INFORMATION TO USERS

While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. For example:

- Manuscript pages may have indistinct print. In such cases, the best available copy has been filmed.

- Manuscripts may not always be complete. In such cases, a note will indicate that it is not possible to obtain missing pages.

- Copyrighted material may have been removed from the manuscript. In such cases, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or as a 17"x 23" black and white photographic print.

Most photographs reproduce acceptably on positive microfilm or microfiche but lack the clarity on xerographic copies made from the microfilm. For an additional charge, 35mm slides of 6"x 9" black and white photographic prints are available for any photographs or illustrations that cannot be reproduced satisfactorily by xerography.

Daniels, Thomas G.

MICROCOUNSELLING: TRAINING IN SKILLS OF THERAPEUTIC COMMUNICATION WITH R.N. DIPLOMA-PROGRAM NURSING STUDENTS

Dalhousie University (Canada) PH.D. 1985

PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs or pages _____
2. Colored illustrations, paper or print _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Pages with black marks, not original copy _____
6. Print shows through as there is text on both sides of page _____
7. Indistinct, broken or small print on several pages ✓
8. Print exceeds margin requirements _____
9. Tightly bound copy with print lost in spine ✓
10. Computer printout pages with indistinct print _____
11. Page(s) _____ lacking when material received, and not available from school or author.
12. Page(s) _____ seem to be missing in numbering only as text follows.
13. Two pages numbered _____. Text follows.
14. Curling and wrinkled pages _____
15. Dissertation contains pages with print at a slant, filmed as received ✓
16. Other _____

_____

_____

MICROCOUNSELLING: TRAINING IN SKILLS OF THERAPEUTIC COMMUNICATION WITH R.N. DIPLOMA-PROGRAM NURSING STUDENTS

by

Thomas G. Daniels

A Thesis

Submitted in Partial Fulfillment of the Requirements

for the Degree of Doctor of Philosophy

Dalhousie University

 September, 1985

DALHOUSIE UNIVERSITY

FACULTY OF GRADUATE STUDIES

The undersigned hereby certify that they have read and recommend to the Faculty of Graduate Studies for acceptance a thesis entitled "Microcounselling: Training in Skills of Therapeutic Communication with R.N. Diploma-Program Nursing Students"

by Thomas Gerard Daniels

in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Dated September 13, 1985

External Examiner

Research Supervisor

Examining Committee

DALHOUSIE UNIVERSITY

Date Sept. 13/86

Author Thomas G. Daniels

Title Microcounselling: Training in Skills of Therapeutic Communication with R.N. Diploma-Program Nursing Students

Department or School Education

Degree Ph.D. Convocation October Year 1985

Permission is herewith granted to Dalhousie University to circulate and to have copied for non-commercial purposes, at its discretion, the above title upon the request of individuals or institutions.

Signature of Author

DEDICATION

I dedicate this project to the memory of mom and dad.

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

This study assessed the degree to which nursing students acquired and retained six microskills of communication.

Fifty-three second year female RN students were randomly assigned to either an experimental-group which recieved microcounselling, or a non-attention control group. The subjects completed both the Carkhuff Indicies of Communication and Discrimination as pretests. The experimental-group then had approximately 25 hours of taining in microcounselling. Following training, the subjects completed these indicies again, the Empathy Construct Rating Scale and a 10 to 15 minute audio-taped interview in which she assumed the role of a helping nurse.

MANOCOVA indicated a significant main effect at post-training suggesting the experimental-group performed better than the control-group on all the measures when taken together. The experimental-group performed significantly better than the control-group on empathy, reflections of feeling, summarizations, Good responses, closed questions and empathy increase over training.

At the 9 month follow-up, there was no statistically significant difference between the groups on any of the dependent measures.

Support was offered for microcounselling with RN diploma nursing students.

ACKNOWLEDGEMENTS

I would to thank my supervisor and friend Dr. Joe Murphy for his constant encouragement and support throughout the project. I would also like to thank my committee members Dr. Norm Uhl and Dr. Bill Hunter for their ongoing support.

A special debt of gratitude goes out to the nursing school where this research was conducted. In particular, I would like to thank Mrs. Westby, Mrs. Denny and Mrs. Andrews for their enthusiastic support for this project. Without their ongoing help, this project would not have been possible. I would like to acknowledge the very fine graduates of 1985 who were the subjects of this research. Knowing these students, one has to be hopeful about the future of the nursing profession.

I would like to thank the administration at Sir Wilfred Grenfell College for supporting my doctoral studies and this project in particular. As well I'd like to thank the following colleagues: Dr. Dan Stewart, Dr. Duncan Ferguson, Dr Sheliagh Skerry and Dr. David Smallwood who each gave of their time.

And last certainly not least, I want to thank Marie, Tommy and Susan. For long periods at a time I ignored you as I worked on this project. You stayed by my side constantly, your patience never seemed to wane. I could not have completed this project without this special family.

CHAPTER 1

INTRODUCTION

The philosophical bases of the importance of communication skills to nursing are well documented (Bashor, 1983; Bowen-Jones, 1979; Clark, 1981; Elliott, Everly, & Everly 1979; Gardner, 1979; LaMonica, 1979; LaMonica et al., 1976; Murphy, 1982; Pasquali & Joyce, 1975; Stetler, 1977; Williams, 1979). The Nursing Times considered communications skills to be of enough importance to declare 1981 communications year (Clark, 1981).

While nursing by definition is a helping profession, and fundamentally accepts the importance of communication skills, compelling evidence suggests that the possession of communication skills is of more than just theoretical interest to nurses as health professionals (LaMonica, et al., 1976). In reviewing the literature on patient outcome studies, Gerrard (1978) indicated that, in 89% of studies, positive patient responses were related to the interpersonal skills of the health professional. Positive responses included relief from anxiety, relief from pain, and improved cardiovascular and respiratory performance. Williams (1979) indicated that aged patients assigned to low-empathy

nurses tended to exhibit a measured decrease in self-concept whereas patients with high-empathy nurses tended to produce fewer self-deprecating comments.

Communication has been found to play a major role in both patient compliance and satisfaction during treatment (Francis & Morris, 1969). Furthermore it was found that nurses with good interpersonal communication skills facilitate the adjustment of inoperable cancer patients (Kyle, 1964). Wood (1982) reported that numerous studies have shown that patient satisfaction is directly related to the quality of interpersonal relationships between health professionals and their patients. Harben (1977) goes further to suggest that the health care system's performance depends upon the ability and willingness of health professionals to communicate.

The 1977 report of the Ombudsman to The National Health Services in England indicated that over 50% of the cases of individual patient complaints had communication problems as the underlying consideration. This prompted the Joint Board of Clinical Nursing Studies to recommend an investigation into the practice of teaching nurse-patient communication, to identify suitable methods of teaching communication skills to nurses, and to evaluate such methods (Bridge & Speight, 1981).

The concern over the level of communication skills among nurses is not surprising in view of the literature in the area. Duff & Hollingshead (1968) found that in a

sampling of Registered Nurses(RNs), Licensed Practical Nurses(LPNs), and Nursing Assistants(NAs), that 71% of the RNs, 80% of the LPNs, and 74% of the NAs showed minimal or no empathy toward their patients.

LaMonica (1976), implementing a staff development program for empathy training based on the Human Relations Training Model, found that the subjects, 39 registered nurses practising in an acute and chronic care hospital, had extremely low levels of empathy. The condition of empathy is considered very important in nursing and the helping professions in general (Carkhuff, 1969; LaMonica, 1979; Williams, 1979). Karshmer and LaMonica (1976) found similar low levels of empathy in senior baccalaureate nursing students prior to a formal psychiatric nursing experience. Furthermore, facilitative levels of the skill were not acquired following this placement.

Observing nurse-patient communications initiated by patients' reports of distress, Graffam (1970) found that in only 10% of the cases did the nurses encourage the patients to explore the source of the distress. In 60% of the cases the nurses communicated unilaterally, and in about 13%, nurses actually blocked the patients attempts at communication. These findings concur with two earlier studies. First, Matthews (1962) found that fewer than 7% of 122 RNs showed evidence of encouraging patients to communicate about their experiences. And second, Hays (1966), in analysing verbatim written responses by nurses to

patients, found that the nurses communications in general were not therapeutic.

In spite of the recognized value of interpersonal communication skills in nursing, historically, little has been done to include known effective methods of communications training in nursing education curriculua. Clark, (1981) addresses this concern and states:

> In nursing today a situation has arisen where in theory the need for communication and interpersonal skills is recognized but in practise little attention has been paid to the fact that communication involves skills which, like others, can and should be taught. As a general rule relatively little time is spent during general nursing training in explicitly developing students communication or interpersonal skills. (p. 12)

This view appears to be representative of a position which emphasizes the discrepancy between the expressed need for and value of communication skills training in nursing programs, and that which actually exists. While available programs exist for developing interpersonal and communication skills, these typically have not been used in nursing education (Hills and Knowles, 1983). Hills and Knowles further suggest that " most training programs deal with such skills at the conceptual level, providing little or no skill demonstration or assessment" (p.83).

LaMonica (1976) suggests that " nursing educators should formally integrate theory and experience in learning helping skills into their curriculum" (p.450). Clement (1983), in reiterating the need for an experiential component which integrate psychiatric nursing concepts into

the general curriculum, states:

> ...the first step in the learning process is doing something that we have not done before and understanding that doing in relationship to previous learning. Abstract generalizations of previously unexperienced stimulii just don't make it. (p.2).

LaMonica (1979), referring to an earlier study (Eisenman, 1970) which indicated that nursing programs tend to dampen creativity, suggests that nursing education additionally suffers from " the specific lack of training in empathy skills" (p.9). Kalish (1971) found the same result with respect to empathy, and went further to indicate that the intellectual learning of psychological theories, or increase in "psychological-mindedness", is inversely related to demonstrated empathy in nurses. Gaps in nursing training are indicated by Funkhouser (1976) who, in surveying ten thousand nurses, found that 64% felt that they gave poor or only fair psychological support to their patients.

Clark (1981) aptly outlined this concern when, in reference to her research, she stated, "I have been struck by an apparent contradiction surrounding the fact that although 'communication' is central to the whole of nursing, it is an aspect which is almost never explicitly taught." (p.18).

Literature on communications in nursing emphasises the core condition of empathy (Bowen-Jones, 1979; Clark, 1981; Elliott, et al., 1979; Forsyth, 1980; Gagan, 1983; Hewitt, 1982; Hills & Knowles, 1983; Kalish, 1971; LaMonica, 1979; LaMonica, et al., 1976; Pasquali & Joyce, 1975;

Stetler, 1977; Williams, 1979 . There is little doubt that empathy is crucial to adequate nursing communications functioning. However the possession of empathy alone will be quite insufficient to the nurse as it has been shown that nurses are required to demonstrate a variety of other communication skills (Bashor, 1983; Boles, 1976; Bowen-Jones, 1979; Clark, 1981; Murphy, 1982).

Bowen-Jones (1979) emphasises the importance of the nurse as counsellor. She suggests that the nurse needs a full repertoire of facilitative communication skills "so as to create an effective counselling climate" (p.55). Elliott et al. (1979) emphasise the importance of good interpersonal and communication skills in nursing to ensure the integrity of the team-work element in the health-care delivery system. Hewitt (1982) reiterates this notion and further suggests, from an organizational perspective, that good communication skills are essential to the delivery of health care.

Within the more general field of counselling psychology, a great deal of effort has been devoted to the development of methods of training in psychotherapeutic-communication and helping skills. One of the most widely reported of such methods is microcounselling (Ivey & Authier,1978).

Microcounselling is a highly systematic and structured method of teaching skills of communication and interviewing (Ivey, 1971). This approach emphasises a psychoeducational approach to training in generic skills (microskills) of

communication. It involves an intensive short-term period of training which is experiential and behavioral in nature, and uses models as a source of change in the trainee (Ivey,1971; Ivey,1983; Ivey & Authier 1978). Recent studies have shown that by teaching the fundamental microskills there is a concommitant and significant increase in the functional level of the trainee in the core condition of empathy (Geary, 1979; Uhlemann, et al., 1980; Simek-Downing, 1981; Bailey, 1981; Uhlemann, et al., 1982; and Crabb, et al., 1983). This approach to training in interviewing and communication skills therefore seems particularly relevant to the field of nursing.

Ivey (1983) has fully delineated the microcounselling paradigm as an hierarchical arrangement of generic skills units of communication " that will help you develop a more intentional and rounded ability to interact with a client" (p.4). The concept of intentionality is central to the microcounselling framework. Ivey (1983), describes intentionality as

> acting with a sense of capability and deciding from a range of alternative actions. The intentional individual has more than one action, thought or behavior to chose from in responding to changing life situations. The intentional individual can generate alternatives in a given situation and approach a problem from different vantage points, using a variety of skills and personal qualities, adapting styles to suit different cultural groups. (p. 3)

This concept of intentionality is particularly important to nursing as good nursing communication involves

more than the ability to be empathic. Speaking of the importance of communication in nursing, Clark (1981) suggests that nurses need a variety of communication skills suited to the tasks that they are required to perform. These tasks include: (1) responding to the patients' physical and emotional needs, (2) taking comprehensive nursing admission history, and (3) giving emotional and psychological support. Murphy (1982) emphasizes the importance of nurses' being able to adequately communicate treatment programs to the patient, insuring that patients are properly informed so that they may give informed consent, and ensuring patient understanding and consequent compliance.

The generic microskills approach provided by the microcounselling framework appears to be particularly useful to nursing as it provides a basis for the many communication functions they have to perform. Ivey (1983) demonstrates how the Basic Listening Sequence (open and closed questions, reflection of feeling, reflection of meaning, encouraging, paraphrasing, summarization) and the Client Observation Skills and Attending Behaviors may be used singly or in combinations by personnel of various theoretical orientations within psychology, as well as education, business and health care. By example, Ivey (1983) states

> In defining the nature of a client's problem in a mental health clinic, the interviewer often begins with an open- question for instance,' Could you

> tell whats on your mind today?'. ...Later the interviewer may paraphrase the client's ideas to insure clarity of understanding: ...'you've been saying so far your prroblem is ...'. Then the counsellor likely will reflect feelings-'You seem to be feeling angry'...In a similar fashion, the physician or nurse diagnosing a headache works through the basic listening sequence to ensure accurate diagnosis. (p.6-8).

Research offers data in support of the microcounselling paradigm as an effective way to teach the therapeutic skills of communication to various populations; the research also indicates that those trained via microcounselling can effect positive changes in client behavior (Kasdorf & Gustafson, 1978). However, there remains a need to investigate the application of microcounselling in nursing training. This study will focus on the degree to which nursing students, in an RN diploma program, are able to acquire and retain six microcounselling interviewing skills, and the effect that the acquisition of these skills has upon the therapeutic communication of these trainees.

Significance of the Study

The literature on the level of communication skills among nurses indicates that they function at a low level in the important therapeutic dimension of empathy (Gagan, 1983). The applicability of the microcounselling paradigm to nursing education has not been adequately demonstrated. The limited number of microcounselling studies with nurses has yielded either mixed results or have been fraught with

methodological problems.

Forti (1975) for example, was unable to support the efficacy of microcounselling for teaching the skill of direct mutual communication to sophomore and junior baccalaureate nursing students. Carr (1976) failed to teach five microskills to 10 first year baccalaureate nursing students using the microtraining model. Spruce and Snyders (1982) indicated success using microcounselling to teach psychiatric nurses six microskills. As this study was admittedly methodologically weak, they cautioned interpreting the results in favor of microcounselling. Authier & Gustafson (1976) indicate supervised and non-supervised microcounselling was somewhat effective in increasing the use of microskills of RNs and LPNs. Data for the RNs alone was not reported. Small numbers of subjects were used in this study (n = 18 divided into three groups). Wallace (1981) indicated success in teaching social approval skills to psychiatric personnel using brief microcounselling. The effects with the nursing personnel alone were not reported. And finally, Hearn (1976), in what is perhaps the best designed of the nursing studies reviewed, indicated microcounselling to be more effective than either sensitivity training or programmed learning in teaching graduate nurses skills of therapeutic communication. A limitation of this study is the small numbers of subjects used (n = 25 divided into four groups).

In summary, there is widespread support for the

premise that more highly structured and experiential communication skills training programs should exist within the gestalt of the nursing training context. Furthermore it is clear that while the therapeutic core condition of empathy is important to the nursing profession, other skills of communication and interpersonal functioning are equally important. There is evidence that both within nursing and applied psychology, errors in therapeutic communication can have a damaging effect both on the helper-client relationship and on the clients themselves (Bowen-Jones, 1979; Carkhuff, 1969). And, the microcounselling model has been shown to have beneficial effects in terms of communication skills acquisition in the helping professions in general.

Statement of the Problem and Research Questions

The objectives of this study were to both offer support for microcounselling theory and more specifically to investigate the efficacy of microcounselling as a training modality for teaching six skills of therapeutic communication to RN diploma program nursing students. The six skills taught were:

1. attending behavior
2. open and closed questions
3. minimal encouragers
4. reflection of feeling
5. paraphrasing
6. summarization

The subjects for this experiment were nursing students

from a medium sized hospital school of nursing in eastern Canada. Participants have completed the second year of their two year, eight month nursing program leading to the qualification of RN. The initial two years of study represents the total of the formal instructional period, while the last two-thirds of a year is spent in a supervised placement. Sixty of the 61 students in this class agreed to participate in this study.

The following research questions were addressed:

1. Will those nursing students who participate in the microcounselling training (the experimental-group) demonstrate a significantly higher overall level of performance on the dependent variables than the non-participating students (the control-group)?

2. Will those in the experimental-group demonstrate significantly higher post-training levels of empathy than the control-group?

3. Will the experimental-group demonstrate significantly higher post-training application of the microskills than the control-group?

4. Will the experimental-group demonstrate a significantly lower post-training number of errors of therapeutic communication than the control-group?

5. Will the experimental-group demonstrate a significantly higher post-training level of discrimination than the control-group?

6. Will the experimental-group, in contrast to the

control-group, demonstrate a significant increase, from pretest to posttest, in ability to both discriminate facilitative responses and communicate empathy?

7. Will the experimental-group maintain the skills at a nine month follow-up?

As both experimental- and control-groups have received the formal nursing instruction in communication, and as this diploma program is representative of the other programs in eastern Canada, a statement is also made on the relative effectiveness of traditional nursing programming in communication skills training when compared to the traditional training coupled with microcounselling.

Definition of Terms

Microcounselling. The terms microcounselling and microtraining are used interchangeably. Microcounselling can be described as a highly structured and systematic method of teaching fundamental skill-units of helping, communications and interviewing. It is a short-term intensive period of training, experiential in nature, in which each skill is taught individually in a training sequence. Microcounselling is considered an open system, and while many variations are possible (Ivey & Authier, 1978), the following elements are usually included: an audio- or video-taped baseline interview by the trainee; a written manual describing the skill; video-models demonstrating the effect on communication of using or not

using, or misusing, the skill; practise of the skill; and feedback to the trainee by the supervisor or leader who maintains a warm, supportive relationship with the trainee and focuses on the positive aspects of the trainee's performance.

Microskills. The microskills of concern to this study are the following six skill units on communication and interviewing:

1. attending behavior- therapeutically paying attention which consists of the dimensions of eye contact, verbal following, comfortable posture, and selective attention.

2. questioning- the appropriate use of both open- and closed-questions. Open-questions allow the client freedom of expression of thoughts or feelings without imposed limits. Closed-questions can generally be answered with a one word or short answer and thus imply more structure.

3. minimal encouragers- a short phrase or a word, or a nonverbal gesture, that assists the client to continue talking once he/she has begun.

4. reflection of feeling- verbalization by the helper of the client's feeling states as they occur in the interview.

5. paraphrasing- a reflection of content. This is a restatement to the client of his/her cognitive portion of the interview. The entire content of a part or all of the interview is repeated for the client in an abbreviated or

clarified form.

6. summarization- a restatement to the client of what has been said in an interview or over several interviews. It is a restatement from a much broader perspective than paraphrasing, in which the main points are accurately reported back to the client.

In operational terms, the microskills are those which are measured by "The Ivey Taxcnomy" (Ivey and Authier, 1978), (see Appendix A).

Empathy. Full agreement on a definition of empathy has not been achieved. In part, this has led to the diverse number of both types and styles of empathy measurement instruments. In an applied or interactive sense, however, it is generally agreed that empathy is having both the understanding of another person's feelings and the context in which these feelings occur, and the ability to accurately communicate back to the person this understanding (Carkhuff, 1969; Gagan, 1983; and Rogers, 1965). At a high level of accurate empathy, the message "I am with you" is unmistakably clear. The therapist's remarks fit perfectly with the client's mood and content, and serve to clarify and expand the client's awareness of his/her own feelings or experiences. Conversely, at a low level of empathy the therapist may go off on a tangent of his/her own or may misinterpret what the client is feeling (Truax & Carkhuff, 1967). In operational terms for this study, empathy is that which is measured separately by both a 5-point rating scale

entitled " Empathic Understanding in Interpersonal Processes: A Scale for Measurement" (Carkhuff, 1969), (see Appendix B); and "The Empathy Construct Rating Scale" (LaMonica, 1981), (see Appendix C).

Therapist Error. Therapist error is understood as therapist-oriented interactive behaviors that are either known through research or proposed in theory to be counterproductive to the therapeutic relationship and/or damaging to the client (Matarazzo, et al., 1966). These errors are grouped into three broad categories: Errors of Focus, Faulty Role Definition, and Faulty Facilitation of Communication. In operational terms for this study, therapist error is that which is measured by " The Therapist Error Checklist (Matarazzo, et al., 1966), (see Appendix D)

Discrimination. Discrimination refers to the ability of the helper to discern effective from ineffective helping processes. In operational terms for this study, it is that which is measured by the instrument "A Description of Helper Responses to Helpee Stimulus Expressions: An Index of Discrimination" (Carkhuff, 1969), (see Appendix E).

Organization of the Remainder of Dissertation

The remainder of this dissertation contains four chapters. Chapter 2 contains both a theoretical and conceptual framework for microcounselling and a review of the related literature; Chapter 3 is a description of the research methodology and procedures; Chapter 4 presents the

results of the experimentation and an interpretation and discussion of the results; and Chapter 5 presents a summary of the study, the conclusions and implications for further research.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

Considerable effort has been devoted in the past twenty years to the development of methodologies for training counsellors and psychotherapists. Ford (1979) classifies several major training orientations under the following headings: integrated didactic-experiential training; interpersonal process recall; anxiety reduction; 'traditional' training programs; supervisory appoaches; and microcounselling. This present review however will focus entirely on the microcounselling literature. Reviews of the other orientations already exist (Capelle,1975; Carr, 1976; Ford, 1979; Forti, 1975; Higginson, 1981). This chapter will examine the following two major issues: (1) a conceptual framework for microcounselling, and (2) the research literature on microcounselling.

