the issue of what the necessary and sufficient components of the method were. Microcounseling involves the isolation of particular interviewer skills, manuals describing those skills, videotaped models, immediate playback of the students' practice interviews, and supervision emphasizing cueing and discrimination. Ivey (1971) reported that McDonald and Allen attempted to determine the most important components of microtraining by systematically including and omitting key aspects of the format. They found that the student's self-observation, accompanied by the supervisor's cueing and reinforcing behavior were the most powerful aspects of the approach. However, these authors concluded that the utilization of the full compliment of microcounseling methods was the most effective means to impart the skills. However, this study was carried out in a teacher training program and the skills were teaching skills. Whether these conclusions generalize to the interview training situation can only be determined by future research.

Originally, microcounseling was performed with only two trainees at a time. The present study used training groups consisting of four students. This author has recently used the microcounseling paradigm

to train the nursing personnel at a local psychiatric inpatient unit. The size of this training group was six to eight members at each session. Although there is no objective data to support the conclusion, the trainees appeared to learn the skills even though there was not time during any given training session for all members of the group to perform a practice interview. Determination of the most efficient size for a training group may well be an important task for future studies.

Summary. The result of the present study demonstrated that while both groups of subjects were more proficient interviewers following training, the students who received microcounseling training appeared to be better interviewers than those students who received a more traditional learning experience. The experimental subjects showed some measure of generalization on each of the six microcounseling skills during the post-training interviews, while the control subjects exhibited improvement only on the Close-Ended Questions, Open-Ended Questions, and Summarizations measures. The microcounseling subjects showed significantly greater improvement over time than the control subjects on Attending Behavior and Reflection of Feeling. On the Therapist Error Checklist the experimental subjects demonstrated significantly greater positive change than the control subjects in the percent of the utterances categorized as GOOD and POOR, while both groups of students improved over time in the percentage of their statements which were judged as FAIR.

Although the data from the five Carkhuff scales failed to reveal any significant changes over time, the microcounseling group showed

larger changes in the predicted direction on all five measures. However, a serious question was raised about the utility of these scales as major aspects of any interviewer training program. The inter-rater reliabilities were disappointingly low on each of these dimensions.

Both groups of subjects demonstrated significant improvement from the first to the second set of interviews on all three of the questionnaires completed by the interviewees following each interview. However, the magnitude of change was greater for the control group in each instance. Since this was discrepant with all the other findings, the need for developing more discriminating measures for assessing the impact of interviewer change on the interviewee was discussed.

Two alternative explanations of the results of this project were discussed. It was concluded that the differences between the groups could not be explained on the basis of differences in the nature of the student-supervisor relationships within the two training conditions. In addition, the learning goals for the two groups of students were not so divergent as to warrant the criticism that the various dependent variables included in the present study were stacked in favor of the microcounseling group.

It was noted that there were numerous patient effects which were significant throughout the study. These were primarily attributable to one particular interviewee. The importance of interviewee homogeneity for research purposes and heterogeneity for training purposes was discussed. In addition, a number of suggestions, both methodological and content, for future interview training studies were presented.

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APPENDICES

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Basic Interviewing Skills Manual, Part I

ATTENDING BEHAVIOR

Good attending behavior demonstrates to the client that you respect him as a person and that you are interested in what he has to say. By utilizing good attending behavior to enhance the client's self-respect and to establish a secure atmosphere, the interviewer facilitates free expression of whatever is on the client's mind.

There are three primary types of activities which best characterize good attending behavior:

1. The interviewer should be physically relaxed and seated with natural posture. If the interviewer is comfortable, he is better able to listen to the person with whom he is talking. Also, if the interviewer is relaxed physically, his posture and movements will be natural, thus enhancing his own sense of well-being. This sense of comfort better enables the interviewer to attend to, and to communicate with, the client.
2. The interviewer should initiate and maintain eye contact with the interviewee. However, eye contact can be overdone. A varied use of eye contact is most effective, as staring fixedly or with undue intensity usually makes the client uneasy. Additionally, varied eye contact should seem more natural to the interviewer, thus helping him to feel at ease also.
3. The final characteristic of good attending behavior is the interviewer's use of comments which follow directly from what the interviewee is saying. By directing one's comments and questions to the topics provided by the client, one not only helps him develop an area, but reinforces the client's free expression, resulting in more spontaneity and animation in the client's talking.

In summary, the interviewer's goal is to listen attentively and to communicate this attentiveness through a relaxed posture, use of varied eye contact, and verbal responses which indicate to the client that he is attempting to understand what the client is communicating. Specific behaviors which may be utilized are:

1. Relax physically; feel the presence of the chair as you are sitting on it.
2. Let your posture be comfortable and your movements natural; for example, if you usually move and gesture a good deal, feel free to do so at this time.

