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COUNSELOR EMPATHY TRAINING VIA AUDIOTAPE,
ROLEPLAYING AND MICROCOUNSELING

by Gilles Boulais

Doctoral dissertation presented to
the Faculty of Psychology of the
University of Ottawa in partial
fulfillment of the requirements
for the degree of Doctor of
Philosophy

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CURRICULUM STUDIORUM

Gilles Boulais was born July 11, 1948, in Ottawa, Ontario. He received the Bachelor of Arts degree from the University of Ottawa in 1969, the Bachelor of Philosophy degree from Saint Paul University in 1969, and finally a Master of Psychology degree from the University of Ottawa in 1972.
ACKNOWLEDGMENTS

This doctoral dissertation was prepared under the supervision of Daniel Lee, Ph.D., assistant professor at the University of Ottawa.

The author is also indebted to his colleagues, Donald Boulet, Ph.D., and Walter Leckett, Ph.D., assistant professors at the Faculty of Psychology, for their support and assistance in this project. A special thank you is extended to Mrs. R. B. Robinson of St. Catharines, Ontario, who ensured that the first chapter was written in the King's English, and to a stalwart and loving Suzanne Robinson, my partner-in-life, who was patient and supportive throughout this project.
ABSTRACT

The purpose of the present study was to compare the effects of three training methods in empathy in order to establish which of the three was most effective in promoting higher levels of empathy in the helper.

Forty-two volunteer student-counselors from the University of Ottawa were randomly assigned to four groups: (1) a control group receiving 9 hours of pre-experimental audiotape empathy training ($n = 11$); (2) an experimental group 1 receiving 9 hours of pre-experimental training plus an additional 9 hours of identical audiotape training ($n = 10$); (3) an experimental group 2 receiving the 9 hours of pre-experimental training plus 9 more hours of role-playing ($n = 11$); and finally (4) an experimental group 3 receiving the 9 hours of pre-experimental training plus Microcounseling training ($n = 10$).

The experimental design was a pretest-posttest control group design. Empathy was measured by scoring responses to the Index of Communication and rating excerpts from the recorded standard interviews. Independent judges rated the responses to the Index of Communication and the excerpts from the standard interviews, using the Carkhuff Empathic Understanding in Interpersonal Processes: A Scale for Measurement (Carkhuff empathy scale).
A multivariate analysis of variance was performed to test for significant differences between the pretest and posttest means of the three groups. Significant differences were found between posttest means on one criterion only, the standard interview.

The results indicated that 1) both the roleplaying and the Microcounseling were more effective than the audio only and the no-treatment group in promoting higher levels of empathy in the trainees, and that 2) Microcounseling was as effective as Carkhuff's systematic training approach in training for empathy, but it was not superior to Carkhuff's approach. Several reasons are suggested for these results.
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INTRODUCTION

The purpose of the present research was to compare three training approaches in empathy in an attempt to establish which was most effective in promoting high levels of empathy in the helping role. The Microcounseling approach (Ivey, 1971) seemed the most promising because of its use of experiential methods such as roleplaying, an immediate second practice trial, and videotape feedback.

Recent research in the area of empathy (Gladstein, 1977; Rogers, 1957b, 1975; Rogers, Gendlin, Truax & Keisler, 1967) has underlined the importance of this dimension in order for psychotherapy to have a positive outcome. Over and above the boundaries drawn by the main theories of counseling and psychotherapy, the literature reveals a basic agreement regarding the importance of empathy in order that positive change occur in a client (Fischer, Paveza, Kickertz, Hubbard & Grayston, 1975; Fromm-Reichman, 1950; May, 1967; Truax & Carkhuff, 1967). The importance of empathy led to a search for effective methods of training helpers to be empathic. Carkhuff (1969a; 1969b) and Truax and Carkhuff (1967) developed a systematic training approach which integrated the didactic and experiential dimensions of training.

Research evidence (Truax & Carkhuff, 1967; Truax & Mitchell, 1971) shows that systematic training can promote
higher levels of empathic functioning in the counselor-trainee. However, many studies in the field have used written criteria, which may not reflect actual interview processes (Gormally & Hill, 1974). Since the goal of training is empathic responding in the interview, the criterion measure should approximate an interview situation. The present research used a laboratory analogue of the interview called a standard interview. Even if systematic training has been successful in promoting higher empathy in the trainee, the question remains as to which of the many training methods is most effective in promoting these higher levels of empathy. Previous research (Boulet, 1974a, 1974b; Boulais, 1977) seems to have established roleplaying as an effective tool for teaching empathic responding, when the roleplaying is preceded by Carkhuff style audio-training. However, Boulet's studies incorporated only trainer verbal feedback. The question therefore remained: does roleplaying with video feedback constitute the best tool for training in empathy? Would the Microcounseling approach, which integrates both roleplaying and the structured feedback of video playback, be superior to roleplaying only? The literature does not report any application of the Microcounseling paradigm to training in empathy as operationally defined by Carkhuff (1969a). Therefore, the unique contribution of the present research
was to apply both approaches of training to Carkhuff empathy in an attempt to compare both systems of training.

The present research not only attempted to answer the question as regards the differential effectiveness of the methods, but also attempted to add to the already existing literature regarding the effects of systematic training on empathic behavior in the helper. The first chapter will present a review of the literature in the areas of empathy and training. The second chapter describes the sample, the setting of the experiment, the instruments, the selection and training of independent judges, and finally, the experimental treatments. The final chapter presents the results and discusses them.
CHAPTER I

REVIEW OF THE LITERATURE

The purpose of this first chapter is to define the nature of empathy and review systematic training in this area. The following sections will be included: (1) a definition of empathy; (2) its role in psychotherapy and counseling; (3) systematic training; (4) roleplaying and Microcounseling; and finally (5) a rationale regarding the expectations of the experiment.

The Nature of Empathy and Its Role in Counseling and Psychotherapy

A Definition of Empathy

Both early psychologists and early phenomenological philosophers were keenly interested in what we know today as empathy. In fact, the concept was introduced by a German psychologist, Theodor Lipps, in 1897 (Buchheimer, 1963; Katz, 1963). It was also the topic of a doctoral dissertation in phenomenological philosophy by Edith Stein (1917/1964). Stein, an assistant to Husserl, entitled her study *Zum Problem der Einfühlung*, The Problem of Empathy, and presented it to the University of Freiburg. In her study, Stein reviewed the treatment of the concept by Lipps and redefined the term to mean "putting oneself into
another's place" (p. xx). Later in the present study, the reader will notice the similarity of today's psychological definition of empathy to her definition. Further on in her dissertation, Stein clarified that the idea of empathy was "the perceiving of foreign [not I] subjects and their experience" (p. xxii). Amazingly, she foresaw what Rogers (1957) was to call the "as if" dimension of empathy by describing it as a "quasi" sameness of feeling.

Einfühlung, the German word for empathy, belonged to the field of aesthetics, and was meant by Lipps to describe the "tendency of a subject to fuse with the object that absorbs his attention" (Katz, 1963, p. 2). Katz went on to explain that the word empathy was introduced into the English language by Edward B. Titchener of Cornell University, as an equivalent to the original German word. Astin (1967) linked the English word empathy to the Greek em-patheia, which she described as "[implying] an active appreciation of another person's feeling experience" (p. 57). Buchheimer (p. 62) also suggested that, since Lipps' conceptualization implied a "taking in of the stimulus and a reintegration of it by the respondent," one could easily, by analogy, apply the term empathy to the counseling situation, where the counselor takes in a stimulus (feeling) provided by a client and reintegrates it to present the client with a reformulation. The present study will concern itself with
the definition of empathy as it is found in the field of counseling and psychotherapy.

Hinsie and Campbell (1970), in their psychiatric dictionary, defined empathy as "putting oneself into the psychological frame of reference of another, so that the other person's thinking, feeling, and acting are understood." This definition would stand as acceptable to most theoreticians of both the psychoanalytical and client-centered schools of psychotherapy.

Freud saw the phenomenon of empathy in the therapist as an "intellectual identification" rather than an affective one, the latter being a defense mechanism (Fox & Goldin, 1964, p. 323; Katz, 1963; p. 71-77). In Freud's mind, this identification made it possible to grasp intuitively another person's feeling state. Robert Fleiss said, "We ... should like to suggest calling it [empathy] trial identification" (Katz, 1963, p. 13). Smith Petro and Hansen (1977) have defined empathy as:

the apprehension of the inner feeling states of another individual ... the act of empathizing is a subjective process, distinct from two other ways of knowing: (a) inference, a more cognitive process, and (b) intuition, a more visceral, conative process (p. 373).

Often viewed as a multidimensional phenomenon, empathy's various dimensions have yet to be empirically established. Only one author seems to have devoted his energies to defining tentatively some of those dimensions. He is Theodor Reik.
An analyst, Reik devoted many of his writings to the concept of empathy, probably more than any other therapist has ever done to this day. He described the steps in the process of empathy as follows:

1- Identification: We allow ourselves to become absorbed in contemplating the other person and his experiences. ... When we identify we become engrossed in the personality of another and we lose consciousness of self. ... However deep and intense the identification may be, it is of course temporary.

2- Incorporation: By this term we mean the act of taking the experience of the other person into ourselves.

3- Reverberation: What we have taken into ourselves now echoes upon some part of our own experience and awakens a new appreciation.

4- Detachment: We break our identification and deliberately move away to gain the social and psychic distance necessary for objective analysis. We try to place our understanding in a perspective (Katz, 1963, p. 41-46).

Most analytically oriented therapists have rested their definition on this trial or temporary identification. Others, such as Greenson (1960), have described empathy as an "emotional knowing" of the client. Kagan and Krathwohl (1967) have also identified one component, similar to Reik's "identification." It is "affective sensitivity." Affective sensitivity is restricted to the detection and inner description of another's feeling. Affective sensitivity would be a sine qua non condition for the development of "discrimination" as defined by Carkhuff (1969a). Discrimination will
be further defined in the third section of the present chapter and in the sixth section of the second chapter. Kagan and Krathwohl have viewed affective sensitivity as an alterable but basic component of communicated empathy.

The social psychologist and philosopher, George Herbert Mead, defined empathy in terms of roletaking which he described as involving "thinking and feeling as one believes the other person thinks and feels" (Katz, 1963, p. 77). It will soon be evident that the client-centered school of psychotherapy, initiated by Carl R. Rogers, was profoundly influenced by all those theorists. Rogers (1957b, 1958, 1961, 1975) has written extensively on the concept of empathy. His formulations have been the basis for a massive number of studies dealing with empathy. Some will be reviewed later in this chapter. Rogers' definition of empathy has changed from 1957 to 1975, but this change has been an evolution towards an increasing clarification of the concept. In 1957, Rogers (1957b) said, "To sense the client's private world as if it were your own, but without ever losing the 'as if' quality--this is empathy" (p. 99). Rogers (1975), quoting a 1959 statement of his, explains that empathy is:

to perceive the internal frame of reference of another with accuracy ... as if one were the person, but without ever losing the "as if" condition. ... If this "as if" quality is lost, then the state is one of identification (p. 3).
Again, borrowing from Gendlin, Rogers (1975) rewrote his definition to include the concept of experiencing, which proposes that at all times the human organism has bodily feelings which the individual can focus on, or refer to, to discover the meaning of his experience. Empathy then addressed itself to the "felt meaning" in the client, meaning which he/she is experiencing at a particular moment, and which the therapist strives to help him/her describe. Incorporating this new dimension of experiencing, Rogers (1975) proposed four steps in what he called emphatically, the process of empathy:

1- It means entering the private perceptual world of the other and becoming thoroughly at home in it. It involves being sensitive, moment to moment, to the changing felt meanings which flow in this other person.

2- It means temporarily living in his/her life ... without making judgments, sensing meanings of which he/she is scarcely aware, but not trying to uncover feelings of which the person is totally unaware, since this would be too threatening.

3- It includes communicating your sensings.

4- It means frequently checking as to the accuracy of your sensings, and being guided by the responses you receive. ... By pointing to the possible meanings in the flow of his/her experiencing you help the person to focus on this useful type of referent, to experience the meanings more fully, and to move forward in the experiencing (p. 4).

In this new definition, Rogers emphasized the dimension of communication of the understanding of feeling. This aspect has also been emphasized by Truax and Mitchell.
(1971) and by Carkhuff (1969a) and will be one of the major aspects of this study. Carkhuff (1971) defined empathy in the following manner:

[Empathy is] the ability to recognize, sense and understand the feelings that another person has associated with his behavioral and verbal expressions and to accurately communicate this understanding to him (p. 266).

This definition will be the one used in the present study.

Carkhuff's emphasis is on ability to understand and communicate the understanding that the counselor has of the client's immediate feeling. Since the emphasis is on ability, empathy, or rather empathic communication, becomes a skill. There is extensive evidence in the literature that this skill can be taught systematically (Boulet & Bourbonnais, Note 2; Carkhuff, 1969a, 1969b; Charbonneau, 1974; Toukmanian & Rennie, 1975; Truax & Carkhuff, 1965a; Truax & Carkhuff, 1967). A more careful perusal of this evidence will appear in a later section of this chapter, when systematic training in accurate empathy is reviewed.

In closing this section and in order to further clarify the concept of empathy, a brief comment will be made on the often confused concepts of empathy and sympathy. The purpose of the two is different. When we empathize, we focus on the other person's feelings; when we sympathize we are concerned with our own feelings (Katz, 1963). For
example, sympathy is grieving with a friend in grief. To pursue the example, empathy is using a temporary grief in ourselves to understand our friend's grief, and communicate to him this understanding. Sympathizing renders us unable to understand the other person's feeling (Ianotti, 1975, p. 22). Earlier in this section it was underlined that empathy came into the English language from the term Einfühlung. The German equivalent for sympathy is Mitfühlung.

Mit in this context must be translated as "along with". ... A sympathetic person feels "along with" another person but not necessarily "into" another person. A sympathetic person does not need to interact with another person. To feel along with him, he may understand the other person, but he does not need to communicate the understanding to the other person (Buchheimer, 1963, p. 63).

Now that the nature of empathy has been clarified, the role of empathy in psychotherapy and counseling will be reviewed.

The Important Role of Empathy in Counseling and Psychotherapy

"Without empathy there is no basis for helping" (Carkhuff, 1969b, p. 82-83). Carkhuff, in the second volume of his book entitled Helping and Human Relations, presented research evidence to this effect. In fact, what he proposed was that empathy is the most important condition in a helping relationship, if the outcome is to be positive.
In 1957, Rogers (1957b) hypothesized that empathy was one of the important elements in promoting the therapeutic process. This hypothesis was, in later years, supported by research evidence. Truax and Mitchell (1971) and Rogers (1975) have presented a massive number of experimental studies which suggest that empathy is correlated to positive client change. Both articles have underlined the contributions of the Wisconsin Project (Rogers, 1975, p. 6; Truax & Mitchell, 1971, p. 303-310 & 328-392) to the understanding of the role of empathy in positive change. Briefly stated, the results of this study, done by Rogers, Gendlin, Keisler, and Truax (1967), indicated that patients whose therapists offered high levels of empathic understanding and other core conditions, showed significant positive personality and behavioral change.

Some of the effects of offering empathic understanding were outlined by Rogers (1975). He stated that empathy, offered early in the relationship, helps to ensure later success and that empathy is correlated with self-exploration. Self-exploration is probably the foremost consequence of therapist-offered empathy (Leckett, 1976). Recent evidence (Grater & Claxton, 1976) also seems to point to the fact that lack of empathy in the therapist provokes topic changes in the client, which is not conducive to self-exploration. Progress in therapy is
directly related to high levels of client self-exploration (Bergin & Strupp, 1972; Carkhuff, 1969b, p. 28-32).

Matarazzo (1971) summarizes it well by stating that:

The above research is cohesive and nearly unanimous in suggesting that the conditions of warmth, accurate empathy, positive regard and genuineness are important, although not the only variables in determining depth of patient exploration and therapy outcome (p. 900).

Carkhuff (1972a, 1972b) has subsequently described other variables connected to positive outcome, which he labelled action-oriented or "initiative" therapeutic skills. These other variables were concreteness, confrontation, and interpretation, as opposed to the "responsive" dimensions of respect, genuineness, and empathy.

An efficient psychotherapist, then, should strive to offer high levels of empathy. But "experienced therapists often fall short of being empathic (Rogers, 1975, p. 5-6). Because of the importance of empathy, one of the priorities of counselor and therapist education became training in accurate empathic understanding. The following section will review training in the context of psychotherapist and counselor education.

Systematic Training in the Context of Counselor and Therapist Education

In the previous section, empathy was shown to be an important dimension of the helping relationship. One of
the priorities of training therapists and counselors became the training in this core facilitative condition (Berenson, Carkhuff & Myers, 1966). Efforts to train people in these core conditions (empathy, respect, warmth, genuineness, and concreteness) have resulted in the proposal and the validation of systematic training programs as an efficient means of teaching these core conditions (Carkhuff, 1969a, 1969b).

**Systematic Training in Counselor Education**

The emergence of systematic training can be traced back to a dissatisfaction with traditional training programs which focused on modes of treatment, taught didactically. Often this was done at the expense of the trainee learning important interpersonal skills, such as empathy. The inadequacy of traditional training programs has been extensively documented by many writers (Carkhuff, 1966, 1969; Leckett, 1976; Moreland, 1970). Carkhuff (1972b), in a recent article, said:

A "training program" that is not programmatic [systematic] may be more harmful than helpful because of the implications of learning complex behaviors in a random or non-systematic fashion. As learning theorists have long known, skipping steps in attempting to learn more difficult behavior before simple behavior may have potentially harmful effects upon the learner (p. 18).

As far back as 1966, Carkhuff pleaded with professional helpers to recognize the inefficiency of their
training programs. In that article, he perused the literature of training and concluded that:

Clinical psychology, psychiatric and social work training centers throughout the country, in their focus on psychodynamic thinking, have built their programs around what may be a negligible, albeit, at times, an important contribution to the treatment process, when compared to the contribution of the central core of facilitative conditions. Some counseling psychology programs have mistakenly followed suit (p. 363).

Also in that article Carkhuff pointed to the total absence of research relating training content to client benefit, except where lay therapists were concerned. He later went on to argue that it was urgent for professional programs to start applying the findings of research with lay therapists (Carkhuff, 1968). Another important article by Carkhuff, Kratochvil, and Friel (1968), which reported the results of two studies, again showed the inadequacy of traditional programs. In both studies, it was found that traditional training contributed to a deterioration in the levels of warmth, empathy, and genuineness of the trainees as they advanced in their training. Several conclusions were drawn: that traditional training programs reward behaviors that have little to do with facilitation of client change and, that they possibly eliminate those persons who could potentially become the best helpers. Other criticisms have been addressed to traditional programs. Ivey (1971) contended that these programs have neglected the teaching of the
interviewing process, and specific behavioral skills which facilitate client self-exploration (p. 16). Whiteley (1969) also complained that very little was done in the field of counselor education to evaluate the efficacy of the training programs. Carkhuff (1969a), reflecting on the studies done by Carkhuff, Kratochvil, and Friel (1968), emphasized that graduate trainees improved in the discrimination of core facilitative conditions in their training. However, discrimination, he pointed out, has not been related to client change, only communication of the core condition (p. 10).

Still another source of challenge to the training of psychotherapists was Eysenck's (1952, 1965) contention that psychotherapy was inefficient in helping clients. This was further supported by Truax and Carkhuff (1967) who proposed that therapy could be for "better or for worse." As a result of these challenges, research projects were instituted and it was found that only those relationships which offered the core facilitative conditions produced positive change in clients (Rogers, Gendlin, Keisler & Truax, 1967; Truax & Carkhuff, 1967). These findings provoked an increasing awareness of the need to train in those facilitative dimensions. Thus were born systematic training programs.