A Conceptual Framework for Microcounselling

The evolution of counsellor training has been toward a more highly structured and systematic approach to teaching identifiable skills of effective therapeutic communication. Rogers (1957), dissatisfied with the absence of training and evaluation techniques for student therapists, attempted to

make training procedures more systematic and amenable to assessment. He suggested a training program which consisted of the following sequential elements; models in the form of audio recordings, vicarious learning, and experience. Furthermore, Rogers' practice in training beginning therapists reflected this systematic approach. This set the stage for the more highly structured systematic methods of counsellor training that follow. Regarding this, Rogers' approach represents a point of departure in counsellor education from the earlier apprentice-like systems to the more highly structured, systematic and research-based approaches currently used.

Testing an hypothesis that the presence of the core conditions of empathy, warmth and genuineness in a counsellor enhanced the counsellor-client relationship, Carkhuff and Truax (1965) used a systematic approach to teach these conditions to lay-personnel. Using a blend of didactic-intellectual and experiential approaches, the findings indicated that the trainees functioning was brought to a level similar to that of experienced counsellors. Replication of this result was also forthcoming (Berenson, Carkhuff & Myrus, 1966; Carkhuff, Piaget & Pierce, 1967; Martin & Carkhuff, 1968).

Truax and Carkhuff (1967) refined this systematic training procedure, now referred to as an integrated didactic-experiential (commonly known as systematic human relations training) approach, to include the following

sequential elements: modelling tapes of the core conditions being taught; didactic training for discrimination of high and low levels of the condition being taught; and experience. Research has offered support for the viability of this systematic training procedure (Carkhuff, 1969).

Further systematization and structure was brought to counsellor education with the development of microcounselling. Microcounselling is the application of microteaching in counsellor education (Ivey, 1971). Microteaching (Allen, 1967) is a systematic and structured approach to teacher education which uses video technology to teach component skills of teaching. Both microteaching and microcounselling are based on the following essential propositions:

1. It is important to focus on teaching a single skill. An individual obtains a sense of confidence and mastery as he/she learns a new skill. Teaching multiple skills at once tends to confuse the learner (Bank, 1968; Bear, 1968, Lovaas, 1968). Microteaching/microcounselling lessens the complexity of teaching/helping as learning is occuring. An individual experiences a high amount of intrinsic reinforcement as a new skill is learned (Gendlin & Rychlak, 1970). Teaching of specific skills makes the evaluation of the training outcome more effective and precise (Rogers, 1957; Carkhuff & Truax, 1965; Carkhuff, 1969).

2. Modelling is an effective method of behavior

change. Microcounselling is essentially based on a social learning theory. An observer learns to match a model's response as a result of direct or vicarious reinforcement (Miller & Dollard, 1941). The rewarded person exhibits behavior of the reinforcing person later even when the model is no longer present (Maurer, 1960). Modelling leads to the acquisition of new behavior and the modification of existing behavior (Bandura, 1965).

3. Self-observation and confrontation leads to behavior change. This aids learning as the trainee observes his/her behavior and compares and contrasts it to that of a competent model. This results in expanding the normal knowledge of results and feedback in learning (Allen, 1967; & Walz & Johnson, 1963).

4. Feedback in the form of reinforcement leads to learning. Several early studies support both the feedback potential of video-models and the value of reinforcement in counsellor training (Buchheimer, 1965; Carpenter, 1955; Kagan, Krathwol, 1967; and Kagan, Krathwol & Miller, 1965).

5. Microteaching/microcounselling is real teaching/counselling. What often starts off as a learning experience often becomes a real interaction (Allen, 1967; Ivey, 1971, & Ivey & Authier, 1978). Observations suggest that what starts as role-playing often becomes an encounter characteristic of a helping relationship.

These five propositions outlined, formed the basis of this study. The conduct of this study has attended to the

validity of these propositions.

Microcounselling philosophically, is embedded in a humanistic-behavioral context. In contrast to the medical model of helping which emphasises illness - diagnosis - prescription - treatment - cure, microcounselling emphasises a psychoeducational approach to helping which involves ambition/goal - goal setting - skill teaching - goal achievement/satisfaction (Ivey & Authier, 1978).

Microcounselling - a Literature Review

Two published reviews of the microcounselling literature to 1977 are available (Ford, 1979; Kasdorf & Gustafson 1978). Both Ford (1979) and Kasdorf and Gustafson (1978) have similar conclusions concerning the efficacy of microcounselling. The conclusions include the following main points:

1. Several discrete behavioral skills of interviewing have been idientified and include attending behaviors, minimal encouragers, open and closed questioning, paraphrasing, reflection of feeling and summarization.

2. A variety of measurement instruments have been developed to assess the efficacy of microcounselling. The most widely used are behavioral counts such as the Ivey Taxonomy. A number of measures not yoked to microcounselling theory are also used. These include such widely recognized instruments as the Carkhuff scales (Carkhuff, 1969) and the Therapist Error Checklist

(Matarazzo, et al., 1965).

3. Studies addressing the efficacy of the microtraining paradigm, while mixed, have largely supported the efficacy of this training paradigm. Microcounselling has been suggested for teaching a variety of skills to a variety of populations, lay and professional. However, many of the studies have been critized on methodological grounds (Capelle, 1975).

4. When compared to other counsellor training modalities, microcounselling is consistently as effective as the others, and in many cases it is indicated as the most effective.

5. Research on the components of microcounselling suggest generally, that the maximal effect occurs when all the components of the paradigm are used.

6. Microcounselling has been successfully extended to fields other than counsellor education (i.e., business), and has been used to teach such non-helping behaviors as 'sharing'.

7. Studies on the effect of the microcounselling trained helper on his/her clients have been supportive of the methodology. Studies indicating microcounselling as a personality change agent have been less instructive.

The Literature from 1977

This section of the literature review will be organized under the following headings: studies of the

effectiveness of microtraining, studies of the components of the microtraining model, extension studies and studies of demographic and personality variables, and nursing studies.

The Effectiveness of Microtraining

Outcome Studies.

Studies with helping professionals continue to be an important focus in microtraining research. Gill et al. (1983) investigated the usefulness of microcounselling in raising counsellor trainees' level of counselling function to a predetermined standard as measured by the number of microskills used in an initial counselling contact. They used an interrupted time-series design with repeated measures. Three interrupted measures were used, and prior to the third observation, the twelve trainees received microcounselling training in seven traditional microskills. After training, the trainees were more like the pre-determined standard than before training, however this difference was not statistically significant. Trainees' behavior did significantly improve between the second and third observations. However, between the first and second observations, the behavior of the trainees significantly regressed, and only after the microtraining did their counselling behavior approach their initial level before the experiment, and then with some small improvement. Contrary to the authors' claim, this study adds very little to overcome the research design weaknesses of other

microtraining studies. As the microtraining format used in this study was of such an abbreviated form (only a viewing of brief modelling tapes and discussion took place), the lack of significant results are easily understandable. However, as the trainees counselling behavior between the first and second observation deteriorated, this study is instructive in that it suggested that small amounts of supervised practise alone may be more harmful than good.

In a pretest-posttest control-group designed study with 19 graduate students in a criminal justice program, Bennett (1981) used a treatment curriculum which included training in microcounselling, values clarification, self-knowledge and assertiveness. The experimental-group received 45 hours of training and the control-group, 19 graduate students enrolled in a masters' level guidance program, were given an equivalent number of training hours in lectures on theories of guidance and clinical psychology. The results indicated that the experimental-group made significantly more post-training microcounselling responses than the control-group as indicated by the Microcounselling Response Test. On the Microcounselling Interviewer's Evaluation Form, clients rated the experimental trainees to be significantly greater on six scales ranging from attending behavior to sensitivity to the client. As well, the experimental trainees in contrast to the control trainees, showed significant gains in self-knowledge development as measured by the Volunteer Experience Test.

As impressive as these results appear, it is difficult to separate the training effect of the microcounselling from the other training experiences. Furthermore, the authors reported that the experimental trainees showed more interest in, and saw more relevance in, the microcounselling evaluation devices than did the control trainees.

In an effort to assess the transferability of skills taught through microcounselling, Robinson (1981) taught 29 graduate students in counselling the skill of reflection of feeling. The treatment conditions were four levels of performance assessment stimuli: (1) video-taped simulated client; (2) roleplaying classmate; (3) video-taped simulated client with roleplay; and (4) a control. On measures of feeling appropriateness and content relevance in post-interviews with clients, the data showed that while the skills were learned, there were no differences among the experimental conditions. Interviewer experience did not enhance or detract from the trainees skill performance. When the skill was acquired, the trainees used the skill with a client believed to be seeking help.

In a study focusing on teaching higher level skills of helping, Russell (1982) operationalized the skills of self-disclosure, social analysis, behavior feedback, androgyny encouragement and positive evaluation of women and used microcounselling to teach these skills to feminist helpers. Forty-five counsellors were divided into an experimental and control group matched on years of

counselling and scores on the Attitudes Toward Women Scale(ATW). After a five week microcounselling training program in the feminist helping skills, both experienced and inexperienced experimental trainees significantly increased their scores on the ATW, and their self-disclosure and social analysis skills. At a follow-up (period not indicated), only the social analysis skills were retained.

In a study with a lay population, Gluckstern et al.(1978) trained 14 community people as drug counsellors via microcounselling. Using the Ivey Taxonomy as the dependent measure, the trainees showed significant pre-post gains in three of the microskills (reflection of feeling, closed feeling questions, and decreased closed-questions) and three areas of focus (more client, less self and less topic). Perhaps more significant here is the corollary finding of positive changes in client verbal behavior as a function of helper behavior. Posttests indicated that the clients made more self-referenced statements and statements of affect. This is an important finding in support of the validity of the psychoeducational potential of the microcounselling paradigm. Skills showed a differential rate of extinction over a seven month follow-up. The results of this study are limited by lack of a control group, and small numbers of subjects.

In another study with lay people, Weiner (1982) was unable to show significant gains in the use of the microskills of Open Invitaion to Talk and Paraphrasing with

43 upper-middle class parents following brief microtraining in these skills. Furthermore there was no significant gain shown on other skills of effective helping not yoked to the microcounselling system. The results indicate that more intensive exposure to these skills would be necessary for behavior change to occur in the trainees, supporting earlier research which indicates that for more complex skills, 'more is better'.

In a study with skilled non-professionals, Cristani (1978) implemented a microcounselling training program to train child care workers in two counselling skills. In a time-series design with two pre-treatment and two post-treatement observations, four child care workers were trained in open-questions and expression of feeling. Results indicated that the trainees achieved significant growth in the skills taught. However there was no significant rate of transfer to work enviorment. Assessment failed to indicate whether this failure to demonstrate transfer was a failure of the instruments to detect the transfer or an actual lack of transfer of the skills. Given the small numbers and lack of controls in this study, the results are difficult to interpret.

In an application of the microcounselling paradigm to training non-adults, Carr (1983) demonstrated that high school volunteers could be trained in six of ten components of attending behavior. There was no change in a non-treated control group. This supports an earlier study by Aldrige

and Ivey (1971). However, there were no differences between experimental- and control-groups on interviewee ratings following post-training interviews. Furthermore, contrast to these results, Engel (1981) was unable to demonstrate the effectiveness of microcounselling for teaching attending behavior to ninth graders.

In a report of a systematic interpersonal skill development program, Bradley (1977) gives an anecdotal account of the results of microcounselling as an approach to training inner-city youth in interpersonal skills. Vocational education teachers were trained via microcounselling and subsequently reported success in teaching their students interpersonal skills also through microcounselling. These skills were taught in the context of job interviewing preparation. Grinnell and Lieberman (1977) were successful in teaching mentally retarded adults eye-contact and body posture via microcounselling in an effort to improve their job interview behavior and, hence, employability. However, this program was not successful in teaching the higher level microskills to these subjects, nor was there any evidence presented indicating gain in employment among the trainees.

In summary, several studies report success in using the microcounselling methodology to train various populations in communication skills. Where the full microtraining format is used, the results appear to be consistently more positive, supporting earlier research

findings. The transferability of skills to work settings has yet to be fully established. While many of the studies show the same lack of experimental rigor which forced Capelle (1975) to criticize earlier literature, the abundance of evidence in this one direction cannot be ignored, particularly in the light of similar findings in the research prior to 1977.

Comparison studies.

Most of the studies in this area of research compare Microcounselling (MC) with the three other main systems of counsellor education; Human Relations Training (HRT), Interpersonal Process Recall (IPR) or one or another forms of didactic instruction. The evidence is convincing in that it supports the microcounselling as a training paradigm, and several studies show microcounselling to be a superior training modality. For example, Wallace et al., (1981) indicated microcounselling as significantly superior to a discussion group to teach social approval skills to psychiatric nurses. Sawyer and Sawyer (1981) indicated microcounselling to be significantly superior to didactic instruction for teaching teacher-parent communication to teachers of pre-school handicapped children. This supports an earlier study by Rogers (1979). Higginson (1981) found microcounselling to be significantly superior to empathy training which was a discussion with instructor of a baseline interview, for teaching empathy to students in an

introductory counselling course. Several studies indicate microcounselling as better than no training (Charonko, 1979; Leytham, 1983; Toukmanian, et al., 1978; & Crabb et al., 1983). And, several studies indicate microcounselling as effective a training modality as other major systems of training (Crabb et al., 1983; Pereira, 1978; & Toukmanian et al., 1978).

In summary, microcounselling appears to be an effective method for teaching skills of counselling and communication to a variety of populations. Design limitations notwithstanding, it has been demonstrated that microcounselling is as effective a method of training as any of the other major training modalities such as Human Relations Training or Interpersonal Process Recall. However the literature fails to establish consistently either Microcounselling or Human Relations Training or Interpersonal Process Recall as the universally favored method. Yet, when compared to certain methods of training in helping and communication skills, such as lecturing or other didactic methods, discussion or practise alone, microcounselling is shown to be consistently superior. Furthermore, the combination of Microcounselling with Human Relations Training appears to be particularly effective.

Studies of the Components of Microtraining

The need for economy both in time and financial cost has been a primary motivating factor for a body of research investigating the components of microtraining. Questions as to which components or combinations of components of the microcounselling model are effective for training a given skill and under which conditions, characterize this research.

In a study to determine the effects of the four primary components of the microtraining model (modeling, rehearsal, feedback and remediation), Peters et al. (1978) used four treatment conditions to teach a strategy for developing counselling goals to 40 graduate students in counselling. The treatment conditions were: modeling only; modeling and practise; modeling practise and feedback; and modeling, practise, feedback and remediation. Results indicate that on both written and role-play measures, subjects in all four treatment conditions showed significant gains in their ability to develop counselling goals and strategy. As well, there were no differences among the groups, and the skills were retained at the end of a two week follow-up period. These results indicate that exposure to either written or video models is an effective way to promote short-term retention of counselling strategies. Furthermore, the additional components of practice,

remediation, and feedback do not appear to have any additional effects. These results are consistent with support earlier findings with respect to the importance of modeling but fail to support the widely held notion that practise is important for skill development. However as a no-treatment control was absent, and because it is impossible to determine the effect of training exposure time, these results are difficult to interpret. Furthermore, an extended period of follow-up would be required to determine differential rates of retention among the groups.

In a somewhat contradictory study of the influences of modeling and feedback by the supervisor to teach microskills to beginning counsellors, Fyffe and Oei (1979) found that for the simpler skills, such as attending behavior and minimal encouragers, the addition of supervisor modeling was not required for their increased use of these skills. However, for the more complex skills of reflection of feeling, feedback and modeling did improve learning. As it has been previously demonstrated that modeling following instructions increased learning of communication skills, it may be that modeling by a supervisor may be less effective than standardized video- or audio-taped models. Musser (1982), however, was unable to demonstrate that live-video models were better than no models at all. Furthermore as skills of attending and minimal encouragers are relatively simple skills, trainees' initial level of functioning in

these skills was high to start with in this study suggesting a 'ceiling effect' might be operating.

In a reasonably well designed study with 45 undergraduate females who scored low on Carkhuff' empathy scale, Richardson and Stone (1981) used three variations of the microtraining model to teach the skills of reflection of feeling and confrontation. These trainees were randomly selected from a group of low-scorers in a group of 98 initial participants. These 45 trainees were then randomnly assigned to three training groups: cognitive behavioral(CB), behavioral(B) and programmed learning(PL). The CB and B groups received a traditional microtraining format with the exception that the CB group had additional training in cognitive strategies. The PL group had programmed manuals only. Follow-up measures of reflection, congruence and empathy indicate that the CB group performed significantly better than the PL group. As well, they were better than the B group but the difference was not statistically significant. The B group was better, but not significantly so, than the PL group. The results do not strongly support the efficacy of programmed manuals within this context. However Uhlemann et al. (1980), working with paraprofessional hotline workers, found that both microtraining and programmed-learning trainees were significantly better than no-training controls on empathy, attending behavior and therapist errors. No difference was found between the two training groups.

While the use of the cognitive adjunct procedure in microtraining has been given support here, further replication is needed. However two reasonably well designed studies (Baker et. al. 1983, 1984) have shown the addition of a mental practise component in microtraining to be quite effective. Both studies used a traditional microtraining model. The difference between training groups was that one used microskills(MS), roleplay, practice and the other practised the skills mentally(MP). In the first study (Baker, et al., 1983) both the MS and MP groups were significantly better than the control-group on attending skills and responding skills. The MS group was significantly better than the other two groups on the physical dimensions of attending but the MP group made significantly more appropriate verbal responses. In the second study (Baker et al., 1984), which taught decision-making, again both training groups performed significantly better than the controls on the dependent measures, and most importantly on the qualitative dimensions of helping, a result not found in the 1983 study.

In a well designed study to assess the effect of both modeling and programmed-learning in microcounselling, Uhlemann et al. (1982) assigned 20 human service workers to two modified microcouselling training groups (model and no-model) and to a no-training control group. Five standard microskills were taught to the training groups both of which used programmed materials and only differed on the modeling

component. Data suggest that both training groups improved their interview empathy and open-questioning while reducing closed-questioning. No such improvement was shown in the control-group. These results support the efficacy of a modified microcounselling format using programmed-materials. The addition of the modeling component appeared to make little difference, a consistent finding in this literature.

The role of the supervisor continues to be an important focus in microtraining research. The results of this research however, are mixed. In a posttest only control-group design, Hayman (1977) taught two treatment groups of graduate counselling students open-questions, paraphrasing, and responding to feeling, via microcounselling. A standard microcounselling format was used except that one group received supervised feedback and the other did not. A no-treatment control-group received an equivalent amount of time in class. The results indicate that the group with no supervisor feedback was significantly more effective than the group with supervisor feedback. One might hypothesize, in light of an earlier finding (Charonko, 1979) that supervision may be anxiety provoking and thus detrimental to training in such contexts as those which occur in this study. An interesting ancillary finding was that for the most experienced trainees, supervisor feedback had a detrimental effect. The least experienced helpers appeared to benefit from the feedback. Walker (1978), on the other hand found that, within microcounselling, trainees

behavior was not different if the feedback was given by instructor or peer.

In an apparently contradictory set of findings, Berg and Stone (1980) have shown that training groups receiving both high- and low- structured supervision, within a microtraining format, performed significantly better than didactic-controls on both qualitative and quantitative dimensions of reflection of feeling and level of empathic communication. It is difficult to reconcile this data with the Hayman study in that this present study used supervisors who were operating at a higher conceptual-level, a factor not reported nor apparently controlled for in the Hayman study. The Berg and Stone study was conducted with introductory psychology students (novice counsellors) and hence supports Hayman's finding that the inexperienced counsellors benefitted from supervisor feedback. On the other hand, Stone (1981) was unable to demonstrate a significant effect on counsellor behavior as a result of supervisory treatments in a microtraining program. While there were indications that the differentially supervised training groups performed better than the controls, the extremely small numbers of subjects used (n=5), high number of dependent measures and relatively inexperienced supervisors do not allow firm conclusions to be drawn.

Finally, Thompson and Blocher (1979) investigated co-counselling supervision in microcounselling. They found that by having the supervisor and counsellor trainee

co-counsel the client, the addition of the co-counselling component did not add anything to the traditional microcounselling sequence in terms of skill acquisition by the trainees. The authors note that co-counselling results in less time for: trainee observation, reinforcement from the client for appropriate responses, and supervisor reinforcement of the trainee behavior during interview replay.

In summary, the research since 1977 tends to support the efficacy of the microcounselling paradigm as a method for teaching skills of therapeutic communication. For certain simpler skills, such as minimal encouragers, fewer than the full number of components may be adequate. Others, such as reflection of feeling, appear to require more of the components of the training paradigm.

As the populations, dependent measures, and research design vary so widely from study to study, it is difficult to support a single cogent and coherent conclusion regarding the importance or power of any single component of microcounselling. The singular importance of models, feedback, practise, supervision has yet to be either universally endorsed or rejected. Depending on one's training requirements, directions may be found in the literature.

Extension Studies and Studies of Demographic and Personality Variables

A number of studies have suggested the use of microcounselling for teaching behaviors other than skills of therapeutic communication. For example, Poitras-Martin and Stone (1977), reported success in using microcounselling to teach sixth-graders problem solving skills. Devoe and Sherman (1978), successfully applied microtraining to teach elementary school children sharing behaviors. Waranch (1981) indicated success in teaching special education student teachers the skill of communicating test results to parents of exceptional children. Irwin (1981) successfully extended microcounselling to teach speech pathologists the skill of treating speech misarticulations. In two well controlled studies, Sawyer, Allen and Reisen (1983), and Sawyer and Allen (1980), successfully extended microcounselling to teach performance evaluation interviewing to rehabilitation administrators, and sexual counselling for spinal-cord injured women, respectively. However, Forbes (1978) was only moderately successful in teaching high school students conflict-reduction through microcounselling. And Chandler (1983) was unsuccessful in extending microtraining to teach infant movement assessment to physical and occupational therapy students.