3. Use eye contact, by looking at the person with whom you are talking. Vary your gaze rather than staring fixedly.
4. Follow what the other person is saying by taking your cues from him. Don't jump from subject to subject.
5. Let your responses indicate to the client that you are with him, that you are trying to understand what he is experiencing, describing, and feeling.

Basic Interviewing Skills Manual, Part III

MINIMAL ENCOURAGES TO TALK

Once the client has been helped by the interviewer's attention and open-ended questions to begin telling his story, the interviewer's task is to facilitate his continuing to talk. The interviewer really needs to say very little in order to encourage a client to continue talking, elaborating, and explaining. Simple "um-hmm's", repetitions of one or two words from what he just said, one-word questions, such as "Then?" are very often sufficient. The word "minimal" refers both to how much the interviewer says, which can be very little, and to the amount of direction or intervention he imposes on the content and flow of the interview. When the interviewer uses minimal encourages to keep the client talking in a meaningful way, he is behaving minimally in both senses.

The successful usage of this technique presupposes that the interviewer has tuned in to what the client is discussing. Minimal encourages to talk should follow directly from what the interviewee has just said. When used correctly, the interviewee, although maintaining control of the interview in that he is talking about what he wants to discuss, is forced to elaborate, explain, and to take a more in-depth look at his problem. Often the interviewer will want and need to talk more, and to more actively direct or focus the content of what the client is saying. However, this is an extremely useful technique whether it is used as an adjunct to other techniques or relied on primarily by itself.

Some more examples of the type of comments described by the title "minimal encourages to talk" are:

1. Oh? So? Then? And? etc.
2. The repetition of one or two key words.
3. Tell me more.
4. How did you feel about that?
5. Give me an example.
6. What does that mean to you?
7. Umm-hmm.

Basic Interviewing Skills Manual, Part II

OPEN INVITATION TO TALK

The client comes into an interview with something that he feels is a problem. The initial task of the interviewer is to stay out of the interviewee's way so as to find out how the client sees his situation. Most useful in determining this is the technique of providing limited structures through the use of an open invitation to talk.

An open invitation to talk may be best understood when compared with a closed approach to interviewing. For example:

Open: Could you tell me a little bit about your marriage?

OR

Closed: Are you married? Do you get along with your wife?

It may be observed that the open comments provide room for the client to express his real self without the imposed categories of the interviewer. An open comment allows the client an opportunity to explore himself with the support of the interviewer. A closed invitation to talk, on the other hand, often emphasizes factual content as opposed to feelings, demonstrates a lack of interest in what the client has to say, and frequently attacks or puts the client in his place.

Crucial to the giving of open-ended questions is the concept of who is to lead the interview. While the interviewer does ask questions while using this skill, the questions are centered around concerns of the client rather than around concerns of the interviewer for the client. Questions should be designed to help the client clarify his own problems, rather than provide information for the interviewer. A typical problem with closed questions is that the interviewer leads the client to topics of interest to the interviewer only. Too often an interviewer projects his own theoretical orientation onto the information he is trying to gather, imposes artificial structure too early. If the interviewer relies on closed questions to structure his interview, he usually is forced to concentrate so hard on thinking up the next question that he fails to listen to and attend to the client.

Open invitations to talk are extremely useful in a number of different situations. For example:

1. They help begin an interview.
 - a) What would you like to talk about today? How have things been since the last time we talked together?
Etc.

2. They help get the interviewee to elaborate on a point.
 - a) Could you tell me more about that? How did you feel when that happened?
3. They help elicit examples of specific behavior so that the interviewer is better able to understand what the interviewee is describing.
 - a) Will you give me a specific example? What do you do when you get "depressed"? What do you mean when you say your father is out of his mind?
4. They help focus the client's attention on his feelings.
 - a) What are you feeling as you're telling me this? How did you feel then?

Basic Interviewing Skills Manual, Part V

PARAPHRASING

Paraphrasing is used to achieve three purposes: (1) to convey to the client that you are with him, that you are trying to understand what he is saying; (2) to crystallize a client's comments by repeating what he has said in a more concise manner; and (3) to check the interviewer's own perceptions to make sure he really does understand what the client is describing.

Just as the reflection of feeling involves some reiteration of content, paraphrasing entails some recognition of the client's feeling. The primary difference between the two is one of emphasis, whether the first concentrates on the emotional aspect of the client's communication, while the latter emphasizes the cognitive or content aspect of the message.