The first systematic training program was proposed by Rogers (1957a). Rogers is generally considered to be
the founder of the "client-centered" school of psychotherapy. This approach and the persons involved in it have provided the strongest influence toward the scientific observation of psychotherapy training and outcome (Matarazzo, 1971). As will be seen, they brought several new elements into systematic training, where only the didactic element was present in traditional programs. Foremost is the experiential dimension, where the trainee learns by doing more than by being told what to do (Bradford & Lippitt, 1946; Moskowitz, 1975; Polanyi, 1966; Truax, Carkhuff & Douds, 1964). That people learn best by doing has been ably demonstrated by the laboratory training method of education (Benne, Bradford & Lippitt, 1964). Also present in systematic training is the element of programmatic instruction, where simpler tasks lead to more complex tasks on a basis of increased competency.

Rogers (1957a), in introducing his training program, stressed that "intellectual" training (didactic training) was necessary but not sufficient to engage in psychotherapy. He proposed that this cognitive training be complemented by an experiential approach, where the following steps were prescribed:

1. Listening to recordings of expert therapists counseling clients.
2. Roleplaying therapeutic interviews in dyads.
3. Viewing motion pictures of psychotherapy sessions.
4. Trainee receiving supervision which is therapeutic; receiving supervision which offers the dimensions being cognitively transmitted.

5. Directly observing live therapy sessions.

6. Participating in personal group therapy.

7. Participating in individual personal therapy.

8. Practicing supervised psychotherapy.

9. Recording of all the trainee's sessions.

10. Engaging in co-therapy.

Later training programs borrowed heavily from this approach. Thus Truax, Carkhuff, and Douds (1964) and Truax and Carkhuff (1967) proposed a further integration of the didactic and experiential. Two noteworthy differences were present in these new programs: the introduction of training in the core conditions of empathy, warmth, and genuineness, plus rating scales to judge the level of these conditions being offered. The authors provided for the following steps:

1. A quasi-therapy group where the trainee was encouraged to self-explore by highly facilitative trainers.

2. Readings and teachings regarding the core conditions and examinations.

3. Models functioning at different levels in the core conditions, are presented via audiotape excerpts.

4. Trainee learns to rate using the scales.

5. Empathy training: trainees listen to excerpts, reformulate client statements trying to grasp the meaning of the client statement.
6. Roleplaying in dyads which is recorded and then rated by both trainee and expert raters.

7. After trainee has attained high rated levels of core conditions, he/she is allowed "one-shot" interviews with real clients. Excerpts are rated.

8. If rated highly, then trainee proceeds to supervised therapeutic practice. His performance is again monitored via rating scales.

In 1969, Carkhuff introduced a revised version of this approach, which he called "Systematic Training" (Carkhuff, 1969a). The integrated didactic-experiential approach of Truax, Carkhuff and Douds (1964) and Carkhuff's systematic training were different in that the latter had eliminated the quasi-therapy group, the extensive readings and examinations, the presentation of audio models, and finally, the supervised practice. Carkhuff's model retained the didactic teaching and the rating scales, the reformulation by trainees of audio excerpts of client statements, and roleplaying. Also, as was shown in the previous section, Carkhuff operationally defined empathy and developed a 5-point scale to measure it. This scale and a detailed description of the training procedure will be outlined in the following chapter. Carkhuff's systematic training approach and Ivey's Microcounseling approach (Ivey, 1971; Ivey, Normington, Miller, Morrill & Haase, 1968), to be discussed in a later section of this chapter, will be the two principal approaches used in the present study.
Carkhuff's definition of empathy includes two aspects: that of discrimination and that of communication (1969a, p. 82-84). In discrimination training, where the goal is to teach the trainee to differentiate levels of responding to a client affect, the first step is to give the trainee some information on the chosen facilitative condition. During that phase, the trainee is helped to understand the possible levels of empathic responding through the use of the scale developed by Carkhuff, called the Empathic Understanding in Interpersonal Processes: A Scale for Measurement (see Appendix 1). It is a 5-point scale and will be described in more detail in the following chapter. This scale will be referred to in the present text as Carkhuff's empathy scale. Later in the communication training phase, the trainee has to formulate his own responses, at a level specified by the scale. This formulation of responses is done first, in response to audio excerpts of client statements, then secondly, in response to a peer trainee in a roleplayed dyad.

This dual aspect of empathy, discrimination, and communication, can be further clarified by restating a few ideas from previous sections. Empathy was posited to be the ability to understand, sense, and recognize the feeling of a person and to accurately communicate this understanding. The last part cannot be sufficiently emphasized because the
client cannot perceive understanding if it is not communicated. The effect of the communication, if it is accurate, is that the client feels understood and thus is free to explore further, which is part of positive change. Communication is crucial since understanding alone would not help the client. If empathy is to be therapeutic it must be communicated. But, again, this accurate communication depends upon an accurate understanding or discrimination. In fact, Carkhuff (1969a) states explicitly that "discrimination is a necessary but not sufficient condition for communication" (p. 83). He reviews research which shows that high level communicators are high level discriminators, but that high level discriminators are not necessarily high level communicators. It would seem that communication needs to be specifically taught and practiced.

Now that systematic training has been examined in terms of its sources and content, a review of its effectiveness in producing facilitative helpers will be presented. The studies reviewed will deal first with the effectiveness of systematic training in general. Evidence of the effectiveness of systematic training to teach empathy will then follow.

Truax and Carkhuff (1967) and Truax and Mitchell (1971) stated that there existed many studies which pointed to the fact that trainees can be taught to function at a
level of interpersonal skill (core condition), (1) that nearly equaled that of experienced therapists, and (2) that was effective in producing significant positive change in clients. Taken together, the available evidence suggested that there were benefits in this new approach to training. The more important of these studies will now be reviewed.

Carkhuff and Truax (1965a) simultaneously trained two groups, one consisting of 12 graduate students involved in psychotherapy training, the other group composed of 5 volunteer lay hospital workers. The training lasted 16 weeks, with twice weekly meetings of 2 hours, for a total of 64 hours of training. Two additional hours per week of listening to recorded therapy were included but the trainees did this on their own. The training program was identical to the one described by Truax, Carkhuff, and Douds (1964). At the end of their training, all the trainees interviewed the same three patients and recorded samples were excerpted to be rated, two from each interview, for a total of six excerpts. Samples from expert therapists' sessions were also rated for comparison. Ratings were made on scales of accurate empathy, positive regard, therapist self-congruence, and client self-exploration. Results rank ordered the groups in the following manner: first, experienced therapists; second, graduate students; third, lay workers. However, there were no significant differences
between the groups, except on therapist self-congruence, where experts were higher. The authors concluded that 100 hours of training in specific core dimensions can enhance the functioning of trainees to the level of expert therapists. Still another study by Carkhuff and Truax (1965b) found that psychiatric patients seen by systematically trained lay personnel, showed greater constructive behavior change than a control group of in-patients.

Van der Kolk (1971) compared the didactic-experiential approach and traditional approach to training with a para-professional hospital worker population. The traditional approach was that of the usual treatment of trainees in a graduate school. After 48 hours of training, the integrated approach group showed greater gain than the traditional or control group. Similar results with a similar hospital population were obtained by Naar (1974). This systematic type of training has also been applied in a graduate school setting by Shapiro and Gust (1974) and Conklin, Altman and Boek (1976) with equally successful results. Counselors in university residences have also been successfully trained in the core dimensions by Schroeder, Hill, Gormally, and Anthony (1973) and Newton (1974). A similar population was used in the present study and will be further described in the next chapter. Carkhuff (1969a, 1972b) has listed an impressive number of studies which present the successful
application of systematic training to many diverse populations, such as clinical psychologists, residence counselors, teachers, nurses, parents, undergraduates, and many others.

**Systematic Training in Empathy**

A closer examination will now be done of the application of systematic training in teaching empathic communication per se. Although many methods have been used to train people in empathy, such as Zen meditation (Lesh, 1970), self-instruction (Ochiltree, Yager & Brekke, 1975; Saltmarsh, 1974), critical-thinking training (Natale, 1972), roleplaying (Rastatter, 1969; Wells, 1976), roleplaying and modeling (Goldstein & Goedhart, 1973; Fraser & Vitro, 1975), and finally, modeling either live or recorded, with or without instructions (Dalton, Sunblad & Hylbert, 1973; Gulanick & Schmeck, 1977; Payne, Weiss & Kapp, 1972; Perry, 1975), the present study is more concerned with the use of systematic training to teach empathy.

The present review will attempt as much as possible to divide the studies into the ones where the criterion measure was written only, into the studies where it was a verbal measure only, and finally, into those where both the written and verbal measures of empathy were used. The outcome criterion should attempt to measure the functioning in the interview, that is, verbal functioning. The use of
Carkhuff's Index of Communication, a written test of empathy (1969a, p. 94-99; see Appendix 3), in some of the following studies, assumed that trainee responses to the test items were an accurate reflection of the trainee's empathic functioning in the interview. The Index of Communication items are isolated client statements. In a live interview situation, client statements are not isolated but part of a continuous flow of words. In the absence of solid research evidence regarding the Index, one can only speculate whether the Index of Communication is actually equivalent to an interview situation. Some trends in research results may enlighten this difficult question.

Carkhuff (1969a, p. 108-110), in his book, discussed two studies, one by Greenberg and the other by Antonuzzo and Kratochvil, where the validity of written measures was examined. Carkhuff concluded that there was a close relation between the written and the verbal measures, that both "are valid indexes of assessment" but he cautioned about the following discrepancies: low-level communicators show varying results on written and verbal indexes, whereas high-level communicators are either consistent on both measures, or receive lower ratings on the written measure. It would seem that high-level communicators respond better to a live client, whereas low-level communicators function better on a written test. Dubois (1973) obtained similar
results. It could be argued that the subjects in the present study, although low-level communicators at the onset, were relatively high functioners after the pre-experimental training, so that the written measure, for them, would in fact reflect their interview level of functioning.

All of this points the way towards proceeding with caution in measuring empathy. Mistakes in assessing the effectiveness of training can be made. Carkhuff underlined that when it is possible, projective helpers should be cast in the helping role (an interview) for the purpose of assessing the level of empathy they offer. Carkhuff (1969d) also added later that the Index of Communication is a standardized and efficient means of assessment of functioning in the helping role.

In concluding, it seems that, depending on the population being trained, the experimenters will have to judge whether the Index of Communication is a valid assessment of their trainees' functioning or not. In the present study, the Index of Communication scores were used along with ratings of audio recorded excerpts from a standard interview. Caution was used in assessing the effectiveness of training.

One of the several studies which used only a written outcome is the study by Kalisch (1971). Kalisch, basically
using the integrated didactic-experiential approach (Truax, Carkhuff & Douds, 1964), trained her two experimental groups for 12.5 hours. The control groups received lectures for the same amount of time. The empathy levels of all groups were measured before and after training by using written responses of the trainees to standardized filmed client statements developed by Strupp and Jenkins. Analysis of variance revealed significant differences between the pretest and posttest in favor of the experimental groups. In another study, using this time the written responses to Carkhuff's Index of Communication to measure the empathic functioning of trainees, Eicke (1971) was successful in enhancing the level of empathy in the very short period of six hours. Pretest and posttest results were rated using Carkhuff's empathy scale. The experimental group showed greater gains in empathic responding than the control group. Boulet and Bourbonnais (Note 2) trained 23 graduate psychology students in empathy over a 2-week period. Using the systematic training approach of Carkhuff, the authors proceeded with the training program and administered the Index of Communication five times during the program. Ratings by outside judges revealed significant differences between beginning and final ratings. The authors concluded that a short training program of approximately 18 hours can bring trainees to communicate higher levels of empathy.
Twice again, this time with rather diverse populations, systematic training in empathy was successfully implemented and written measures were used: in the first, Bierman, Carkhuff, and Santilli (1972) trained pre-school teachers and family workers, and, in the second, Nelson-Jones and Patterson (1974) trained students of a counseling program at the University of Aston in Birmingham, England.

Several studies used the interview only. That is, empathy was measured by rating recorded excerpts from the trainees' interviews. The difficulties in using such a measure rather than rating written responses to the Index of Communication are that the interview situation is not a standardized test and is a much more complex task, especially for a trainee with only a few hours of empathy training and no interviewing skills. He/she does not become a trained interviewer after several hours of training in empathy, even more so if subjects have no background in counseling, as was the case in the present study. Perhaps populations which have had experience in interviewing, such as in the Boulet and Bourbonnais study would show equal performance on both criteria of measurement.

Verrill (1969) used three groups in her study, one experimental and two control. The experimental group received systematic training in empathy; control group I had an equivalent number of reading hours related to
empathy, and control group 2 received no treatment. Posttest ratings of excerpts, after six weeks of training, revealed no significant differences between the groups. However, trends in the hypothesized direction were found. The author suggested that perhaps a longer training period would have proved successful. In the light of the above remarks on the interview as a criterion measure, it could perhaps be said that the interview was too difficult a task and impeded the trainees' empathic functioning in this study. Perhaps a written measure would have given significant differences between groups. Also, the use of a posttest only control group design in her study eliminated the possibility of equating the groups before treatment. Perhaps some subjects were higher on empathy than others in the beginning, and this would affect final scores. Posttest control group designs can be used when randomization into different groups is assured, which was not the case here.

Truax and Lister (1970) trained experienced counselors in empathy for over 40 hours. Pre- and post-ratings from excerpts showed significant gains in empathy. Here it must be underlined that the population was of experienced counselors and that the interview with that population can reflect accurately their level of empathy.
Charbonneau (1974) employed both criteria as measures of empathy. His study intended to examine the effects of systematic training in empathy on a bilingual student nurse population of the University of Ottawa. Two repeated experiments were performed. Using a pre- and posttest control group design, Charbonneau trained the nurses for 18 hours. Results of covariance analysis indicated that trainees offered higher levels of empathy on both the written and verbal measures but in French only, their mother tongue. In English, only the written measure produced significant differences. Verbal facility or lack thereof, in a second language, impeded empathic communication in an interview. The written measure did not incorporate the urgency of a live interaction, especially if the trainee was functioning in a second language. Nonetheless, the results of the French measures were further indication that both criteria could be equated in some circumstances.

In another study done at the University of Ottawa, Boulet (1974a) trained 32 residence counselors using systematic training. The same design was used again, and both criteria were used. Pretest results showed all three groups to be equal in empathy. Posttest results on the interview ratings showed significant differences between groups. No posttest differences were found on the Index of Communication. This occurred because the training that preceded the
experiment was tailored to tap such "written" empathy, whereas the experimental treatment as such was addressed more to the skills needed in an interview situation, that is, communication of empathy and not only discrimination of empathy. Still another study using both criteria was done by Stone and Vance (1976). The group trained with combined instructions, modeling and rehearsal (roleplaying), gained the most in empathic responding.

Many studies have been presented to this point. All had in common that they used a systematic training approach to enhance the empathic functioning of their subjects. Several broad conclusions can be drawn:

1. Systematic training tends to be more effective in enhancing empathic functioning than traditional training programs.

2. Systematic training in empathy can produce changes in both written and verbal criteria of measurement.

3. Systematic training is effective with many and diverse populations, regardless of the level of education, nationality, race, age, and previous experience in counseling.

In closing this section, a final study will be examined. Carkhuff, Collingwood, and Renz (1969) trained 16 students in discrimination of empathy only. They administered both the Index of Communication (trainees respond to the test items) and the Discrimination Index (trainees rate expert responses) after the training, and cast the trainees in the role of helper in a standard interview. Results showed
the helpers to have gained in discrimination only. The authors concluded that, with low-level trainees, little or no generalization occurs from discrimination training to communication training. In fact, low-level trainees seem to learn and apply only what they are taught.

In view of such results, low-level trainees would profit from actual rehearsal of communication of empathy. This can be done by casting them in the role of helper during training. Roleplaying as a teaching tool could enhance the trainee's level of communication.

**Roleplaying**

Now that the effectiveness of systematic training in empathy has been established, the use of roleplaying as a training tool will be reviewed. This method is an integral part of systematic training, but has received little attention in the literature of systematic training. Roleplaying held an important place in Truax's (Truax & Carkhuff, 1967), Carkhuff's (Carkhuff, 1969a), and Ivey's (Ivey, 1971) methods. Carkhuff (1969a) mentioned and suggested its use repeatedly without ever giving a rationale for its use. This section proposes to do just that.

First, a definition of roleplaying will be attempted. Roleplaying, since its inception by J. L. Moreno (1946), has been called by many other names, such as reality practice,
role practice, and recently, behavioral rehearsal (Lazarus, 1966). Levit and Jennings (1961), in a brief article, clarified the concept of roleplaying and eliminated the confusion of other terms, often incorrectly used as synonyms for roleplaying:

Role playing is a ... technique in which people spontaneously act out problems of human relations and analyze the enactment with the help of other role players and observers. Role playing, sociodrama, and psychodrama are closely related, and the terms sociodrama and role playing are sometimes used interchangeably. ... Role playing is a general term referring to the spontaneous acting out of roles in the context of human relations. It is part of the two broad methods devised by J. L. Moreno—sociodrama and psychodrama (p. 706).

They further clarified the difference between socio drama and psychodrama, but the present study is only concerned with the concept of roleplaying.

Mann (1956) suggested that roleplaying was a situation where a person takes a role not normally taken by himself/herself or if one's own habitual role, taken in a setting other than the usual setting. The latter applies in the case of the present study where the trainee assumed the role of counselor or helper, but in a setting other than where they actually did counsel. From the behavioristic point of view, came the definition of Jakubowksi-Spector (1969):
Role playing is a behavior change ... procedure in which human social responses are developed and modified in a dyadic or group situation. Role playing involves ... instructing the individuals to reproduce the behavior of a model. In the simulated counseling experience the client [reproduced] the behavior of a ... model client and the counselor [reproduces] the behavior of a model counselor (p. 4).

Roleplaying, therefore, allows the practicing of new behaviors, behaviors that form the complex skill of empathic communication, for example. Roleplaying is very much an experiential method of training which favors quick and efficient learning. As Klein (1959) has said, "it is rare that ways of behaving are influenced by intellectual exercise" (p. 10). Roleplaying allows for the "doing" instead of the "talking about." It demands a holistic involvement from the participants, physical, cognitive, and affective. Klein (1959) underlined a dimension of role-playing which has been emphasized by many other authors. Roleplaying, he suggested, "provides an opportunity to play a part in a situation that has realism but is not real. Being free from risk or fear, the actor may practice how to behave more effectively" (p. 11). Margaret Barron (1947) previously addressed herself to a similar concern when she said that:

Role playing or reality practice is being increasingly recognized as an effective means of translating principles into methods, of learning the how, of getting the feel of doing something in a situation where one is not playing for keeps. In training
which is directed toward improving skill in interpersonal relations it offers a most effective way of bridging the gap between formal study of principles ... on a verbal level to actual work with those methods and techniques (p. 198).

Ivey (1971) also underlined the safe practice aspects of roleplaying when he paraphrases an Allan and Ryan study: pilot-trainees rehearse pilot behaviors in Link trainers, medical students cut up cadavers and student lawyers plead their case in moot court.

Corsini and Cardone (1966) further explained that, in roleplaying, the situation is perhaps contrived but the action and the feelings become very real:

The main concept here is that the role playing experience is real. If a person conquers a troublesome situation by practicing it in the safety of a therapeutic session, he gains self-confidence ... skills, etc., almost as well as if he had encountered these experiences in real life. The person who has rehearsed real problems in an artificial environment has gained real insights ... real skills which he can transfer to true life situations (p. 95).

Why does roleplaying work? How can roleplaying facilitate the learning of new behaviors? Only Corsini and Cardone (1966, p. 12-17) have offered a specific rationale. They proposed that roleplaying was unique because it offered "simultaneity," "spontaneity," and "veridicality."

1. Simultaneity is present because as in real life, role playing involves simultaneous acting, feeling and thinking. The person is involved holistically. The simultaneity tends to create total involvement.
2. Spontaneity is present, because as in real life, the individual self-generates his behavior, he creates every moment and reacts to a situation without a script being written for him. The person improvises imaginatively.

3. Veridicality is present, because as in real life, the feelings, ideas and behaviors generated by the contrived situation are real. They have reality in the subject who is living the experience. It is a subjective, psychological reality, similar to the pilot's experience in the Link trainer where he/she experiences the subjective reality of flying, its sounds, its sights and its kinesthetics. The Link trainer has veridicality because of its verisimilitude. It seems real to the pilot.