Attempts to show microcounselling as a personal growth vehicle have been largely unsuccessful or at best difficult to interpret. For example, Paradise and Potter (1977),

combining group counselling and microcounselling, indicated that their trainees showed improvement on 7 MMPI variables. However the effect of the microcounselling alone was not indicated. A similar finding was reported by Levine (1980) with college students as measured on the Personal Orientation Inventory (POI). Scroggins and Ivey (1978), failed to indicate personality growth on the POI in residence hall staff following microtraining, a finding supported by Campbell (1981) with high school students. However Simek-Downing (1981), did show a significant gain in conceptual-level in graduate trainees as a result of a 15-week training program which included microcounselling. And, McCarthy (1978) reported an increase in internal locus of control in senior citizens as a result of microcounselling and information on locus of control. In both cases, it is difficult to separate the effects of the microcounselling alone.

Attempts to assess a subject's suitability to microtraining based on pre-training characteristics have not been successful. For example, McCarthy (1978) failed to find a correlation between a trainee's locus of control and his/her ability to profit from microtraining. Geary (1979) failed to demonstrate that the trainees' initial level of developmental empathy indicated the level of comprehensiveness of the micromodel required for learning, and Albert (1981) failed to show a relationship between levels of dogmatism and the ability to profit from

microcounselling.

In summary, research has further extended the population base with which microtraining appears to be effective for teaching helping or communication skills. While not strongly supportive of the personal growth resulting from microcounselling, the data suggest that microtraining is an effective training tool with older adults and senior citizens, those in religous training and lay-helpers. Furthermore, the data are suggestive rather than clear with respect to a relationship between microtraining and personality or demographic variables. Those studies indicating positive effects of microtraining on personality have had methodological flaws or have included other experiences with microcounselling, making it difficult to determine the effects of microcounselling alone. As well, there have been an equal number of studies failing to demonstrate personality growth. However, it appears to be strongly indicated that microcounselling, alone or together with other training experiences, has been favorably accepted as a training experience by trainees. In this regard then, microtraining is likely to at least contribute to positive attitudes in the trainees about learning counselling or communications skills. One might argue then, that this establishes a positive base on which future personal growth might occur.

Nursing Research

The literature has not offered strong support for the application of microcounselling in nursing. For example, Forti (1975) applied partial variations of the microcounselling paradigm to teach the skill of direct mutual communication to sophmore and junior baccalaureate students. A small number of subjects (n=10 per group) were used and these were volunteers. The results failed to support the hypotheses, as significant change was found to occur on only 3 to 7 of the 17 dependent variables.

Carr (1976) failed to demonstrate that 20 volunteer first year baccalaureate nursing students could acquire five microskills as a result of microtraining. Partial acquisition of attending behavior, open invitation, reflection of feeling and paraphrase occured. What little acquisition occured was not retained nor generalized to the clinical setting. The control-group, in contrast to the experimental-group, showed a decrease in cognitive focus. Small numbers of subjects (n=10 per group) were used in this study and any conclusion otherwise regarding the viability of microcounselling would be hazardous at best.

Spruce and Snyders (1982), working with psychiatric nurses, demonstrated that these subjects acquired six microskills and subsequently showed improvement in the core conditions of empathy, warmth and congruence following sixteen, 90-minute, microcounselling sessions. As well,

these skills levels were maintained at two week follow-up assessment. Extreme caution is warranted in interpreting these results, since only 5 nurses participated in the study and there were no controls. Furthermore, these subjects were described as highly motivated. The writers were thus called upon to state that while the program was successful "this does in itself indicate that the manner in which the microcounselling strategy was applied was accountable for its effectiveness." (p.85).

In a more tightly controlled study with 15 RNs and 3 LPNs who worked in a psychiatric ward, Authier and Gustafson (1976) indicated partial success with two variations of the microcounselling method (supervised group and non-supervised group) in teaching these subjects microskills. Small numbers of subjects (N = 6 per group) and/or the abbreviated training format (6 hours) may explain why full significance was not achieved. While there is some support in the literature for short training programs with certain skills such as attending behavior, greater training effects are more often associated with longer training periods of 20 to 30 hours (Kasdorf & Gustafson, 1978). The effect for the RNs alone was not reported.

Using a brief microcounselling format to teach psychiatric personnel social approval skills, Wallace et al. (1981) found that the microcounselling group significantly improved in their level of post-training functioning as compared to a discussion group. The two groups were each

composed of nine members randomly assigned from 13 psychiatric nurses and five health care workers. In addition to being unable to separate the effects for the nurses only, two design limitations were present: first, there was the lack of a no-training or unstructured discussion group as a control, and second, both training groups were conducted by the same trainer. The trainer's preference for one or the other of the training modalities, is, therefore uncontrolled.

In what is perhaps the best designed of the nursing studies reviewed, Hearn (1976) compared three methods of counsellor training with graduate nurses. Twenty-five nurses were randomly assigned to one of four training conditions: microcounselling, sensitivity training, programmed learning, and attention-control. The microcounselling group received a two-day, Ivey-based microcounselling workshop. The sensitivity training group attended a two day encounter group. The programmed learning group read manuals designed to teach the same skills as those taught in the microcounselling workshop. The attention control-group watched and discussed five counselling films. All subjects participated in pre-training, post-training and one month follow-up interviews with pseudoclients. Dependent measures included behavioral counts of microskills, focus of helper comments, focus of client responses, therapist errors and nursing staff performance evaluation. Overall, it was found that

the microcounselling was the most effective training condition with these nurses using more microskills, making more helpee-referenced statements during post-interviews than the other groups. As well, the microcounselling group made more 'Good' therapeutic responses and fewer errors of communication on post- and follow-up interviews. The one shortcoming in this study was the small numbers of subjects used. The 25 nurses were divided into four groups, leaving extremely low numbers of subjects in the respective training conditions.

It is clear that the usefulness of microcounselling in nursing has not been adequately demonstrated. This appears to be particularly true for graduate nurses who have been the subjects of most of the successful studies reported to date. With respect to these studies, problems with research designs prohibit firm conclusions being drawn. Even less evidence has been presented in support of the applicability of microcounselling training for nursing students, and in particular diploma-program students.

Chapter Summary

Kasdorf and Gustafson (1978) aptly described the reasons why microcounselling has received such attention in the literature on counsellor education and communication skills training.

Microtraining increasingly appears to be a paradigm which is sufficiently precise for experimental rigor but

is simultaneously practical for action research in applied settings. (p. 372)

Yet in spite of this, many of the recent microcounselling studies have the same experimental design weaknesses and lack of follow-up studies which forced Capelle (1975) to criticise the earlier research in this area.

With this in mind, it is important to note that there are a sufficient number of well-controlled studies which lead to reasonable conclusions about the microcounselling paradigm. Research on microcounselling has lead to the identification of a number of generic skills of helping which have become widely accepted within the field of counsellor education and in communications training. Such skill concepts include; attending behaviors, styles of questioning, minimal encouragers, reflection of feeling and content, paraphrasing and summarization.

There have been a sufficient number of studies which have strongly supported microcounselling as an efficient and effective way of training beginning helpers in the various skills of therapeutic communication. As well there is a clear indication that the microtraining technology is a suitable training paradigm with a variety of professional and paraprofessional populations as well as people of various ages ranging from elementary school children to senior citizens. When compared to other major training methodologies, microtraining consistently holds its own,

is simultaneously practical for action research in applied settings. (p. 372)

Yet in spite of this, many of the recent microcounselling studies have the same experimental design weaknesses and lack of follow-up studies which forced Capelle (1975) to criticise the earlier research in this area.

With this in mind, it is important to note that there are a sufficient number of well-controlled studies which lead to reasonable conclusions about the microcounselling paradigm. Research on microcounselling has lead to the identification of a number of generic skills of helping which have become widely accepted within the field of counsellor education and in communications training. Such skill concepts include; attending behaviors, styles of questioning, minimal encouragers, reflection of feeling and content, paraphrasing and summarization.

There have been a sufficient number of studies which have strongly supported microcounselling as an efficient and effective way of training beginning helpers in the various skills of therapeutic communication. As well there is a clear indication that the microtraining technology is a suitable training paradigm with a variety of professional and paraprofessional populations as well as people of various ages ranging from elementary school children to senior citizens. When compared to other major training methodologies, microcounselling consistently holds its own,

and proves to be a powerful adjunct when combined with other training methods. Client outcome studies have neither been numerous nor instructive. Where this variable has been studied, there appears to be a direct relationship between helpers trained by microtraining and positive client verbalizations.

The vast majority of microcounselling studies have focused on the components of the system. Generally speaking, when all the components of microcounselling are used, the outcomes appear to be consistently more positive. However a number of studies have shown that for simpler skills such as some of the attending skills and minimal encouragers, fewer of the training components are required. Clearly, for complex skills such as reflection of feeling, more components of the system are required. The conflicting results as to which components are the most influential for training within the microcounselling context forces one to conclude that the research has not universally supported or failed to support any single component of the paradigm.

The literature addressing the application of microtraining to nursing has neither been abundant nor have the results been positive. Poorly designed research, coupled with the limited populations within the field of nursing addressed, leads one to ask whether microcounselling is a viable tool for nursing education. This statement appears to be particularly true of diploma-programs in nursing.

Research on extending the microcounselling paradigm into areas other than counsellor training has been largely successful. To date studies have suggested the efficacy of microcounselling in teaching clients skills of communication, children problem solving and sharing behaviors, adolescents conflict resolution, assertive behavior for adults, skills of supervision to administrators and the treatment of addictive behavior in addicts.

The study of personality variables in microcounselling research has not been very productive. Those studies indicating personality growth generally have included other training experiences along with microcounselling and thus have made it impossible to separate the effects for the microcounselling alone. It appears to be unreasonable to expect such a short-term period of training as traditional microcounselling provides to effect lasting personality growth. Such changes require more intensive experiential relationships. However, in virtually all the studies which have assessed the trainee's attitude to the training experience, the trainees rated the microcounselling experience very favorably. It might be reasonable to expect that such favorable attitudes might form the basis on which further personal growth would occur.

It is clear that the microtraining methodology has been demonstrated to be a viable training paradigm and one quite amenable to investigation. While much of the microcounselling research has been weak methodologically,

the amount of research in support of this training methodology cannot be easily dismissed. Continued verification of this paradigm through well-conducted research is needed. As well, research on the extension capability of microcounselling to other non-psychoeducational skills and populations may prove the usefulness of microcounselling within the psychoeducational settings and other settings as well.

Hypotheses

Based on the research questions put in Chapter 1 and the literature reviewed above, the following hypotheses were tested:

Hypothesis 1 At post-training, the experimental-group exhibits a significantly higher overall level of performance than the control group on the dependent variables (when taken together).

Hypothesis 1a At post-training, the experimental-group exhibits a significantly higher level of therapeutic empathy than the control-group, as measured by the Carkhuff Empathy Scale.

Hypothesis 1b At post-training, the experimental-group exhibits a significantly higher level of empathy than the control-group, as

measured by the Empathy Construct Rating Scale.

Hypothesis 1c — At post-training, the experimental-group exhibits a significantly higher use of the microskills than the control-group, as measured by the Ivey Taxonomy.

Hypothesis 1d — At post-training, the experimental-group exhibits significantly fewer errors of therapeutic communication than the control group, as measured by the Therapist Error Checklist.

Hypothesis 1e — At post-training, the experimental-group exhibits a higher facility to discriminate facilitative communications than the control-group, as measured by the Carkhuff Index of Discrimination.

Hypothesis 2 — The experimental-group, in contrast to the control-group, exhibits a significant increase in the level of empathy from pre-test to posttest, as measured by the Carkhuff Empathy Scale.

Hypothesis 3 — The experimental-group members, in contrast to those in the control-group, exhibits a significant increase in ability to discriminate facilitative responses, from pretest to posttest, as measured by the Carkhuff Index of Discrimination.

Hypothesis 4 At the 9-month follow-up, the experimental -group exhibits a higher level of performance than the control-group on the dependent variables (when taken together).

Hypothesis 4a At the nine month follow-up, the experimental-group exhibits a significantly higher level of therapeutic empathy than the control- group, as measured by the Carkhuff Empathy Scale.

Hypothesis 4b At the nine month follow-up, the experimental-group exhibits a significantly higher level of empathy than the control-group, as measured by the Empathy Construct Rating Scale.

Hypothesis 4c At the nine month follow-up, the experimental-group exhibits a significantly higher use of the microskills than the control-group, as measured by the Ivey Taxonomy.

Hypothesis 4d At the nine month follow-up, the experimental-group exhibits significantly fewer errors of therapeutic communication than control-group, as measured by the Therapist Error Checklist.

Hypothesis 4e At the nine month follow-up, the experimental-group exhibits a significantly higher facility to discriminate facili-

tative communications than the control-group, as measured by the Carkhuff Index of Discrimination.

CHAPTER 3

EXPERIMENTAL DESIGN AND PROCEDURE

Introduction

This chapter describes the steps to be involved in conducting this study. The following topics are covered: sample and formation of groups, instrumentation, experimental procedure, training of raters, and instrument scoring and tape rating procedures.

Sample

The sample consisted of all full-time second year female students (n=60) in a two year, eight month Registered Nurse (R.N.) diploma program. In all, there are 56 females and 4 males (males were dropped from the study). The age-range for this group is 18-36, with a mean age of 21.2 years. Within this population 54 of the students are single, four are married and two are separated from their spouses. Thirty-three of the students have high school matriculation, one has a university degree, and 26 have post-secondary education of up to two years. (see Appendix F for more detail on this sample.)

The first two years of this program represent, for all

practical purposes, the formal instructional part of the program. The last two-thirds of a year is a clinical placement prior to the writing of the RN exams. This program is similar to other RN programs in Canada in terms of curriculum, admission requirements, selection procedures and population served. In terms of selection procedures, this program is typical of other RN diploma programs in Canada.

The administration at the nursing school readily gave formal approval for conducting this study. However, this approval was contingent upon the second year class's willingness to participate, and this researcher's ability to conduct the study in non-class hours.

This researcher met with the entire class and explained in full detail the nature and scope of the study, and what would be required of the students who decided to participate. It was made clear that their participation in this study was strictly voluntary and that only this researcher would know who participated in the study and who did not. In other words their 'participating or not' was to be held in confidence. It was further explained that those who chose to participate in the study may discontinue their participation at any point. Finally this researcher discussed the form that the results of this study would take and how the data were to be treated confidentially.

Following the individual's agreement to participate, they were informed that the class as a whole would receive extra vacation time equivalent to the amount of the time the

participants (meaning the experimental-group) spent in the study.

Formation of Groups

This study used an experimental design with covariates (Campbell and Stanley, 1963). From the class of students an experimental-group (E-group) and a control-group (C-group) were arranged by random assignment using a table of random numbers. (Appendix F gives the demographic characteristics of these respective groups). There was no significant difference between the groups on the pretests.

The Instruments

The instruments used in this study are of two basic types: (1) paper and pencil tests completed by the subjects in the study; and (2) rating scales employed by external examiners. All measures have been used previously in microcounselling research. Measures both yoked and non-yoked to microcounselling theory are used.

A Description of Helper Responses to Helpee-Stimulus Expressions: An Index of Discrimination

This index is designed as a selection instrument to measure a helper's ability to discern effective from ineffective helping processes (Carkhuff, 1969). As a selection device, its focus is upon assessing the ability of the helper to discern the helpee's areas of functioning and dysfunctioning, and the helper's ability to make accurate prescriptions and prognoses concerning which of the

available alternate treatment modes might be most efficacious (Carkhuff, 1969).

Level of discrimination of the facilitative core conditions involves an assessment of the ratings of sixteen written, standardized, and representative helpee stimulus expressions (see Appendix E). The subject is asked to use a five-point rating scale which yields ratings of the helper's communication to helpee expression, or gross ratings of facilitative interpersonal functioning.

The two variables that were manipulated in forming helping responses were (i) the level of the facilitative conditions offered by the helper and (ii) the helper's action orientation. Thus, in response to each helpee stimulus expression, four possible combinations of helper responses occur in random order: high facilitative (HF) - high active (HA); high facilitatve (HF) - low active (LA); low facilitative (LF) - high active (HA); low facilitative (LF) - low active (LA).

The subject's discrimination scores on the five-point scale are established by determining the mean absolute deviation of the subject's rating, independent of direction, from the consensus of expert ratings (Carkhuff, 1969).

A number of reviews have been written on both the Index of Discrimination and Index of Communication indicating validity and reliability (Hefele and Hurst, 1972). An example includes expert raters who had demonstrated high predictive validity in previous studies

agreeing on the ratings assigned to the helper responses (Carkhuff, 1969). The estimate of reliability reported for the Index of Discrimination on a population of graduate counsellors was .71. This rank-order correlation was obtained by eight expert raters in a one month test-retest (Carkhuff, et al., 1968).

A Description of Helper Stimulus Expressions: An Index of Communication

This assessment procedure is designed to assess the level of communication in prospective helpers (Carkhuff, 1969). (see Appendix H). The index consists of sixteen helpee statements which reflect one of five problem areas: social-interpersonal; educational-vocational; child-rearing; sexual-marital; and confrontation of helper. As well, subjects are required to respond to helpee silence.

Subjects write responses to each of the helpee statements, and these are used to assess the various facilitative conditions (e.g., empathy) as outlined by Carkhuff (1969). Carkhuff (1969) reviews several studies in support of the predictive validity of this index.

Empathic Understanding in Interpersonal Processes: a Scale for Measurement

A revision of earlier empathy scales (Carkhuff, 1968; Carkhuff and Berenson, 1967; and Carkhuff and Truax, 1967), this scale is designed to measure empathic understanding of

helper responses to helpee stimuli.

A five-point scale is employed to measure the level of helper empathy. Level 1, the lowest level, is exemplified by helper expressions (verbal and non-verbal) which either do not attend to or significantly detract from the expressions (verbal or non-verbal) of the helpee. At level 5, the highest level, the helper's expression adds significantly to the feeling and meaning of the helpee's expression. Complete description and examples of the different levels of functioning are given in Appendix B.

The helper's level of empathic functioning is obtained by rating his/her responses in terms of the five levels of empathy. Typically, the rating of responses is conducted by trained raters who have demonstrated high levels of reliability in rating empathic functioning using this scale. Scores may range from 1 to 5 and points in between. Sources of helper functioning may be obtained from type-scripts, audio-tape or video tape records of the helper in a real or role-played interaction with a helpee.

This rating scale appears to have face validity (Carkhuff and Berenson, 1967; Truax and Carkhuff, 1967; and Carkhuff,1969a, 1969b). However the degree of validity of the rating scale is largely a function of the raters who employ them (Carkhuff, Kratochvil and Friel, 1968).

Carkhuff, Kratochvil, and Friel (1968), determined Pearson r's on intra/inter-rater reliabilities on the core condition of empathy using this five-point scale. The

intrarater reliabilities for three experienced raters were .90, .99, and .94 respectively. The interrater reliabilities for the same raters were .88, .87, and .85 respectively. Carkhuff, Piaget and Pierce (1968), studying three groups of university students (freshmen, seniors and first year graduates), determined Pearson r's on intra/inter-rater reliabilities on this same scale. For two sets of two raters each they found: intrarater reliabilities of .95, .99, .99, and .98., and interrater reliabilities of .59, and .93.

The Ivey Taxonomy (IT)

The IT is a behavioral frequency count instrument designed to classify into catagories, the verbal responses of either the helper or helpee (Ivey and Authier, 1978). This instrument is founded on the premise that if specific behaviors being taught, then it is logical to test for the presence or absence of these behaviors.

The IT classifies the microskills into the following categories: (1) attending behavior, (2) attending skills, and (3) influencing skills. Additional categories exist for classifying focus dimensions and qualitative dimensions of the helping relationship (see Appendix A for a full description of these categories). Scoring involves a classification of each therapist response into the appropriate category and a tabulation of the responses within a given skill category.

Gluckstern (1973) reported interrater reliabilities of 80.7% to 92.2%. Total agreement on 2102 ratings by two independent raters was 86.6%. Face validity of the instrument has been verified by experts at The American University (Gluckstern, 1973). The construct validity of the IT is a function of the validity of each of the constructs of which the instrument is composed. Ivey and Authier (1978) present a survey of the research supporting these constructs and the reliability and validity of teaching the various skill/constructs.

Therapist Error Checklist

This instrument is designed to measure therapy in general and is not yoked to any particular theoretical orientation. The revised 1976 form includes three basic categories of therapist error: errors in focus, faulty role definition and faulty facilitation of communication (see Appendix D for full description).

Within each of the three categories, therapist's responses may be rated as either GOOD, FAIR or POOR. Matarazzo, et al.(1965) describe a GOOD statement as one that facilitates further communication from the helpee, focuses upon a significant topic, and reflects an empathic attitude. Furthermore, a GOOD statement contains no therapeutic errors. A FAIR statement may be ineffective in facilitating exploration, and while not of significant therapeutic focus, is not irrelevant. It also reflects an

appropriate therapist attitude. Furthermore a FAIR response contains 1-3 therapeutic errors. A POOR statement is generally one that is considered to block communication, and contains more than 2 therapeutic errors. Scoring involves a tabulation of the number of errors within each category.

The development of this instrument was inspired by early research on, and theory about, what constitutes appropriate and effective therapeutic behavior (Porter, 1950; Rogers, 1942; and Wolberg, 1954). This instrument may be said to have construct validity in that it corresponds directly to expert formulation of what distinguishes appropriate and effective therapeutic behavior from inappropriate and ineffective therapeutic behavior. Inter-rater reliabilities have been established for each of the four categories as such: errors of focus, .84; errors of role definition, .93; errors in facilitation of communication, .88; and other errors, .96 (Matarazzo, et al., 1965)

Empathy Construct Rating Scale

This instrument developed by LaMonica (1981) is an attempt to provide a reliable and valid objective measure of the the construct of empathy. This paper and pencil, self-administered, self-report test consists of 84 items that describe the way a person may feel about another or act towards someone (LaMonica 1981, outlines the development of the item pool).

Of the 84 items, thirty-five of the items are stated negatively and forty-nine stated positively in an effort to decrease the likelihood of an acquiesence response set. Appendix C outlines the test. LaMonica (1981) provides extensive statistical data indicating the instrument's internal consistency, content validity and discriminant validity.

The Experimental Procedure

This study employed an experimental design with co-variates. Prior to the assignment of the subjects to either the experimental or control groups, all participating second year nursing students completed the Carkhuff Indices of Communication and Discrimination. Students subsequently were notified as to which group they were assigned. (see section Formation of Groups).