When utilizing this technique, the interviewer attempts to feed back to the client the essence of what the client has just said. Used in this manner, this skill is extremely functional in clarifying confusing content, tying a number of recent comments together, high-lighting issues by stating them more concisely, and in checking one's perceptions.

The following are some good examples of accurate paraphrasing:

Client: I don't know about him. One moment he's nice as can be, and the next he is a real bastard.

Interviewer: He's pretty inconsistent then.

Client: Every day there is something new to do. There must be ten different activities going on at any one time around here.

Interviewer: So there are lots of activities for you to choose from.

Client: He's really crummy. His degree is from a non-accredited school, he's had very little training, and he has a very poor relationship with his wife.

Interviewer: You don't think he is very competent.

Client: He is supposed to be an authority, yet he's mixed up all the time. He talks as if everything he says is true, but he's quite uncertain a lot of the time.

Interviewer: You feel that if a man gives you the impression that he knows everything, then he should know everything.

Basic Interviewing Skills Manual, Part IV

REFLECTION OF FEELING

The more quickly a client comes to see the interviewer as a person with whom it is safe to open up, the sooner the client is able to utilize the interviewer's support to begin his explorations of his problem. By using reflection of feeling, the interviewer conveys to the interviewee that he is trying to understand just how he feels, thus reinforcing the client's free expression of his feelings. Reflection of feelings also serves as a good perception check, in that by reflecting feelings the interviewer is often able to crystallize more sharply, for the client, the client's own feelings, thus enabling him to deal more effectively with them. In general, the interviewer can determine if he is using this technique successfully by whether or not the client begins to both express more feelings, and to recognize the feelings he does express.

There are a number of fairly common errors which the beginning interviewer quite frequently makes. Often an interviewer will concentrate on information-gathering rather than feeling reflection. On other occasions, an interviewer may realize the importance of reflecting feelings but may not be attending closely enough to what the client is saying that he can accurately do this. Another frequent error is to mistake the artificial labeling or categorization of feelings for reflection of feelings. The interviewer who successfully uses this skill not only correctly verbalizes the emotion the client is experiencing, but demonstrates his empathetic understanding by his tone of voice and by appropriate gestures and posture.

Finally, the beginning interviewer, in his attempt to demonstrate to the client that he is not only "with him", but that he also possesses a certain expertise, substitutes speculations about the client's unconscious motivation for reflecting what the client is really expressing.

The following are some examples of good reflections of feeling:

Client: I'm so out of it; I can hardly operate. I can't do anything because that feeling is always there.

Interviewer: Like there is a terrible burden that you're carrying around.

Client: I could hardly believe it. That was probably one of the most wonderful things that ever happened to me.

Interviewer: You were really happy.

Client: I couldn't think of anything to say when he said that he liked my hair. (blushes)

Interviewer: You must have felt pretty happy, but also a little embarrassed.

Client: After that I suggested that we all go out for some beer and pizza, but they all kept playing cards. (low affect, sudden slouch in posture, etc.)

Interviewer: You must have felt pretty disappointed when no one responded to that.

SUMMARIZATION

When an interviewer uses summarization, he attempts to recapitulate, to condense, and to crystallize the essence of what the interviewee has said, including both expressions of emotion and descriptive content. While a summary thus resembles a combination of reflection of feeling and paraphrasing, it differs from them in one fundamental respect: the temporal period covered by a summary is substantially longer than that of either reflection of feeling or a paraphrase. The latter deal with the client's last few sentences or short paragraph. A summary puts together a number of client paragraphs, or an entire phase of a session, or may cover even an entire interview.

A summary which integrates both the emotional and cognitive elements of what the client has been discussing may serve at least three major functions:

- 1) It may crystallize, in a more coherent and integrated manner, what the interviewee has been talking about.
- 2) It may serve as a stimulus for further exploration of a particular topic or area.
- 3) Because it pulls together material discussed over a substantial period of time, it frequently serves as a necessary perception check for the interviewer.

Summarizations are frequently used in any of the following situations (this is not an inclusive list):

- 1) When the interviewer wishes to structure the beginning of a session by recalling the high points of a previous interview.
- 2) When the interviewee's presentation of a topic has been either very confusing or just plain lengthy and rambling.
- 3) When an interviewee has seemingly expressed everything of importance to him on a particular topic.
- 4) When plans for the next steps to be taken require mutual assessment and agreement on what has been learned so far.
- 5) When, at the end of a session, the interviewer wishes to emphasize what has been learned within it, perhaps in order to give an "assignment" to the client for the interval until the next session.

INTERVIEWER VERBALIZATION CATEGORIZATION SHEET

Student Name & Tape No.				
Open-ended Questions				
Close-ended Questions				
Minimal Activity				
Paraphrase				
Reflection of Feeling				
Summariza- tion				
Other				

THERAPIST ERROR CHECK LIST

General Quality of Statement

Good statement or question.