Basically, roleplaying is used because it allows for the practice of skills where this practice is safe for both the trainee and the person or persons that are involved with the trainee in the exercise. There are no dire consequences, and mistakes can be corrected without threat to the trainee, because he is not playing for keeps, and without threat to the client because he/she is not in need of real help in that roleplay situation.

Now that a definition of roleplaying has been proposed, and that rationales for its general effectiveness have been presented, a brief review of the various uses of roleplaying will be presented, along with some of the experimental research which supports its specific effectiveness as a training tool in the counseling field.

Roleplaying has been used to change attitudes (Janis & Gilmore, 1965), help students in the classroom understand key points in a lecture (Hollander, 1973), or train industry
supervisors in interpersonal skills (Bavelas, 1947; Bradford & Lippit, 1946; Moskowitz, 1975). It has also been used in psychotherapy very extensively; in fact, it originated there (Bohart, 1977; Corsini & Cardone, 1966; Moreno, 1946; Perls, 1969). It also has been used extensively for training in the helping professions. Kromberg and Slavinsky (1969) used roleplaying to train nurses in coping behaviors with psychiatric patients. Nurses were also trained by roleplaying various nursing skills (Ketcham, 1952). Medical students were trained in interviewing skills through roleplaying (Burra, 1972; Schneider & De Perrot, 1970). Other uses of roleplaying have been to train job placement counselors (Barron, 1947), teachers (Moskowitz, 1975), guidance teachers (Schwebel, 1953; Stripling, 1954), and paraprofessional mental health workers (Jones, 1969; Signell, 1974). Finally, it has been used to train in various counseling and psychotherapeutic skills (Eisman-Boyardsky & Goldman-Vance, 1970; Jakubowski-Spector, 1969).

Boies (1972) reviewed the experimental literature and addressed several criticisms to the field of roleplaying which still apply today in most cases. First, she pointed out that there were few attempts to operationalize the definition of roleplaying. Secondly, there was a general failure to consider factors which might influence the
results of roleplaying, such as post-session discussion, role reversal, etc. These factors are seldom controlled. A third criticism was that authors failed to describe and measure objectively the changes produced by roleplaying. Her last criticism was that often roleplaying was expected to produce change even though the roleplaying content had little to do with the problem.

Mann and Mann (1966) presented experimental evidence which showed that the enactment of a role in roleplaying sessions improves the future enactment of that role. Also, Jansen and Stolurow (1962), in a rigorous experiment, operationally defined roleplaying as having two factors: role creativity and role change which they measured through tests. Although the authors suspected an interactive effect between improvising and imitating, the two independent variables, they tentatively concluded that roleplaying was a potentially effective means of training psychiatric aides.

Residence assistants were trained in dealing with typical problems in university residence in an experiment by Campbell (1972). The author used roleplaying, discussion, and information-giving as his three methods of training. As far as helping responses were concerned, the roleplaying group showed greater gains than the other treatment groups and the control group. Stone (1975) trained Master's level students in one counseling skill called "counselor tacting response leads," which basically was a skill used to help
the client be specific. The study involved 64 subjects who were divided into groups undergoing high and low fidelity treatments which had three phases: modeling, practice, and testing. In the practice phase, the high fidelity procedure (roleplaying) was to have the trainee respond verbally to a live roleplay client, whereas the low fidelity trainee was presented with a written stimulus and had to respond in writing. Results indicate that the high fidelity methods, such as roleplaying, are superior to the low fidelity methods, such as writing a response. A final study presented evidence that roleplaying was superior to lectures in developing interviewing skills (Balinski & Dispenzieri, 1961). The roleplaying group reflected feeling more often and were less defensive in the interview than either the lecture group or the control group.

Rastatter (1969) presented the results of an unsuccessful attempt to train 39 subjects in four core conditions, of which empathy is one (Carkhuff, 1969a, 1969b). He was unsuccessful, probably because the roleplaying was not preceded by the discrimination part of the training, which involves substantial verbal modeling. The problem was presented in the following manner: roleplaying is a superior training method if the trainee plays the counselor role only, the client role only, or both. The results of his study prevented drawing any conclusions. However, for
the purpose of the present study, it is useful to underline the fact that roleplaying may be useless if it is not preceded by a clear didactic definition of the skill, and, in the case of empathy, preceded by discrimination and communication training, and modeling of the skill. Boulet (1974a) and Uhlemann, Lea and Stone (1976) seemed to support this statement. Boulet distributed 32 volunteers into a control group and two experimental groups. The two experimental groups received audio communication training in empathic communication, but the second group continued with the nine hours of roleplaying, while the first continued in the audio only. A comparison of pre- and posttests revealed significant differences in favor of roleplaying when it was preceded by the audio training. Also a study by Wells (1976) used roleplaying in the context of Carkhuff's systematic training to train social work students in empathic responding. This study again supported that systematic training could be used to teach empathy in a short time. However, the group roleplaying their own real problems in the helpee situation did not, as the author expected, become more empathic than the helpees roleplaying with a script. Another study (Rappaport, Gross & Lepper, 1973) suggested that instructions are an essential part of this type of training if it is to be effective. The authors used two training methods, video recorded modeling and sensitivity training to train
college student volunteers in social skills. Half of their subjects received general instructions, the other half specific instructions. Under specific instructions all groups were equally successful, even the no-training control group. The authors concluded that sophisticated methods of training are useless in training this population for social skills. For the purpose of the present study, which studies empathic skill, it is sufficient to underline the fact that any type of training method could be useless without specific instructions, that is, a didactic presentation of behavioral expectations.

The results of various studies equally tended to support the importance of detailed instructions, this time using modeling as a training tool (Stone & Vance, 1976; Uhlemann, Lea & Stone, 1976; Whalen, 1969). Perry (1975) found that instructions did not matter if the model was high functioning but she concluded that perhaps her instructions were not detailed enough. In conclusion, it would seem that roleplaying could be an effective method of training if it were preceded by specific instructions and modeling.

The Use of Videotape Playback in Counseling and Psychotherapy Training

Berger (1970), in the introduction to his book Videotape Techniques in Psychiatric Training and Treatment,
quoted a 1952 statement by Kubie:

The effects of facing an auditory and visual image of one's own psychological activities have never been examined systematically. We do not know if it would be therapeutic or noxious, and whether it would bypass the resistances to insight or increase them (p. xiv).

This statement is still relevant today, even though some aspects of Kubie's question have started to find answers in studies done in the last 10 years (Bailey & Sowder, 1970; Marks, Montgomery & Davis, 1975; Reivich & Geertsma, 1969). Videotape playback made its appearance as a psychotherapy training tool in the mid-1950's (Ruhe, Grundle, Laybourne, Forman, Jacobs & Eaton, 1960; Wittson & Dutton, 1956). Audiotape playback had been used for several years before that, for the same purpose (Covner, 1944). Professor R. H. Shevenell (Note 3), of the Faculty of Psychology of the University of Ottawa, reported during the present author's doctoral dissertation seminar, that he had begun using wire spool audio recordings of students' interviews for supervision as early as 1946.

Walz and Johnston (1963) thought that the major implication of their study was that videotaping offered "promise as a unique means of assisting counselor candidates to view their interview performance" (p. 236). A careful perusal of the field of playback through recordings has revealed enormous controversy as to whether audiotape playback or videotape playback were superior to one another
(English & Jelenevsky, 1971). The field seemed to be plagued by inadequate experimental designs: from one-shot case studies to single group studies, all lacking in control of confounding variables. The result was that the conclusions of these studies were tentative. However, many authors (Ivey, Normington, Miller, Morrill & Haase, 1968; Kagan, Krathwhol & Miller, 1963; Walz & Johnston, 1963) have suggested that videotape playback can be effective as a counselor training tool, and have devised training methods which center on the use of videotape. Also, a recent study by Stone (1975) seemed to point towards the superiority of audio-visual feedback, as opposed to audio only, when the audio-visual was used in combination with a model and role-playing. Ivey et al. (1968) have developed a training method, Microcounseling, which relies heavily on video playback. This training model was the object of further scrutiny in the present study. Also, Kagan (1975) has applied the Interpersonal Process Recall method, first developed as a therapeutic tool, to the training of counselors. Kagan's method also relies heavily on video playback in one phase of training.

Most of the studies comparing the two media have shown both audiotape and videotape playback to be effective. Frankel (1971) trained 42 female undergraduates in a Microcounseling skill called Attention to Feeling. Although it
was difficult to distinguish the separate effects of video modeling and video feedback in this study, video feedback was seen as a definite contribution to effective functioning in this important counseling skill. Markey, Frederickson, Johnson and Julius (1970) found both audiotape and videotape feedback equally effective in counselor training. On the other hand, Yenawine and Arbuckle (1971) reported more advantages in the use of videotape than in the use of audiotape, but also stressed the tentativeness of their results. The advantages mentioned in the studies can be summarized by saying that videotape was more "complete" and "realistic" in regards to the actual counseling session. Kagan et al. (1963) proposed that a client's feeling process, being complex and multidimensional, was better captured by the double aspect (auditory and visual) of videotape than by that of audiotape, where the whole "action" dimension was absent.

Further support for the use of videotape was presented by White and Clemens (1971). They suggested that video playback produced "cognitive dissonance." This concept, they added, first developed by Festinger, suggested that an individual would strive to adjust a perception, an attitude, a behavior, etc., when he/she perceived that there was a discrepancy between his/her perception and the perception of a significant other. The self-confrontation
provided by video playback will often cause such a "dissonance" and lead the counselor-trainee to a designed change. Wilmer (1967), explaining the self-confrontation nature of video playback, said, "what is disturbing is that 'he and they' both see the same thing, giving little outlet for 'denial' or 'illusion'" (p. 128). Other authors (Alker, Tourangeau & Staines, 1976) have similar views. They propose that audiovisual feedback provides a person with special information that allows for increased self-awareness. The present author visited Oak Ridge Hospital at Penetanguishine, Ontario, which is an institution for the criminally insane. An anonymous patient (Note 1) said, "TV don't lie." He, along with his peers, regularly used video playback in their self-treatment. In a subsequent discussion, this patient explained that it would be difficult to deny the truthful reproduction of reality provided by a videotape recording. Furthermore, there is experimental evidence that listening to a playback provoked greater than normal physiological arousal (Holzman, 1969). In fact, the sound of one's own voice produced psychophysiological arousal "in some subjects even though they did not consciously recognize that they were listening to their own voices" (p. 204).

The desired change in behavior can also be viewed complementarily in the light of Bandura and Walter's social
learning theory, as suggested by Frankel (1971). There would be, after playback, an improved discrimination between desirable and undesirable behavior, desirable being defined as the closest match to a model. Imitation of a model has been found to be an important factor in learning (Bandura, 1965a, 1965b, 1969, 1971). Modeling has been extensively and successfully used in counseling training (Bailey, Deardoff & Nay, 1977; Belluci, 1972; Dalton & Sunblad, 1973; Eskedal, 1975; Goldstein, Cohen, Blake & Walsh, 1971; Perry, 1975; Wallace, Horan, Baker & Hudson, 1975). More specifically, high functioning models in empathy have produced high functioning trainees (Dalton & Sunblad, 1973; Goldstein & Goedhart, 1973; Gulanick & Schmeck, 1977; Payne, Weiss & Kapp, 1972; Perry, 1975). Playback could therefore provide trainees with an opportunity to review the adequacy of their imitative response.

Ivey (1971), again citing a study by McDonald and Allen, said that, "the presence of a supervisor facilitated learning from a model," when the supervisor pointed to instances of desirable and undesirable behavior in the playback. Ivey further added that, "self viewing accompanied by supervisor comments was the most powerful aspect of the microtraining treatment" (p. 123). Thus the playback via videotape recording is more useful if an experienced supervisor points to instances of desirable and undesirable

This type of feedback has been coined by Stoller (1968) as "focused feedback." Stoller explains that focused feedback is "a 'centering of participants' attention on that aspect of videotape feedback which would seem to be most relevant for beneficial behavioral change" (p. 219). Focused feedback using videotape recording was used in one of the experimental groups in the present study and will be further described in the next chapter, when the experimental procedure is discussed. In summarizing the unique advantages of playback, it can be said that playback (1) provides a confrontation that cannot be easily denied, (2) produces "cognitive dissonance," (3) provides feedback on the adequacy of the imitative response and, finally, (4) provides "focused feedback."

Thus, in conclusion, a method of training which incorporates both focused feedback, via video playback, and modeling, would in all probability promote the learning of counseling skills. Microcounseling, proposed by Ivey, Normington, Miller, Morrill and Haase (1968) is such a method.
Microcounseling

A Definition

Microcounseling (Ivey et al., 1968; Ivey, 1971) is a structural approach to interview training. It proposes a systematic method of training based on the identification and the teaching of a single skill at a time. This format is based on an operant conditioning paradigm where the desired behavior (empathic responding) is reinforced through social attention (Bandura, 1969) from the trainers and peers. Details of this attention will be described in the next chapter, in the section on experimental treatments. Furthermore, the proposed framework suggests the use of intensive practice of that skill in a scaled-down version of a counseling session (microsession), and adds a videotape playback as a support to learning. The main steps in Microcounseling are:

1. A definition of the specific skill to be learned.
2. A model of the skill.
3. A 5-minute microsession.
4. Playback via videotape recording on the first microsession.
5. A repeat 5-minute microsession where emphasis is placed on integration of the feedback from step 4.
6. A playback of the second microsession (step 5). In both playbacks, the trainee is given trainer focused feedback.
Ivey (1971, p. 6) suggested a detailed procedure for Microcounseling. The above list was a summary of that procedure. The same author added that, "Many alternatives and additions to this basic framework are possible" (p. 7). Further on, he also added that, "This framework can be adapted in many ways ... it can be used for a multitude of purposes, and ... it appears to be most effective when it meets the individual needs and desires of the supervisor and trainee" (p. 135). Ivey (p. 102) reported, as an example, a study where the experimenter used a modified version of the Microcounseling paradigm to train counselors in accurate empathic responses. The modifications used were roleplaying empathic responses, instead of dealing with a real client in a microsession and the use of co-counseling (trainer and trainee are counselors to the client) after the roleplaying. Both the trainer and the trainee mutually evaluated their performance in a post-session, by comparing their performance to the definition of the skill in the manual and to the models.

Based on this knowledge, the present study used a modified version of the Microcounseling paradigm, to suit the needs of the experiment. A detailed description of this modified use will be given in the chapter on experimental procedure. The main differences were that this study used live models, roleplaying instead of real
clients, and omitted the use of a manual to define the skill.

The Microcounseling Paradigm in Counselor Training

Although the Microcounseling paradigm has been used to train varied populations in various interpersonal skills (Clack, Conyne & Strand, 1975; Higgins, Ivey & Uhlemann, 1970; Saltmarsh & Hubele, 1974), it mostly has been applied in the field of counselor training. Amongst the major experimental studies were the studies where Microcounseling was used for training in "attending behavior" (Aldridge & Ivey, 1973; DiMattia & Arndt, 1974; Ivey et al., 1968; Moreland, Ivey & Phillips, 1973; Roy, 1971). The only unsuccessful use of Microcounseling was reported by Authier and Gustavson (1975). The authors explained their results by saying that the sub-professionals they trained may have needed more hours of training and may have been poorly motivated to learn the skill involved. However, the same authors (Authier & Gustavson, 1976) later successfully trained nurses in various Microcounseling skills. Microcounseling has been used to train in various other counseling skills (Boyd, 1973; Elsenrath, Coker & Martinson, 1972; Miller, Morrill & Uhlemann, 1970). Since the present study is mainly concerned with empathy, the following section will
attempt to circumscribe the use of the Microcounseling paradigm in training for empathy.

The Microcounseling Paradigm Used for Training in Empathy

Reflection of feeling, the main skill used to communicate verbal empathy, is a skill which allows for focusing on feelings the client is experiencing often "beyond" the content of what he/she is verbalizing. However, training in reflection of feeling, as a skill, does not necessarily include the learning of the quality or the level of empathy as defined by Carkhuff (1969b, p. 315-317). Different levels of empathy have been operationally defined in the Carkhuff empathy scale.

In the Microcounseling studies to be reviewed, the training in reflection of feeling did not automatically imply the learning of the quality of the reflection. It seemed that Ivey (1971, p. 57-59, p. 154-156) assumed that the quality or level of empathy would be mastered as the counselor became more skillful in accurate reflection of feeling, but there was no explicit teaching, in the Microcounseling method, of the different levels of empathic understanding.

The literature does not report any application of the Microcounseling paradigm or modified Microcounseling paradigms to training in this qualitative aspect of empathy as proposed by Carkhuff. All the Microcounseling
studies have reported training in reflection of feeling, that is, focusing on feeling without explicit provisions being made for the quality of empathic understanding being offered in that reflection. The result is that counselors trained in the Microcounseling skill of reflection of feeling could unwittingly offer their clients a range of response varying from 2 to 5 on the Carkhuff scale, in an inconsistent way, so that the quality varied without the counselor having any yardstick for evaluating his responses. Only one study has attempted to compare the Ivey reflection of feeling approach and the Carkhuff accurate empathy approach. This study will be reviewed in detail later in this section.

Most Microcounseling studies have grouped training in many counseling skills along with reflection of feeling. Such are studies by Authier and Gustafson (1976), Guttman and Haase (1972), Haase and DiMattia (1970), Haase, DiMattia and Guttman (1972), Ivey et al. (1968), Moreland, Phillips, Ivey and Lockhart (cited in Ivey, 1971, p. 116-117, Moreland, Ivey and Phillips (1973), and Toukmanian and Rennie (1975). As reported earlier, only Authier and Gustafson (1975) revealed negative results when they attempted to train subprofessionals in reflection of feeling. The only exception to the above studies is the Parker (1972) study, because he trained successfully his subjects in reflection of feeling only.
As reported earlier, all of the Microcounseling studies have been used to train in reflection of feeling and not in Carkhuff's accurate empathy. The present study proposes to apply a modified Microcounseling approach to training in empathy, as defined by Carkhuff, and thus attempt to compare the Microcounseling system to the Carkhuff system of training in empathy.

The only reported study which attempted this comparison was a study done at York University by Toukmanian and Rennie (1975). But, as its authors concluded, "A small number of subjects prevented the investigators from contrasting the training operations of the two systems when both sets of operations were applied to both sets of training contents" (p. 350). In fact, the two experimental groups were trained in different counseling behaviors, one in Microcounseling's reflection of feeling, amongst other skills, while the other group was trained in Carkhuff's empathic communication, amongst other core conditions. Both groups were assessed on both the Ivey reflection of feeling responses emitted and the Carkhuff empathy scale, so that an attempt at comparing could be made. The Microcounseling group in their study showed significantly greater gain on Carkhuff empathy ratings than the Human Relations Training (Carkhuff) group. The authors explained by saying that, "The [Microcounseling] students learned something extra that
is part of judged empathy. Precisely what this is awaits a more careful delineation of the components of judged empathy than has hitherto appeared in the literature" (p. 350).

Briefly stated, the authors explained that the two systems are difficult to compare when the skills they address are operationally defined in a different manner. The present study will attempt a comparison of the two systems of training by training its experimental groups in the same operationally defined skill, namely, empathic communication, as operationally defined by Carkhuff. Also, the present study, in contrast to the Toukmanian and Rennie study, used a modified version of the Microcounseling system, whereas, in the Carkhuff system, the trainee only starts actual practice of the skill after he has learned to discriminate the different levels of empathy. This modification was made to conform to the needs of the experiment and will be further discussed in the next chapter.

Statement of the Problem

The problem can be stated in a brief question: Why should the Microcounseling approach be more effective than roleplaying in training for empathy? The present chapter presented evidence regarding the superiority of systematic training over traditional methods of training. These systematic training programs were more effective because
they incorporated an experiential and programmatic dimension.

The experiential dimension added the practice of therapeutic skills before their actual application in a therapeutic session. This experiential dimension also added the use of models as teaching tools. The experiential approach allowed for the trainee to learn by doing instead of being told what to do, as was done in the traditional didactic methods. The experiential approach did not discard the didactic element but only added to it.