This researcher met with the E-group members and decided upon the schedule for the training program in microcounselling. The arrangement of the times for the approximately 25 hour training program was conducted in a democratic manner with the students deciding upon the time they were available to meet.

The microtraining program for the experimental-group involved six training segments; each segment consisted of 3-5 hours of training. The program took place over a four week period. Prior to the actual training in microskills, this researcher presented a brief introduction on

microcounselling to the experimental-group.

The experimental-group was trained in the following skills of interviewing and counselling in this order: attending behavior; questioning; minimal encouragers; parapharasing; reflection of feeling; and summarization. As well a microcounselling training segment was given in skill-integration.

The microcounselling paradigm used is the format adapted for use with large groups (Ivey, 1983). For each of the microskills, as well as the skill integration, this format was adapted from Ivey and Gluckstern (1982) "The Basic Attending Skills Manual", and Jessop (1979) "Nurse - Patient Communication: A Skills Approach", and consisted of the following sequential steps:

1. Subjects were given a training manual which not only describes the skill to be learned, but also outlines the training sequence for the skill, including rating forms, and information for viewing the modelling tapes.
2. Following a theoretical presentation of the skill, the subjects viewed standardized video models showing how both the presence and absence of the skill influenced therapeutic communication.
3. The skill was further discussed and the video-models were shown again. The subjects used rating forms to rate the presence, absence and

the effect of the skill in the video demonstrations.

4. The trainees were then divided into subgroups of four. Each subgroup remained together for the remainder of the study. The subgroups then practiced the skill using the systematic group practice procedure (Ivey, 1983).
5. The skill was then reviewed.

Between training segments the experimental-group members were encouraged to practice the skill as much as possible. Further, they were instructed not to discuss the training or skills with members of the control-group. During the experimental period, the control-groups' behavior was not accounted for, as the members of this group were non-attention controls.

Following the experimental training program, this researcher met with the participants of both groups for posttesting. Students then completed the Carkhuff Indices of Communication and Discrimination, and the Empathy Construct Rating Scale. Students were then asked to complete a 10-15 minute audio-taped role-play interview in which they were to assume the role of a nurse-helper, the details of this were then given. All tapes were returned within 1 week. This researcher checked a sample of the students and observed that the proper procedure for taping was followed.

A 9 month follow-up was conducted. During the last class for these students, who have already passed all school exams and written the RN exams, they were given a packet of material containing the written instruments, a blank cassette tape and instructions on how to complete the post-posttest follow-up requirements. All completed materials were returned by mail in a self-addressed stamped envelope provided for them. Twenty-four of the original 53 participants responded to the request for follow-up data.

Training of Raters

Trained raters were used to rate the taped interviews for microskills and therapist errors. The post-posttest tapes were also rated for empathy using the Carkhuff scale. The raters were not involved in the study in any other way other than for rating. All the raters were trained by this researcher.

The raters who rated the microskills and therapist errors are psychologists with Ph.Ds. One, a social psychologist, had two years of training and practice in counselling psychology and was familiar with microcounselling. The other, a developmental psychologist, had no formal counselling training but had read widely in the area and had some experience in counselling. The training program for the raters in microskills for use on the Ivey Taxonomy(IT) consisted of approximately 30 hours of training in microcounselling. The overall interrater

agreement achieved on the six microskills of the IT was, 92% (attending behavior-97%, open-questions-100%, closed-questions-77%, minimal encouragers-89%, paraphrases-83%, reflection of feeling-91%, summarizations 100%). For the focus dimensions on the IT, the overall interrater agreement was 88%. The interrater agreement for overall non-helpee focus was 87.8%. Intrarater agreement on the IT for the raters was 97% and 98% respectively.

The training program for the raters on the Therapist Error Checklist consisted of approximately 7 hours of instruction and practice. On the categories of GOOD, FAIR, and POOR, an interrater agreement of 100% was achieved for each category. On the three subcategories of the checklist, the following interrater agreement was achieved: errors in focus- 96%, faulty role definition-100%, and faulty facilitation of communication- 94%, for an overall interrater agreement of 96%. The overall intrarater aggrement on this scale was 84% and 81% respectively.

The rater who rated empathy using the Carkhuff scale has completed all requirements of the Ph.D. in counselling including the thesis but not the oral defense of the thesis. He has approximately 10 years experience in counselling and had used the Carkhuff scales before. He and this researcher achieved an interrater reliability of r=.93, and he an intrarater reliability of r=.95.

Scoring of Instruments-Rating of Tapes

Both the Index of Discrimination and Empathy Construct Rating Scale employ objective scoring procedures. Scoring was done by this researcher with the help of a student assistant.

The Carkhuff Empathy Scale, The Ivey Taxonomy and The Therapist Error Checklist, while employing strict guidelines for scoring, complete elimination of elements of subjective judgement in the scoring procedures is not possible. These instruments were scored by the external raters under the following conditions:

1. The 10-15 minute audio-tapes were edited to 10 minutes (3 from the beginning of the tape, 4 from the middle and 3 from the end of the tape). A master tape of the 10 minute exerpts was made with each students tape placed in random order. This was the same for the post-post tapes as well.
2. Half of all the tapes were scored for the microskills was one rater and the other half by the other rater. When all the tapes had been rated for microskills the raters rated the tapes for therapist error. The order of the tapes this time was counterbalanced so that the half rated for microskills by one rater was rated by the other for therapist error and vice

3. The Carkhuff Index of Communication was rated for empathy by one rater, not this experimenter. This rater also rated the post-post audio-tapes for empathy using the Carkhuff Empathy Scale. The order in which the Index of Communication was rated was randomized for both pre and posttest as well as experimental- and control- group.

Statistical Analysis

The statistical procedure used in analysing the data was MANOVA with two covariates. The posttest and follow-up data from the Carkhuff Index of Discrimination, Index of Communication, the Empathy Construct Rating Scale, The Ivey Taxonomy and the Matarazzo Therapist Error Checklist were the dependent variables. The pretest data from the Carkhuff Index of Discrimination and Index of Communication were the covariates. ANOVA, of the gain scores for both Carkhuff Empathy and Discrimination from pretest to posttest, was used in examining Hypotheses 2 and 3 respectively.

CHAPTER 4

RESULTS AND DISCUSSION

The results of the data analysis with respect to the hypotheses stated in this study are presented in the first section of this chapter. The second section of this chapter contains an interpretation and discussion of the results. Computation of the MANOCOVA was done by the SPSS version 7-9 (Hull & Nie, 1981). The probability level of .05 has been employed as the acceptable level of significance. Appendix G offers support for the use of covariance in analysis of Hypotheses 1 and 4 and indicates significant correlations between covariates and dependent measures (the low correlation is between Carkhuff Empathy pre and post, $r = .37$ and the high correlation is between Discrimination pre and post, $r = .67$). Analysis of variance indicated that there was no significant difference between the two groups with respect to the total number of therapist statements made for rating on the Ivey Taxonomy and Therapist Error Chechlist.

The failure of certain subjects to be present for one or more stages of the experiment, and the dropping of the four males from the sample, reduced the E-group to 24 and C-group to 29. While all of the original sample were asked to provide follow-up data 9 months later, only 24 responded

(E-group = 8, C-group = 16). This, and the failure of some subjects to complete certain instruments, accounts for differences in degrees of freedom shown in tables.

Testing of Hypotheses

Hypotheses

Hypothesis 1:

At post-training, the experimental-group (E-group) exhibits a significantly higher overall level of performance than the control-group (C-group) on the dependent variables (when taken together).

Findings. Table 1 reports the numbers of subjects, means and standard deviations of the dependent variables and the covariates. Table 2 indicates that with respect to the overall effect, there was a significant post-training difference between the two groups on the dependent variables in the predicted direction ($F = 3.50$, $p < .001$). To determine which dependent variables were contributing most to the significant multivariate F, the means of the E-group and C-group on each dependent variable and their univariate Fs will now be examined in the form of five hypotheses.

Hypothesis 1a:

At post-test, the experimental-group exhibits a significantly higher level of empathy than the control-group, as measured by the Carkhuff Empathy Scale.

Findings. The univariate analysis of covariance

Table 1

Means and Standard Deviations of the Pretests and the Dependent Variables at Posttest

Variable	Group	Mean	Std. Dev.	N
Pretests				
Carkhuff Empathy	E	1.73	.31	24
	C	1.82	.37	29
Discrimination	E	4.30	.94	24
	C	3.94	.75	29
Dependent Variable (Post.)				
Carkhuff Empathy	E	2.04	.22	24
	C	1.87	.34	29
Discrim.	E	4.07	.99	24
	C	3.96	1.06	28
Empathy Construct	E	188.80	42.10	24
	C	151.94	40.90	29
Therapist Error Checklist				
Good	E	11.4	6.9	23
	C	7.3	4.2	29
Fair	E	11.9	6.9	23
	C	9.8	5.5	29
Poor	E	6.5	5.0	23
	C	8.6	6.9	29
Good + Fair	E	23.3	11.4	23
	C	17.6	8.4	29

.. cont'd

Focus	E	19.3	13.3	23
	C	26.3	20.1	29
Role	E	4.0	5.4	23
	C	5.1	6.4	29
Communication	E	14.3	6.7	23
	C	15.8	9.7	29
Total Errors	E	37.7	20.6	23
	C	44.4	28.9	29
Ivey Taxonomy				
Attending Behavior	E	47.2	26.4	23
	C	40.6	23.1	28
Open-Questions	E	5.1	3.3	23
	C	5.1	3.8	28
Closed-Questions	E	6.0	3.7	23
	C	10.4	6.7	28
Minimal Encouragers	E	26.3	19.6	23
	C	17.3	16.0	28
Paraphrases	E	6.7	6.5	23
	C	4.5	2.3	28
Reflection of Feeling	E	3.7	2.8	23
	C	1.7	1.6	28
Summarizations	E	.8	.9	23
	C	.1	.4	28
Verbal Microskills	E	63.6	33.0	23
	C	51.3	25.7	28
Total Microskills	E	90.2	51.2	23
	C	68.9	40.0	28

.. cont'd

Focus Dimension(IT)				
Helpee	E	47.5	24.9	23
	C	38.3	21.1	28
Helper	E	3.6	3.4	23
	C	3.0	3.1	28
Dyad	E	.2	.5	23
	C	.1	.3	28
Other	E	5.3	6.2	23
	C	6.0	6.9	28
Topic	E	4.1	4.7	23
	C	6.1	7.4	28
Non-Helpee Total	E	12.5	8.9	23
	C	15.1	11.7	28

Table 2

Univariate and Multivariate Analyses of Covariance on the Posttest Dependent Variables(x)

Dependent Variable	df	MS Between Groups	Univariate F	Multivariate F
Carkhuff Empathy	1, 46	.07	10.15 ***	3.50 ***
Discrim.	1, 46	.62	.93	
Empathy Construct	1, 46	1749.10	7.60 **	
Therapist-Error Good	1, 46	33.34	5.37 *	
Therapist-Error Fair	1, 46	39.25	1.35	
Therapist-Error Poor	1, 46	35.15	1.17	
Therapist-Total Errors	1, 46	674.94	.33	
Attending Beh.	1, 46	576.30	.95	
Open-Quest.	1, 46	13.39	.02	
Closed-Quest.	1, 46	29.88	7.70 ***	
Minimal Encouragers	1, 46	308.44	2.88	
Paraphrases	1, 46	22.86	2.73	
Reflection of Feeling	1, 46	5.12	8.73 ***	
Summarization	1, 46	.43	15.67 ***	

* $p < .05$
** $p < .01$
*** $p < .001$

(x) Source of variation E-group vs. C-group

Table 2 cont'd...

Dependent Variable	Adjusted Means E-Group	C-Group
Carkhuff Empathy	2.07	1.83
Discrimination	3.90	4.12
Empathy Construct	186.50	154.13
TECL (Good)	11.58	7.68
TECL (Fair)	12.07	9.95
TECL (Poor)	6.02	7.89
TECL Total Errors	37.43	41.79
Attending Behavior	47.07	40.23
Open Questions	5.07	5.21
Closed Questions	5.83	10.25
Min. Encouragers	25.76	17.08
Paraphrases	6.75	4.45
Ref. of Feeling	3.67	1.73
Summarizations	.85	.09

indicates there was a significant post-training difference between the two groups on the variable of communicated empathy (F = 10.15, p < .01). The means for the E-group and C-gr oup were 2.04 and 1.87 respectively. Table 1 indicates that the difference between the groups was in the predicted direction.

Hypothesis 1b:

At post-training, the experimental-group exhibits a significantly higher level of empathy than the control-group, as measured bt the Empathy Construct Rating Scale.

Findings. The univariate analysis of covariance indicates that there was a significant post-training difference between the two groups on this empathy scale (F = 7.03, p < .01). The means for the E-group and C-group were 188.8 and 151.9 respectively. Table 2 indicates that the difference between the groups was in the predicted direction.

Hypothesis 1c:

At post-training, the experimental group exhibits a significantly higher use of the microskills than the control-group, as measured by the Ivey Taxnomy.

Findings. The univariate analysis of covariance indicates that for the total number of microskills (F = 2.76, p > .05). There was no significant difference between the means (90.2 and 68.9 respectively) of the E-group and C-group, however the difference is in the

Table 3

Univariate Analyses of Covariance on Combined Posttest Dependent Variables

Dependent Variable	df	MS Between Groups	F	Sig. of F
Therapist-Error (Good+Fair)	1, 46	336.43	3.24	.49
Verbal Microskills	1, 46	1230.44	1.41	.24
Total Microskills	1, 46	1962.91	2.76	.10

Table 4

Univariate Analyses of Covariance of the Focus Dimension Variable of the Ivey Taxonomy for the Posttest Data

Focus	df	SS	MS	F	Sig. of F
Helpee	1, 46	22374.00	468.39	2.40	.12
Helper	1, 46	454.63	9.88	1.25	.26
Dyad	1, 46	7.81	.17	.53	.47
Other	1, 46	1939.74	42.17	.16	.69
Topic	1, 46	1860.68	40.45	.58	.44
Non-Helpee Total	1, 46	5189.69	112.81	.26	.61

predicted direction.

The univariate analysis of covariance on the individual microskills indicates that for three of the skills there is a significant difference between the groups in the predicted direction: (1) Reflection of Feeling ($F = 8.73$, $p < .01$), the means for the E-group and C-group are 3.7 and 1.7 respectively; (2) Summarizations ($F = 15.67$, $p < .01$), the means for the E-group and C-group are .8 and .1 respectively; and (3) Closed-Questions ($F = 7.70$, $p < .01$), the means for the E-group and C-group are 6.0 and 10.4 respectively (see Table 1 & 2). While the change in verbal attending statements, minimal encouragers, verbal microskills, total microskills, helpee-focused and non-helpee-focused statements was in the predicted direction, it was not statistically significant (see Table 1, 3 & 4).

Hypothesis 1d:

At post-training, the experimental-group exhibits significantly fewer errors of therapeutic communication than the control-group, as measured by the Therapist Error Checklist.

Findings. The univariate analysis of covariance indicates that for the total number of therapeutic errors made, the difference between the groups was in the predicted direction but was not significant ($F = .33$, $p > .05$) with the means of the E-group and C-group 37.7 and 44.4 respectively (see Tables 1 & 2). However for the category of

Good responses, the difference between the groups was significant and in the predicted direction (F = 5.37, p < .02) with the means of the E-group and C-group 11.4 and 7.3 respectively. For all other categories of this index, the differences between the groups were in the predicted direction but not statistically significant (see Table 1).

Hypothesis 1e:

At post-training, the experimental-group exhibits a higher facility to discriminate facilitative communications than the control-group, as measured by the Carkhuff Index of Discrimination.

Findings. The univariate analysis of covariance indicates the following for the post-training levels of discrimination (F = .93, p > .34). The means of the E-group and C-group 4.07 and 3.96 respectively (see Tables 1 & 2). This difference is not statistically significant nor is it in the predicted direction. A higher discrimination score indicates less facility to discriminate facilitative communications.

Hypothesis 2:

The experimental-group, in contrast to the control-group, exhibits a significant increase in the level of empathy from pretest to posttest, as measured bu the Carkhuff Empathy Scale.

Findings. ANOVA of the gain scores from pretest to posttest suggests the E-group, not the C-group had a significant increase in empathy (F = 4.95, p < .05). The

change was in the predicted direction (see Table 5). The pre-post means of the E-group were 1.73 and 2.04 with standard deviations of .31 and .22 respectively. The pre-post means of the C-group were 1.82 and 1.87 with standard deviations of .37 and .34 respectively.

Hypothesis 3:

The experimental-group members, in contrast to those in the control-group, exhibits a significant increase in ability to discriminate facilitative responses, from pre-test to post-test, as measured by the Carkhuff Index of Discrimination.

Findings. ANOVA of the gain scores from pretest to posttest failed to indicate a significant difference between the groups ($F = 1.68$, $p > .05$) (see Table 5). The respective pre-post means for the E-group were 4.30 and 4.07, with standard deviations of .94 and.99. The respective pre-post means for the C-group were 3.94 and 3.96, with standard deviations of .75 and 1.07. Even though the E-group's change was in the predicted direction, it was not statistically significant. The C-group' scores decreased from pretest to posttest but this change was not statistically significant.

Hypothesis 4:

At the 9 month follow-up, the experimental-group exhibits a higher level of performance than the control-group on the dependent variables (when taken

Table 5

ANOVA on the Gain Scores from Pretest to Posttest on Carkhuff Empathy and Discrimination

Source of Variation	Dependent Measure	df	SS	MS	F
E-Group vs. C-Group	Empathy	1, 40	129.19	11.64	4.59**
	Discrimination	1, 40	1.05	.62	1.68

** $p < .05$

together).

Findings. Table 6 reports the numbers of subjects, means and standrd deviations for the dependent variables at follow-up. Table 7 indicates that with respect to the overall effect on the follow-up data, the difference between the two groups was not significant ($F = .47$, $p > .05$). While the multivariate F was not significant, the univariate Fs were examined to determine whether there was support for Hypotheses 4a through 4e.

Hypothesis 4a:

At the 9 month follow-up, the experimental-group exhibits a significantly higher level of therapeutic empathy than the control-group, a measured by the Carkhuff Empathy Scale.

Findings. The univariate analysis of covariance indicates the following ($F = 1.85$, $p > .05$). The respective means for the E-group and C-group were 1.53 and 1.38 (see Tables 6). The difference between the two groups was not statistically significant but was in the predicted direction (see Table 6 & 7).

Hypothesis 4b:

At the 9 month follow-up, the experimental-group exhibits a significantly higher level of empathy than the control-group, as measured by the Empathy Construct Rating Scale.

Table 6

Means and Standard Deviations of the

Dependent Variables at the 9 Month Follow-Up

Dependent Variable	Group	Mean	Std. Dev.	N
Empathy	E	1.53	.30	8
	C	1.38	.37	15
Discrim.	E	3.78	.48	8
	C	3.58	.90	14
Empathy Construct	E	192.13	56.55	8
	C	174.87	29.99	16
Therapist-Error Checklist				
Good	E	8.3	3.9	8
	C	6.4	2.7	15
Fair	E	10.8	4.9	8
	C	9.2	5.4	15
Poor	E	5.6	5.5	8
	C	7.5	6.5	15
Good + Fair	E	19.0	4.6	8
	C	15.6	6.3	15
Focus	E	17.9	12.9	8
	C	19.5	16.2	15
Role	E	4.9	8.3	8
	C	7.9	8.3	15
Communication	E	11.4	6.0	8
	C	11.8	8.4	15
Total Errors	E	34.1	24.7	8
	C	39.3	26.1	15

.. cont'd

Ivey Taxonomy Attending Behavior	E	37.6	23.4	8
	C	25.7	12.9	15
Open-Quest.	E	4.4	3.2	8
	C	4.5	5.4	15
Closed-Quest.	E	6.3	3.8	8
	C	7.2	5.7	15
Min. Encourag.	E	17.1	15.6	8
	C	9.3	10.8	15
Paraphrases	E	4.5	2.8	8
	C	3.3	3.6	15
Ref. of Feel.	E	2.9	3.1	8
	C	1.2	.9	15
Summarizations	E	1.6	1.7	8
	C	.4	.8	15
Verbal Microskills	E	51.0	27.3	8
	C	35.2	17.2	15
Total Microskills	E	68.1	41.7	8
	C	44.1	24.5	15
Focus (IT)				
Helpee	E	34.1	23.2	8
	C	27.1	14.2	15
Helper	E	5.3	5.3	8
	C	5.5	9.2	15
Dyad	E	.4	.5	8
	C	.7	1.4	15
Other	E	7.4	6.9	8
	C	6.9	7.2	15
Topic	E	4.0	2.9	8
	C	4.5	4.9	15
Non-Helpee Total	E	17.0	12.7	8
	C	17.5	19.4	15

Table 7

Univariate and Multivariate Analyses

of Covariance on the 9 Month Follow-Up Data (x)

Dependent Variable	df	MS Between Groups	Univariate F	Multivariate F
Carkhuff Empathy	1, 17	.13	1.13	.47
Discrim.	1, 17	.52	.51	
Empathy Construct	1, 17	2014.10	1.10	
Therapist-Error, Good	1, 17	9.52	.06	
Therapist-Error, Fair	1, 17	33.04	.09	
Therapist-Error, Poor	1, 17	38.19	1.92	
Therapist-Error, Total Errors.	1, 17	671.77	1.30	
Attending Behavior	1, 17	268.38	.06	
Open-Questions	1, 17	25.64	.45	
Closed-Questions	1, 17	28.41	1.18	
Minimal Encouragers	1, 17	164.50	.28	
Paraphrases	1, 17	7.95	.13	
Reflection of Feeling	1, 17	3.58	.47	
Summarization	1, 17	1.59	2.40	

** $p < .05$ (x) Source of variation E-group vs. C-group

Dependent Variable	Adjusted Means E-Group	C-Group
Carkhuff Empathy	1.57	1.39
Discrimination	3.55	3.80
Empathy Construct	195.16	170.65
TECL (Good)	7.82	7.43
TECL (Fair)	10.56	9.65
TECL (Poor)	4.27	8.74
TECL Total Errors	29.11	44.58
Attending Behavior	33.74	31.66
Open Questions	3.69	5.47
Closed Questions	5.46	8.48
Min. Encouragers	15.56	12.02
Paraphrases	4.36	3.80
Ref. of Feeling	2.43	1.75
Summarization	1.56	.46

Findings. The univariate analysis of covariance indicates the following (F = 1.10, p > .05). The means of the E-group and C-group were 192.1 and 174.9 respectively (see Tables 6 & 7). The difference between the groups was not statistically significant but was in the predicted direction (see Table 6).