Fair statement - says generally right thing but partly ineffectual; embodying at least one error listed below.

Poor statement - embodies serious error.

I. Errors of Focus

1. Narrow focus or focus on irrelevant material.
2. Focus on symptoms in nonproductive manner.
3. Neglects to label or explore important content.
4. Allows sidetrack.
5. Changes topic abruptly.
6. Stops exploration.
7. Inaccurate reflection or question indicating lack of understanding of what patient has said.
8. Fails to structure sufficiently - patient rambles.
9. Non-contributory statement or question.

II. Faulty role definition - authoritarian or social.

10. Argues - is authoritarian or dogmatic.
11. Criticizes, belittles patient - condescending.
12. Cross-examines patient.
13. Participates in criticism of another professional person.
14. Gives information or advice inappropriately.
15. Makes personal reference or gives opinion inappropriately.
16. Gives reassurance or agreement where inappropriate.
17. Flatters patient.
18. Laughter when inappropriate.

III. Faulty facilitation of communication.

19. Guesses facts (asking yes or no).
20. Asks yes, no, or brief answer questions.
21. Interrupts.
22. Interrupts silence too soon.
23. Allows silence too long.
24. Awkwardness - awkward pause, abrupt, makes long speech, structures too much.

IV. Other errors

25. Irrelevant or unprofessional statement.
26. Asks patient own interpretation or question to which he could not be expected to know the answer.

ATTENDING BEHAVIOR

"Verbal Attending Behavior"

Date:
Tape:
Rater:

Changes topics abruptly, disruptive and inappropriate changes.

Verbal emphasis and highlighting; labels and explores important content; good following, clear communication.

Focuses on irrelevant material, non-contributory statements or questions

Allows sidetracking, inaccurate reflect. Neglects to label or explore important content

Good following and understanding; accurate reflect, and interpretation.

"Eye Contact"

Inattentive, loses eye contact frequently,

Observes closely, good use of eye contact, always attentive.

Avoids prolonged eye contact, uncertain, indirect, uncertain as to attentiveness.

Somewhat attentive, does not vary use of eye contact.

Attentive most of time.

"Posture and Movements"

Tense, unnatural,
uncomfortable.

Too relaxed; sloppy;
somewhat tense or
rigid, slightly ner-
vous, slouches.

Comfortable, but not
too relaxed; attend-
ing, but not
intensely.

Comfortable, attentive,
very little variation.

Natural, very
attentive, at ease,
some variation.

"Verbal variety-appropriateness"

Inappropriate affect
as reflected in voice
modulation, irritating,
shrill, distracting.

Hesitant, faltering,
uncertain, monotone,
some inappropriate
affect.

Very little change
in tonal qualities,
stereo-typed, little
affect.

Pleasant and clear,
some variation, pro-
vides good source of
stimuli, some appro-
priate affect.

Articulate, consider-
able variation, in
affect and feeling,
expression reflected
in voice modulations.

SCALE 1

EMPATHIC UNDERSTANDING IN INTERPERSONAL PROCESSES:

A SCALE FOR MEASUREMENT

Level 1 _____ The verbal and behavioral expressions of the first person either do not attend to or detract significantly from the verbal and behavioral expressions of the second person(s) in that they communicate significantly less of the second person's feelings than the second person has communicated himself.

Examples: The first person communicates no awareness of even the most obvious, expressed surface feelings of the second person. The first person may be bored or uninterested or simply operating from a preconceived frame of reference which totally excludes that of the other person(s).

In summary, the first person does everything but express that he is listening, understanding, or being sensitive to even the feelings of the other person in such a way as to detract significantly from the communications of the second person.

Level 2 _____ While the first person responds to the expressed feelings of the second person(s) he does so in such a way that he subtracts noticeable affect from the communications of the second person.

Examples: The first person may communicate some awareness of obvious surface feelings of the second person, but his communications drain off a level of the affect and distort the level of meaning. The first person may communicate his own ideas of what may be going on, but these are not congruent with the expressions of the second person.

In summary, the first person tends to respond to other than what the second person is expressing or indicating.

Level 3 _____ The expressions of the first person in response to the expressed feelings of the second person(s) are essentially interchangeable with those of the second person in that they express essentially the same affect and meaning.

Examples: The first person responds with accurate understanding of the surface feelings of the second person but may not respond to or may misinterpret the deeper feelings.