The programmatic dimension of systematic training allowed trainees to learn simple tasks first and then move to more complex tasks when the earlier ones were mastered.

All three methods used in the present study were experiential and programmatic. The present chapter presented evidence as to their effectiveness. The audio only treatment and the roleplaying treatment however did not provide the video playback and the immediate second practice trial offered by Microcounseling. These two added dimensions were posited to provide Microcounseling with more effectiveness in training for empathy.

Roleplaying, although offering an opportunity for practice of the skill in a real and spontaneous manner comparable to a real interview, did not provide the immediate second practice and the video playback. The theoretical basis for the superiority of these added dimensions will now
be restated.

Video playback would first, capture the multidimensional and complex process of a client's feeling experience much better because the recording would allow for both the auditory and visual dimensions to be examined during playback. Secondly, the video playback could provoke cognitive dissonance in the trainee. The trainee, provided with a recording of his voice and actions, would then strive to readjust his empathic behavior when he/she perceived a discrepancy between his/her evaluation of performance and that of the trainers and peers. The third advantage of video playback is that it provided self-confrontation through a faithful recording which allows for little denial or illusion. The fourth advantage can be summarized by saying that video playback allows the trainee to check the adequacy of his imitative response to a model. The trainee is thus better able to discriminate between desirable and undesirable behaviors, desirable being the closest match to a model. And finally, video playback provides focused feedback which allows for a centering of the trainee's attention to the accuracy of each of his empathic responses.

Microcounseling, as opposed to roleplaying, not only offered video playback but also offered an immediate second practice trial. The second practice trial would theoretically improve trainee performance by providing additional
time to practice responding empathically. It allows for more time to reinforce desirable behavior through the social attention of trainers and peers.

Thus Microcounseling could be a more effective method of training. The present study will try to determine whether the Microcounseling approach can promote significant gains in empathy, when Ivey's system is applied to training in one operationally defined skill, namely, Carkhuff's empathy. Will the Microcounseling approach in this study prove to be more effective than the other types of training, namely, roleplaying and audio only training, in enhancing the empathic responding of low-level communicators?

**Summary**

This chapter has reviewed the concept of empathy and its role in the helping relationship. Evidence was presented to support the use of systematic training in empathic communication. One of the steps of systematic training, roleplaying, was examined for its contribution to this approach. Finally, videotape feedback was discussed and its relative merits were presented.

The following chapter will present a description of the experimental procedure designed to discover whether or not the use of the Microcounseling approach is more effective than the use of roleplaying without video feedback. In
that chapter, specific null hypotheses will be formulated to answer this question. Statistical tests, which will be used to evaluate each hypothesis, will also be presented.
CHAPTER II

EXPERIMENTAL DESIGN

The present chapter will present a detailed account of all procedures used to test the null hypotheses. The chapter includes sections on (1) the sample, (2) the setting of the experiment, (3) the instruments, (4) the selection and training of judges, (5) the pre-experimental procedures, (6) the experimental treatments, and (7) the null hypotheses.

The Sample

The Trainees

The subjects involved in this experiment were 42 students registered in various programs at the University of Ottawa, such as medicine, arts, science, economics, and management sciences. There were three categories of subjects within this group: 18 residence counselors (RC), 6 standby residence counselors (SRC), and finally, 18 orientation counselors (OC). The RCs were floor counselors in university residences hired to help students in residence with any problem they might encounter. SRCs were students who had applied for a residence counselor position but had been rejected for that year and told to re-apply because they had potential to be good counselors. OCs were students from various departments who were involved in
helping newly arrived students adapt to campus life and especially to their own department.

The sample consisted of 21 females and 21 males. The French-speaking subjects were fluently bilingual, that is, they spoke fluent French and English. The non-bilingual subjects spoke English only. The whole experiment was conducted in English. Ages ranged from 19 to 26. The mean age was 21.24 years.

Recruitment of the subjects was done by the present author and one of the trainers involved in the experiment. Out of a possible 40 RCs, 18 volunteered for a research project described to be in human relations training. They were told that they would have to devote approximately 22 hours to the training, distributed over a month's period. All six SRCs participated. And, finally, 12 OCs volunteered out of a possible 25. No monetary incentive was offered to the subjects. The only incentive was access to increased competency as a helper, after training. The 14 recommendations made by Rosenthal and Rosnow (1975, p. 120), regarding reduction of volunteer bias, were followed as closely as possible.

None of the subjects had ever received systematic training in the core conditions of helping and could be considered low functioners in empathic communication. The whole sample was involved in several procedures prior to
the randomized assignment to groups and prior to the experimental treatments. First, each group of subjects was asked to come to the Guidance Center of the University of Ottawa to choose three 3-hour periods that fitted their individual timetables. These nine hours of audio-training were the pre-experimental treatment, and will be called audio only training. This procedure was followed to facilitate participation of the subjects in the whole experiment and would hopefully motivate them to pursue the remainder of the training, having had a sample of the training. The strategy was successful and there was no attrition during the experiment. Secondly, following the nine hours of training, there were two hours of testing. Both the testing and the audio training will be described in a following section.

The Trainers

The present experiment was conducted by the author and two other Ph.D. students in counseling psychology, at the University of Ottawa. All three trainers had experience in both counseling and systematic training. The three trainers could be considered high functioning counselors in the core conditions (Pierce, Carkhuff & Berenson, 1967; Vitalo, 1970). The three trainers worked in pairs or singly, alternating between groups on a rotation basis.
This procedure will be explained in greater detail in a subsequent section of this chapter. This was done to avoid the trainers biasing the quality of training in various groups, by their expectations. This trainer bias, also called the "Rosenthal effect" (Rosenthal, 1967), can be avoided if the investigators use trainers who know nothing of the nature of the experiment. In the present study, this practice was prohibitive in terms of financial cost.

The Standard Clients

Students were recruited from various undergraduate courses at the University of Ottawa to participate in an experiment where their role would be to talk to a counselor and share their feelings about current important personal concerns. They would be involved in the role of helpee in an experimental or laboratory analogue of a counseling interview, called a standard interview (Miller, 1971; Keisler, 1971; Strong, 1971). The standard interview, one of the criterion measures in the present study, will be described further in a following section.

The standard client was coached to perform in a specific manner in this standard interview, by being given specific instructions on how to behave. In the case of the present study, he/she was encouraged to disclose personally relevant feelings to the helper. The standard
clients in this experiment were paid $2.00 per interview. There were 42 standard clients, a few were used in more than one interview, but never assigned to the same helper.

The Setting of the Experiment

All phases of training, both pre-experimental and experimental, were conducted in rooms at the Guidance Center of the University of Ottawa. The pretesting and posttesting sessions were also conducted in the same building.

One room in the basement was used for the pre-experimental treatment of all trainees. This room was a room usually used for training purposes. It had comfortable seating and audio recording equipment. A second room, used later in the experimental treatment, was the student lounge of the Center. It was adapted for this training by including audio recording equipment. A third additional room was used in the experimental treatment phase, along with the above-mentioned rooms. This third room was made comfortable by stacking the tables on top of each other, pushing them to the side of the room, and providing chairs and cushions for the trainees. It was ordinarily used for group-testing purposes. Apart from the chairs, the trainers also equipped this room with audio visual equipment. The equipment included one camera with trolley, one television monitor, one video recorder, one microphone, and all the
necessary wiring and videotapes. A complete identical audiovisual system was also stored in the "student lounge" room. The type of playback picture used in training was always a wide-angle shot which showed a complete picture of both trainees, one in the role of counselor, the other in the role of client. In the experimental phase of the treatment, each group would always be divided into two smaller groups, which always used the same rooms.

Testing had two phases: pretest Index of Communication and standard interview, and posttest Index of Communication and standard interview. The Index of Communication was administered in the group testing room with the long tables in their usual place. The standard interviews were conducted in the various counseling offices of the Guidance Center. The offices were all equipped with audio recordings.

The Instruments

Carkhuff's Empathy Scale

Carkhuff's definition of empathy, presented in the first section of the first chapter, was operationalized by his empathy scale. Carkhuff (1969b, p. 315) entitled this scale Empathic Understanding in Interpersonal Processes: A Scale for Measurement. In the present study, the scale shall be referred to as Carkhuff's empathy scale. The Carkhuff empathy scale appears in Appendix 1. In the
present study, the Carkhuff empathy scale was used by both judges and trainees. The judges used the scale to rate the trainee responses to the Index of Communication and the excerpts from the standard interviews. The trainees used the Carkhuff empathy scale during training to rate their own responses and those of their peers.

The Carkhuff empathy scale was derived from "A Scale for the Measurement of Accurate Empathy" (Truax & Carkhuff, 1967), which was a 9-point scale. The Carkhuff empathy scale was reduced to a 5-point scale. Briefly, at level 3 of the scale, the helper's response is interchangeable with the expressed feelings and meaning of the helpee's statement. A level 3 response is the minimal level of facilitative interpersonal functioning, because lower-level responses subtract affect and meaning from the helpee's statement (level 3) or detract and do not attend to the helpee's communication (level 1). Levels 4 and 5 responses add in such a way as to express feelings that are deeper or beyond that which was expressed by the helper. There were difficulties involved in the use of a level 5 rating because it necessitated "the facilitator ... responding with a full awareness of who the other person is and a comprehensive and accurate ... understanding of his deepest feelings " (Carkhuff, 1969b, p. 317). Trainees were not experienced therapists and did not know each
other intimately; therefore, they rarely could be rated beyond level 4. This matter will be given more attention in the last chapter.

The validity and reliability data for the Carkhuff empathy scale is, for the most part, derived from data obtained in research devoted to the validity and reliability of the Truax accurate empathy scale (A Scale for the Measurement of Accurate Empathy), from which the Carkhuff empathy scale is derived. The predictive validity of the Truax accurate empathy scale is based on relationships between accurate empathy scale ratings and indices of client improvement or regression. These therapeutic outcomes were usually measured by psychological tests, clinicians' diagnostic evaluations of personality change and time spent in hospital after the beginning of therapy. Truax (1963) found a positive relationship (+.77) between accurate empathy scale ratings and positive change in hospitalized patients. A number of other studies (Rogers, Gendlin, Truax & Keisler, 1967; Truax & Mitchell, 1971), which used the accurate empathy scale, consistently showed that clients of therapists offering high levels of empathy, as measured by the accurate empathy scale, showed greatest gain. Regarding his own scale, Carkhuff (1969) stated:
This scale [Carkhuff empathy scale] is derived in part from the [Truax accurate empathy scale] which has been validated in extensive process and outcome research on counseling and psychotherapy ... and in part from an earlier version [of the Tauax accurate empathy scale] that had been validated in extensive process and outcome research.... In addition, similar measures of similar constructs have received extensive support in the literature (p. 315).

Hefele and Hurst (1972) have presented evidence to support their claim that the Carkhuff empathy scale has very good content validity. They went on to defend the instrument's predictive and construct validity by saying that clients of highly facilitative counselors (rated > 3.0) engaged in more self-exploration than clients of low functioning counselors (rated < 3.0). The same authors ended their review of reliability and validity of the Carkhuff empathy scale by saying:

If we, as behavioral scientists, wish to (a) study important phenomena, and (b) effect significant changes, it is critical that we feel relatively free to step beyond the traditional criteria of scientific methodology. While it is difficult to argue that reliability and validity can ever be totally dispensed with, Kaplan does argue that we ought to be willing to, as Carkhuff ... also suggests, subjugate the "criterion of rigor" to the "criterion of meaning." If we can focus on meaningful problems [human suffering and its alleviation] then perhaps rigorous methodology for evaluating our treatment procedures can come after the fact (p. 68).

Construct validity focuses on responding to the question: does the scale measure the attribute it purports to measure? Horwitz (1977), in rejecting claims by Avery, D'Augelli and Danish (1976), presents arguments regarding
the validity of the Carkhuff empathy scale. Horwitz concludes by saying:

At present, the objective measurement of empathy is admittedly crude and subject to numerous sources of error, but the development of more refined instruments ... is not advanced unless data are interpreted in the light of a coherent conceptual framework [Rogers, 1975] (p. 295).

Thoresen (1977), in a critique of both articles (Avery et al., 1976; Horwitz, 1977), makes his main argument the fact that data does not speak for itself and therefore is subjectively interpreted. This view is also supported by Polanyi (1958). Thoresen states that:

The experimental efforts of Avery et al. ... are commendable, as is the logical challenge of Horwitz. Most likely the construct of [empathic understanding], under close scrutiny, will yield to a more complex notion, transcending the limits of a single measuring procedure. Empathic behavior probably has social, cognitive, psycho-motor, and physiological properties. Moving toward a multibehavior-multimethod strategy, using a variety of correlational and experimental designs, should help us better understand what empathic understanding is and how it functions (p. 301-302).

However, this day of such sophisticated measures has not yet come and the Carkhuff empathy scale, although a crude measure, was used in the present study. Conclusions in the present study will be made in the light of present controversy regarding the validity and reliability of the scale (Avery, D'Augelli & Danish, 1976; Gladstein, 1977; Horwitz, 1977; Thoresen, 1977).
The reliability of the Carkhuff empathy scale was also partly derived from the Truax accurate empathy scale. Truax and Carkhuff (1967) reported interjudge ratings of the same audiotape excerpts of from +.43 to +.95, using the Truax accurate empathy scale. Truax and Mitchell (1971) presented similar evidence regarding the reliability of the accurate empathy scale per se. As for the reliability of the Carkhuff empathy scale, Hefele and Hurst (1972) presented a thorough review and reported interjudge reliabilities varying from +.83 to +.98, depending on the studies.

**Index of Communication**

The Index of Communication was one of the outcome criteria in this study. It is a standardized 16-item test designed to measure the ability of a person to communicate empathically. A copy of this index can be found in Appendix 3. The Index of Communication was developed by Carkhuff (1969a, p. 95-112). He made the following statement: "The best index of successful training ... is a previous index of a critical aspect of that training" (p. 93). The Index of Communication's distinctive advantage is that it is standardized, whereas the standard interview is subject to the fluctuations of the heterogeneity of stimuli presented by live clients. Carkhuff added
later, "the best index of communicative functioning is an assessment of the level of responses to standardized and representative helpee stimulus expressions" (p. 94).

The Carkhuff empathy scale can be presented either in writing or verbally; if it is presented verbally, it can be through a recording, or live through a standard helpee. In the present study, the written presentation form was used. The trainees responded also by writing responses to the Carkhuff empathy scale items. The odd-numbered items were presented for the pretest and the even-numbered for the posttest. The purpose of the procedure was to avoid a practice effect on the test results. Split-half reliability coefficients will be reported in the next chapter.

The Carkhuff empathy scale items cover the following affect areas: depression and distress, anger and hostility, and finally, elation and excitement. The problem-contents illustrated by the Carkhuff empathy scale items are the following: social-interpersonal, educational-vocational, child-rearing, sexual-marital, confrontation of helper, and silence (Table 1).

The validity and reliability of the Index of Communication have been provided by many studies reviewed by Carkhuff (1969a, p. 99-108). Carkhuff quoted a study by Greenberg where a close relation was established between written responses to the Index of Communication and (1) verbal
Table 1

Description of the Areas Covered by the Items of the Index of Communication

<table>
<thead>
<tr>
<th>Problem-contents</th>
<th>Affects</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Depression-Distress</td>
</tr>
<tr>
<td>Social-interpersonal</td>
<td>1</td>
</tr>
<tr>
<td>Educational-vocational</td>
<td>2</td>
</tr>
<tr>
<td>Child-rearing</td>
<td>3</td>
</tr>
<tr>
<td>Sexual-marital</td>
<td>4</td>
</tr>
<tr>
<td>Confrontation of helper</td>
<td>15</td>
</tr>
<tr>
<td>Silence</td>
<td></td>
</tr>
</tbody>
</table>

\[A^a\]Carkhuff (1969a, p. 99).
responses and (2) responses in the helper role. Carkhuff also reported that factor analyses suggest that all 16 items are measuring essentially the same variable. Recent evidence on the validity of the Index of Communication has been provided by Conklin and Hunt (1975), who used the Discrimination Index devised by Carkhuff, an index whose 16 items are identical to the items of the Index of Communication. The only difference is that the Discrimination Index provides several model helper responses that are to be rated by the trainee, whereas the Index of Communication does not provide the model responses; the trainee has to provide his own. The authors concluded that the Discrimination Index had the highest loading on the empathy factor.

In the present study, the trainee responses to the Index of Communication were randomized within each item number so that, for example, a judge would randomly rate the responses to item 8 for all 42 subjects. Twelve responses, of a possible 42 responses to each item, were randomly selected for the purpose of re-rater, in order to establish intrajudge reliability coefficients. These 192 responses were presented to the judges for re-rating. The results will be presented in the next chapter. As far as interjudge reliability on the Index of Communication was concerned, it was based on 512 items and will be reported in the next chapter.
Standard Interview

The standard interview was the second outcome criterion used in the present study. It provided a more realistic assessment of a trainee's ability to help. Carkhuff (1969a) has stated that, "if the conditions are available, casting the prospective helpers in the helping role appears to be the preferred method of assessing communication" (p. 105). Recently, Gormally and Hill (1974) defended the use of a standard interview by saying that it reflected the trainees' acquisition or nonacquisition of the real capacity for empathic responding in an actual interview situation. Anthony and Wain (1971) have provided further support to this statement.

The standard interview was preferred to real clients to avoid possible unethical manipulations such as worsening the condition of a real client through inept interventions (Heller, 1971) and to avoid the heterogeneity of problems usually presented in counseling. Furthermore, the trainees were not experienced interviewers and possibly could not conduct an interview with a person in real need of help. The standard interview, as was mentioned in an earlier section, is a laboratory analogue of a therapeutic interview where the client is coached to perform specific behaviors. In the case of the present study, the standard clients were given specific instructions to disclose personally relevant
feelings to the helper, regarding a current concern. The instructions can be found in Appendix 4.

The trainees were also given "helping" instructions which are to be found in Appendix 5. The helpees were randomly assigned to their helpers and the 30-minute interview was audiotaped. This procedure was followed for both pretest and posttest. Two 2-minute excerpts were selected from both pretest and posttest interviews and were randomly presented to judges for rating. This procedure will be described in a later section of the present chapter.

The Selection and Training of Judges

Independent judges were needed to rate the trainees' responses to the Index of Communication. The judges used the Carkhuff empathy scale for rating trainee responses. Independent judges were used because evidence seemed to suggest that they could best rate the counselor's empathic functioning (Bachrach, Luborsky & Mechanick, 1974; Gardner, 1967; Horenstein, Houston & Holmes, 1973; Keisler, 1966). Research evidence also suggested that trained lay persons could be as effective in rating as professionals (Keisler, 1966; Rogers et al., 1967; Shapiro, 1968). The two judges chosen for this present study were the judges who rated similar material in studies by Charbonneau (1973) and Boulet and Bourbonnais (Note 3). Dubois (1973) and Charbonneau
were both involved in the training of these judges. A summary of the training done by Dubois and Charbonneau will follow, because the hypotheses relating to the present study rest upon the ratings of the judges. The main problem was to ensure the reliability of the judges' ratings.

Dubois and Charbonneau chose clinically naive judges, as recommended by Rogers et al. (1967). The authors modeled their training on that given by Rogers and his colleagues. They also included several steps recommended by Carkhuff (1969a, 1971). Fourteen high school teachers were initially chosen and the Carkhuff Index of Discrimination and the English Placement Test were administered to them. The English Placement Test was used because the judges were French-speaking and had to rate some English responses. The Index of Discrimination is comprised of the same 16 items as the Index of Communication, but the Index of Discrimination provides four expert responses to each item, which the potential judge rated using the Carkhuff empathy scale. The judges' ratings were then compared to those provided by Carkhuff. Dubois and Charbonneau eliminated six persons on the basis of the results of the Index of Discrimination and the English Placement Test. The six eliminated had the lowest scores on the English Placement Test and had the highest mean deviations per item, from expert ratings on the Index of Discrimination. The smaller
the mean deviation per item, the more a judge was rating as the experts had rated.