Hypothesis 4c:

At the 9 month follow-up, the experimental group exhibits a significantly higher use of the microskills than the control-group, as measured by the Ivey Txonomy.

Findings. The univariate analysis of covariance indicates that for the total number of microskills used (F = .67, p > .05), the means of the E-group and C-group were 68.1 and 44.1 respectively (see Table 6). While the difference between the two groups was in the predicted direction, it was not statically significant (see Tables 6 & 7). Furthermore, the univariate analysis on the focus dimension of the Ivey Taxonmy indicates no significant difference between the two groups on this measure (see Table 9). The differences between the E-group and C-group on all subcatagories of the IT, except for open-questions and other focus, was in the predicted direction, but did not reach statistical significance (see Tables 6, 7, 8 & 9).

Table 8

Univariate Analyses of Covariance on Combined Dependent Variables at the 9 Month Follow-Up

Dependent Variable	df	MS Between Groups	F	Sig. of F
Therapist-Error (Good+Fair)	1, 49	45.49	.47	.49
Verbal Microskills	1, 49	85.94	.13	.72
Total Microskills	1, 19	928.70	.67	.42

Table 9

The Focus Dimension Variable of the Ivey Taxonomy: Univariate Analyses of Covariance of the 9 Month Follow-up Data

Focus	df	SS	MS	F	Sig. of F
Helpee	1, 19	1285.25	67.64	.37	.54
Non-Helpee	1, 17	6667.26	329.19	.25	.62

Hypothesis 4d:

At the 9 month follow-up, the experimental-group exhibits significantly fewer errors of therapeutic communication than the control-group, as measured by the Therapist Error Checklist.

Findings. The univariate analysis indicates the following for the total number of therapeutic errors made ($F = 1.31$, $p > .05$). The means of the E-group and C-group were 34.1 and 39.3 respectively (see Tables 6 & 7). This difference, while in the predicted direction, is not statistically significant. On all subcategories of this instrument, the differences between the E-group and C-group were in the predicted direction but the differences were not statistically significant (see Tables 6, 7 & 8).

Hypothesis 4e:

At the 9 month follow-up, the experimental-group exhibits a significantly higher facility to discriminate facilitative communications than the control-group, as measured by the Carkhuff Index of Discrimination.

Findings. The univariate analysis indicates the following ($F = .45$, $p > .05$). The means of the E-group and C-group were 3.78 and 3.58 respectively (see Table 6 & 7). This difference is not in the predicted direction and is not statistically significant (see Table 7).

Summary of Statistical Tests

MANOCOVA produced a significant F ($p < .05$) In support of the main effect, Hypothesis 1, indicating that the E-group performed significantly better than the C-group on the dependent measures at postest. Significant univariate Fs in the predicted direction for Hypothesis 1a-Carkhuff Empathy, Hypothesis 1b-Empathy Construct, reflection of feeling, summarization, closed-questions from Hypothesis 1c, and Good therapeutic responses from Hypothesis 1d, contributed to the significant main effect. All other dependent measures, with the exception of open-questions, changed in the predicted direction but the change was not statistically significant.

ANOVA produced a significant F in support of Hypothesis 2 indicating that the E-group, in contrast to the C-group, significantly increases their performance on the Carkhuff Empathy from pretest to posttest. ANOVA failed to produce a significant F for Hypothesis 3, indicating no significant differences between the E-group and the C-group in terms of change in discrimination from pretest to postest.

MANOCOVA failed to produce a significant F for Hypothesis 4-the follow-up dependent measures, indicating no significant differences between the E-group and C-group at the 9-month follow-up on the dependent measures. Furthermore, there were no significant univariate Fs for the

remaining hypotheses, Hypotheses 4a through 4e. On all posttest dependent measures, with the exceptions of discrimination and open-questions, change was in the predicted direction but was not statistically significant.

Interpretation and Discussion of Results

Interpretation and Discussion of Findings for Hypothesis 1

The results of MANOCOVA indicate support for this hypothesis. The findings strongly suggest that microtraining is an effective method for increasing nursing trainees' skills in several dimensions of therapeutic communication. A variety of important therapeutic abilities were measured. These include the ability to empathize, the ability to discriminate facilitative communications, the ability to use microskills of communication, the ability to make good therapeutic responses and the ability not to make therapeutic errors of communication. MANOVA indicates that the E-group performed significantly better than the C-group on the measured therapeutic dimensions when the dimensions are analyzed together for this overall main effect.

Equally significant is the fact that many of the therapeutic dimensions assessed were not theoretically linked to the microcounselling framework. This suggests that training in the microskills, via the microcounselling methodology, leads to growth in other areas of therapeutic functioning for which there was no specific training (e.g.,

empathy). These findings affirm an earlier set of results with graduate nurses, where an increase in helper functioning was demonstrated on a variety of similar variables both yoked and not yoked to microcounseling theory (Hearn, 1976). It appears then, that microcounselling can be an effective training paradigm with second year diploma-program nursing students. Furthermore, these data support group-instruction in microcounselling.

Interpretation and Discussion of Findings for Hypothesis 1a

Univariate analysis of covriance suggest, that the performance on the Carkhuff Empathy Scale significantly contributed to the significant multivariate F. The main effect seen in Hypothesis 1 is in part accounted for by the significant performance on this scale. The findings further suggest that, as result of the microtraining, the experimental-group trainees had a significantly greater ability to empathize than the control-group trainees who did not receive any training. This is understandable as the experimental-trainees were also significantly better than the control-trainees in reflection of feeling (see Table 2), and also made more post-training attending comments and paraphrases than the control-trainees (see Table 1). Together, the presence of verbal attending, paraphrases and reflection of feeling have been positively related to empathy (Ivey, 1983).

It should be noted however, that at post training, neither group had achieved a level of empathic functioning

considered the minimally facilitative level of 3.00 on the Carkhuff scale (Carkhuff, 1969). The means for the E-group and C-group are 2.04 and 1.87 respectively (see Table 1). It appears that with such low-functioning trainees, as the pretests suggest they are, more extensive training specifically in empathy might be required to bring these subjects to a facilitative level of functioning. These results are consistent with earlier findings with respect to level of empathic functioning achieved after short-term training. Wood (1982) was unable to bring third year medical students to a facilitative level of empathy after a nine week Human Relations Interviewing skills course focusing on empathy, and LaMonica et al. (1976) were unable to bring graduate nurses to a facilitative level of empathic functioning after a seven week staff development program based on Carkhuff methods. The results of this experiment are encouragingly supportive of microcounselling as an approach to empathy training.

Interpretation and Discussion of Findings for Hypothesis 1b

Univariate analysis of covariance indicates that the performance on the Empathy Construct Rating Scale significantly contributed to the significant multivariate F. The main effect seen in Hypothesis 1 is in part accounted for by the significant performance on this scale. The Empathy Construct Rating Scale, in contrast to the Carkhuff Empathy Scale, does not measure the ability to communicate empathy. This scale tends to indicate more about empathy

knowledge and empathic self-view (LaMonica, 1981). The experimental-trainees see themselves as having more of the characteristics of an empathic person, as well as doing more of the kinds of things an empathic person would do. They are more aware of the kinds of activities related to empathy. This strongly suggests that training in the microskills leads not only to an increase in ability to communicate empathically, as demonstrated in Hypothesis 1, but an increase in the trainees' empathic knowledge. As this instrument is largely experimental, it is difficult to state the relationship between high scores on it and an increased ability to empathize. These particular results suggest little relationship between the Carkhuff Empathy Scale and the Empathy Construct Rating Scale. The Pearson correlation between these two variables is .05 for participants in this study.

Intrpretation and Discussion of Findings for Hypothesis 1c

Univariate analysis of covariance of the IT suggests that the performance on the total use of the microskills did not contribute to the significant multivariate F. Change on the total use of microskills was in the predicted direction. However, for two of the six microskills (reflection of feeling & summarizations), the experimental-group showed a statistically significant higher use of these skills than the control-group (see Table 2). Therefore, the performance on these two skills did contribute to the significant main

effect in Hypothesis 1. Furthermore, these skills are generally recognized as higher level skills than those of attending behavior and minimal encouragers (Ivey & Authier, 1978).

Lack of significant effect with respect to the total use of microskills may be explained in part by the fact that the E-group and C-group averaged 47.2% and 40.6% of their total skills as verbal attending. It could be argued that even though these subjects were low-functioning communicators at pre-training, they would be expected to be helpee-oriented in their verbal interactions by virtue of the patient focus in their training. Where such a high percentage of their responses are attending, the margin for expected increase would be small. Otherwise, the difference between the groups with respect to the higher level skills is impressive.

The E-group asked significantly less closed-questions than the C-group (see Table 2). This contributed to the significant main effect seen in Hypothesis 1. While there are circumstances where closed-questions are appropriate, such as in filling out a work-history in an employment interview, it is generaly agreed that closed-questions tend to be used more frequently by inexperienced or beginning helpers. As well, closed-questions tend to both inhibit client communication and exploration of client concerns. For this reason, the E-group's lower use of closed-questions is viewed as a positive sign.

With respect to verbal attending, minimal encouragers, overall use of microskills, helpee-referenced and non-helpee-referenced statements, change was in the predicted direction but was not statistically significant.

Interpretation and Discussion of Findings for Hypothesis 1d

Univariate analysis of covariance of the Therapist Error Checklist suggested that performance regarding total errors made did not contribute to the significant multivariate F. However the E-group did make significantly more Good (error free) statements than did the C-group ($F = 5.37$, $p < .02$). This contributed to the significant main effect seen in Hypothesis 1. Performance on all subcategories of this instrument was in the predicted direction but did not reach statistical significance (see Tables 1, 2 & 3).

Interpretation and Discussion of Findings for Hypothesis 1e

Univariate analysis of covariance of the Index of Discrimination suggested that performance on this instrument did not contribute to the significant mulitvariate F. Furthermore change was not in the predicted direction. While not at a statistically significant level, the C-group were better able to discriminate facilitative responses than the E-group at post-training (see Table 1). This in part may be explained by the fact that at pre-training, the C-group had a higher ability to discriminate than the E-group with ($F = 1.42$, $p < .10$). Furthermore, it can be

noted that the E-group improved their functioning from pre- to post-training on this variable whereas the C-group showed a decrease. It could be argued that empathy and therapeutic errors may be conceptually linked to the microskills. Therefore, as microskills functioning increase one should be more empathic and make less communication errors. The ability to discriminate however, appears to be a function of the trainee's initial level of both discrimination and communication (Carkhuff,1969). Carkhuff further indicated that the best prediction of future discrimination is previous discrimination scores. Discrimination appears unrelated to communication among low-level communicators, in that direct training in discrimination appears to be required for these trainees in order for them to improve their discriminative functioning. The subjects of this present study, with pre-training means in discrimination of 3.94 - 4.30 , would be classified as low-level discriminators (Carkhuff, 1969). Therefore, it is understandable why evidence in support of this hypothesis was not forthcoming given the trainees' low-level of both communication and discrimination at pre-training.

Interpretation and Discussion of Findings for Hypothesis 2

Both groups showed an increase in their ability to empathize, however only the E-group's change was significant (see Table 5). The pre-training level of empathy for the E-group was lower than that of the C-group. Not only was there a significant increase in the E-group's level of

functioning from pre-test to post-test but the E-group had a significantly higher level of post-training empathy than did the control-group.

It may be noted, that pre-training levels of empathy for both groups were quite low and do not approach the minimally facilitative level. At pre-training all subjects in this study have completed the formal instructional part of their nursing program. This low level of empathy among nurses is consistent with the findings outlined in Chapter 1. However, the evidence here strongly suggests that nursing students can increase their empathic communication as a result of microcounselling.

Interpretation and Discussion of Findings for Hypothesis 3

The results of the data analysis fail to reject the null-hypothesis at an acceptable level of probability. The E-group's change was in the predicted direction but was not statistically significant. It should be noted that the C-group experienced a decrease in their ability to discriminate from pre-test to post-test. However this decrease was not statistically significant. There appears to be very little in these results to suggest that training in microskills translates into improved ability to discriminate facilitative communications.

Interpretation and Discussion of Findings for Hypothesis 4 to 4e

The results of MANOCOVA indicated that that at the 9 month follow-up, there was no statistically significant

difference between the groups on the dependent variables considered together (see Table 7). Furthermore, univariate analyses of covariance indicates that for all dependent measures and subcategories of these measures, there was no statistical significance between the groups at follow-up. Much of the gain made by the E-group following training appears to have been lost. This finding is consistent with the limited research on follow-up which suggests that skills gained through microcounselling tend to decay as a function of time. This is particularly true where no effort is made to practice the skills nor follow-up training given (Kasdorf & Gustafson, 1978). It should be noted that high attrition at follow-up cautions interpretation of these results. However, on all dependent measures and subcategories of these measures, with the exception of discrimination and open-questions, changes were in the predicted direction but were not statistically significant.

In the 9 month period following the training program, these nursing students were engaged in a full-time clinical internship. An analysis of this training experience indicates that these students generally had little or no time to systematically practice the skills learned through microtraining. Furthermore, no effort was made to do follow-up training with them. Karshmer and LaMonica (1976) indicated that baccalaureate nursing students did not increase their empathy following a clinical placement in psychiatry. It is therefore understandable why a general

clinical placement, such as the subjects of this experiment had during the follow-up period, would not be overly reinforcing for the skills learned through microtraining. Furthermore, as pre-training levels of both empathy and discrimination were low for the subjects of this experiment, the findings here are consistent with the notion that nursing programs in general do little to explicitly teach these skills (Clark, 1981).

With respect to Hypotheses 4a to 4e, the following points seem worth considering:

1. Both group's levels of empathy on the Carkhuff Scale dropped below their pre-training levels. This drop was statistically significant for the C-group ($F = 3.67$, $p < .01$). The drop in empathy by both groups may be partially explained by an earlier finding which suggests that the gestalt of nursing education tends to dampen creativity or complexity (constructs associated with acceptance) and that this is a partial function of the socialization process (Eisenman, 1970). It therefore might be argued that the seven month clinical placement may have negatively influenced the empathic functioning of this group. However , it can be noted that the E-group's functioning on this variable was not significantly affected suggesting the skills acquired are resilient.

2. Both groups showed an increase in their empathy from posttest to follow-up, as measured by the Empathy Construct Rating Scales. This suggests that these students

tend to rate themselves as more empathic than before even though their ability to communicate empathy is lower. While the results tend to support the efficacy of microcounselling for positively influencing the trainee's knowledge of empathy, this appears to have very little relationship to the trainee's actual ability to communicate empathy.

3. With respect to the IT, patterns of variability between the groups vary from skill to skill. For attending behavior, minimal encouragers, reflection of feeling, summarizations, verbal microskills and total microskills, the C-group' performance was less variable than that of the E-group. For questioning and paraphrases, the E-group's performance was less variable than that of the C-group, however the differences here were small.

4. Lack of change in the relative position between the groups on the Index of Discrimination at follow-up is understandable, as it would be unreasonable to expect the experimental-trainees to improve in their ability to discriminate over the follow-up period when there was no effort to teach discrimination nor was there any follow-up microtraining given. Both groups' discrimination score was lower than their respective post-training levels (see Tables 1 & 6). This drop in discrimination is not statistically significant.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Chapter 5 includes a summary of this study, the conclusions with respect to the research questions posed, and a set of recommendations based on the perceived need for further research in this area.

Summary

The importance of communication skills and in particular empathy, within nursing, has been well documented (LaMonica, 1979, 1981). However, evidence suggests that very little time is actually spent explicitly teaching these skills within the gestalt of nursing education (Clark, 1981). Within the field of counselling psychology, methodology for training in skills of therapeutic communication exists (Ford, 1979). One of the most widely reported of such methods is microcounselling (Ivey, 1971; Ivey & Authier, 1978; & Kasdorf & Gustafson, 1978). Studies reporting the application of microcounselling to nursing training are few and with mixed results. The studies which have been conducted, for the most part have been methodologically weak and have lacked follow-up. This study, measured the acquisition and retention of six

interviewing skills of second year RN diploma nursing students.

A class of 60 nursing students, at the end of their second year of a two year, eight month RN diploma program, agreed to participate in this research. These students, range in age from 18 to 36. The 4 males of this sample were dropped from the study. There was a further attrition of 4 subjects, leaving a sample of 53 (E-group = 24, C-group = 29).

Prior to the training program, all subjects completed the Carkhuff Indicies of Discrimination and Communication. The subjects were then randomly assigned to either the experimental-training-group or a non-attention control-group. The experimental-trainees then had an approximately 25 hour microtraining program given by this researcher in the following six communication skills: attending behavior, questioning, minimal encouragers, paraphrases, reflection of feeling and summarizations. Following training, the subjects completed the Indicies of Discrimination and Communication as well as The Empathy Construct Rating Scale. The subjects then made a 10-15 minute audio-taped interview in which each subject assumed the role of a helping nurse. These interviews were rated for the presence of interviewing skills on the Ivey Taxonomy and errors of therapeutic communication on the Therapist Error Checklist. A 9 month follow-up assessment was conducted at the completion of the RN program. At that time

the subjects again completed an audio-taped interview as well as the other assessment devices. Twenty-four of the original 53 subjects participated in this follow-up (see Appendix F).

Three raters were used in this study. Two psychologists with Ph.Ds rated all post-test and follow-up audio-tapes for microskills and therapeutic errors. They achieved an overall interrater agreement of 92% on the Ivey Taxonomy and intrarater agreements of 97% and 98% respectively on this instrument. On the Therapist Error Checklist, these raters achieved an overall interrater agreement of 96% and respective intrarater agreements of 84% and 81%. The other rater scored the Carkhuff Empathy Scale. He and this researcher achieved an interrater reliability of r = .93. He achieved an intrarater reliability of r = .95.

The SPSS (version 7-9) was used to compute MANOCOVA. A probability level of .05 was accepted as the level of significance for the null hypothesis. MANOCOVA was used to test for significance with respect to Hypothesis 1 for the main effect. MANOCOVA was also used to test for significance with respect to the follow-up data - Hypothesis 4. Pre-test scores on empathy and discrimination were used as covariates. Analysis of variance was used to compare means for Hypotheses 1a through 1e and Hypotheses 4a through 4e. ANOVA of the gain scores was used to compare pre-post means for Hypotheses 2 & 3.

Limitations of this Study

1. This study was limited to female nursing students at the end of their second year of study in a two year, eight month R.N. diploma program.

2. This study did not employ an attention control-group.

3. Small numbers of subjects included in the 9-month follow-up suggest the conclusions derived from the follow-up data be treated cautiously.

Conclusions

Fourteen hypotheses were formulated to test the 7 research questions posed in Chapter 1. As a result of testing for the hypotheses, conclusions regarding these research questions will now be presented.

Question 1

Will those nursing students who participate in the microcounselling training (the experimental-group), demonstrate a significantly higher overall level of performance on the dependent variables than the non-participating students (the control-group)?

Hypothesis 1 addresses this question directly. MANOCOVA gives a significant F. It is concluded, that with respect to overall functioning on the dependent variables, the group of nursing students participating in the microtraining significantly out-performed the group who did

not have the training. Furthermore, this research design suggests that this difference between the groups was due to the microtraining. Of the nursing studies reviewed, this appears to be the most convincing evidence to date of the efficacy of microtraining with this occupational group. Hearn (1976) in a well controlled study however, was able to indicate the efficacy of microtraining with graduate nurses on a variety of similar dependent measures. No studies have been reviewed here indicating this degree of success with nursing students and in particular RN diploma students. It is concluded that microcounselling is not only an effective training paradigm but that its application within the gestalt of nursing education is supported.

Question 2

Will the experimental-group demonstrate significantly higher post-training levels of empathy than the control-group?

Hypotheses 1a & 1b address this question. Univariate Fs for hypothesis 1a (Carkhuff Empathy Scale) and for hypothesis 1b (Empathy Construct Rating Scale) were significant. Regarding both communicated empathy and knowledge of empathy, the experimental-trainees significantly outperformed the control-trainees. It appears that microtraining in these six microskills is an effective method for increasing empathic functioning with this population. The fact that the E-group did not achieve a minimally facilitative level of empathy as a result of the

microtraining is understandable given their low level of pre-training functioning in empathy and discrimination. This result is consistent with earlier findings on empathy (Carkhuff, 1969; Crabb et al., 1983; Toukmanian et al., 1978; & Wood, 1982).

It appears that in order for these trainees to achieve minimally facilitative empathy, a more intense focus on empathy within microtraining would be required. The time spent for training would perhaps have to be spent specifically on teaching empathy or empathy related skills such as reflection of feeling and paraphrasing. Given that a considerable portion of the training time in this study was spent on other skills, the post-training difference between these groups is strong support for the efficacy of microcounselling for teaching nursing students the core condition of empathy.

Question 3

Will the experimental-group demonstrate a significantly higher post-training application of the microskills than the control-group?

Hypothesis 1c specifically addresses this question. A significant effect for the total use of the microskills was not found. However, the E-group performed significantly better than the C-group on reflection of feeling, summarizations and closed-questions. Change on other subcategories of the IT were in the predicted direction but were not statistically significant.

While the E-group's overall use of the microskills was not significantly higher than that of the C-group's use of these skills, the E-group use of a number of the higher level microskills was significant. As well, the E-group used more of all of the other microskills than the C-group with the exception of open-questions on which the groups were equal. It is therefore concluded, that microtraining appears to be an effective method for increasing the use of microcounselling skills with nursing students.

Question 4

Will the experimental-group demonstrate a significantly lower post-training number of errors of therapeutic communication than the control-group?

Hypothesis 1d specifically addresses this question. A significant effect for the total number of therapist errors was not found. However, the E-group made significantly more Good therapeutic responses than the C-group. Change on all other subcategories of the Therapist Error Checklist were in the predicted direction but were not statistically significant. These results appear to indicate that the E-group performed better than the C-group with respect to functioning in therapeutic communication. This pattern of responding on the Therapist Error Checklist is consistent with earlier findings with beginning helpers (Evans, et al., 1978; Hearn, 1976; & Uhlemann, 1980).

In an effort to explain the lack of significant effect regarding the total number of therapist errors made, several

points seem relevant:

1. The microtraining in this study appears to be the first significant effort to teach these students the skills of therapeutic communication. The nursing training in communications for nursing students has been largely didactic and cognitive focused. Their low-level of pre-training empathy supports this assertion.