In summary, the first person is responding so as to neither subtract from nor add to the expressions of the second person; but he does not respond accurately to how that person really feels beneath the surface feelings. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4_____ The responses of the first person add noticeably to the expressions of the second person(s) in such a way as to express feelings a level deeper than the second person was able to express himself.

Example: The facilitator communicates his understanding of the expressions of the second person at a level deeper than they were expressed, and thus enables the second person to experience and/or express feelings he was unable to express previously.

In summary, the facilitator's responses add deeper feeling and meaning to the expressions of the second person.

Level 5_____ The first person's responses add significantly to the feeling and meaning of the expressions of the second person(s) in such a way as to (1) accurately express feeling levels below what the person himself was able to express or (2) in the event of on-going deep self-exploration on the second person's part, to be fully with him in his deepest moments.

Example: The facilitator responds with accuracy to all of the person's deeper as well as surface feelings. He is "together" with the second person or "tuned in" on his wave length. The facilitator and the other person might proceed together to explore previously unexplored areas of human existence.

In summary, the facilitator is responding with a full awareness of who the other person is and a comprehensive and accurate empathic understanding of his deepest feelings.

*Adapted from Carkhuff (1969)

SCALE 2

THE COMMUNICATION OF RESPECT IN INTERPERSONAL PROCESSES:

A SCALE FOR MEASUREMENT

Level 1_____ The verbal and behavioral expressions of the first person communicates a clear lack of respect (or negative regard) for the second person(s).

Example: The first person communicates to the second person that the second person's feelings and experiences are not worthy of consideration or that the second person is not capable of acting constructively. The first person may become the sole focus of evaluation.

In summary, in many ways the first person communicates a total lack of respect for the feelings, experiences, and potentials of the second person.

Level 2_____ The first person responds to the second person in such a way as to communicate little respect for the feelings, experiences, and potentials of the second person.

Example: The first person may respond mechanically or passively or ignore many of the feelings of the second person.

In summary, in many ways the first person displays a lack of respect and concern for the second person's feelings, experiences, and potentials.

Level 3_____ The first person communicates a positive respect and concern for the second person's feelings, experiences and potentials.

Example: The first person communicates respect and concern for the second person's ability to express himself and to deal constructively with his life situation.

In summary, in many ways the first person communicates that who the second person is and what he does matter to the first person. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4_____ The facilitator clearly communicates a very deep respect and concern for the second person.

Example: The facilitator's responses enables the second person to feel free to be himself and to experience being valued as an individual.

In summary, the facilitator communicates a very deep caring for the feelings, experiences, and potentials of the second person.

Level 5_____ The facilitator communicates the very deepest respect for the second person's worth as a person and his potentials as a free individual.

Example: The facilitator cares very deeply for the human potentials of the second person.

In summary, the facilitator is committed to the value of the other person as a human being.

*Adapted from Carkhuff (1969)

SCALE 3

FACILITATIVE GENUINENESS IN INTERPERSONAL PROCESSES:

A SCALE FOR MEASUREMENT

Level 1 _____ The first person's verbalizations are clearly unrelated to what he is feeling at the moment, or his only genuine responses are negative in regard to the second person(s) and appear to have a totally destructive effect upon the second person.

Example: The first person may be defensive in his interaction with the second person(s) and this defensiveness may be demonstrated in the content of his words or his voice quality. Where he is defensive he does not employ his reaction as a basis for potentially valuable inquiry into the relationship.

In summary, there is evidence of a considerable discrepancy between the inner experiencing of the first person(s) and his current verbalizations. Where there is no discrepancy, the first person's reactions are employed solely in a destructive fashion.

Level 2 _____ The first person's verbalizations are slightly unrelated to what he is feeling at the moment, or when his responses are genuine they are negative in regard to the second person; the first person does not appear to know how to employ his negative reactions constructively as a basis for inquiry into the relationship.

Example: The first person may respond to the second person(s) in a "professional" manner that has a rehearsed quality or a quality concerning the way a helper "should" respond in that situation.

In summary, the first person is usually responding according to his prescribed role rather than expressing what he personally feels or means. When he is genuine his responses are negative and he is unable to employ them as a basis for further inquiry.

Level 3 _____ The first person provides no "negative" cues between what he says and what he feels, but he provides no positive cues to indicate a really genuine response to the second person(s).

Example: The first person may listen and follow the second person(s) but commits nothing more of himself.

In summary, the first person appears to make appropriate responses that do not seem insincere but that do not reflect any real involvement either. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4 _____ The facilitator presents some positive cues indicating a genuine response (whether positive or negative) in a non-destructive manner to the second person(s).

Example: The facilitator's expressions are congruent with his feelings, although he may be somewhat hesitant about expressing them fully.