The eight remaining judges received the first four steps of the training. Steps 1 and 2 were repeat experiences for them, since all 14 judges had been introduced to the concept of empathy and the Carkhuff empathy scale prior to being tested with the Index of Discrimination and the English Placement Test. The first four steps were as follows:

1. Theoretical presentation and discussion of empathy with relevant texts by reputed authors.

2. Presentation of the Carkhuff empathy scale with examples to illustrate the five levels of empathy (see Appendix 2).

3. Review of the five levels of the Carkhuff empathy scale along with a lecture on the possible errors involved in using rating scales (Guilford, 1954). Simple examples were then rated.

4. Index of Discrimination retest; rating of 20 excerpts with re-rate three days later of the same 20 excerpts.

At this point, four individuals were eliminated on the basis of mean deviations from expert ratings on both the Index of Discrimination retest and the 20-excerpt retest.

5. Discussion between judges and trainers of ratings given to the 20 excerpts.

6. Rating of 10 new excerpts.

7. Discussion of the ratings given to these 10 new items.
8. Rating of three series of 10 excerpts and re-rate of the three series after three days.

9. Discussion of the ratings given to the 30 excerpts.

At this point, Charbonneau assigned his two judges to his material. The two judges had intrajudge reliabilities of .74 and .58 with an interjudge reliability of .72. Later, when their reliabilities were calculated for their ratings of responses to the Index of Communication, the interjudge Ebel reliability coefficient (Guilford, 1954, p. 395) was .71 and their intrajudge reliabilities were .83 and .75. A later study (Boulet & Bourbonnais, Note 2), using the same two judges, obtained re-rate reliabilities of .81 and .79 (intra) and .88 (inter) on the rating of Index of Communication responses. Boulet (1974b), also using the same judges, reported an interjudge reliability coefficient of .90 for the Index of Communication.

Since the two judges had demonstrated their reliability, they were rehired for rating the material of the present study. The judges were financially remunerated. One judge was male, the other female. Both judges rated all the material so that, if sex-biasing of ratings were present, it would be equalized in the end (Olesker & Balter, 1972). There is controversy in the area of sex differences and empathy. Olesker and Balter found that male raters responded more empathically to males, and female raters
responded more empathically to females. Schwab (1974) and Smith Petro and Hansen (1977) found that male and female counselors were equal in their empathic discrimination and that sex had no effect on accurate rating. Both studies, in fact, confirmed previous studies (Breisinger, 1976; Taft, 1955): male and female counselors are equally empathic. Olesker and Balter's findings only opposed the previous studies in that their judges seemed to rate more favorably same sex subjects. In view of the controversy, the present study was designed to control for possible sex-biasing in the rating of responses. The training of the two judges for the present study consisted of a re-acquaintance with the Carkhuff empathy scale, along with practice in rating written responses and excerpts from audio recordings.

The first step consisted in presenting to them responses to all 16 items of the Index of Communication. They rated and then discussed their rating for each item. After approximately 240 ratings, they demonstrated adequate agreement and were assigned to the rating of the written material.

The second step was to present audiotaped statements to them of the examples of the five levels of the Carkhuff empathy scale (see Appendix 2). They then rated a number of audio excerpts and discussed their ratings. Upon
adequate agreement, they were assigned to rate the audio excerpts from the standard interviews.

_The Selection of Audio Excerpts_

Financial factors and time factors prohibited the rating of all the empathic responses in all 84 standard interviews. It was necessary to choose excerpts that would be representative of the trainee's empathic functioning. Keisler (1966, 1971) and Rogers et al. (1967) presented evidence which indicated that excerpts from interviews could be representative of a trainee's global functioning. Many authors (Bachrach, Luborsky & Mechanick, 1974; Gormally & Hill, 1974) have supported this common practice in the field. Bozarth and Kraeft (1972) have even suggested that, in some cases, one appropriately chosen excerpt can be indicative of a trainee's functioning.

The problem of segment location and length also had to be solved. Researchers (Carkhuff, 1969b; Mintz & Luborsky, 1971) have agreed that segment location can vary according to the purposes of the research. Research has also shown that various dimensions (i.e., experiencing) of a therapeutic relationship fluctuate in intensity throughout the interview (Keisler, Klein & Mathieu, 1965). With this knowledge, it was decided that one segment would be randomly selected from the middle third of the 30-minute
interview. It was assumed that client and counselor would take the first 10 minutes to establish rapport and that few empathic responses would be found in this first third of the interview. This procedure was identical to that followed by Charbonneau (1974).

Thus two segments of 2 minutes each were randomly selected from within the middle and final thirds. Segment length does not affect the rating of excerpts (Keisler, Mathieu & Klein, 1964). Carkhuff (1969b) has suggested the briefest possible excerpts. He and other authors (Avery, D'Augelli & Danish, 1976) have also suggested that an excerpt contain a minimum of a "helpee-helper-helpee" interaction (p. 227).

For the purpose of the present study, two segments were selected from the pretest standard interview and two from the posttest standard interview, for a total of 168 audio excerpts. After the selection of the excerpts, they were coded and copied in a random fashion on a new audiotape, and a copy of the new tape was made. Thus both judges were presented the material simultaneously and randomly. The randomization in the presentation was done to avoid rater bias which could result from the recognition of subjects' voices from prior excerpts (Bozarth & Krauft, 1972). Sixty-four segments were randomly selected for re-rating to determine intrajudge reliabilities, that is, four excerpts of four randomly selected subjects in each of the four groups.
The Rating Procedure

Following recommendations made by Guilford (1954, p. 263-269), the rating procedure itself was carried out by the judge writing an X on a graphic scale which reproduced visually the five levels of the Carkhuff empathy scale (see Appendix 6). Each rating was done on a separate sheet (scale). The judges were always apart during rating and set their own schedules of work within a deadline set by the researcher. They were given the following information:

1. Ratings tend to become unreliable after more than 2 hours of work without a break.
2. Usually 5 hours of rating a day is optimal.
3. Raters should avoid discussing their ratings.

The judges ignored the purpose of the present study and its design.

Procedures and Experimental Treatment of Groups

This section will describe the various pre-experimental procedures, the random assignment to groups, the experimental treatment of the groups, and the testing procedures.

Pre-experimental Procedures

The 42 subjects chose three 3-hour sessions which fitted their individual timetables. These 9 hours of
empathy training were called "audio only" training. The audio only pre-experimental procedure was performed to ensure that all unmotivated subjects would leave before the experiment per se. This strategy was successful because there was no attrition during the experiment. The pre-experimental procedures were also an attempt to produce a homogeneous population, to ensure that posttest differences were in fact due to the treatments and not to some chance occurrence, such as a "selected" population (Campbell & Stanley, 1963). Audio only training included two parts: discrimination training and communication training.

Discrimination training, in its first phase, introduced the trainees to the concept of empathy. This was done by asking the trainees to share their ideas about empathy, its nature and uses. The trainers led the discussion and emphasized relevant points, often quoting from their clinical experience or the research literature. The discussion led eventually to a clear definition of empathy and its importance in a helping relationship. The second phase of discrimination training was an introduction to the Carkhuff empathy scale. All five levels were clearly defined by the trainers and examples of responses at each level were given. The third phase involved playing a single audiotaped client statement to the group. Then a
trainer would read aloud a possible helper response to this client statement. The trainee's task in this phase was to rate this helper response using the Carkhuff empathy scale. Their ratings for each response were always written on a piece of paper. Each trainee, in turn, read his/her rating aloud and had to give a rationale for his/her rating when this was requested by one of the trainers. The trainers underlined important aspects in the discussion and contributed new material when it was warranted and also gave the "expert" rating for each helper response. The trainers read more than one helper response to each client statement. Approximately 30 helper responses were rated by the trainees over a period of 3 hours. The discrimination training of 3 hours ended when all trainees consistently did not deviate more than 0.5 from expert ratings. Discrimination training was the basis on which communication training was built because it provided a repertoire of empathic responses through the modeling of expert responses. Discrimination training also provided a tool for rating trainee performance in the communication phase.

The goal of communication training was to improve the trainees' level of empathic functioning through the formulation of interchangeable (level 3) responses to audiotaped client statements. Communication training spanned a period of 6 hours. In the first part, trainees
listened to an audiotaped client statement and simultaneously read a transcript of the client statement. Their task in this first phase of communication training was to write an interchangeable (level 3) helper response on a piece of paper. At this stage, the trainees could refer to the transcript to formulate responses and had a reasonable length of time to respond. As the training progressed, they were expected to respond more rapidly. The trainers randomly asked trainees to read their response aloud. Each trainee had an opportunity to read his/her response. Each response was immediately rated by both peers and trainers. This first phase lasted 2 hours. The second phase involved an identical procedure, only this time the transcript was withdrawn, thus forcing the trainees to refine their listening. They still wrote responses. This phase also lasted 2 hours. Finally, in the last phase of communication training, trainees were exposed to identical procedures, but this time had to respond verbally instead of writing the client statements. Thus the trainee was being progressively introduced to responding as he/she would in an interview situation, that is, accurately and rapidly.

After the 9 hours of pre-experimental training, the subjects were randomly assigned to the control group and the experimental groups, and then administered the pre-treatment assessment. Table 2 illustrates the results of
<table>
<thead>
<tr>
<th>Groups</th>
<th>RC&lt;sup&gt;a&lt;/sup&gt;</th>
<th>SRC&lt;sup&gt;b&lt;/sup&gt;</th>
<th>OC&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>No treatment (11)</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Audio only (10)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Roleplaying (11)</td>
<td>4</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Microcounseling (10)</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

<sup>a</sup>RC = residence counselor

<sup>b</sup>SRC = standby residence counselor

<sup>c</sup>OC = orientation counselor
the random assignment of the 42 subjects to the four groups. In the statistical analysis, two subjects were randomly eliminated to make the $N$ equal across groups. Therefore, following this elimination, all four groups had 10 subjects. In the next chapter, when the results are presented, the group mean ($M$) of the two groups where a subject was eliminated will be provided with and without that subject who was eliminated.

**Testing Procedures**

The use of a pretest-posttest control group design allowed for the checking of equivalence between groups before the experimental treatments. Only the pretest will be described because posttest procedures were identical.

The eight odd-numbered items of the Index of Communication and a standard interview comprised the pretest. The posttest consisted of identical procedures, repeated two weeks later, following the experimental treatments. For the posttest, even-numbered items of the Index of Communication and a standard interview were used. The distribution of odd-even items to pretest and posttest was done to avoid a practice effect on the test, which could occur in such a short time span. A Spearman-Brown split-half reliability coefficient was calculated for both pretest and posttest to check the equivalence of forms.
This coefficient will appear in the next chapter. Ideal experimental conditions would have allowed for an additional three control groups which would have not been given the pretest. This procedure would have controlled for the interaction effect between the pretest and the treatments. However, this control was impossible due to the already large number of subjects involved in the present study.

All pre-experimental procedures and experimental treatments are illustrated in Figure 1.

**Experimental Treatments**

**Control group.** The control group was a no-treatment group. That is, after the audio only training and the pretest, the subjects in this group were told to return in 2 weeks and would at that point receive further instructions. The posttest was administered to them 2 weeks later. The experimenters had good reason to believe that the subjects in the other three groups did not discuss their treatments with the subjects of the control group. It was evident following the experiment that the subjects were genuinely surprised by the fact that subjects in other groups had received different types of training.

**Experimental group 1 (audio only).** Experimental group 1 received an additional 9 hours of training identical
PRE-EXPERIMENTAL PROCEDURES

AUDIO ONLY TRAINING

9 hours
42 subjects

(a) Discrimination Training  (b) Communication Training

Random assignment of 42 subjects to four groups

PRETEST

90 min.

Index of Communication 60 min.
Standard Interview 30 min.

EXPERIMENTAL TREATMENT

9 hours

C Ex. 1 Ex. 2 Ex. 3
Control Audio Role- Micro-
Group Only playing counseling

POSTTEST

90 min.

Index of Communication and Standard Interview

Figure 1. Diagram of Procedures and Experimental Treatments.
to that of the last phase of communication training. That is, for 9 hours, the trainees, each in turn, responded verbally, without the aid of transcripts, to audio recorded client statements. They were encouraged to formulate level 3 responses. The 10 trainees in this group were divided into two smaller subgroups so that each trainee could have more practice trials. In the pre-experimental audio only training, they had had approximately three opportunities each to respond, rate, and be rated so that now, by being divided into two groups, their practice trials were doubled to approximately six. Therefore, each trainee in this experimental group 1 was given approximately six practice trials of responding, being rated, and rating. Since there were only three trainers, each experimental group came at a different time. The trainers at each training session alternated between the two subgroups in a pair or singly, on a rotation basis (Table 3). This was done for each experimental group to minimize the possibility of a "Rosenthal effect" (Rosenthal, 1967). Ideally, the trainers would have been outsiders who knew nothing of the design of the experiment, but in the present study, hiring trainers with such expertise would have been financially prohibitive.

Experimental group 2 (roleplaying). The 11 subjects in this group had at least three practice trials in the
Table 3  
Trainer Rotation Schedule

<table>
<thead>
<tr>
<th>Training sessions</th>
<th>1st hour</th>
<th>2nd hour</th>
<th>3rd hour</th>
</tr>
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<tbody>
<tr>
<td>Session 1</td>
<td>W&lt;sup&gt;a&lt;/sup&gt; and G&lt;sup&gt;b&lt;/sup&gt;</td>
<td>D</td>
<td>G</td>
</tr>
<tr>
<td>Room A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
<td>D</td>
<td>W and G</td>
<td>W</td>
</tr>
<tr>
<td>Room A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 3</td>
<td>D</td>
<td>W and D</td>
<td>W and G</td>
</tr>
<tr>
<td>Room A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room B</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>W = co-trainer  
<sup>b</sup>G = present author  
<sup>c</sup>D = co-trainer
role of helper during the 9 hours of training. The role-playing sessions lasted approximately 5 minutes. The trainer or one of the trainers first offered a helper-model. The helpee was either the co-trainer or a trainee. The trainer strove to model a counselor offering level 3 empathic responses. Only one modeling session was given in both experimental group 2 and experimental group 3 (Micro-counseling). Once the model had been provided, trainees were cast in either the helpee or the helper roles for the remaining time. This group, too, was divided into two subgroups. Because the roleplaying procedure was more time consuming than the audio only treatment, the trainees only had approximately three practice trials each in the helper role. The three trainers again alternated between these two subgroups. The trainers' task in this group was, along with the other trainees, to give a global rating to the trainee in the helper role. This was done by computing the mean of all ratings of responses offered in that role-play session. However, contrary to experimental group 3, the trainees in the present group did not get an immediate opportunity to integrate this feedback by practicing another time. They had to wait for all other trainees to practice. The goal of this roleplaying at all times was to give the trainees an opportunity to assume the role of helper-counselor giving empathic responses. Whatever
benefits accrued from playing the role of helpee were not examined during training. Perhaps playing the role of helpee facilitated insight into their feeling process and thus into the feeling process of others. The literature seems to point in this direction. However, the present study emphasized the helper role and the benefits accrued from playing that role.

Experimental group 3 (Microcounseling). In this group, the 10 subjects received 9 hours of Microcounseling training. This group was also divided into two subgroups and the trainers alternated between the groups. Because of the time-consuming procedures of an immediate second practice and focused feedback through videotape recording, only two practice trials were allowed each trainee. Basically, the procedures in the Microcounseling group were identical to those of the roleplaying group, only in the Microcounseling group the feedback was provided through videotape replay and the trainee received an opportunity to integrate the feedback by being put into an immediate second microsession.

Again, in this group, a live model was provided by the trainers. The trainee's performance in the helper role was video recorded. The replay allowed both trainers and peers to rate each response and offer an alternative response when the helper's response was inadequate. After
the replay, the trainee was immediately recast in the helper role and expected to correct his performance, using the prior feedback. Thus this final treatment added two unique dimensions to the training: focused feedback via videotape replay and an immediate second practice to integrate the feedback.

This completes the descriptions of the various experimental treatments. The next section will present the specific null hypotheses related to the present study and will present the statistical analysis used to test these hypotheses.

**Hypotheses, Statistics, and Summary**

The first group of hypotheses were related to the effects of the pre-experimental empathy training. They are the following:

1. There are no significant differences between the four groups in the mean level of empathy as measured by the pretest Index of Communication.

It is expected that there will be no significant differences between the group means as measured by the Index of Communication.

2. There are no significant differences between the four groups in the mean level of empathy as measured by the pretest standard interview.

It is expected that there will be no significant differences between the group means as measured by the standard interview.
Both measures are expected to provide means well below the minimally facilitative level 3, which will reflect the trainees’ inability to communicate empathically.

The next group of null hypotheses were concerned with posttest results and were related to the effects of various training methods on the level of empathy offered in the four groups as measured by the Index of Communication.

3. There are no significant differences between the control group and experimental group 1 (audio only) in the mean level of empathy as measured by the Index of Communication.

It is expected that there will be no significant differences between the means of the control group and the audio only group as measured by the posttest Index of Communication.

4. There are no significant differences between the control group and experimental group 2 (role-playing) in the mean level of empathy as measured by the Index of Communication.

It is expected that there will be no significant differences between the means of the control group and the roleplaying group as measured by the posttest Index of Communication.

5. There are no significant differences between the control group and experimental group 3 (Microcounseling) in the mean level of empathy as measured by the Index of Communication.

It is expected that there will be no significant differences between the means of the control group and the Microcounseling group as measured by the posttest Index of Communication.
6. There are no significant differences between experimental group 1 (audio only) and experimental group 2 (roleplaying) in the mean level of empathy as measured by the Index of Communication.

It is expected that there will be no significant differences between the means of the audio only group and the roleplaying group as measured by the posttest Index of Communication.

7. There are no significant differences between experimental group 1 (audio only) and experimental group 3 (Microcounseling) in the mean level of empathy as measured by the Index of Communication.

It is expected that there will be no significant differences between the means of the audio only group and the Microcounseling group as measured by the posttest Index of Communication.

8. There are no significant differences between experimental group 2 (roleplaying) and experimental group 3 (Microcounseling) in the mean level of empathy as measured by the Index of Communication.

It is expected that there will be no significant differences between the means of the roleplaying group and the Microcounseling group as measured by the posttest Index of Communication. In fact, Index of Communication scores will substantially be the same on both pretest and posttest because the additional training in the experimental groups does not add to the ability to communicate empathy in a written fashion, which the Index of Communication seems to be measuring. Only the standard interview seems to be able to measure on-the-job ability to communicate empathically.
The remaining hypotheses were also concerned with posttest data and were related to the effects of various training methods on the level of empathy offered in the four groups as measured by the standard interview.

9. There are no significant differences between the control group and experimental group 1 (audio only) in the mean level of empathy as measured by the standard interview.

It is expected there will be no significant differences between the means of the control group and audio only group as measured by the standard interview, because the additional hours of identical audiotape training given to the audio only group does not provide them with the ability to communicate empathically within an interview.

10. There are no significant differences between the control group and experimental group 2 (roleplaying) in the mean level of empathy as measured by the standard interview.

Significant differences between the means are expected between the control group and the roleplaying group.

11. There are no significant differences between the control group and experimental group 3 (Microcounseling) in the mean level of empathy as measured by the standard interview.

Significant differences between the means are expected between the control group and the Microcounseling group. In both the latter cases significant differences are expected because roleplaying provides adequate training for an interview situation.
12. There are no significant differences between experimental group 1 (audio only) and experimental group 2 (roleplaying) in the mean level of empathy as measured by the standard interview.

It is expected that there will be significant differences between the audio only group and the roleplaying group.

13. There are no significant differences between experimental group 1 (audio only) and experimental group 3 (Microcounseling) in the mean level of empathy as measured by the standard interview.

It is expected that there will be significant differences between the audio only group and the Microcounseling group.

14. There are no significant differences between experimental group 2 (roleplaying) and experimental group 3 (Microcounseling) in the mean level of empathy as measured by the standard interview.