2. As such, these students had little past opportunity to practice these kinds of skills. It is therefore highly unlikely that these students would have internalized any of their higher level skills. From the perspective of therapeutic communication, these students are truly at the beginning stage.

3. While the microtraining did include a sequence on skill-integration, no effort was made to teach these students how to do psychotherapy. The Therapist Error Chechlist does assess dimensions of the helping relationship which are not simply a function of possessing generic skills of communication.

4. It may be argued that much of what these students encounter in nursing communication may be at variance with that which is psychotherapeutic. Certainly the literature on communication in nursing supports this premise. The experimental-trainees may have had to unlearn unproductive communication styles as well as try to learn the microskills.

With these points in mind, the gains made by the

E-group on this variable are indeed quite impressive. It is concluded therefore that microtraining is an effective method for improving therapeutic communication and therefore reducing therapeutic errors with nursing students.

Question 5

Will the experimental-group demonstrate a significantly higher post-training level of discrimination than the control-group?

Hypothesis 1e specifically addresses this question. A significant effect with respect to discrimination was not found. Furthermore, the observed change was not in the predicted direction. At post-training, the C-group had a higher facility to discriminate facilitative communications than did the E-group. This difference was not significant.

There are activities within the microtraining format that are specifically intended to help the trainee discern the use and non-use of the various skill dimensions. However, it appears that this component of the training is not sufficient to have it translate into improved discrimination as measured by the Carkhuff Index of Discrimination. It is therefore concluded, that microtraining in the six skills of communication alone appears not to be sufficient for discrimination training with nursing students.

Question 6

Will the experimental-group, in contrast to the control-group, demonstrate a significant increase, from

pretest to posttest, in their ability to both discriminate facilitative responses and communicate empathy?

Hypotheses 2 & 3 specifically address this question. With respect to discrimination, there was no significant pre-post change in either group in their ability to discriminate facilitative responses. The E-group however, showed an increase in ability whereas the C-group showed a decrease. At post-training both groups would be still regarded as low-level discriminators. These results support an earlier conclusion that, among low-level discriminators, increase in ability to discriminate is a function of the trainee's initial level of discrimination (Carkhuff, 1969). Taken together with the results from question 6, there appears little within the parameters of this study to support microtraining as a discrimination training methodology for nursing students. It might be argued however, that were these subjects functioning at a higher level of discrimination, more substantial changes in this ability over training might be expected. It is concluded therefore, that lack of significant effect on this variable is not to be taken as a sign of inadequacy of microcounselling but as a function of the following two factors operating within this study: (1) these subjects were low-level discriminators initially, and (2) specific training in discrimination was not offered.

With respect to empathy, the E-group showed a significant pretest-posttest increase whereas the C-group

did not. Neither group achieved minimally facilitative empathic functioning. In part, this appears to be a function of the subject's initial low-level of functioning on this variable. Earlier findings indicate that trainees functioning at low-levels of communication tend to gain the least from training (Carkhuff, 1969). Taken together with the findings from question 2, there is convincing evidence here in support of microtraining in these microskills as an effective method of increasing the level of empathic functioning of nursing students.

Question 7

Will the experimental-group maintain the skills at at 9 month follow-up?

Hypotheses 4 through 4e address this question. MANOVA of the follow-up data indicates that there is no statistically significant overall difference between the groups on the dependent variables at the follow-up period. Furthermore, there is no statistically significant difference between the groups on any of the individual dependent measures nor sub-catagories of the dependent measures at follow-up. Caution is warranted in interpretating the follow-up data. Only 24 of the original 53 subjects were able to be included in the follow-up data analysis. Of these, the C-group respondees out-numbered the E-group respondees 2 to 1.

On the surface it appears that the gains made by the E-group as a result of training, were lost at follow-up.

However, changes on all dependent measures and subcategories of these measures, with the exception of discrimination and open-questions, were in the predicted direction.

Lack of significant difference between the groups at follow-up is taken as support for earlier findings which suggest, that where there is no opportunity for follow-up training or practice, skills acquired through microtraining tend to diminish with time (Kasdorf & Gustafson, 1978). It is concluded that the the skills acquired by the E-group did show some maintenance at the follow-up period.

Support for Microcounselling Theory

The underlying propositions outlined in chapter 2 form the basis of microcounselling theory and thus represent the conceptual framework for this study. The five propositions are: 1. the importance of teaching a single skill, 2. the effectiveness of modelling, 3. self-observation and confrontation lead to behavior change, 4. reinforcing feedback leads to behavior change, and 5. microcounselling is real counselling. An important objective of this study was to offer support for microcounselling theory and thus support for these propositions. The microcounselling training in this study was conducted in accordance with the traditional microcounselling paradigm and thus included training segments incorporating the five underlying propositions of microcounselling theory. Therefore, the successful results reported in chapter 4 are interpreted by this researcher not only as support for the efficacy of the

microcounselling paradigm with nursing students, but also as support for the efficacy of microcounselling theory in general.

Anecdotal Findings

Microtraining appears to be a training format highly acceptable to nursing trainees. At several points during the approximately 25 hour microtraining program, most of the students reported to this researcher how pleased they were with the training experience. Several students reported that for the first time they felt they were actually learning to do the skills that were discussed in their lectures. Many suggested that this kind of training should have been done in their first year. As the training went on, several reported that they appeared to have new insights about people with whom they were relating. Several suggested that they found it easier to understand their patients and that they did not worry as much about saying the right thing.

As the training progressed this researcher observed an increase in the trainee's confidence as communicators. This observation appears to be supported by the E-group's superior performance on the Empathy Construct Rating Scale. The post-training findings suggest that this confidence is warranted. During the 9 month follow-up period many of the experimental-trainees came to this researcher and reaffirmed their positive feelings about what they had learned in the

microtraining. Two students did report however, that they were getting little opportunity to practice the skills but they felt that this kind of training should be included at the beginning of the nursing program.

Recommendations for Further Research

The following recommendations are suggested for further study:

1. As this study offered little in support of microtraining as training in discrimination, it would be useful to specifically design a microtraining program for discrimination training and test its efficacy.

2. Microtraining with first year diploma program nursing students would offer information on the generalizability of this training paradigm within this occupational group.

3. A study which would include microtraining throughout the RN program with follow-up a year after graduation would suggest not only the extent to which nursing students can be taught to communicate but also what effect the working nursing enviornment has on the maintenance of these acquired skills.

4. An evaluation of the outcome effects of skills learned on an index of patient improvement, would be useful.

5. An evaluation of the outcome effects of the skills learned with respect to general nursing performance

evaluation is recommended.

6. An evaluation of the outcome effects of skills learned on nursing student evaluation in the clinical area is recommended.

7. A series of studies comparing microtraining and other established training methods with RN students is recommended. A variety of outcome measures including nursing performance and patient response is suggested.

8. Future studies with nursing students should include male subjects.

9. As the microtraining format appears to be one with which the nursing students feel comfortable, the application of this paradigm to teaching nursing procedures other than communication should be investigated.

APPENDICES

APPENDIX A

The Ivey Taxonomy

THE IVEY TAXONOMY OF MICROTRAINING SKILLS

A. ATTENDING BEHAVIOR

A fundamental dimension of therapeutic attention which includes: appropriate eye contact, comfortable posture and verbal following.

B. ATTENDING MICROSKILLS

Closed Questions. Questions that can be answered with 'yes' or 'no' or just a few words.

Open Questions. Questions beginning with "what", "how", "why" or "could" and typically allow for a more self-explorative response.

Minimal Encouragers. A minimal response repeating the helpee's exact words or phrases. Also includes "Mm-mm", "uh-huh" or "Tell me more..."

Paraphrase. Selective attention to key content of helpee's past verbalization. Giving back the essence of these verbalization.

Reflection of Feeling. Selective attention to key affective aspects of helpee behavior.

Summarization. Like paraphrase or reflection of feeling except that it represents key segments or themes of helpee's thinking covering a longer period of time.

C. FOCUS DIMENSION

Helpee. Helpee's statement focuses on helpee and is often demonstrated by using helper's name, or "you".

Helper. The Helper makes an "I" statement.

Dyad. "I-you" focus. Includes attention to relationship between helper and helpee.

Others. Focus on another person not present in the helping situation at that point in time.

Topic. The subject of the essence of a special topic or problem and might include; marriage, work, abortion... .

APPENDIX B

Empathic Understanding in Interpersonal Processes: A Scale for Measurement

THE DESCRIPTION OF THE FIVE LEVELS OF EMPATHY

Level 1

At this level the helper communicates no awareness of even those obvious expressed surface feelings of helpee. The helper may in fact detract significantly from the verbal or behavioral expressions of the helpee.

Level 2

The helper may communicate some awareness of the obvious surface feelings of the helpee but tends to miss significant affect of the communication.

Level 3

The helper responds accurately to the surface feelings that the helpee but may not respond to or may misinterpret deeper feelings. At this level, the helper responses are essentially interchangeable with those of the helpee.

Level 4

The helper communicates his understanding of the helpee expression in a deeper level than they were expressed by the helpee. The helper responses adds to that of the helpee in that the helper communicates a level of understanding at a deeper level than the helpee was unable to previously express.

Level 5

The helper responds accurately to the helpee's deeper as well as surface feelings. Helper responses would assist in expressing feelings that were previously beyond the helpee's immediate awareness. Communication of the helper is a comprehensive and accurate understanding of the helpee's feelings.

APPENDIX C

The Empathy Construct Rating Scale

APPENDIX D

The Therapist Error Chechlist

R.G. MATARAZZO CHECKLIST OF THERAPIST ERRORS

Major categories of errors

I. Errors in Focus

- relevance (includes unprofessional statement etc...)
- insufficient direction (includes allowance of side-track ...)
- fails to respond sensitively (includes inaccurate responses etc...)

II. Faulty Role Definition

- authoritian (includes criticizism etc...)
- social (includes inappropriate laughter etc...)

III. Faulty Facilitation of Communication

- (includes interruptions, awkwardness, etc...)

For a full explication of the subcategories see Ivey & Authier, 1978 or Matarazzo et al, 1966.

APPENDIX E

A Description of Helper Responses to Helpee Stimulus Expressions: An Index of Discrimination

Sixteen helpee expressions are included. The following are examples:

Helpee: 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, again, I wonder if there is more for me. Others say there has to be. I really don't know.

Helper Responses:

(1) Hmm. Who are these other people?
(2) So you find yourself raising a lot of questions about yourself - educationally, vocationally.
(3) Why are you dominated by what others see for you? If you are comfortable and enjoy being a housewife, then continue in this job. The role of mother, homemaker can be a full-time, self-satisfying job.
(4) While others raise these questions, these questions are real for you. You don't know if there is more out there for you. You don't know if you can find more fulfillment than you have.

Helpee: 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 group I was with.

Helper Responses:

(1) You know you have changed a lot. There are a lot of things you want to do but no longer can.
(2) You are dammed sure who you can't be any longer but you are not sure who you are. Still hesitant as to who you are yet.
(3) Who are these people that make you so angry? Why don't you tell them where to get off! They can't control your existence. You have to be your own person.
(4) So you have a social problem involving interpersonal difficulties with others.

Helpee: Gee, those people! Who do they think they are? I just can't stand interacting with them anymore. Just a bunch of phonies. They have 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.

Helper Responses:

(1) They really make you very angry. You wish you could handle them more effectively than you do.
(2) Damm, they make you furious! But it's just not them. It's with yourself, too, because you don't act on how you feel.
(3) Why do you feel these people are phony? What do they say to you?
(4) Maybe society itself is at fault here - making you feel inadequate, giving you this negative view of yourself, leading you to be unable to successfully interact with others. (Carkhuff, 1969)

For full descriptions see Carkhuff, 1969

APPENDIX F

Demographic Variables of the Total Sample

	Student #	Sex	Age	Marital Status	# of Children	Formal Education	Nursing Aptitude VA	NA	AP	LS	PS	RS	AT
E	599	F	18	S	1	High School	29	41	15	29	11	22	132
E e	106	F	19	S	0	H.S. & 1 College	30	53	27	29	37	25	174
E e	594	F	18	S	0	High School	46	42	22	28	22	30	168
E e	107	F	27	M	0	H.S. & Coll. T & T (NA)	67	45	24	41	32	39	224
E e	593	F	19	S	0	High School	44	49	25	28	26	19	166
E	108	F	29	M	0	H.S. & 1 Voc.	68	36	25	31	23	36	194
E	592	F	18	S	0	High School	28	37	21	25	20	23	133
E	591	F	19	S	0	High School	43	38	19	22	29	28	160
	110	F	20	S	0	H.S. & 1 Voc.	38	47	28	29	14	25	153
E e	590	F	21	S	0	H.S. & 1 Voc.	33	35	17	25	19	17	129
	499	F	20	S	0	High School	39	46	23	33	19	22	159
	498	M	33	M	0	H.S. & 1 Voc. & 1 sem. College	28	37	18	21	15	22	123
	204	M	27	S	0	H.S. & 1 Voc.							
E	496	F	18	S	0	High School	38	44	25	33	22	33	170
E e	206	F	20	S	0	H.S. & 1 Voc.	19	52	25	24	41	29	185
E	494	F	22	S	0	H.S. & 2 Voc.	28	37	19	29	25	24	143
E	207	F	18	S	0	High School	44	46	17	28	11	26	149
E	492	F	21	S	1	H.S. & 2 College	34	36	16	31	29	31	161
E	209	F	22	S	0	H.S. & 1 College	27	48	27	27	32	23	157
E e	601	F	19	S	0	H.S. & ½ College	40	51	26	23	19	23	156
E e	899	F	18	S	0	High School	43	48	25	31	12	23	157
	898	F	19	S	1	High School	28	50	25	31	17	26	152
E	897	F	19	S	0	High School	18	29	16	26	5	20	98
	896	M	30	S	0	H.S. & 1 Voc.	42	32	16	23	19	25	141
E	895	F	19	S	0	High School	43	52	26	31	26	32	184
E	894	F	19	S	0	High School	29	31	13	30	26	15	131
E	893	F	20	S	0	High School	35	31	16	33	23	22	144
E	892	F	19	S	0	High School	32	46	25	38	18	30	164
E	609	F	29	Sep	2	H.S. & 1 Voc.	67	51	27	32	26	31	207
E	891	F	20	S	0	High School	62	49	25	40	42	37	230

E - Experimental-group participants at posttest

e - Experimental-group participants at 9 - month follow-up

	Student #	Sex	Age	Marital Status	# of Children	Formal Education	Nursing Aptitude						
							VA	NA	AP	LS	PS	RS	AT
C	101	F	29	S	0	High School	27	53	27	20	24	28	152
C c	102	F	38	S	0	High School	55	36	21	28	19	26	164
	103	M	22	M	0	H.S. & 1 College	47	46	26	24	36	35	188
C c	597	F	29	S	0	High School	23	43	21	22	14	26	128
C c	104	F	29	S	0	High School	37	43	19	24	18	22	144
C c	596	F	21	S	0	High School	32	41	24	23	21	22	139
C c	105	F	29	S	0	High School	25	43	22	32	18	31	149
C	595	F	28	S	1	High School	43	29	18	33	21	30	166
C c	109	F	30	S	0	H.S. & 1 College							
C c	201	F	29	S	0	High School	50	47	26	37	17	34	185
C	202	F	26	S	0	High School	35	48	22	36	24	27	170
C c	203	F	36	S	2	H.S. & 1 Voc.	61	45	23	25	19	24	174
C	497	F	24	S	0	H.S. & NA Mip.	42	35	14	24	16	24	141
C	205	F	29	S	0	High School	65	44	25	29	24	38	200
C c	495	F	25	S	0	High School	43	54	25	35	11	39	182
C c	493	F	28	S	0	High School	38	51	26	36	17	23	165
C	208	F	28	S	0	H.S. & 1 College	45	37	28	35	37	38	192
C	491	F	24	S	0	H.S. & ½ College	40	55	27	24	24	24	167
C c	210	F	29	S	0	High School	44	47	22	14	29	32	166
C c	490	F	28	S	0	High School							
C c	602	F	23	S	0	H.S. & 2 Voc.	58	36	18	27	16	26	163
C c	603	F	29	S	0	High School	53	37	22	35	20	25	170
C	604	F	29	S	0	High School	25	31	17	32	22	21	131
C	605	F	24	S	0	H.S. & 1 Voc.	46	51	28	28	27	28	180
C	606	F	28	Sep.	1	H.S. & 1 Voc.	58	25	11	26	18	35	162
C c	607	F	22	S	0	H.S. & 2 College	33	45	21	33	15	28	154
C	608	F	24	S	0	H.S. & B.SA.	69	53	27	34	37	35	228
C	610	F	21	S	0	High School							
C c	890	F	18	S	0	High School	32	52	29	15	31	22	152
C	489	F	19	S	0	H.S. & 1 College	46	47	24	42	23	31	189

C - Control - group participants at posttest

c - Control - group participants at 9 - month follow-up

APPENDIX G

Pearson Correlations

Variable List

Var 1 - group
Var 2 - CarKhuff empathy pretest
Var 3 - CarKhuff empathy posttest
Var 4 - CarKhuff empathy follow-up
Var 5 - Empthyy Construct Rating Scale posttest
Var 6 - Empathy Construct Rating Scale follow-up
Var 7 - Discrimination pretest
Var 8 - Discrimination posttest
Var 9 - Discrimination follow-up
Var 10 - # statements Therapist Error CheckList posttest
Var 11 - Therapist Error Chechlist Good posttest
Var 12 - Therapist Error CheckList Fair posttest
Var 13 - Therapist Error CheckList Poor posttest
Var 14 - Therapist Error CheckList error category 1 posttest
Var 15 - Therapist Error CheckList error category 2 posttest
Var 16 - Therapist Error CheckList error category 3 posttest
Var 17 - Therapist Error CheckList total errors
Var 18 - # statements Therapist Error CheckList follow-up
Var 19 - Therapist Error CheckList Good follow-up
Var 20 - Therapist Error CheckList Fair follow-up
Var 21 - Therapist Error CheckList Poor follow-up
Var 22 - Therapist Error CheckList error category 1 follow-up
Var 23 - Therapist Error CheckList error category 2 follow-up
Var 24 - Therapist Error CheckList error category 3 follow-up
Var 25 - Therapist Error CheckList total errors follow-up
Var 26 - # microsKill statements posttest
Var 27 - Attending Behavior posttest
Var 28 - Open Questions posttest
Var 29 - Closed Questions posttest
Var 30 - Minimal Encouragers posttest
Var 31 - Paraphrases posttest
Var 32 - Reflection of Feeling posttest
Var 33 - Summarizations posttest
Var 34 - Helpee Focus posttest
Var 35 - Helper Focus posttest
Var 36 - Dyad Focus posttest
Var 37 - Other Focus posttest
Var 38 - Topic Focus posttest
Var 39 - Culture/Enviornment Focus posttest
Var 40 - Total MicrosKills posttest
Var 41 - Total Other Focus posttest
Var 42 - # microsKill statements follow-up
Var 43 - Attending Behavior follow-up
Var 44 - Open Questions follow-up
Var 45 - Closed Questions follow-up
Var 46 - Minimal Encouragers follow-up
Var 47 - Paraphrases follow-up
Var 48 - Reflection of Feeling follow-up
Var 49 - Summarizations follow-up
Var 50 - Helpee Focus follow-up
Var 51 - Helper Focus follow-up
Var 52 - Dyad Focus follow-up
Var 53 - Other Focus follow-up
Var 54 - Topic Focus follow-up
Var 55 - Culture/Enviornment follow-up
Var 56 - Total MicrosKills follow-up
Var 57 - Total Other Focus follow-up