In summary, the facilitator responds with many of his own feelings, and there is no doubt as to whether he really means what he says. He is able to employ his responses whatever their emotional content, as a basis for further inquiry into the relationship.

Level 5 _____ The facilitator is freely and deeply himself in a non-exploitative relationship with the second person(s).

Example: The facilitator is completely spontaneous in his interaction and open to experiences of all types, both pleasant and hurtful. In the event of hurtful responses the facilitator's comments are employed constructively to open a further area of inquiry for both the facilitator and the second person.

In summary, the facilitator is clearly being himself and yet employing his own genuine responses constructively.

*Adapted from Carkhuff (1969)

SCALE 5

PERSONALLY RELEVANT CONCRETENESS OR SPECIFICITY OF EXPRESSION

IN INTERPERSONAL PROCESSES:

A SCALE FOR MEASUREMENT

Level 1_____ The first person leads or allows all discussion with the second person(s) to deal only with vague and anonymous generalities.

Example: The first person and the second person discuss everything on strictly an abstract and highly intellectual level.

In summary, the first person makes no attempt to lead the discussion into the realm of personally relevant specific situations and feelings.

Level 2_____ The first person frequently leads or allows even discussions of material personally relevant to the second person(s) to be dealt with on a vague and abstract level.

Example: The first person and the second person may discuss the "real" feelings but they do so at an abstract, intellectualized level.

In summary, the first person does not elicit discussion of most personally relevant feelings and experiences in specific and concrete terms.

Level 3_____ The first person at times enables the second person(s) to discuss personally relevant material in specific and concrete terminology.

Example: The first person will make it possible for the discussion with the second person(s) to center directly around most things that are personally important to the second person(s), although there will continue to be areas not dealt with concretely and areas in which the second person does not develop fully in specificity.

In summary, the first person sometimes guides the discussions into consideration of personally relevant specific and concrete instances, but these are not always fully developed. Level 3 constitutes the minimal level of facilitative functioning.

Level 4_____ The facilitator is frequently helpful in enabling the second person(s) to fully develop in concrete and specific terms almost all instances of concern.

Example: The facilitator is able on many occasions to guide the discussion to specific feelings and experiences of personally meaningful material.

In summary, the facilitator is very helpful in enabling the discussion to center around specific and concrete instances of most important and personally relevant feelings and experiences.

Level 5_____ The facilitator is always helpful in guiding the discussion, so that the second person(s) may discuss fluently, directly, and completely specific feelings and experiences.

Example: The first person involves the second person in discussion of specific feelings, situations, and events, regardless of their emotional content.

In summary, the facilitator facilitates a direct expression of all personally relevant feelings and experiences in concrete and specific terms.

*Adapted from Carkhuff (1969)

SCALE 6

CONFRONTATION IN INTERPERSONAL PROCESSES:

A SCALE FOR MEASUREMENT

Level 1_____ The verbal and behavioral expressions of the helper disregard the discrepancies in the helpee's behavior (ideal versus real self, insight versus action, helper versus helpee's experiences).

Example: The helper may simply ignore all helpee discrepancies by passively accepting them.

In summary, the helper simply disregards all of those discrepancies in the helpee's behavior that might be fruitful areas for consideration.

Level 2_____ The verbal and behavioral expressions of the helper disregard the discrepancies in the helpee's behavior.

Example: The helper, although not explicitly accepting these discrepancies, may simply remain silent concerning most of them.

In summary, the helper disregards the discrepancies in the helpee's behavior, and, thus, potentially important areas of inquiry.

Level 3_____ The verbal and behavioral expressions of the helper, while open to discrepancies in the helpee's behavior, do not relate directly and specifically to these discrepancies.

Example: The helper may simply raise questions without pointing up the diverging directions of the possible answers.

In summary, while the helper does not disregard discrepancies in the helpee's behavior, he does not point up the directions of these discrepancies. Level 3 constitutes the minimum level of facilitative interpersonal functioning.

Level 4_____ The verbal and behavioral expressions of the helper attend directly and specifically to the discrepancies in the helpee's behavior.

Example: The helper confronts the helpee directly and explicitly with discrepancies in the helpee's behavior.

In summary, the helper specifically addresses himself to discrepancies in the helpee's behavior.

Level 5_____ The verbal and behavioral expressions of the helper are keenly and continually attuned to the discrepancies in the helpee's behavior.

Example: The helper confronts the helpee with helpee discrepancies in a sensitive and perceptive manner whenever they appear.

In summary, the helper does not neglect any potentially fruitful inquiry into the discrepancies in the helpee's behavior.