It is expected that there will be significant differences between the means of the roleplaying group and the Microcounseling group as measured by the posttest standard interview because of the added dimensions of a second practice trial and videotape recording feedback provided by Microcounseling.

A multivariate analysis of variance was performed to test for possible significant differences between the group means. The APL Instapak (Cooper, 1974) program was used. The multivariate and univariate F ratios were reported. A level of confidence of .01 was used for the testing of hypotheses. When significant differences were found, the Tukey HSD technique was used to locate the source of the difference.
In summary, this chapter presented the sample, the setting of the experiment, the instruments, the selection and training of the judges, the selection of audio excerpts, the rating procedure, the procedures and the experimental treatment of groups, and finally, the null hypotheses along with a presentation of the statistical analysis to test these hypotheses.
CHAPTER III

PRESENTATION AND DISCUSSION OF RESULTS

This chapter will outline and discuss the results of the experiment. Since the results were based on judges' ratings of responses to the Index of Communication and the standard interview, the reliability of the ratings will be reviewed first.

Reliability of the Index of Communication

Two types of reliabilities will be reported for the judges: the interjudge reliability and the intrajudge reliability. The interjudge reliability refers to the agreement of ratings between the two judges, whereas, the intrajudge reliability refers to the consistency of the same judge's rating of the same excerpt. The second rating occurred two weeks after the first.

Table 4 presents the inter- and intrajudge reliabilities for the Index of Communication. The Pearson correlations for judges I and II are the result of the re-rating of 192 responses by both judges. For judge I, the correlation coefficient was .88, and for judge II the correlation coefficient was .83.

The interjudge reliability was calculated by using the Ebel intraclass reliability formula suggested by
<table>
<thead>
<tr>
<th>Reliability</th>
<th>Judges</th>
<th>N</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra</td>
<td>I</td>
<td></td>
<td>.88\textsuperscript{a}</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>192</td>
<td>.83\textsuperscript{a}</td>
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<tr>
<td>Inter</td>
<td></td>
<td>512</td>
<td>.94\textsuperscript{b}</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Pearson correlation coefficient  
\textsuperscript{b}Ebel intraclass correlation coefficient
Guilford (1954). Based on the ratings of 512 responses to the Index of Communication, the interjudge reliability coefficient was .94. Truax and Carkhuff (1967) have reported that, in 28 studies reviewed, the coefficients of reliability ranged from .43 to .95.

Table 5 presents the reliability coefficients for the standard interview. The intrajudge reliability coefficients are the result of the re-rating of a total of 48 excerpts. Judge I obtained a Pearson $r$ of .86 and judge II an $r$ of .83.

The interjudge reliability coefficient is the result of 168 ratings. The Ebel coefficient was .92. It was, therefore, assumed that the present ratings could be deemed reliable and that the results could be interpreted with a fair margin of certainty.

Finally, to close this section, a brief mention will be made of results of the Spearman-Brown correction checking the internal consistency of the Index of Communication. The reliability of the pretest Index of Communication (odd-numbered items) and the reliability of the posttest Index of Communication (even-numbered items) were estimated using the Spearman-Brown correction formula. The pretest coefficient was .82 and the posttest was .66. The reliability of the Index of Communication was deemed acceptable for the purposes of this study.
Table 5
Intra- and Interjudge Reliabilities for Ratings of Standard Interview Excerpts

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Judges</th>
<th>N</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra</td>
<td>I</td>
<td>48</td>
<td>.86a</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td></td>
<td>.83a</td>
</tr>
<tr>
<td>Inter</td>
<td></td>
<td>168</td>
<td>.92b</td>
</tr>
</tbody>
</table>

aPearson correlation coefficient
bEbel intra-class correlation coefficient
Presentation of Results

The present section will outline the results for the four groups in the experiment.

Order Effect in the Testing

In Chapter II it was mentioned that the experimenters attempted to control for order effect in the testing. The two tasks (Index of Communication and standard interview) were thus assigned so that an equal number of subjects (n = 5) in each group did task A (Index of Communication) followed by task B (standard interview), while the rest of the subjects in each group (n = 5) were assigned to task B (standard interview) first, followed by task A (Index of Communication). Tables 6 and 7 present the means and standard deviations for the Index of Communication and the standard interview. Boulet (1974a), a fellow researcher, reported that t tests revealed no significant differences for either tasks administered before or after each other in his three groups. Since there was no order effect in the presentation of the tasks, all data was combined according to their respective treatment groups.
Table 6

Scores for the Index of Communication Administered before or after the Standard Interview\(^a\)

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Index of Communication administered first</td>
<td>Index of Communication administered second</td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>15</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>(M)</td>
<td>40.77</td>
<td>39.77</td>
<td>.84</td>
</tr>
<tr>
<td>(SD)</td>
<td>4.29</td>
<td>5.99</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Boulet (1974a), p. 89.
Table 7

Scores for the Standard Interview Administered before or after the Index of Communication

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard Interview administered first</td>
<td>Standard Interview administered second</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>6.77</td>
<td>6.40</td>
<td>.603</td>
</tr>
<tr>
<td>SD</td>
<td>1.75</td>
<td>1.54</td>
<td></td>
</tr>
</tbody>
</table>

Pretest Results Obtained in the Eight Odd-numbered Items of the Index of Communication

The 42 individual scores obtained on the eight odd-numbered items of the Index of Communication appear in Appendix 7. The scores are the result of the sum of eight ratings given by two judges. To facilitate statistical analysis, two subjects were randomly eliminated, one from the control group and one from the roleplaying group. Thus each cell contained 10 scores. The means and standard deviations for the two groups where a subject was eliminated are reported with and without the eliminated scores in Table 8. No significant differences between the two group means were revealed by a t test. The analysis was computed with n = 10 in each cell. Table 9 presents the means and standard deviations for the four groups.

Pretest Results Obtained in the Standard Interview

The 42 individual scores on the standard interview can be found in Appendix 9. These scores are the result of the sum of two ratings per subject, multiplied by two judges. Again here, the analysis was based on 40 subjects. The means and standard deviations of the groups where a subject was eliminated appear in Table 10. No significant differences between the means with and
<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th></th>
<th>Roleplaying</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With</td>
<td>Without</td>
<td>With</td>
<td>Without</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>40.50</td>
<td>40.65</td>
<td>40.27</td>
<td>41.25</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>4.39</td>
<td>4.60</td>
<td>4.50</td>
<td>3.29</td>
</tr>
<tr>
<td><strong>t</strong></td>
<td>0.08</td>
<td></td>
<td>0.56</td>
<td></td>
</tr>
</tbody>
</table>

\[ t_{.99(19)} = 2.86 \]
Table 9
Pretest Index of Communication Means and Standard Deviations for the Four Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>10</td>
<td>40.65</td>
<td>4.60</td>
</tr>
<tr>
<td>Audio only</td>
<td>10</td>
<td>37.95</td>
<td>6.87</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>10</td>
<td>41.25</td>
<td>3.29</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>10</td>
<td>43.15</td>
<td>2.57</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Roleplaying</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With</td>
<td>Without</td>
<td>With</td>
</tr>
<tr>
<td>M</td>
<td>6.68</td>
<td>6.90</td>
<td>6.59</td>
</tr>
<tr>
<td>SD</td>
<td>1.85</td>
<td>1.79</td>
<td>1.61</td>
</tr>
<tr>
<td>t</td>
<td>0.27</td>
<td></td>
<td>0.01</td>
</tr>
</tbody>
</table>

$t_{.99}(19) = 2.86$
without the eliminated subject were revealed by a t test. The analysis proceeded with \( n = 10 \) in each cell. The means and standard deviations for the pretest standard interview appear in Table 11.

In order to test for significant differences between the Index of Communication and the standard interview means, a multivariate analysis of variance was performed using the APL Instapak developed by Cooper (1974). Table 12 summarizes the results of this analysis. The multivariate ANOVA produced an F ratio of 1.08 which is less than 3.08 corresponding to \( F_{.09}(6,70) \). Univariate F ratios have also been included in Table 12 for the purpose of localizing differences if they occurred. Null hypotheses 1 and 2, which stated that there were no significant differences between the four groups in their mean level of empathy, were therefore retained, because the F ratio did not approach significance.

Posttest Results Obtained on the Eight Even-numbered Items of the Index of Communication

The 42 individual posttest Index of Communication scores appear in Appendix 8. These scores are the sum of eight ratings given by two judges. Again, only 40 subjects were included in the statistical analysis. As before, the data for each of the two groups where a subject was eliminated appears in Table 13. No significant differences were found
Table 11

Pretest Standard Interview Means and Standard Deviations for the Four Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>10</td>
<td>6.90</td>
<td>1.79</td>
</tr>
<tr>
<td>Audio only</td>
<td>10</td>
<td>6.30</td>
<td>1.53</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>10</td>
<td>6.60</td>
<td>1.70</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>10</td>
<td>6.70</td>
<td>1.65</td>
</tr>
</tbody>
</table>
Table 12
Pretest $F$ Ratio for Multivariate Test of Equality of Mean Vectors

$F = 1.08, \, df = 6,70, \, ns^a$

<table>
<thead>
<tr>
<th>Source</th>
<th>MS</th>
<th>df</th>
<th>$F$</th>
<th>Level of significance $^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index of Communication</td>
<td>46.20</td>
<td>3.36</td>
<td>2.16</td>
<td>ns</td>
</tr>
<tr>
<td>Standard interview</td>
<td>0.63</td>
<td>3.36</td>
<td>0.22</td>
<td>ns</td>
</tr>
</tbody>
</table>

$^a_{F_{.99}(6,70)} = 3.08$

$^b_{F_{.99}(3,36)} = 4.38$
Table 13

Posttest Index of Communication Means and Standard Deviations for the Control Group and the Roleplaying Group with and without the Eliminated Subjects

<table>
<thead>
<tr>
<th></th>
<th>Control With</th>
<th>Control Without</th>
<th>Roleplaying With</th>
<th>Roleplaying Without</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>37.27</td>
<td>37.65</td>
<td>41.09</td>
<td>41.05</td>
</tr>
<tr>
<td>SD</td>
<td>5.04</td>
<td>5.14</td>
<td>4.59</td>
<td>4.83</td>
</tr>
<tr>
<td>t</td>
<td>0.17</td>
<td></td>
<td>0.02</td>
<td></td>
</tr>
</tbody>
</table>

\[ t_{.99(19)} = 2.86 \]
between the means with and without the eliminated subject. The analysis was computed with \( n = 10 \) in each cell. The means and standard deviations for the four groups are in Table 14.

Posttest Results Obtained on the Standard Interview

The 42 individual scores on the standard interview can be found in Appendix 10. These scores are the result of two ratings by two judges. Forty subjects were again used in this analysis. The means and standard deviations of the groups where a subject was eliminated appear in Table 15. No significant differences were found between the means with and without the eliminated subjects. The analysis was performed with \( n = 10 \) in each group.

The means and standard deviations for the posttest standard interview appear in Table 16. Because of the wider range of standard interview scores in the Microcounseling group (see Appendix 10) and the subsequent larger standard deviations (see Table 16), a Levene test for homogeneity of variance (Keith, 1972) was performed. It did not yield significant results. However, the greater variance was a definite factor in choosing a .05 level of significance when the Tukey HSD technique (Kirk, 1968) was applied in post hoc analysis. The Tukey HSD technique assumes homogeneity of variance. A multivariate analysis of variance was performed to test for significant differences between the means. Table 17 summarizes this analysis. This
Table 14
Posttest Index of Communication Means and Standard Deviations for the Four Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>10</td>
<td>37.65</td>
<td>5.14</td>
</tr>
<tr>
<td>Audio only</td>
<td>10</td>
<td>40.60</td>
<td>7.34</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>10</td>
<td>41.05</td>
<td>4.83</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>10</td>
<td>43.55</td>
<td>2.93</td>
</tr>
</tbody>
</table>
Table 15
Posttest Standard Interview Means and Standard Deviations for the Control Group and the Roleplaying Group with and without the Eliminated Subjects

<table>
<thead>
<tr>
<th></th>
<th>Control With</th>
<th>Control Without</th>
<th>Roleplaying With</th>
<th>Roleplaying Without</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
<td>6.14</td>
<td>6.15</td>
<td>7.96</td>
<td>8.05</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>0.64</td>
<td>0.67</td>
<td>0.96</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>t</strong></td>
<td>0.05</td>
<td></td>
<td>0.23</td>
<td></td>
</tr>
</tbody>
</table>

\[ t_{.99(19)} = 2.86 \]
Table 16
Posttest Standard Interview Means and Standard Deviations for the Four Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>10</td>
<td>6.15</td>
<td>0.67</td>
</tr>
<tr>
<td>Audio only</td>
<td>10</td>
<td>6.10</td>
<td>0.74</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>10</td>
<td>8.05</td>
<td>0.96</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>10</td>
<td>7.85</td>
<td>2.20</td>
</tr>
</tbody>
</table>
Table 17
Posttest $F$ Ratio for Multivariate Test of Equality of Mean Vectors

$F = 4.02$, $df = 6,70$, $p < .01^a$

<table>
<thead>
<tr>
<th>Source</th>
<th>MS</th>
<th>df</th>
<th>$F$</th>
<th>Level of significance $^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index of Communication</td>
<td>58.52</td>
<td>3,36</td>
<td>2.08</td>
<td>ns</td>
</tr>
<tr>
<td>Standard interview</td>
<td>11.17</td>
<td>3,36</td>
<td>6.63</td>
<td>$p &lt; .01$</td>
</tr>
</tbody>
</table>

$^a_{F_{.99}(6,70)} = 3.08$
$^b_{F_{.99}(3,36)} = 4.38$
multivariate ANOVA produced an $F$ ratio of 4.02 which was greater than the critical value of $F_{.99}(6,70) = 3.08$. Since the standard interview was used for both pretesting and post-testing, it was assumed that there would be a high correlation between pretest and posttest scores on the standard interview, and thus that perhaps a multivariate analysis of covariance, using pretest scores as covariates, could be performed. Very little precision was acquired in this analysis, so that it was discarded.

Since the observed $F$ ratio surpassed the critical value, it then appeared that some of the null hypotheses were to be rejected. However, the multivariate $F$ ratio reveals only that there were differences between the group mean vectors composed of both the Index of Communication and the standard interview. The $F$ ratio did not indicate between which groups and on which criteria the groups differed. Therefore, univariate $F$ ratios were calculated and included in Table 17 to establish the loci of the differences.

The $F$ ratio for the Index of Communication was 2.08, which was smaller than 4.38 corresponding to $F_{.99}(3,36)$. It would then seem that the four group means did not differ significantly on the first of the dependent measures (Index of Communication). Hypotheses 3 to 8, which dealt with the Index of Communication, were thus retained. The $F$ ratio for the standard interview was 6.63 which was greater than 4.38 corresponding to $F_{.99}(3,36)$. Thus it appeared that the groups
differed on the standard interview only. The loci of the differences still needed to be established. Post hoc analysis of the data was needed to reveal the exact location of the differences.

Table 18 presents the results of the Tukey post hoc (Kirk, 1968) technique which is expressed in "honestly significant differences" (HSD). At a .05 level of confidence, the following differences were found: there were significant differences between the control group and both the roleplaying and Microcounseling groups, but no differences between the control group and the audio only group. Thus null hypotheses 10 and 11 were rejected, but null hypothesis 9 was retained. There were also observed differences between the audio only group and both the roleplaying and Microcounseling groups. Thus null hypotheses 12 and 13 were rejected. However, there were no significant differences observed between the roleplaying and Microcounseling groups, thus null hypothesis 14 was not rejected. An approximate power value of the contrast between the mean of the roleplaying group (8.05) and the mean of the Microcounseling group (7.85) was calculated to be of 6%. Thus null hypothesis 14 could not be rejected conclusively.

To summarize, only two null hypotheses regarding the standard interview were retained: hypothesis 9, which stated that there were no significant differences between
the control group and the audio only group, and hypothesis 14, which stated that there were no significant differences between the roleplaying group and the Microcounseling group.

In closing this section, a brief outline will be given of the pretest and posttest means of males and females across groups on both dependent measures. Tables 19 and 20 summarize
Table 18
Tukey HSD Test for Significant Differences Between Pairs of Means in the Standard Interview

<table>
<thead>
<tr>
<th>Group</th>
<th>Control</th>
<th>Audio only</th>
<th>Roleplaying</th>
<th>Microcounseling</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>6.15</td>
<td>6.10</td>
<td>8.05</td>
<td>7.85</td>
</tr>
<tr>
<td>Control</td>
<td>-</td>
<td>0.05</td>
<td>-1.90</td>
<td>-1.70</td>
</tr>
<tr>
<td>Audio only</td>
<td>-</td>
<td>-</td>
<td>-1.95</td>
<td>-1.75</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.20</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\[ HSD_{0.05, 36} = 1.56 \]
Table 19

Male and Female Pretest Means and Standard Deviations on the Index of Communication and Standard Interview for the Four Groups

<table>
<thead>
<tr>
<th></th>
<th>Index of Communication</th>
<th>Standard Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>M</td>
<td>39.64</td>
<td>41.29</td>
</tr>
<tr>
<td>SD</td>
<td>5.52</td>
<td>4.34</td>
</tr>
<tr>
<td>t</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup><sub><i>_t_.99(40) = 2.704</i></sub>
### Table 20

Male and Female Posttest Means and Standard Deviations on the Index of Communication and Standard Interview for the Four Groups

<table>
<thead>
<tr>
<th></th>
<th>Index of Communication</th>
<th></th>
<th>Standard interview</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>M</td>
<td>39.55</td>
<td>41.57</td>
<td>7.31</td>
<td>6.71</td>
</tr>
<tr>
<td>SD</td>
<td>5.60</td>
<td>5.33</td>
<td>1.47</td>
<td>1.55</td>
</tr>
<tr>
<td>t</td>
<td></td>
<td>1.20</td>
<td></td>
<td>1.28</td>
</tr>
<tr>
<td>( t_{.99(40)} )</td>
<td></td>
<td>2.704</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
these results. The pretest male and female means on the Index of Communication were 39.64 and 41.29, respectively, whereas the posttest male mean was 39.55, and the female was 41.57. The pretest male and female means on the standard interview were 6.26 and 6.88, respectively, whereas the posttest means for males and females were 7.31 and 6.71, respectively. No significant differences between the mean levels of empathy of both sexes, either before or after experimentation, on both criteria, were revealed by t tests. The power of the preceding pair-wise comparisons was approximated at 3 to 4% for both pretest and posttest Index of Communication scores. As for the standard interview, the power values were 3 to 4% for the pretest and 6 to 9% for the posttest.

Discussion of the Results

Summary of the Results

Since no order effect had occurred in the presentation of the two criterion measures, all 42 scores were combined according to their respective groups.

No significant differences existed in the control group and the roleplaying group with and without the eliminated subjects on both the Index of Communication and the standard interview pretests and posttests. The analysis thus proceeded with n = 10 in each cell.
The overall statistical analysis of the pretest data, a multivariate analysis of variance, revealed no significant differences between the group mean vectors, composed of Index of Communication and standard interview scores, as an F ratio of 1.08 indicated. Null hypotheses 1 and 2, which stated that there were no significant
differences between the four groups on both criteria, were then retained. The expectation that the pool of subjects would be low on empathy at the start was borne out. That the scores were higher on the Index of Communication was expected because of the written dimension of the text. The lower scores on the standard interview were also expected since it reflected more accurately the actual ability of a trainee to offer empathy in a real interview, which at that point in the research, he/she had not been trained to do.

The overall statistical analysis of the posttest data indicated that there were significant differences between the group mean vectors, as indicated by a multivariate $F$ ratio of 4.02. The univariate $F$ ratios pointed to differences on the standard interview criterion only. This was expected. Thus null hypotheses 3 to 8, which stated that there were no significant differences between the four groups on the Index of Communication, were retained. Index of Communication scores were substantially the same before and after. The insensitivity of the Index of Communication to measure actual verbal empathy will be further discussed in the last chapter.