Pearson Correlation Coefficients

NOTE: underscored significant (p < .05)

	var1	var2	var3	var4	var5	var6	var7	var8	var9	var10
var1	1.00	.13	-.27	-.20	-.41	-.21	-.21	-.05	-.13	-.18
var2	.13	1.00	.37	.16	-.03	.00	-.35	-.34	-.39	-.10
var3	-.27	.37	1.00	.26	.16	.09	-.26	-.24	-.40	-.13
var4	-.20	.16	.26	1.00	.14	.21	.03	.16	.33	.01
var5	-.41	-.03	.16	.14	1.00	.67	.28	.23	-.11	.24
var6	-.21	.00	.09	.21	.67	1.00	-.01	.05	-.16	.05
var7	-.21	-.35	-.26	.03	.28	-.01	1.00	.67	.50	-.04
var8	-.05	-.34	-.24	.16	.23	.05	.66	1.00	.56	-.13
var9	-.13	-.39	-.39	.33	-.11	-.16	.43	.56	1.00	-.04
var10	-.18	-.10	-.13	.01	.24	.05	-.04	-.14	-.04	1.00
var11	-.33	-.09	.11	-.16	.19	-.13	-.01	-.30	-.22	.65
var12	-.14	-.03	-.02	.19	.16	.02	-.11	-.09	.23	.79
var13	.16	-.09	-.24	.00	.16	.17	.00	.08	-.07	.58
var14	.15	-.06	-.36	.05	.12	.13	.03	.13	-.02	.58
var15	.05	-.05	.03	-.10	.22	.11	-.15	-.15	-.29	.36
var16	-.07	-.04	-.18	-.17	.11	.10	-.03	-.06	-.03	.76
var17	.09	-.07	-.31	-.02	.17	.15	-.01	.05	-.06	.72
var18	-.06	-.22	-.32	-.26	.07	.06	.19	-.03	.05	.09
var19	-.28	-.22	-.07	.22	.23	.18	.27	-.00	.22	.27
var20	-.15	-.14	-.26	-.11	.01	-.14	.03	-.08	.21	.09
var21	.15	-.19	-.32	-.46	-.01	.12	.18	.03	-.16	-.06
var22	.05	-.09	-.17	-.44	-.10	.04	.15	-.10	-.20	-.02
var23	.18	-.13	-.34	-.43	.26	.28	.10	.13	-.33	-.07
var24	.03	-.31	-.35	-.26	-.06	-.13	.17	.11	.22	-.05
var25	.10	-.18	-.31	-.48	.01	.08	.17	.01	-.16	-.05
var26	-.08	-.26	-.18	.20	.24	.18	-.03	-.11	.27	.62
var27	-.13	-.30	-.17	.23	.23	.19	-.02	-.09	.31	.57
var28	.00	-.03	-.25	-.07	-.07	.16	.08	-.05	.20	.50
var29	.37	-.18	-.37	-.41	-.20	-.14	.02	.04	-.00	.40
var30	-.24	-.29	-.08	.28	.29	.29	-.00	-.07	.29	.39
var31	-.23	-.09	.03	.26	.27	.37	-.08	-.13	.03	.36
var32	-.41	-.14	.10	.33	.19	-.04	.10	-.10	-.16	.31
var33	-.47	-.03	.32	.35	.10	.11	-.00	.10	-.13	.23
var34	-.20	-.32	-.11	.20	.28	.27	.00	-.13	.25	.68
var35	-.10	-.14	-.07	.28	.07	-.21	-.11	-.07	.12	.47
var36	-.08	.11	.05	-.27	-.13	-.34	-.09	-.07	-.09	.37
var37	.05	-.19	-.18	.29	.22	.23	-.11	.00	.15	.52
var38	.16	.20	.00	-.29	-.15	-.12	-.13	-.16	-.40	.18
var39	-.16	-.11	-.02		.04		-.05	-.11		.15
var40	-.23	-.30	-.13	.20	.28	.26	.00	-.09	.27	.55
var41	.12	-.01	-.13	.06	.03	-.05	-.21	-.13	-.05	.56
var42	-.16	-.42	-.25	-.20	.05	.04	.20	.14	.11	.21
var43	-.32	-.51	-.10	-.02	.21	.08	.20	.25	.25	.30
var44	.02	-.14	-.12	-.13	-.18	-.14	.20	-.11	.26	.26
var45	.09	-.20	-.10	-.58	-.08	.02	.01	-.16	-.23	-.08
var46	-.30	-.39	-.18	.13	.15	-.01	.06	.26	.32	.22
var47	-.22	-.18	.13	.19	.14	.06	.11	.11	.33	.32
var48	-.39	-.34.	-.07	.23	.44	.46	.32	.30	.31	-.14
var49	-.46	-.19	.02	.27	.31	.05	.34	.00	.17	.45
var50	-.19	-.43	-.22	-.02	.19	.10	.19	.20	.26	.37
var51	.01	-.15	-.16	-.23	-.02	.03	.25	.10	-.20	-.07
var52	.12	.01	-.43	-.21	.17	.09	.03	.36	-.30	.01
var53	-.03	-.24	-.08	-.15	.15	.11	.14	-.08	-.07	.26
var54	.05	-.20	-.32	-.39	-.14	.06	.17	.29	-.03	.02
var55										
var56	-.36	-.47	-.16	.09	.22	.06	.22	.26	.33	.33
var57	-.07	-.29	-.22	-.30	.13	15	.20	05	.10	.10

	var11	var12	var13	var14	var15	var16	var17	var18	var19
var1	-.33	-.13	.16	.15	.05	-.07	.09	-.06	-.28
var2	-.09	-.03	-.08	-.06	-.05	-.04	-.07	-.22	-.22
var3	.11	-.02	-.33	-.36	.03	-.18	-.31	-.32	-.07
var4	-.16	.19	.00	.05	-.10	-.17	-.02	-.26	.22
var5	.19	.16	.16	.12	.22	.11	.17	.07	.23
var6	-.13	.02	.17	.13	.11	.10	.15	.06	.19
var7	-.01	-.11	.00	.03	-.15	-.03	-.01	.19	.27
var8	-.30	-.09	.08	.13	-.15	-.06	.05	-.03	-.00
var9	-.22	.23	-.07	-.02	-.29	-.03	-.06	.05	.22
var10	.65	.79	.58	.58	.36	.76	.72	.09	.27
var11	1.00	.37	-.05	-.08	.01	.34	.06	-.07	.21
var12	.37	1.00	.25	.29	.14	.67	.46	.06	.08
var13	-.05	.25	1.00	.95	.60	.52	.95	.16	.18
var14	-.08	.29	.95	1.00	.46	.48	.95	.16	.18
var15	.01	.14	.60	.46	1.00	.19	.58	.39	.15
var16	.34	.67	.52	.48	.19	1.00	.68	.07	.01
var17	.06	.46	.95	.95	.58	.68	1.00	.21	.16
var18	-.07	.06	.16	.16	.39	.07	.21	1.00	.55
var19	.21	.08	.18	.18	.15	.01	.16	.55	1.00
var20	.10	.10	-.05	-.02	.18	-.11	-.01	.80	.38
var21	-.33	-.03	.24	.20	.44	.23	.30	.76	.10
var22	-.16	.01	.11	.13	.28	.11	.17	.81	.22
var23	-.32	-.21	.37	.23	.58	.36	.38	.43	.04
var24	-.20	.09	.02	.03	.34	-.05	.08	.87	.24
var25	-.26	-.04	.19	.16	.45	.16	.25	.87	.22
var26	.28	.39	.40	.40	.35	.38	.49	.34	.33
var27	.28	.37	.33	.34	.32	.32	.42	.34	.32
var28	.30	.30	.29	.36	-.02	.53	.41	.38	.28
var29	.17	.22	.39	.38	.15	.51	.46	.01	-.08
var30	.14	.43	.26	.27	.25	.16	.31	.32	.32
var31	.40	.35	-.03	-.03	.10	.13	.05	.41	.62
var32	.54	.30	-.18	-.23	.03	-.01	-.14	-.24	.18
var33	.24	.27	-.08	-.06	-.02	.11	-.01	-.41	-.19
var34	.32	.35	.35	.34	.35	.37	.44	.32	.35
var35	.17	.43	.25	.35	.38	.22	.41	-.12	-.13
var36	.40	.16	.21	.21	.12	.12	.21	.03	-.05
var37	.39	.32	.37	.34	.33	.18	.37	.14	.40
var38	.01	.14	.21	.26	.01	.29	.28	-.36	-.31
var39	.14	.09	.10	.10	-.08	.31	.15		
var40	.29	.54	.29	.31	.28	.29	.38	.34	.38
var41	.32	.39	.41	.46	.30	.35	.50	-.27	-.09
var42	.13	.19	.06	.10	.05	.08	.11	.63	.34
var43	.24	.34	-.02	.04	-.05	.04	.04	.49	.43
var44	.23	.31	-.04	.01	-.22	.14	.01	.36	.35
var45	-.08	-.04	.10	.07	.40	.17	.17	.67	.14
var46	.21	.33	-.12	-.07	-.14	-.08	-.08	.22	.22
var47	.35	.43	-.17	-.10	-.18	.04	-.09	.40	.50
var48	-.23	-.19	.11	.08	.14	-.12	.05	.32	.58
var49	.63	.33	-.13	-.10	-.03	.05	-.04	.23	.52
var50	.28	.34	.15	.18	.12	.14	.20	.56	.57
var51	-.14	-.16	.15	.17	.18	.07	.18	.48	.04
var52	-.12	-.01	.15	.13	.08	.19	.18	.17	-.29
var53	.23	.14	.09	.14	.15	.16	.19	.62	.44
var54	-.22	.17	.11	.11	.06	.26	.16	.55	-.06
var55									
var56	.28	.40	-.06	.00	-.11	.02	.00	.45	.45
var57	.05	.00	.11	.13	.12	.16	.17	.60	.17

	var20	var21	var22	var23	var24	var25	var26	var27	var28
var1	-.15	.15	.05	.18	.03	.10	-.00	-.13	.00
var2	-.14	-.19	-.09	-.13	-.31	-.18	-.26	-.30	-.03
var3	-.26	-.32	-.17	-.34	-.35	-.31	-.18	-.17	-.25
var4	-.11	-.46	-.44	-.43	-.26	-.48	.20	.23	-.07
var5	.01	-.01	-.10	.26	-.06	.01	.24	.23	-.07
var6	-.14	.12	.04	.28	-.12	.08	.18	.19	.16
var7	.03	.18	.15	.10	.17	.17	-.03	-.02	.08
var8	-.08	.03	-.10	.13	.11	.01	-.11	-.09	-.05
var9	.21	-.16	-.20	-.33	.22	-.16	.27	.31	.20
var10	.09	-.06	-.02	-.07	-.05	-.05	.62	.57	.49
var11	.10	-.33	-.16	-.32	-.20	-.26	.28	.28	.30
var12	.10	-.03	.01	-.21	.09	-.04	.59	.57	.30
var13	-.05	.24	.11	.37	.02	.19	.40	.33	.29
var14	-.02	.20	.13	.23	.03	.16	.40	.34	.36
var15	.18	.44	.28	.58	.34	.45	.35	.32	-.02
var16	-.11	.23	.11	.36	-.05	.16	.38	.32	.53
var17	-.01	.30	.17	.38	.08	.25	.43	.42	.41
var18	.80	.76	.31	.43	.37	.37	.34	.34	.36
var19	.38	.10	.22	.04	.24	.22	.33	.32	.23
var20	1.00	.31	.41	.07	.79	.50	.34	.37	.26
var21	.31	1.00	.91	.67	.70	.97	.13	.11	.27
var22	.41	.91	1.00	.42	.68	.93	.13	.12	.37
var23	.07	.67	.42	1.00	.29	.66	.06	.03	.03
var24	.79	.70	.68	.29	1.00	.79	.23	.26	.30
var25	.50	.97	.93	.66	.79	1.00	.17	.15	.31
var26	.34	.13	.13	.06	.23	.17	1.00	.99	.36
var27	.37	.11	.12	.03	.26	.15	.99	1.00	.31
var28	.26	.27	.37	.03	.30	.31	.36	.31	1.00
var29	-.12	.17	.14	.18	-.06	.12	.36	.31	.32
var30	.29	.14	.14	.04	.24	.17	.90	.92	.15
var31	.43	.01	.09	.12	.13	.13	.43	.48	.04
var32	-.09	-.45	-.31	-.43	-.29	-.42	.19	.25	-.13
var33	-.18	-.47	-.41	-.28	-.36	-.45	-.01	.02	-.02
var34	.28	.14	.17	.06	.20	.18	.95	.96	.40
var35	.08	-.20	-.26	-.20	.12	-.19	.52	.48	.39
var36	.07	.04	.11	-.07	.04	.05	.13	.12	.03
var37	.12	-.05	-.05	-.06	.07	-.04	.63	.61	.18
var38	-.29	-.23	-.26	.13	-.48	-.26	.28	.21	.20
var39							-.07	-.07	-.01
var40	.34	.18	.12	.04	.23	.15	.97	.99	.30
var41	-.15	-.20	-.32	-.13	-.27	-.32	.66	.59	.34
var42	.48	.51	.56	.11	.68	.57	.40	.41	.61
var43	.48	.21	.27	-.05	.56	.31	.54	.56	.58
var44	.30	.18	.32	-.27	.28	.18	.03	.02	.18
var45	.29	.84	.86	.49	.61	.85	.11	.08	.40
var46	.44	-.10	-.06	-.26	.43	.01	.41	.45	.36
var47	.43	.06	.19	-.29	.36	.12	.36	.36	.56
var48	.22	.08	.05	.29	.14	.17	.34	.35	.15
var49	.25	-.07	.02	-.19	.11	-.02	.55	.58	.24
var50	.53	.22	.25	.03	.58	.33	.49	.48	.58
var51	.17	.67	.65	.45	.44	.66	.19	.19	.40
var52	.02	.43	.26	.54	.22	.40	-.03	.00	.12
var53	.31	.58	.66	.23	.47	.60	.42	.42	.62
var54	.25	.79	.74	.36	.63	.74	.03	.03	.38
var55									
var56	.51	.10	.18	.18	.54	.20	.54	.57	.54
var57	.25	.74	.73	.42	.53	.72	.37	.37	.56

	var29	var30	var31	var32	var33	var34	var35	var36	var37
var1	.37	-.24	-.23	-.41	-.47	-.20	-.10	-.08	.05
var2	-.18	-.29	-.09	-.14	-.03	-.32	-.14	.11	-.19
var3	-.37	-.08	.05	.10	.32	-.11	-.07	.05	-.18
var4	-.41	.28	.26	.33	.35	.20	.28	-.27	.29
var5	-.20	.29	.27	.19	.10	.28	.07	-.13	.23
var6	-.14	.29	.37	-.04	.11	.27	-.21	-.34	.23
var7	.02	.00	-.08	.10	.00	.00	-.11	-.09	-.11
var8	.04	-.07	-.15	-.10	.10	-.13	-.07	-.07	.00
var9	.00	.29	.05	-.16	-.13	.25	.12	-.09	.15
var10	.40	.39	.36	.31	.23	.60	.47	.37	.52
var11	.17	.14	.40	.54	.24	.32	.17	.40	.39
var12	.22	.43	.35	.30	.27	.55	.42	.16	.32
var13	.39	.26	-.03	-.18	-.08	.35	.25	.21	.37
var14	.38	.27	-.03	-.23	-.06	.34	.35	.21	.34
var15	.15	.25	.10	.03	-.02	.35	.38	.12	.33
var16	.51	.16	.13	-.01	.11	.32	.22	.12	.18
var17	.46	.31	.05	.14	.01	.44	.41	.21	.37
var18	.01	.32	.41	-.24	-.41	.32	-.12	.03	.14
var19	-.08	.32	.62	.18	-.19	.35	-.13	-.05	.39
var20	-.12	.29	.43	-.09	-.18	.28	.08	.07	.12
var21	.17	.14	.01	-.45	-.47	.14	-.20	.04	.12
var22	.14	.14	.09	-.31	-.41	.17	-.26	.11	-.05
var23	.18	.04	.12	-.43	-.28	.06	-.20	-.07	-.06
var24	-.06	.24	.13	-.29	-.36	.20	.12	.04	.07
var25	.12	.17	.13	-.41	-.45	.18	-.19	.05	-.04
var26	.36	.98	.43	.19	-.01	.95	.52	.13	.63
var27	.31	.92	.48	.25	.02	.96	.48	.12	.61
var28	.32	.15	.04	-.13	-.02	.40	.39	.03	.18
var29	1.00	.04	.07	-.04	-.11	.35	.24	.02	.35
var30	.04	1.00	.32	.15	-.02	.89	.34	.05	.47
var31	.07	.32	1.00	.48	.16	.47	.10	.09	.42
var32	-.04	.15	.48	1.00	.38	.29	.17	.02	.22
var33	-.11	-.02	.16	.38	1.00	.03	.23	.19	.01
var34	.35	.89	.47	.29	.03	1.00	.46	.03	.56
var35	.24	.34	.10	.17	.23	.46	1.00	.03	.29
var36	.02	.05	.09	.02	.19	.03	.03	1.00	.41
var37	.35	.47	.42	.22	.01	.56	.29	.41	1.00
var38	.37	.13	-.07	-.11	-.06	.16	.33	-.04	-.10
var39	-.11	-.02	-.01	-.10	.11	-.10	-.06	-.05	-.12
var40	.21	.94	.52	.29	.05	.97	.44	.10	.38
var41	.51	.42	.14	.11	.04	.52	.67	.26	.63
var42	.13	.37	.18	-.08	-.22	.35	.09	.24	.48
var43	-.02	.55	.34	.09	-.08	.51	.28	.04	.56
var44	.08	-.04	.16	.12	-.25	.05	-.15	-.14	-.13
var45	.33	.07	-.06	-.35	-.37	.14	-.13	.15	.08
var46	-.10	.42	.21	.18	.03	.35	.42	.03	.51
var47	-.16	.37	.34	.12	-.07	.35	.09	-.12	.41
var48	-.16	.46	.44	-.13	.04	.39	-.16	-.15	.14
var49	-.08	.50	.57	.69	-.06	.55	.35	-.27	.54
var50	.07	.45	.33	.03	-.10	.44	.26	.04	.57
var51	.19	.18	.00	-.27	-.14	.16	-.15	.39	.19
var52	.05	-.06	.10	-.12	-.11	-.06	-.06	.14	.03
var53	.30	.33	.33	-.02	-.32	.42	-.02	.15	.51
var54	.09	.00	-.11	-.35	-.32	-.03	-.22	.14	-.06
var55									
var56	-.08	.55	.36	.18	-.07	.50	.32	-.02	.36
var57	.22	.36	.20	-.20	-.30	.35	-.15	.25	.39

	var38	var39	var40	var41	var42	var43	var44	var45	var46
var1	.16	-.16	-.23	.12	-.16	-.33	.02	.09	-.30
var2	.20	-.11	-.38	-.01	-.42	-.51	-.14	-.20	-.39
var3	.00	-.02	-.13	-.13	-.24	-.18	-.12	-.10	-.18
var4	-.29		.28	.06	-.20	-.02	-.13	-.58	.13
var5	-.15	.04	.28	.03	.05	.21	-.18	-.08	.15
var6	-.12		.26	-.05	.03	.08	-.14	.02	-.01
var7	-.13	-.05	.08	-.21	.20	.20	.20	.01	.06
var8	-.16	-.11	-.09	-.13	.14	.25	-.11	-.16	.26
var9	-.40		.27	-.05	.11	.25	.26	-.23	.32
var10	.18	.15	.55	.56	.21	.30	.26	.00	.21
var11	.01	.14	.29	.32	.13	.24	.23	-.08	.21
var12	.14	.09	.54	.39	.19	.34	.31	-.04	.33
var13	.21	.10	.29	.41	.06	-.02	-.04	.10	-.12
var14	.26	.10	.31	.46	.10	.04	.01	.07	-.07
var15	.01	-.08	.28	.30	.05	-.05	-.22	.40	-.14
var16	.29	.31	.29	.35	.08	.04	.14	.17	-.08
var17	.23	.15	.38	.30	.11	.04	.01	.17	.06
var18	-.36		.34	.27	.62	.49	.36	.67	.22
var19	-.31		.38	-.03	.34	.43	.34	.14	.22
var20	-.29		.34	-.15	.48	.48	.30	.29	.44
var21	-.23		.10	-.29	.51	.21	.18	.84	-.10
var22	-.26		.12	-.32	.56	.27	.32	.86	-.06
var23	.13		.04	-.13	.11	-.05	-.27	.49	-.26
var24	-.48		.23	-.27	.68	.56	.28	.61	.43
var25	-.26		.15	-.32	.57	.31	.18	.85	.01
var26	.28	-.07	.97	.66	.40	.54	.03	.11	.41
var27	.21	-.07	.99	.59	.41	.56	.02	.08	.45
var28	.20	-.01	.30	.35	.61	.58	.18	.40	.36
var29	.37	-.11	.21	.31	.13	-.02	.08	.33	-.10
var30	.13	-.02	.94	.42	.37	.55	-.04	.07	.42
var31	-.07	-.01	.52	.14	.18	.34	.16	-.06	.21
var32	-.11	-.10	.29	.11	-.08	.09	.12	.35	.18
var33	-.06	.11	.05	.04	-.22	-.08	-.25	-.37	.03
var34	.16	-.10	.97	.52	.35	.51	.05	.14	.35
var35	.33	-.06	.44	.67	.09	.51	.05	.14	.35
var36	-.04	-.05	.10	.26	.24	.04	-.14	.15	.03
var37	-.10	-.12	.58	.63	.48	.56	-.13	.08	.51
var38	1.00	.06	.17	.65	-.31	-.30	-.10	-.18	-.28
var39	.06	1.00	-.05	-.04					
var40	.17	-.05	1.00	.53	.38	.55	.00	.05	.43
var41	.65	-.04	.53	1.00	.14	.24	-.17	-.11	.38
var42	-.31		.38	.14	1.00	.30	.21	.66	.73
var43	-.30		.55	.24	.90	1.00	.18	.38	.90
var44	-.10		.00	-.17	.21	.18	1.00	.14	.00
var45	-.18		.05	-.11	.66	.38	.14	1.00	.10
var46	-.28		.43	.30	.73	.90	.00	.10	1.00
var47	-.32		.38	.11	.48	.62	.58	.09	.44
var48	-.24		.42	-.29	.14	.22	-.17	.04	.12
var49	-.19		.59	.30	.21	.34	.27	-.09	.26
var50	-.26		.47	.25	.85	.94	.25	.36	.01
var51	-.09		.18	-.02	.65	.35	-.20	.67	.14
var52	-.01		-.01	-.02	.10	-.06	-.20	.18	-.11
var53	-.13		.38	.17	.78	.59	.21	.73	.30
var54	-.23		-.04	.24	.58	.34	.37	.67	.13
var55									
var56	-.32		.56	.24	.84	.98	.26	.25	.32
var57	-.18		.35	.07	.79	.35	.09	.77	.25

	var47	var48	var49	var50	var51	var52	var53	var54
var1	-.22	-.39	-.46	-.19	.01	.12	-.03	.05
var2	-.18	-.34	-.19	-.43	-.15	.01	-.24	-.20
var3	.13	-.07	.02	-.22	-.16	-.43	-.08	-.32
var4	.19	.23	.27	-.02	-.23	-.21	-.15	-.39
var5	.14	.44	.31	.19	-.02	.17	.15	-.14
var6	.06	.46	.05	.10	.03	.09	.11	.06
var7	.11	.32	.34	.19	.25	.03	.14	.17
var8	.11	.30	.00	.20	.10	.36	-.08	.29
var9	.33	.31	.17	.26	-.20	-.30	-.07	-.03
var10	.32	-.14	.45	.37	-.07	.01	.26	.02
var11	.33	-.23	.63	.20	-.14	-.12	.23	-.22
var12	.43	-.19	.33	.34	-.16	-.01	.14	.17
var13	-.17	.11	-.13	.15	.15	.15	.09	.11
var14	-.18	.08	-.10	.18	.17	.13	.14	.11
var15	-.18	.14	-.03	.12	.18	.08	.15	.06
var16	.04	-.12	.05	.14	.07	.19	.16	.26
var17	-.09	.05	-.04	.20	.18	.13	.13	.16
var18	.48	.32	.23	.56	.48	.17	.61	.55
var19	.30	.38	.32	.57	.04	.23	.44	-.06
var20	.43	.22	.25	.53	.17	.02	.31	.25
var21	.06	.08	-.07	.22	.67	.43	.58	.73
var22	.19	.05	.02	.25	.65	.26	.66	.74
var23	-.29	.29	-.19	.03	.45	.34	.23	.36
var24	.36	.14	.11	.58	.44	.22	.47	.63
var25	.12	.17	-.02	.33	.66	.40	.60	.74
var26	.36	.34	.55	.49	.19	-.03	.42	-.03
var27	.36	.35	.58	.48	.19	.00	.42	-.03
var28	.36	.15	.24	.58	.40	.12	.62	.38
var29	-.16	-.16	-.08	.07	.19	.04	.30	.09
var30	.37	.46	.50	.45	.18	-.06	.33	.00
var31	.34	.44	.57	.33	.00	.16	.33	-.11
var32	.12	-.13	.69	.03	-.27	-.12	-.02	-.35
var33	-.07	.04	-.06	-.10	-.14	-.11	-.32	-.32
var34	.35	.39	.55	.44	.16	-.06	.42	-.03
var35	.09	-.16	.35	.26	-.15	-.06	-.02	-.22
var36	-.12	-.15	-.27	-.04	.39	.14	.15	.14
var37	.41	.14	.54	.57	.19	.03	.51	-.06
var38	-.32	-.24	-.19	-.26	-.09	-.01	-.19	-.23
var39								
var40	.38	.42	.59	.47	.18	-.01	.38	-.04
var41	.11	-.29	.30	.25	-.02	-.02	.17	-.24
var42	.48	.14	.21	.85	.65	.10	.78	.57
var43	.62	.22	.34	.94	.35	-.06	.59	.34
var44	.38	-.17	.27	.25	-.20	-.20	.21	.37
var45	.09	.04	-.09	.36	.67	.18	.73	.67
var46	.44	.12	.26	.81	.14	-.11	.30	.13
var47	1.00	.00	.56	.64	-.03	-.14	.45	.23
var48	.00	1.00	.09	.29	.16	.19	.12	-.14
var49	.56	.09	1.00	.36	-.04	.04	.38	-.10
var50	.64	.29	.36	1.00	.30	-.12	.58	.26
var51	-.03	.16	-.04	.30	1.00	.40	.73	.50
var52	-.14	-.19	.04	-.12	.40	1.00	.19	.53
var53	.45	.12	.38	.58	.73	.19	1.00	.44
var54	.23	-.14	-.10	.26	.50	.53	.44	1.00
var55								
var56	.69	.20	.42	.93	.22	-.12	.51	.28
var57	.38	.08	.16	.48	.88	.41	.88	.65

	var35	var36	var37
var1		-.36	-.07
var2		-.47	-.29
var3		-.16	-.22
var4		.09	-.30
var5		.22	.13
var6		.06	.15
var7		.22	.20
var8		.26	.05
var9		.33	-.10
var10		.33	.10
var11		.28	.05
var12		.40	.00
var13		-.07	.11
var14		.00	.13
var15		-.11	.12
var16		.02	.16
var17		.00	.17
var18		.45	.60
var19		.45	.17
var20		.51	.25
var21		.10	.74
var22		.18	.73
var23		-.18	.42
var24		.54	.32
var25		.20	.72
var26		.54	.37
var27		.37	.37
var28		.54	.56
var29		-.08	.22
var30		.55	.36
var31		.36	.20
var32		.18	-.20
var33		-.07	-.30
var34		.50	.35
var35		.32	-.15
var36		-.02	.25
var37		.56	.39
var38		-.32	-.18
var39			
var40		.56	.36
var41		.24	.09
var42		.84	.79
var43		.98	.55
var44		.26	.09
var45		.25	.77
var46		.92	.25
var47		.69	.30
var48		.20	.08
var49		.42	.16
var50		.93	.48
var51		.22	.08
var52		-.12	.41
var53		.31	.88
var54		.28	.65
var55			
var56		1.00	.44
var57		.44	1.00