*Adapted from Carkhuff (1969)

RELATIONSHIP QUESTIONNAIRE¹

People feel differently about some people than they do about others. There are a number of statements below that describe a variety of ways that one person may feel about another person, or ways that one person may act toward another person. Consider each statement carefully and decide whether it is true or false when applied to your present relationship with your counselor. If the statement seems to be mostly true, then mark it true; if it is mostly not true, then mark it false.

- | <u>T</u> | <u>F</u> | |
|----------|----------|---|
| ___ | ___ | 1. He understands my words, but does not know how I feel. |
| ___ | ___ | 2. He understands me. |
| ___ | ___ | 3. He understands exactly how I see things. |
| ___ | ___ | 4. He often misunderstands what I am trying to say. |
| ___ | ___ | 5. Sometimes he will argue with me just to prove he is right. |
| ___ | ___ | 6. He can read me like a book. |
| ___ | ___ | 7. He ignores some of my feelings. |
| ___ | ___ | 8. He knows more about me than I do about myself. |
| ___ | ___ | 9. Sometimes he is so much "like me" in my feelings that I am not at all distracted by his presence. |
| ___ | ___ | 10. Even when I cannot say quite what I mean, he knows how I feel. |
| ___ | ___ | 11. He usually helps me to know how I am feeling by putting my feelings into words for me. |
| ___ | ___ | 12. He must understand me, but I often think he is wrong. |
| ___ | ___ | 13. He seems to follow almost every feeling I have while I am with him. |
| ___ | ___ | 14. He usually uses just the right words when he tries to understand how I am feeling. |
| ___ | ___ | 15. Sometimes he is so much "with me" that with only the slightest hint he is able to accurately sense some of my deepest feelings. |

T F

- ___ ___ 16. I often cannot understand what he is trying to tell me.
- ___ ___ 17. Whatever he says usually fits right in with what I am feeling.
- ___ ___ 18. He sometimes seems more interested in what he himself says than in what I say.
- ___ ___ 19. He sometimes pretends to understand me, when he really does not.
- ___ ___ 20. He usually knows exactly what I mean, sometimes even before I finish saying it.
- ___ ___ 21. He often leads me into talking about some of my deepest feelings.
- ___ ___ 22. He sometimes completely understands me so that he knows what I am feeling even when I am hiding my feelings.
- ___ ___ 23. He helps me know myself better by sometimes pointing to feelings within me that I had been unaware of.
- ___ ___ 24. I can learn a lot about myself from talking with him.
- ___ ___ 25. When he sees me he seems to be "just doing a job".
- ___ ___ 26. He never knows when to stop talking about something which is not very meaningful to me.
- ___ ___ 27. He sometimes cuts me off abruptly just when I am leading up to something very important to me.
- ___ ___ 28. If I had a chance to talk with a different counselor, I would.
- ___ ___ 29. He uses the same words over and over again, till I am bored.

¹Adapted from Truax and Carkhuff, 1967.

SELF-DISCLOSURE QUESTIONNAIRE

Please place a check on the line beside each item which describes a topic you would feel capable of discussing with the person who has just interviewed you.

- ___ 1. Whether or not you will drink alcoholic beverages. If so, your favorite drinks - beer, wine, gin, brandy, whiskey, etc.
- ___ 2. The foods you like best, and the ways you like food prepared; e.g., rare steak, etc.
- ___ 3. Whether or not you belong to any church. If so, which one, and the usual frequency of attending.
- ___ 4. Whether or not you belong to any clubs, fraternity, civic organizations. If so, the names of these organizations.
- ___ 5. Any special skills that you have learned; e.g., play a musical instrument, sculpture, wood-carving, weaving, etc.
- ___ 6. Whether or not you have any favorite spectator sport. If so, what these are; e.g., boxing, wrestling, football, basketball, etc.
- ___ 7. The places that you have traveled to, or lived in during your life - other countries, cities, states.
- ___ 8. What your political sentiments are at present - your views on local or federal government policies of interest to you.
- ___ 9. Whether or not you have been seriously in love during your life before this year. If so, with whom, what the details were, and the outcome.
- ___ 10. The characteristics of that person which you dislike, that you wish that person would change and improve.
- ___ 11. The personal deficiencies that you would most like to improve, or that you are struggling to do something about at present; e.g., appearance, lack of knowledge, loneliness, temper, etc.
- ___ 12. Whether or not you presently owe money; if so, how much and to whom.
- ___ 13. The kind of future you are aiming for, working for, planning for, both personally and vocationally; e.g., marriage and family, professional status, etc.