Post hoc analysis using the Tukey HSD technique revealed differences between the control group and roleplaying and Microcounseling groups. This was expected. It also
revealed differences between the audio only group and the roleplaying and Microcounseling groups. This was also expected. However, no significant differences were found between the control and audio groups, which was expected, and the roleplaying and Microcounseling groups, which was not expected. These findings led to the rejection of hypotheses 10 to 13, and the retention of hypotheses 9 and 14. The unexpected results of Microcounseling and roleplaying not having significantly different means will be further discussed later in this chapter.

Finally, $t$ tests revealed no significant differences between males and females on both criteria for both pretest and posttest.

**Discussion of Null Hypotheses 1 and 2**

The first two hypotheses referred to the level of empathic functioning of the four groups prior to experimental treatment. The statistical analysis revealed no significant differences between the groups. The four groups then appeared to be equivalent in their mean level of empathy before treatment. Table 21 presents the Index of Communication and standard interview means of the four groups converted into Carkhuff empathy scale scores. The Index of Communication mean is the result of scores on the eight odd-numbered items of the Index of Communication
Table 21
Pretest Index of Communication and Standard Interview Means According to the Carkhuff Empathy Scale

<table>
<thead>
<tr>
<th>Group</th>
<th>Index of Communication</th>
<th>Standard interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>2.54</td>
<td>1.73</td>
</tr>
<tr>
<td>Audio only</td>
<td>2.37</td>
<td>1.58</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>2.58</td>
<td>1.65</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>2.70</td>
<td>1.68</td>
</tr>
</tbody>
</table>
rated by two judges for a total of 16 ratings per subject. The standard interview mean is the result of scores on two tape excerpts rated by two judges, for a total of four ratings per subject.

The pretest Index of Communication combined mean for the four groups was 2.55. This mean is comparable to means in previous studies. Boulet (1974b) had a combined pretest Index of Communication mean of 2.45; Pierce and Drasgow (1969) had 2.53, and Charbonneau (1973) had a 2.56 (French) and a 2.43 (English) mean. Therefore, after only 9 hours of audio-tape empathy training, the subjects in the present study were functioning at levels commensurate to groups having received at least twice the amount of training, at least as measured by the Index of Communication.

The combined pretest mean of the four groups on the standard interview was 1.66, which was similar to Boulet's (1974b) mean of 1.57. However, combined means of other studies were not comparable: Pierce and Drasgow's (1969) mean = 2.35 and Charbonneau's (1973) means = 2.57 (French) and 2.33 (English). This was foreseen since the pre-experimental audiotape empathy training, which used isolated client statements to which trainees responded one at a time, did not prepare them for responding empathically in an interview situation. It did, however, prepare them adequately for the Index of Communication. This will be discussed in more detail at a later point.
It should be pointed out that the present study's pretest standard interview combined mean for the four groups of 1.66 was a definite indication of the sample's naiveté as regard empathy. Carkhuff (1969a, 1969b) labels this type of functioning low empathic functioning. Later in the discussions this low functioning will be further discussed.

However, at this point, the important fact is that the subjects were low functioners in empathy and that no significant differences were found between the four groups.

Discussion of Null Hypotheses 3 to 8

These hypotheses had to do with the effects of experimental treatment as measured by the Index of Communication. The statistical analysis revealed no significant differences between the four groups on the posttest Index of Communication. It thus seemed that the three experimental groups did not differ, in their mean level of empathy, from the control group. The groups did not differ despite an additional 9 hours of training, whether it was an additional 9 hours of audiotape training, or roleplaying, or roleplaying with video feedback. It thus appeared that these various treatments had little effect on posttest empathy scores as measured by the Index of Communication.
The four groups' Index of Communication and standard interview posttest means appear in Table 22. The control group had a posttest Index of Communication mean of 2.35, and the audio only group 2.54, having received an additional 9 hours of audiotape empathy training. The difference is 0.19 and not significant. The role-playing group was slightly higher at 2.57, and so was the Microcounseling group at 2.72.

Audiotape empathy training is really only the first phase of systematic empathy training. During that phase, trainees respond to isolated audiotaped client statements. Since empathic communication was a new behavior, simple skills were required at first, in the sense that many supports were provided: a transcript of the client statements, paper and pencil to write responses. Gradually such support was withdrawn. The final goal of this first phase of training was to have trainees respond aloud to an isolated client statement without the use of the transcript. This goal was achieved since all Index of Communication scores approach 2.5, which seemed an acceptable level of functioning at that point of training.

However, it is obvious that the roleplaying and Microcounseling treatments added very little to this basic audiotape training, at least as measured by the Index of Communication. Further discussion about the Index of Communication will appear in the next section.
<table>
<thead>
<tr>
<th></th>
<th>Index of Communication</th>
<th>Standard interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>2.35</td>
<td>1.54</td>
</tr>
<tr>
<td>Audio only</td>
<td>2.54</td>
<td>1.53</td>
</tr>
<tr>
<td>Roleplaying</td>
<td>2.57</td>
<td>2.01</td>
</tr>
<tr>
<td>Microcounseling</td>
<td>2.72</td>
<td>1.96</td>
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</table>
Discussion of Null Hypotheses 9 to 14

These hypotheses referred to the effects of experimental treatment as measured by the standard interview. The statistical analysis revealed that there were significant differences between the groups. The roleplaying group was found to offer significantly higher levels of empathy than the control group and the audio only group. The Microcounseling group was also significantly superior to these two groups. However, no differences were found between the Microcounseling group and the roleplaying group and also between the control and the audio only group.

The nonsignificant differences between the control group and the audio only group on the standard interview were expected. Nine hours of audiotape empathy training, even doubled in the audio only group, did not prepare the subjects for the standard interview, as their means of 1.54 and 1.53 denote. It should also be noted that these two groups offered substantially lower levels of empathy on the standard interview than on the Index of Communication, where their means were 2.35 and 2.54, respectively. At this point in the discussion, a more elaborate comparison of the two outcome criteria may be enlightening.

The Index of Communication is a 16-item test which presents a sample of client feelings and problem areas. The three main affects presented are anger, depression, and
eration which are situated in the context of five different problem areas: social-interpersonal, educational-vocational, child-rearing, sexual-marital, confrontation of the therapist, and silence. These affects and problems are in fact common in counseling. However, each item contains one affect in the context of one problem area. The affect is more easily identifiable there than in a stream of words from a live client. Also the Index of Communication is a written test with no real time limit, thus allowing the trainee to read his response and the item many times. In many ways the test is easier than responding to a real client because the affects are not isolated in an interview. In fact, Gormally and Hill (1974) have suggested that the Index of Communication may not measure the complex skill of responding consistently and rapidly at level 3 in a live counseling session. Matarazzo (1971) also reported that students' interview behavior did not always conform to their written responses. The conclusions of these authors seem to indicate that the skill or skills which the roleplaying and Microcounseling groups learned may not have been measured by the Index of Communication. That is why another outcome criterion, the standard interview, was added. In an interview, the counselor-trainee not only has to identify the affect quickly, an affect often hidden in the content, but he/she must also respond within a reasonable
delay—or else his/her client will soon tire of being misunderstood. Therefore, no lengthy delay exists in the interview. To add to the difficulty, often an interview with a client will provoke affect in the counselor who, being an inexperienced interviewer, may confound his feelings with the client's and thus be inaccurate in his empathic responding.

In view of the previous discussion, it would be expected that trainees having received audiotape empathy training only would respond well to the Index of Communication but do poorly on the standard interview. Thus no significant differences were found between the control group and the audio only group on the standard interview, because their learnings did not generalize to the interview situation. Carkhuff (1969a, 1969b) has already addressed this point. Low level functioners only learn what they are taught. The implication is that low level functioners such as the present subjects must be given an opportunity to practice considerably before they are put in an interview situation.

The roleplaying and Microcounseling groups had such an opportunity. And significant differences were found between the roleplaying group and the control and audio only group and also between the Microcounseling group and the control and audio only groups. Are these differences
attributable to the differential treatments? The design of the present experiment allows for some cautious parallels to be drawn, not necessarily on a cause-effect basis. There is a probability, since the groups were apparently equivalent at the onset, that these two treatments (role-playing and Microcounseling) did contribute to the significant differences.

It would then appear that roleplaying preceded by audiotape training, and Microcounseling preceded by audiotape training also, were more effective than audiotape only training in promoting higher levels of empathic functioning in the interview. Roleplaying offered the trainees an opportunity to practice responding empathically in a situation very similar to that encountered in the standard interview. The roleplaying group rehearsed with the help of constant peer and trainer feedback. The Microcounseling group received even more in that they had an opportunity to practice a second time at each turn, to try to integrate the focused feedback provided by videotape playback. The results seemed to indicate that in the second phase of training, roleplaying and roleplaying with video feedback are equally superior to audiotape training only.

Finally, it was found that no significant differences occurred between the roleplaying and Microcounseling groups. Both approaches were efficient in promoting higher
levels of empathy in the trainees with means close to 2.0 on the standard interview. It had been expected that Micro-
counseling would be superior because it provided an immedi-
ate second trial, the purpose of which was for the trainee to integrate the focused feedback provided by the video replay. Results did not support this expectation. Since the experiment controlled for several potentially con-
 founding variables, these can be ruled out: the results were most probably not the result of history, maturation testing, statistical regression, and selection (Campbell & Stanley (1963/1966) because of randomization to control and experimental groups and the rotation of trainers. Mortality was not a factor since there were no drop-outs from beginning to end.

Several reasons could be suggested for these results. First and foremost, perhaps the uneven number of trials the trainees had could have been a confounding variable. Because the Microcounseling approach, with its second trial and the belabored process of viewing the replay, was much more time consuming than expected, the trainees in this group, on the average, received one less practice trial at roleplaying than those in the roleplaying group. Since only two practice trials were allowed in the Microcounseling group for each trainee, perhaps a third would have contributed to significant differences. Danet's (1968) findings
could be construed to support this conclusion in that he asks the question of how many trials are necessary for video to become a superior tool of training. There is no literature which provides any direction on this point. It is difficult to decide whether total time in training should be controlled, which this experiment did control, or whether the total number of practice trials should be controlled. Further research could perhaps attempt to discover the optimal number of practice trials necessary for Microcounseling to become a better training tool than the Carkhuff approach. Perhaps a greater number of practice trials will make no difference; it remains a debatable question.

A second reason for the lack of difference between the roleplaying and the Microcounseling groups could be that the roleplaying group was not exposed to videotaping. The Microcounseling group, at the beginning, may have been more anxious because of these recording devices that provide instant confrontation, and thus may not have learned optimally. Again, there is no literature pointing specifically to anxiety-producing effects of the presence of video equipment. Perhaps further research could explore this area. This research could add an additional control group which would receive the same treatment as the roleplaying group, but with video equipment being used in the room without
the trainers giving focused feedback as such, which is used in the Microcounseling approach. This was not foreseen in the present experiment because of the unavailability of experimental evidence in this area.

Still another possible explanation was that the three trainers were using the Microcounseling approach for the first time in this experiment. Their inexperience with this approach may have contributed to a substantial decrease in their effectiveness. The trainers had, on the other hand, used the Carkhuff approach several times. Further research could use trainers more experienced in this method.

In closing, it can be said that the Microcounseling approach, although not evidently superior in the present experiment to roleplaying, could provide in the future a notably efficient means of training. Perhaps it could be used to train counselors when more than one skill needs to be integrated into a complex of skills such as needed in interviewing or diagnostics (Moreland et al., 1973). The Microcounseling group subjects may not have been superior to roleplaying group subjects in empathy, but they may have been better interviewers (Yenawine & Arbuckle, 1971). This was not measured.

Also empathic communication, although containing some nonverbal dimensions (Haase & Tepper, 1972; Smith-Hansen, 1977), is a cognitive-semantic skill (Ivey, 1971;
Moreland, 1971) and therefore perhaps should better be taught using strictly audiotape playback within a Microcounseling approach (Geertsma & Reivich, 1969). Audiotape would have the advantage of being more economical since audiovisual systems are still expensive.

In summary, then, both roleplaying and Microcounseling were more effective in training for higher levels of empathy than audiotape only training. However, no differences were found between roleplaying and Microcounseling.

Also, it can be said, regarding the lack of significant differences between sexes on the level of empathy offered, that the present study was supported by already existing literature. The low power values of the t tests did not allow for firm conclusions with regard to lack of significant differences in the present study.

These conclusions should be interpreted in the light of some limits. The first such variable is the interaction effect between the pretest and the experimental treatments that could have contributed to false positive results on the posttest. Further research could use a posttest only control group design.

A second confounding variable more likely to be present here is the lack of precision of the instruments used to measure empathy. The power analysis provided earlier would point in this direction. The power of the contrasts
between the posttest roleplaying mean and the posttest Microcounseling mean on the standard interview was estimated at 6%. Therefore it could be tentatively concluded that significant differences in empathy could still exist but were not measured because of the insensitivity of the instrument used (Carkhuff empathy scale). Many authors (Avery, D'Augelli &
Danish, 1976; Gladstein, 1977; Horwitz, 1977; Thoresen, 1977) have commented at length as regards the validity and reliability of empathy measures. The literature is inconclusive, to say the least. Yes, the measures are crude. But the best argument is that Carkhuff's empathy scale is the best of a bad lot. Further research could focus on improving such scales along the lines suggested by Thoresen (1977). The concept, although operationalized by scales, remains controversial and elusive (Chinsky & Rappaport, 1970; Rappaport & Chinsky, 1972; Zimmer & Anderson, 1968). Thus the scales are tentative and the judges' reliabilities suffer—even though reliabilities in the present study were high, they were still not perfect. There could therefore be a margin of error. Professional psychotherapists may have rated higher or lower globally than the present judges.

A third possible confounding variable was the possible contamination effect. Subjects from various groups may have communicated training material between sessions. However, this was highly unlikely because the experimenter was witness to genuine surprise on the part of trainees after the experiment.
A fourth possible limitation was the Rosenthal effect (Rosenthal, 1967), or the experimenter bias. Often experimenter bias can have undetermined effects on the various treatments and thus on outcome scores. The experimenters in the present study were aware that their expectations could bias their training. To minimize its effects, there was constant rotation of trainers, and the trainers made a special effort to demand equally from all subjects and to maintain the same enthusiasm in whatever group. Ideally, outsiders, completely ignorant of the design, would have trained the subjects. However, finding competent trainers in this field is both difficult and financially prohibitive. Further research should seek out "outsiders" as trainers.

Gormally and Hill (1974) caution that the use of a standard interview does not necessarily reflect actual performance in a real interview. The standard interview, nevertheless, provides the "closest thing" to a real interview. The use of real clients for this type of training raises too many ethical problems. Thus the standard interview could, if it were more "standardized," provide a very legitimate alternative. Further standardization could mean training clients in self-exploration, coaching clients, and limiting the content areas of test interviews.
Also, length and location of tape segments are still contentious issues (Mintz & Luborsky, 1971). Subsequent research could certainly explore the optimal locations for selecting excerpts and the optimal length, although location seems more important in the area of empathy. Segment length has been researched and 2-minute segments with a helpee-helper-helpee interaction seem sufficient. However, it seems that location could be different with naive and sophisticated interviewers. Naive interviewers perhaps offer empathy, only for a few minutes, because it is their only skill, and then soon, because of increasing anxiety, lose control of the interview and no longer are empathic. Professionals perhaps offer empathy more consistently throughout and thus segments could be taken anywhere in the interview tape. But with naive interviewers perhaps only the first third is relevant. There is no direction in the literature.

The present study chose excerpts in the second and last thirds for rationales already presented. Perhaps these were the lowest. Only further research could elucidate this point.

Still another limit to be mentioned is that the study was done on undergraduate volunteers, and conclusions, strictly speaking, only apply to this type of population (Bernstein, Hakel & Harlan, 1975). Also, roleplaying and Microcounseling are, strictly speaking, effective only
inasmuch as they are preceded by the treatment audio training and the pretest. Ideally, controls would have been introduced by including four other control groups not subjected to a pre-treatment. This procedure was prohibitive because of the limited population available for such an experiment.

However, all of these confounding variables which possibly limit the generalizability of the conclusions should be examined in the light of the fact that the present study was uniquely rigorous when compared to studies in this area, for the following reasons: the control group, the randomization, the rotation of trainers, a large N for this type of study, no mortality, a homogeneous sample, the best possible tools for the area and, finally, what seemed to be optimal treatment for the goals it had.

To close this chapter, some final words will be addressed to the question of the quality of the results, since all discussion has been related to quantitative results. The question can be formulated thus: to what extent are the differences in the standard interview scores qualitatively significant? Carkhuff (1969, 1972) would ask the question in terms of "meaning" of the results. The Carkhuff empathy scale defines level 1 functioning as not attending or detracting from the obvious affect expressed by the helpee. Level 2 is defined in the following manner: "The person may communicate some awareness of obvious surface feelings ...,
but his communications drain off a level of the affect and distort the level and meaning" (Carkhuff, 1969b, p. 316). At level 3 the helper's response is interchangeable with the helpee's expressed affect. In the present study, the 42 trainees, at pretest were functioning at approximately 1.5 on the standard interview. That is 1.5 away from the minimally facilitative level 3. After training, the control and audio only group were still at the same level, but the roleplaying and Microcounseling groups were at 2.0, which is still below minimally facilitative. The half point gain is important, but not sufficient. Thus these two groups of subjects went from detracting to showing some awareness of surface feelings, but often subtracting from the affect. What that means is that roleplaying and Microcounseling subjects went from being nonempathic to expressing some understanding, although not quite enough to facilitate change in a helpee. Perhaps, if all subjects had been experienced interviewers, the empathy scores overall may have been higher. The subjects were probably more concerned on the standard interview with what they were going to say next, as all neophyte counselors do, than with communicating understanding (Hackney, Ivey & Oetting, 1970). Also it can be said that the trainees probably learned skills of interpersonal relating that were not measured by the instruments used.
SUMMARY AND CONCLUSIONS

The goal of the present research was to compare the effects of three systematic approaches to training in promoting higher levels of empathic functioning in the helping role.

The subjects involved were 42 volunteers drawn from a group of university residence and orientation counselors at the University of Ottawa. The subjects were assigned randomly to four groups: a control group, an audio only group, a roleplaying group, and a Microcounseling group. Empathy was measured by the Carkhuff empathy scale and a standard interview. Independent judges rated the empathy of trainees by rating their answers to the Index of Communication and their recorded responses to standard clients. The study used a pretest-posttest control group design.

Results indicated significant differences in the mean level of empathic functioning among the four groups following experimental treatment on one criterion only, the standard interview. The significant differences were discussed and possible limits to the conclusions were mentioned, such as analogue measures as criteria, contamination effect, Rosenthal effect, and the volunteer undergraduate population used as subjects. The importance of the study lies in the confirmation that empathy can be taught in a brief period, through various methods of
systematic training, and that video feedback may not be more effective than trainer verbal feedback in short term training. The importance of this study also lies in the fact that it seems to be the first to compare Carkhuff's approach and Ivey's approach as applied to empathy operationally defined by Carkhuff. Even though Microcounseling did not emerge as superior to roleplaying, the present study offered promising leads for further exploration of the topic. Several reasons were suggested to explain these results: an uneven number of practice trials in the role-playing and Microcounseling groups, and anxiety related to self-confrontation via video playback were mentioned. The Microcounseling approach could possibly contribute substantially to increased efficiency in systematic training. The use of video feedback in short training programs may not build on the unique contributions of video playback. The self-confrontations provided could have a more meaningful impact in long-term training programs. The use of the Microcounseling approach could be more effective when more than one counseling behavior has to be integrated into a complex whole, such as an interview. Only further research will elucidate this point, because there is considerable controversy in the field of empathy presently (Gladstein, 1977). The concept itself is being questioned and re-examined (Avery, D'Augelli & Danish, 1976). The concept
has been defended by opposing arguments (Horwitz, 1977). In the light of the complexity of empathic behavior, Thoresen (1977) has suggested a multidimensional approach in solving the controversy.

The instruments used to measure empathy have been questioned (Chinsky & Rappaport, 1970) and defended (Bozarth & Krauft, 1972).