APPENDIX H

A Description of Helper Stimulus Expressions: An Index of Communication

Sixteen helpee expressions are included covering three main areas of affect: depression-distress, anger-hostility and elation-excitment. The following are samples representing these affective dimensions.

Helpee: 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 games any more. I get upset and come home depressed and have headaches. It seems all so superficial. There was a time when I used to get along with everybody. Everybody said "Isn't she wonderful. She get along with everybody. Everybody likes her." I used to think that was something to be really proud of, ubt that was who I was at that time. I had no depth. I was what the crowd wanted me to be - the particular group I was with.

Helpee: Gee, those people! Who do they think they are? I just can't stand interacting with them any more. 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 any more. 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.

Helpee: I'm so thrilled to have found a counselor 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. (Carkhuff, 1969)

See Carkhuff, 1969 for other items.

REFERENCES

Albert, D.J. (1982). The effects of high and low dogmatism on counselor training. Dissertation Abstracts International, 42, 4763-B.

Allen, D.(Ed.). (1967). Microteaching: A Description. Stanford: Stanford Teaching Education Program.

Allen, D., & Ryan, K. (1969). Microteaching. Reading, Massachusetts: Addison-Wesley, 1969.

Authier, J. (1981). Microtraining of group counselors. Journal for Specialists in Group Work, Aug., 143-147.

Authier, J., & Gustafson, K. (1976). Applications of supervised and non-supervised microcounseling paradigms in the training of paraprofessionals. Journal of Consulting and Clinical Psychology, 44, 704-709.

Bailey, F.C. (1982). Cross cultural Education: the impact of microcounselling paradigms and traditional classroom methods on counselor trainee effectiveness. Dissertation Abstracts International, 42, 3012-A.

Bandura, A. (1969). Principles of Behavior Modification. New York: Holt Rinehart and Winston.

Bandura, A., & Walters, R. (1963). Social Learning and Personality Development. New York: Holt, Rinehart and Winston.

Bank, P. (1968). Behavior therapy with a boy who never learned to walk. Psychotherapy, 5, 150-153.

Bashor, P.H. (1983). A nursing communication assessment guide. Rehabilitation Nursing, 8, 20-1,30.

Bear, D. (1968). Some remedial uses of reinforcement contingency In J. Schlein (Ed.), Research in Psychotherapy (pp. 3-20). Washington, American Psychological Association.

Bennett, B. (1981). Human growth: effects of a human development course on criminal justice personnel Psychological Reports, 48, 511-517.

Berenson, B.G., Carkhuff, R.R., & Myrus, P. (1966). An investigation of training effects upon interpersonal functioning of undergraduate college students. Journal of Counseling Psychology, 13, 4.

Berg, K., & Stone, G. (1980). Effects of conceptual level and supervision on counselor skill development. Journal of Counseling Psychology, 27, 500-509.

Bowen-Jones, J. (1979). Therapeutic communication: the nurse's counselling role. The Australian Nurses' Journal, 8, 54-56.

Bradley, C. (1977). Systematic interpersonal skill development for inner-city youth: a microcounseling approach. Educational Technology. Mar., 46-49.

Bradley, C., & Friedenberg, F. (1982). Teaching the bilingual vocational education student: a mirocounseling approach. Journal of Vocational and Special Needs Education, Fall, 19-24.

Bridge, W., & Speight, I. (1981). Teaching the skills of nursing communication. Nursing Times, 77, 125-127.

Buchheimer, A. (1966, Dec.). Approaches to practicum supervision in counselor training. Paper presented at the meeting of the Association of Counselor Education and Supervision of New York State, New York, NY.

Campbell, O. (1981). The developmental effects of micro counseling in a programmed counseling series. Dissertation Abstracts International, 42, 1485-A.

Campbell, D.T. and Stanley, J.C. (1963). Experimental and quasi-experimental Design for Research. Chicago: Rand McNally.

Capelle, R. (1975). Microcounselling vs. human relations training a critical review of the literature Unpublished Manuscript, Downsview , Ontario, York University.

Carkhuff,R.R. (1968). The counselor's contribution to facilitative processes. Unpublished Manuscript.

Carkhuff, R.R. (1969). Helping and Human Relations: A Primer for Lay and Professional Helpers. Montreal-Toronto: Holt, Rinehart, and Winston Inc..

Carkhuff, R.R., and Berenson, B.G. (1967). Beyond Counselling and Therapy. New York: Holt, Rinehart, and Winston, Inc..

Carkhuff, R.R., Kratochvil, D., and Friel, T. (1968). Effects of professional training: communication and discrimination of facilitative conditions. Journal of Counselling Psychology, 15, 68-74.

Carkhuff, R.R., Piaget, G., and Pierce, R. (1967). The development of skills of interpersonal functioning. Counselor Education and Supervision, 7, 102-106.

Carkhuff, R.R., & Truax, C.(1965). Training in counseling and psychotherapy: an evaluation of an integrated didactic and experiential approach. Journal of Counselling Psychology, 29, 333-336.

Carpenter, C.R. (1955). Psychological research using TV. American Psychologist, 10, 600-610.

Carr, B. (1976). An evaluation of the generalizability of interviewing skills taught to first year baccalaureate nursing students using the microcounseling paradigm. Unpublished doctoral dissertation, The American University.

Chandler, L.S. (1984). The effectiveness of microtraining in teaching infant movement assessment. Dissertation Abstracts International, 44, 2372-A.

Charonko, J.J. (1979). The effects of microcounseling and monitor modeling upon the acquisition of group leadership skills dissertation Abstracts International, 1774-A.

Clark, J.M. (1981). Communication in nursing. Nursing Times, 77, 12-18.

Clement, J.A. (1983). Psychiatric concepts in the nursing curriculum. The Dean's List, 5(2).

Crabb, W.T.,Moracco, J., & Bender, R. (1983). A comparative study of empathy training with programmed instructuion for lay helpers. Journal of Counseling Psychology, 30, 221-226.

Cristani, T.S. (1978). Counseling skills and the child care worker: a research-based training program. Child Care Quarterly, 7, 87-97.

DeVoe, M.W., & Sherman, T.M. (1978). A microtechnology for teaching prosocial behavior to children. Child Study Journal, 8, 83-91.

Duff, R., & Hollingshead, A. (1968). Sickness and Society. New York: Harper and Row.

Eisemann, R. (1970). Creativity change in student nurses: a cross-sectional and longitudinal study. Developmental Psychology, 3, 320-325.

Elliott, T.G., et.al. (1979). Communication: a program design. Supervisor Nurse, 10, 12-18.

Engel, N. (1981). The effects of microcounselling training on the attending behavior skills of adolescents. Dissertation Abstracts International, 42, 1959-A.

Feldman, R.N. (1982). Microcounseling skill training with the elderly and its effects on self-concept and self-esteem. Dissertation Abstracts International, 43(7).

Forbes, W.D. (1978). Effects of micrcounseling training on junior high school student's knowledge, attitudes and behavior related to interpersonal conflict reduction. Dissertation Abstracts International, 2752-A.

Ford, D. (1979). Research on training counselors and clinicians. Review of Educational Reaseach 49, 87-130.

Forti, L. (1975). Media therapy: an evaluation of the effects of programmed instruction and video-taped models on microcounselling behaviors. Unpublished doctoral dissertation, The American Iniversity.

Forsyth, G. (1980). Analysis of the concept of empathy: Illustration of one approach. Nursing Intervention, 80, 33-42.

Francis, V., & Morris, M. (1969). Gaps in doctor-patient communication. New England Journal of Medicine, 280, 535-540.

Funkhouser, G.R. (1976). Quality care part 1. Nursing, 6, 22-31.

Fyffe, A.E., & Oei, T.P. (1979). Influence of modeling and feed back provided by the supervisiors in a micro-skills training program for beginning counsellors. Journal of Clinical Psychology, 35, 651-657.

Gagan, J.M. (19839. Methodological notes on empathy. Advances in Nursing Science, 5, 65-72.

Gardner, K.G. (1979). Supportive nursing: a critical review of the literature. Journal of Psychiatric Nursing, 17, 10-16.

Geary, E. (1979). A construct validity study of develop mental empathy in counsellor skills training programs. Dissertation Abstracts International, 1635B.

Gendlin, E., & Rychlak, J. (1970). Psychotherapeutic Process. In P. Mussen & M.Rosenzweig (Eds.), Annual Review of Psychology, Palo Alto, CA: Annual Reviews.

Gerrard, B. (1978). Interpersonal skills for health professionals: A review of the literature. Unpublished manuscript. McMaster University, Ontario.

Gill, S.J., Berger, C.F., & Cogar, G.L. (1983). Evaluating microcounseling training: comparing trainee per-formance to a predetermined standard for counseling behavior. Evaluation Review, 7, 247-256.

Gluckstern, N. (1973). Training parents as drug counsellors in the community. Personnel and Guidance Journal, 51, 676-680.

Gluckstern, N., Ivey, A.E., & Forsyth, D. (1978). Patterns of acquisition and differential retention of helping skills and their effect on client verbal behavior. Canadian Counsellor, 13, 37-39.

Graffam, S. (1970). Nurse response to patient in distress - development of an instrument. Nursing Research, 19, 331-336.

Greenberg, L.S. (1980). Training counsellors in Gestalt

Grinnell, R.M., & Lieberman, A. Teaching the mentally retarded job interviewing skills. Journal of Counselling Psychology, 24, 3332-337.

Harben, O.K. (1977). Communication in Nursing. Karger.

Hayman, M. (1977). The influence of supervisor feedback in the microcounseling format. Dissertation Abstracts International, 5950-A.

Hays, J. (1966). Analysis of nurse-patient communications. Nursing Outlook, 14, 32-35.

Hearn, M. (1976). Three Modes of Training Counsellors: A Comparative Study. Dissertation Abstracts International,5353-B.

Hefele, T., and Hurst, M. (1972). Interpersonal skill measurement precision, validity and utility. Counselling Psychologist, 3, 62-69.

Hewitt, F.S. (1982). The nurse and the patient: communication skills. Nursing Times, Jan.,45-48.

Higginson, L.C. (1981). Empathy training: a comparison of an experiential method and a microcounseling method. An unpublished doctoral dissertation, Pennsylvania State University, 1981.

Hills, M.D., & Knowles, D. (1983). Nurses' level of empathy and respect in simulated interactions with patients. International Journal of Nursing Studies, 20, 83-87.

Hull, C.H., & Nie, N.H. (1981). SPSS Update: New Procedures and Facilities for Realeases 7-9. New York: McGraw-Hill Book Company.

Hunt, D. (1971). Matching Models in Education. Toronto: Ontario Institute for Studies in Education.

Irwin, R.B. (1981). Training speech pathologists through microtherapy. Journal of Communication Disorders, 14, 93-103.

Ivey, A.E. (1971). Microcounseling: Innovations in Interviewing Training. Springfield: Charles C. Thomas, Publishing.

Ivey, A.E. (1983). Intentional Interviewing and Counseling. Monterey: Brooks/Tate Publishing Company.

Ivey, A., and Authier, J. (1978). Microcounseling: Innovations in Interviewing, Counseling, Psychotherapy, and Psychoeducation. Springfield: Charles C. Thomas Publisher.

Ivey, A.E., Normington, C., Miller, C., Morrill, W., & Haase, R. Microcounselling and attending behavior: an approach to prepracticum counselor training. Journal of Counseling Psychology, 15, 1-12.

Jessop, A. (1979). Nurse-Patient Communication: a Skills Approach. Amherst: Microtraining Associates, Inc..

Kagan, N., & Krathwohl, D. (1967). Studies in human interaction. (Research Report No. 20). East Lansing: Michigan State University, Educational Publications Service.

Kagan, N., Krathwohl, D., & Miller, R. (1963). Simulated recall in therapy using video-tape: a case study. Journal of Counseling Psychology, 10, 237-243.

Kalish, B.J. (1971). Strategies for developing nurse empathy. Nursing Outlook, 19, 714-718.

Karshmer, J., & LaMonica, E. (1976). Effectiveness of nursing curricula on behavioral empathy. Unpublished manuscript, University of Massachusetts.

Kasdorf, J., & Gustafson, K. (1978). Research related to microcounseling. In A.E Ivey, & G. Authier. Microcounseling: Innovations in Interviewing, Counseling, Psychotherapy and Psychoeducation (pp. 323-376). Springfield: Charles C. Thomas Publisher.

Kyle, M.W. (1964). The nurse's approach to the patient attempting to adjust to inoperable cancer. American Nurses Association Clinical Session No.8: Effective therapeutic communication in nursing. New York, American Nurses' Association.

LaMonica, E. (1979). Empathy in nursing practise. Issues in Mental Health Nursing, 2, 15-26.

LaMonica, E. (1981). Construct validity of an empathy instrument. Research in Nursing and Health, 4, 389-400.

LaMonica, E., Carew, D., Winder, A., Haase, A., & Blanchard, K. (1976). Empathy training as a major thrust of a staff development program. Nursing Research, 25, 447-451.

Levine, R. (1980). The effects of microcounseling-personal growth groups and microcounseling-only groups on the self-actualizion of community college students. Dissertation Abstracts International, 41(6).

Leytham, S. (1984). A comparison of two training procedures with child care workers. Dissertation Abstracts International, 44, 2249-B.

Lovaas,, O. (1968). Some studies in childhood schizophrenia, J. Schlein (Ed.). Research in Psychotherapy (pp. 103-121). Washington, DC: American Psychological Association, 1968.

Matarazzo, R., Weins, A., & Saslow, G. (1966). Experimentation in the teaching and learning of psychotherapy skills. In L. Gottschalk, & A. Auerbach (Eds.). Methods of Research in Psychotherapy (pp. 597-635). New York: Appleton.

Matthews, B. (1962). Measurement of psychological aspects of nurse- patient relationships. Nursing Research, 11, 154-162.

McCarthy, K. (1978). Microcounselling: its use with an older adult population and its relationship to internal control. Dissertation Abstracts International , 1346-A.

Moss, F.E., & Halamandris, V.J. (1977). Too Old, Too Sick, Too Bad. Germantown, Md: Aspen Systems Corporation.

Murphy, D.C.(1982). Communication: The key to improved patient understanding. NITA, 5, 370-372.

Paradise, L., & Potter, T. (1977). Changes in personality characteristics of trainees in a counseling methods course. (EDRS Document #142873).

Pasquali, E., & Joyce, B. (1975). An approach to teaching empathy. Journal N.Y.S.N.A., 6, 10-12.

Pereria, G. (1978). Teachng empathy through skill-building versus interpersonal anxiety-reduction methods: a com parison of microcounselling and interpersonal process recall. Dissertation Abstracts International, 1348-A.

Peters, G., Cormier, L., & Cormier, W. (1978). Effects of modeling, rehersal, feeback, and remediation on acq uisition of a counseling strategy. Journal of Counseling Psychology, 25, 231-237.

Poitras-Martin, D., & Stone, G. (1977). Psychological education: a skill-oriented approach. Journal of Counseling Psychology, 24, 153-157.

Quartaro, G., & Rennie, D. (1983). Effects of trainee expectancies and specific instructions on counselling skills acquisition. Canadian Journal of Behavioral Science, 15, 174-185.

Richardson, B., & Stone, G. (1981). Effects of a cognitive adjunct procedure within a microtraining situation. Journal of Counseling Psychology, 28, 168-175.

Robinson, S. (1981, April). Skill transfer: an educational dilemna. Paper presented to the AERA.

Rogers, C. (1942). Counseling and Psychotherapy. Boston: Houghton-Mifflin, 1942.

Rogers, C. (1957). Training individuals to engage in the therapeutic process. In P. Strotter (Ed.), Psychology and Mental Health. Washington, DC: American Psychological Association.

Rogers, M. (1979). The effect of microcounseling training upon preprofessional special educators in their empathic interactions with parents of handicapped children Dissertation Abstracts International, 3'235-A.

Rogers, C. (1965). Client-centered Therapy. Boston: Houghton Mifflin, 1965.

Russell, M. (1984). Microteaching feminist counsellng skills: an evaluation. Dissertation Abstracts International 44, 08.

Sawyer, H., & Allen, H. (1980). Microtraining as a strategy in training rehabilitation administrators for the performance evaluation interview. Journal of Rehabilitation Administration, August, 107-110.

Sawyer, H., Allen, H., & Reisin, B. (1983). Microcounselling: A counselor training format relating to sexual concerns of spinal-cord injured women. Sexuality and Disability, 6, 30-37.

Sawyer, H., & Sawyer, S. (1981). A teacher-parent communication approach. (EDRS Document # 203566).

Scroggins, W., & Ivey, A. (1978). Teaching and maintaining microskills with a residence hall staff. Journal of College Student Personne Mar., 158-161.

Simek-Downing, L. (1981). Training university students in counseling and psychotherapy. Unpublished doctoral dissertation, University of Massachusetts.

Spruce, M.F., & Snyders, F. (1982). An assessment of a microcounseling model for nurse training in facilitative skills. South African Journal of Psychology, 12, 81-87.

Stetler, C.B. (1977). Relationship of percieved empathy to nurse's communication. Nursing Research, 26, 432-438.

Stone, G. (1981). Effects of different strategies within a microtraining situation. Counselor Education and Supervision, 20, 301-311.

Thompson, A.J.M., & Blocher, D. (1979). Co-counseling supervision in microcounseling. Journal of Counseling Psychology, 6, 413-418.

Toukmanian, S., Capelle, R., & Rennie, D. (1978). Counsellor trainee awareness of evaluative criteria: a neglected variable. Canadian Counsellor, 12, 177-183.

Truax, C., & Carkhuff, R. (1965). Experimental manipulation of therapeutic conditions. Journal of Consulting Psychology, 29, 119-124.

Truax, C., & Carkhuff, R. (1967). Toward Effective Counseling and Psychotherapy. Chiago: Aldine Publishing Co.

Uhlemann, M., Hearn, M., & Evans, D. (1980). Programmed learning in the microtraining paradigm with hotline workers. American Journal of Community Psychology, 8, 603-613.

Uhlemann, M., Stone, G., Evans, D., & Hearn, M. (1982). Evaluation of microtraining modifications: implications for paraprofessional training within community counselling agencies. Canadian Counsellor, 16, 115-121.

Walker, M. (1978). The effects of perferred versus assigned associates and peer versus instructor feedback on acquisition of a counseling strategy. Dissertation Abstracts International, 6553-A.

Wallace, G., Marks, R., & Martin, J. (1981). Training psychiatric nursing staff in social approval skills. Canadian Journal of Behavioral Science, 13, 171-180.

Walz, G., & Johnston,J. (1963). Counselors look at themselves on video-tape. Journal of Counseling Psychology, 10, 232-236

Waranch, D. (1982). Training special education student teachers how to communicate test results to parents of exceptional children through microcounseling. Dissertation Abstracts International 42, 3954-A.

Weiner, G. (1982). Training parents in microcounseling techniques. Dissertation Abstracts International 43, 890-B.

Williams, C.L. (1979). Empathic communication and its effect on client outcomes. Issues in Mental Health Nursing, 2, 15-26.

Wolberg, L. R. (1954). The technique of psychotherap New York: Grune & Stratton, 1954.

Wood, K. (1982). The Effects of Interviewing (Counseling) Skills Education on Medical Students. Unpublished doctoral dissertation, Kent State University.