- ___14. Your chief complaints about your work or course of studies; e.g., the things that bore you, or annoy and upset you, such as tasks, assignments, people.
- ___15. The details of your sex life up to the present time, including whether or not you masturbate, whether or not you have had or are having sexual relations, etc.
- ___16. Your problems and worries about your personality; that is, what you dislike most about yourself, any guilt, inferiority feelings, etc., that you might have.
- ___17. How you feel about the appearance of your body - your looks, figure, weight - what you dislike and what you accept in your appearance, and how you wish you might change your looks or improve them.
- ___18. Your thoughts about your health, including any problems, worries or concerns that you might have at present.
- ___19. An exact idea of your regular income (if a student, of your usual combined allowance and earnings, if any).

Adapted from Jourard (1964)

STUDENT-SUPERVISOR RELATIONSHIP QUESTIONNAIRE

My instructor's name was: _____

Directions: Please mark each item "true" or "false", depending upon whether you feel it describes the way you feel about your interview-training instructor.

- | <u>T</u> | <u>F</u> | |
|----------|----------|--|
| _____ | _____ | 1. He seems to hold things back, rather than tell me what he really thinks. |
| _____ | _____ | 2. He understands exactly how I see things. |
| _____ | _____ | 3. Sometimes he seems interested in me, while at other times he doesn't seem to care about me. |
| _____ | _____ | 4. He often misunderstands what I am trying to say. |
| _____ | _____ | 5. Sometimes I feel that what he says to me is very different from the way he really feels. |
| _____ | _____ | 6. He usually is not interested in what I have to say. |
| _____ | _____ | 7. He is a very sincere person. |
| _____ | _____ | 8. He accepts me the way I am, even though he wants me to be better. |
| _____ | _____ | 9. He often leads me into talking about some of my deepest feelings. |
| _____ | _____ | 10. If I had a chance to study under a different instructor, I would. |
| _____ | _____ | 11. He frequently acts so restless that I get the feeling he can hardly wait for the day to end. |
| _____ | _____ | 12. He is always relaxed. I don't think anything could get him excited. |
| _____ | _____ | 13. He gives me so much advice that I sometimes feel overwhelmed. |
| _____ | _____ | 14. He never says anything that makes him sound like a real person. |

T F

- _____ _____ 15. He probably laughs about the things I have said to him.
- _____ _____ 16. His concern about me is very obvious.
- _____ _____ 17. He acts like he knows it all.
- _____ _____ 18. Often he makes me feel stupid, the way he uses strange or big words.

Adapted from Truax and Carkhuff (1967)

INTERVIEW INSTRUCTOR EVALUATION QUESTIONNAIRE

by George Saslow, M.D., Ph.D.

Psychiatry 511 interview instructors regularly request and make use of evaluations of their instructional activities by the students in their groups. Please fill in the rating scale below. Return it to me or to our department secretary. Each small group instructor will receive copies of the feedback from his own group of students. G. Saslow

(Small Group Interviewing)

Instructor's name _____

Date _____

Please place the appropriate number next to the question and answer all questions. Thank you.

Never		Always		
1	2	3	4	5

1. The instructor makes clear to me what I'm expected to learn. _____
2. The teacher is able to explain concepts in a way I can understand. _____
3. The teacher can demonstrate for me applications of these concepts. _____
4. The instructor is aware of what stage I am at in the learning process. _____
5. The instructor gives me prompt feedback and constructive criticism. _____
6. The instructor helps me move on to the next higher step in my learning process in a way that makes good sense. _____
7. The instructor allows me to make a try at the material to be learned with a minimum fear of penalty for making an error. _____
8. If while learning I should make a mistake, I feel the instructor would support me and help me learn from the mistake. _____

- | | Never | | | | Always |
|---|-------|---|---|---|--------|
| | 1 | 2 | 3 | 4 | 5 |
| 9. The instructor takes some personal and/or professional risk in allowing me to make mistakes. | | | | | |
| | _____ | | | | |
| 10. The instructor involves himself - his skill, his knowledge, his feelings, in the learning process with his group. | | | | | |
| | _____ | | | | |
| 11. The instructor deals honestly with me and with what is taking place at the moment in the group. | | | | | |
| | _____ | | | | |
| 12. The instructor has a good knowledge of his subject. | | | | | |
| | _____ | | | | |
| 13. The instructor seems not to care how I learn the material as much as that I learn the material. | | | | | |
| | _____ | | | | |

- | | Low | | | | High |
|---|-------|---|---|---|------|
| | 1 | 2 | 3 | 4 | 5 |
| 14. The instructor seems to fit naturally into the teaching role. | | | | | |
| | _____ | | | | |
| 15. Rate the overall effectiveness of this teacher for you. | | | | | |
| | _____ | | | | |

COMMENTS: Any additional observations that could be useful to the instructor in improving his instructional competence are welcomed.