Finally, the study pointed to a need for further research as follows:

1. Compare the effectiveness in training of audio feedback, video feedback, and verbal trainer feedback.

2. Explore various means of measuring empathy and also factor analyze all the available operational definitions of empathy.

3. Investigate the characteristics of persons who are empathic, or are "trainable" in empathic responding.

4. Investigate the area of audio excerpt sampling for the rating of empathy.

5. Because of the low power of the contrasts between the means of the roleplaying and the Microcounseling groups, the present study could be replicated using greater n's in each cell and more sophisticated instruments for measuring empathy.
REFERENCE NOTES


REFERENCES


Boulet, D. *Comparison of three approaches to systematic empathy training on the communication of empathic understanding*. Unpublished interim report, University of Ottawa, Ottawa, Canada, 1974b.


Cooper, M. INSTAPAK—A package of easy to use interactive statistical programmes in APL. Ottawa, Faculty of Education, University of Ottawa, 1974.


Haase, R. F., & Dimattia, D. J. The application of the microcounseling paradigm to the training of support personnel in counseling. *Counselor Education & Supervision, 1970, 10,* 16-22.


Jakubowski-Spector, P. A. An application of the behavior change principles of role playing and shaping to the training of counselors. Paper presented at the American Personnel & Guidance Association Convention, April, 1969. (ERIC Document Reproduction Service No. ED 043 040)


Jones, M. J. Roleplaying as an educational and training device in a poverty-oriented multiracial group. *Group Therapy, 1969, 22*(3-4), 195-201


Lazarus, A. A. Behavior rehearsal vs. non-directive therapy vs. advice in effecting behavior change. *Behavior Research & Therapy, 1966, 4*(3), 209-212.


Marks, S. E., Montgomery, J. S., & Davis, W. M. Videotape recording in counselling: What we know and where to find it. *The Canadian Counsellor, 1975, 9*(1), 31-44.


Moskowitz, G. *Role playing in higher education.* *Group Psychotherapy and Psychodrama,* 1975, 38, 135-143.


Payne, P. A., Weiss, S. D., & Kapp, R. A. Didactic, experien-
tial, and modeling factors in the learning of
empathy. Journal of Counseling Psychology, 1972,
19, 425-429.

Perls, F. S. Gestalt therapy verbatim. Lafayette, Cal.: 
Real People Press, 1969.

Perry, M. A. Modeling and instructions in training for
counselor empathy. Journal of Counseling Psychology,

Pierce, R., Carkhuff, R. R., & Berenson, B. The differential
effects of hi and lo functioning clients upon
counselors-in-training. Journal of Clinical

Pierce, R., & Drasgow, J. Teaching interpersonal function-
ing to psychiatric inpatients. Journal of Counseling
Psychology, 1969, 16, 297.

Polanyi, M. Personal knowledge. Chicago: University of

Polanyi, M. The tacit dimension. Garden City: Doubleday,
1966.

Rappaport, J., & Chinsky, J. M. Accurate empathy: Confusion
of a construct. Psychological Bulletin, 1972, 77,
400-404.

Rappaport, J., Gross, T., & Lepper, C. Modeling, sensitivity
training, and instructions: Implications for the
training of college student volunteers and for
outcome research. Journal of Consulting and Clinical

Rastatter, C. J. The effect of counselor and client role
playing in counselor training on the level of
counselor responses (Doctoral dissertation, Univer-
Microfilms No. 70 6666)

Reivich, R. S., & Geertsma, R. H. Observational media and
psychotherapy training. Journal of Mental and Nervous


Stripling, R. O. Role playing in guidance training programs. Teachers College Record, 1954, 55(8), 425-429.


Thoresen, C. E. Constructs don't speak for themselves. Counselor Education & Supervision, 1977, 16(4), 296-303.


Walker, B. R., & Latham, W. L. Relationship of a group counseling course, hours in counselor education and sex to empathic understanding of counselor trainees. Counselor Education & Supervision, 1977, 16(4), 269-274.


APPENDIX 1

EMPATHIC UNDERSTANDING IN INTERPERSONAL PROCESSES:
A SCALE FOR MEASUREMENT
APPENDIX 1

EMPATHIC UNDERSTANDING IN INTERPERSONAL PROCESSES:
A SCALE FOR MEASUREMENTa,b

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 communication 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 communica-
tions 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

bIn the text, this scale is referred to as the
Carkhuff empathy scale.
what may be going on, but these are not con-
gruent 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 essen-
tially interchangeable with those of the second person in
that they express essentially the same affect and meaning.

EXAMPLE: The first person responds with accurate under-
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 feelings levels below what the person himself was able to express or (2) in the event of ongoing deep self-exploration on the second person's part, to be fully with him in his deepest moments.

EXAMPLES: 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 wavelength. 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.
APPENDIX 2

EXEMPLES DES CINQ NIVEAUX DE FONCTIONNEMENT: ILLUSTRATION DE L'ÉCHELLE D'EMPATHIE DE CARKHUFF

[EXAMPLES ILLUSTRATING THE FIVE LEVELS OF CARKHUFF'S EMPATHY SCALE]
APPENDIX 2

EXEMPLES DES CINQ NIVEAUX DE FONCTIONNEMENT:
ILLUSTRATION DE L'ÉCHELLE D'EMPATHIE DE CARKHUFF

NIVEAU I

Extrait I

C.: After three years of working my head off, and finally, the graduation on Sunday.
T.: Please, I'm sure you haven't worked that hard (skeptical)
C.: Well, eh, maybe not, but ... I've worked hard.

Extrait II

C.: I don't know what stops me from quitting right now.
T.: You should control yourself better; after all, he's the boss. (authoritative and paternalistic)

Extrait III

C.: Pensez-vous pouvoir m'aider?
T.: Vous ne devriez pas mettre en doute ma compétence. J'ai étudié 3 ans dans ce domaine. (offusqué, indigné, défensif)
C.: Ce n'est pas ce que je voulais faire mais ... eh je me demande.

Extrait IV

C.: Après trois semaines de vacances, je me sens comme un homme neuf; une semaine de plus aurait été mieux.
T.: Comptes-toi chanceux d'avoir des vacances, moi je ne peux pas en prendre. (un peu irrité)
C.: Oui ... c'est vrai ... je pense que vous avez raison.

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* Ces exemples ont été préparés par Gilles E. Dubois et Benoît Charbonneau pour faciliter la compréhension des cinq niveaux de fonctionnement empathique de l'échelle d'empathie de Carkhuff et pour faciliter l'entraînement des juges.
NIVEAU II

Extrait I

C.: The week has been very good. Things are really coming along well.
T.: You seem in better spirits than last week.
C.: Yes.

Extrait II

C.: Y'a pas d'autre mot, deux heures de cours comme ça, ça, n'emmerde.
T.: Tu sembles déçu des cours.
C.: Peut-être, mais je suis surtout en maudit contre les professeurs.

Extrait III

C.: He would like me to go out steady but I don't know if I should.
T.: Going out steady is a serious decision. It is a good thing for you to think about it.
C.: Yes, this is what my mother is telling me.

Extrait IV

C.: Des fois j'ai l'impression que tout ce que je fais, je le fais pour faire plaisir à mes parents.
T.: C'est difficile pour un enfant de ne pas tenir compte de ses parents. (ton un peu intellectualisant)
C.: Oui, mais ... moi j'aimerais ça être plus indépendante.

NIVEAU III

Extrait I

C.: Depuis trois jours j'ai l'impression de perdre les pédales. Tellement d'ouvrage que je ne sais plus où donner de la tête.
T.: Il y a tellement de choses qui arrivent ensemble que tu te demandes comment tout mettre ensemble.
C.: Oui, tout arrive en même temps...
Extrait II

C.: I've been nervous and depressed for the past two weeks and I just don't know why ...
T.: You are puzzled at the way you have been feeling lately.
C.: I don't know what's happening to me.

Extrait III

C.: I am so disappointed; I thought I could have confidence in him.
T.: It is difficult for you to realize that he is not as trustworthy as you thought.
C.: After all we've been through together ...

Extrait IV

C.: I really don't know what it's going to give me to tell you all this.
T.: You are sort of wondering if I can be of any help to you.
C.: You see it is difficult to talk to a stranger.

Extrait V

C.: Les choses vont mal; à l'école, avec mon amie; tout semble rater, je ne sais plus ce que je veux, où je vais.
T.: Ça tourne pas rond dernièrement et tout ça, ça te rend un peu confus.
C.: C'est mêlé, je ne sais plus où donner de la tête.

Extrait VI

C.: J'ai mon voyage, je pars pour deux mois.
T.: Deux mois de répit ça va faire du bien, hein?
C.: Oui, j'ai travaillé très dur depuis quelques mois...

NIVEAU IV

Extrait I

C.: When I see the number of unemployed graduates, I question my decision to go to university next September.
T.: Finding yourself with a diploma and no job would sort of give reason to your parents who oppose this project.
C.: You're damn right, that's the last thing on earth I'd want.
Extrait II

C.: Oui, mais je ne voudrais pas les blesser.
T.: Tu ne voudrais pas leur faire de peine parce que ça peut créer des problèmes de faire de la peine aux gens.
C.: Oui. Ils peuvent réagir de drôle de façon, ils pourraient peut-être se tourner contre moi.

Extrait III

C.: Quand vous vous voyez sur un lac tranquille, pas de bruit, sauf la nature, ça vous donne une sensation intérieure...
T.: De calme, de paix, de sérénité; ce sont des sentiments passionnants et neufs pour toi je pense.
C.: C'est vrai, c'est incroyable combien j'ai changé dernièrement, je ne me reconnais plus.

Extrait IV

C.: I've made three job applications to date. I hope one of them works.
T.: You're anxious to get answers and if they were all negative it would really put you down.
C.: I guess I'd feel like crawling.

NIVEAU V

Extrait I

C.: C'est curieux, depuis quelque temps, j'ai de la difficulté à être affectueux avec ma plus vieille. (ton hésitant, lent)
T.: Peut-être est-ce plus emmarseant, même menaçant d'être affectueux avec elle depuis que tu sens qu'elle est devenue femme. (ton intense, lent, chaleureux)
C.: Oui, c'est ça; peut-être parce que j'ai peur qu'elle interprète mal ceci.

Extrait II

C.: Father, he's o.k., he's a nice guy. He just sits tight while mother nags everybody, she's a problem.
T.: Mother is the problem but maybe you would like father to stand up to her a bit more and start solving the problem ... (slow, warm) and maybe you resent him a bit for not doing so.(intense and tentative)
C.: It's the first time I think about this, but I think I'd like him to be more a man.
Extrait III

C.: Oui, mais je ne veux pas les blesser.
T.: Tu ne veux pas leur faire de peine; peut-être
    crains-tu qu'eux t'en fassent en retour; peut-être
    as-tu le besoin qu'ils continuent à t'accepter, à
    t'aimer. (doux, intense, chaleureux)
C.: Je n'avais pas pensé à ça; je sens que je ne peux me
    passer d'eux et c'est probablement pour ça que je
    fais tout pour ne pas les blesser.

Extrait IV

C.: (coughing, moving around in chair, sighing)
T.: It seems difficult for you to talk about this ... 
    maybe you wonder if it's worth taking a chance. 
    You say to yourself: "Will he really understand, 
    will he really care, will he still like me 
    afterwards?" (intense, warm, gently)
C.: Yes, I guess this is what I'm afraid of ... to lose 
    one more friend.
APPENDIX 3

INDEX OF COMMUNICATION
APPENDIX 3

INDEX OF COMMUNICATION

In the following pages, the same person will present to you 16 different problems. This person comes to you in time of need. She could be a student, a friend, a patient, etc.... The helpee's expressions can easily come in the first contact or first few contacts; however, do not attempt to relate any one expression to a previous expression. Consider them separately. Formulate your response in a way that will be most helpful.

EXEMPLARY I

I don't know if I am right or wrong feeling the way I do. But I find myself withdrawing from people. I don't seem to socialize and play their stupid little games any more. I get upset and come home depressed and have headaches. It all seems so superficial. There was a time when I used to get along with everybody. Everybody said, "Isn't she wonderful? She gets along with everybody. Everybody likes her." I used to think that was something to be really proud of, but that was who I was at that time. I had no depth. I was what the crowd wanted me to be--the particular -roup I was with.

EXEMPLARY II

I love my children and my husband and I like doing most household things. They get boring at times but on the whole, I think it can be a very rewarding thing at times. I don't miss working, going to the office every day. Most women complain of being just a housewife and just a mother. But, then, I wonder if there is more for me. Others say there has to be. I really don't know.

EXEMPLARY III

Sometime I question my adequacy of raising three boys, especially the baby. I call him the baby--well, he is the last. I can't have any more. So I know I kept him a baby longer than the others. He won't let anyone else

---

do things for him. If someone else opens the door, he says he wants Mommy to do it. If he closes the door, I have to open it. I encourage this. I do it. I don't know if this is right or wrong. He insists on sleeping with me every night and I allow it. And he says when he grows up he won't do it anymore. Right now he is my baby and I don't discourage this much. I don't know if this comes out of the situation or if this will handicap him when he goes to school--breaking away from Mama. Is it going to be a traumatic experience for him? Is it something I'm creating for him? I don't worry more about my children than I think most mothers do.

EXCERPT IV

It's not an easy thing to talk about. I guess the heart of the problem is sort of a sexual problem. I never thought I would have this sort of problem. But I find myself not getting the fulfillment I used to. It's not enjoyable--for my husband either, although we don't discuss it. I used to enjoy and look forward to making love. I used to have an orgasm but I don't any more. I can't remember the last time I was satisfied. I find myself being attracted to other men and wondering what it would be like to go to bed with them. I don't know what this means. Is this symptomatic of our whole relationship as a marriage? Is something wrong with us?

EXCERPT V

Gee, those people! Who do they think they are? I just can't stand interacting with them anymore. Just a bunch of phonies. They leave me so frustrated. They make me so anxious. I get angry at myself. I don't even want to be bothered with them anymore. I just wish I could be honest with them and tell them all to go to hell!! But I guess I just can't do it.

EXCERPT VI

They wave that degree up like it's a pot of gold at the end of the rainbow. I used to think that, too, until I tried it. I'm happy being a housewife; I don't care to get a degree. But the people I associate with, the first thing they ask is: "Where did you get your degree?" I answer: "I don't have a degree." Christ, they look at you as you are some sort of freak, some backwoodsman your husband picked up along the way. They actually believe that people with degrees are better. In fact, I think they
are worse. I've found a lot of people without degrees that are a hell of a lot smarter than these people. They think that just because they have degrees they are something special. These poor kids that think they have to go to college or they are ruined. It seems that we are trying to perpetuate a fraud on these kids. If no degree, they think they will end up digging ditches the rest of their lives. They are looked down upon. That makes me sick.

EXCERPT VII

I get so frustrated and furious with my daughter. I just don't know what to do with her. She is bright and sensitive, but damn, she has some characteristics that make me so on edge I can't handle it sometimes. She just... I feel myself getting more and more angry! She won't do what you tell her to. She tests limits like mad. I scream and yell and lose control and think there is something wrong with me--I'm not an understanding mother or something. Damn! What potential! What she could do with what she has. There are times she doesn't use what she's got. She gets by too cheaply. I just don't know what to do with her. Then she can be so nice and then, boy, she can be as ornery as she can be. And then I scream and yell and I'm about ready to slam her across the room. I don't like to feel this way. I don't know what to do with it.

EXCERPT VIII

He is ridiculous! Everything has to be done when he wants to do it, the way he wants it done. It's as if nobody else exists. It's everything he wants to do. There is a range of things I have to do--not just be a housewife and take care of the kids. Oh no, I have to do his typing for him, errands for him. If I don't do it right away, I'm stupid--I'm not a good wife or something stupid like that. I have an identity of my own, and I'm not going to have it wrapped up in him. It makes me...it infuriates me! I want to punch him right in the mouth. What am I going to do? Who does he think he is anyway?

EXCERPT IX

I finally found somebody I can really get along with. There is no pretentiousness about them at all. They are real and they understand me. I can be myself with them. I don't have to worry about what I say and that they might take me wrong, because I do sometimes say things that don't come out the way I want them to. I
don't have to worry that they are going to criticize me. They are just marvelous people! I just can't wait to be with them. For once I actually enjoy going out and interacting. I didn't think I could ever find people like this again. I can really be myself. It's such a wonderful feeling not to have people criticizing you for everything you say that doesn't agree with them. They are warm and understanding, and I just love them! It's just marvelous.

EXCERPT X

I'm really excited! We are going to California. I'm going to have a second lease on life. I found a marvelous job! It's great! It's so great I can't believe it's true--it's so great! I have a secretarial job. I can be a mother and can have a parttime job which I think I will enjoy very much. I can be home when the kids get home from school. It's too good to be true. It's so exciting. New horizons are unfolding. I just can't wait to get started. It's great!

EXCERPT XI

I'm so pleased with the kids. They are doing just marvelously. They have done so well at school and at home' they get along together. It's amazing. I never thought they would. They seem a little older. They play together better and they enjoy each other, and I enjoy them. Life has become so much easier. It's really a joy to raise three boys. I didn't think it would be. I'm just so pleased and hopeful for the future. For them and for us. It's just great! I can't believe it. It's marvelous!

EXCERPT XII

I'm really excited the way things are going at home with my husband. It's just amazing! We get along great together now. Sexually, I didn't know we could be that happy. I didn't know anyone could be that happy. It's just marvelous! I'm just so pleased, I don't know what else to say.

EXCERPT XIII

I'm so thrilled to have found a counsellor like you. I didn't know any existed. You seem to understand me so well. It's just great! I feel like I'm coming alive again. I have not felt like this in so long.
EXCERPT XIV

Silence. (Moving about in chair.)

EXCERPT XV

Gee, I'm so disappointed. I thought we could get along together, and you could help me. We don't seem to be getting anywhere. You don't understand me. You don't know I'm here. I don't even think you care for me. You don't hear me when I talk. You seem to be somewhere else. Your responses are independent of anything I have to say. I don't know where to turn to. I'm just so... - doggone it... - I don't know what I'm going to do, but I know you can't help me. There just is no hope.

EXCERPT XVI

Who do you think you are? You call yourself a therapist! Damn, here I am spilling my guts out and all you do is look at the clock. You don't hear what I say. Your responses are not attuned to what I'm saying. I never heard of such therapy. You are supposed to be helping me. You are so wrapped up in your world you don't hear a thing I'm saying. You don't give me the time. The minute the hour is up you push me out the door whether I have something important to say or not. I - uh - it makes me so goddam mad!
APPENDIX 4

INSTRUCTIONS FOR
STANDARD CLIENT
APPENDIX 4

INSTRUCTIONS FOR
STANDARD CLIENT

You will be meeting shortly with a counselor. We ask you to share your feelings about things that are important to you which can help him to get a better understanding of you and your feelings. Whatever is said by you and the counselor during the interview is strictly confidential and will be used exclusively for research purposes.
APPENDIX 5

INSTRUCTIONS FOR COUNSELOR-TRAINEE
APPENDIX 5

INSTRUCTIONS FOR
COUNSELOR-TRAINEE

You will be meeting shortly with a student; he is willing to share with you his feelings about things which are important to him. Try to be as understanding as possible and communicate this understanding to him. Whatever is said by you and the student is strictly confidential and will be used exclusively for research purposes.
APPENDIX 6

SPECIMEN OF THE FORM USED BY JUDGES FOR RATING TRAINEE RESPONSES
APPENDIX 6

SPECIMEN OF THE FORM USED BY JUDGES FOR RATING OF TRAINEE RESPONSES

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APPENDIX 7

PRETEST INDEX OF COMMUNICATION SCORES
ACCORDING TO GROUPS
## APPENDIX 7

**PRETEST INDEX OF COMMUNICATION SCORES ACCORDING TO GROUPS**

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APPENDIX 8

POSTTEST INDEX OF COMMUNICATION SCORES
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APPENDIX 9

PRETEST STANDARD INTERVIEW SCORES ACCORDING TO GROUPS
APPENDIX 9

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APPENDIX 10

POSTTEST STANDARD INTERVIEW SCORES ACCORDING TO GROUPS
### APPENDIX 10

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