Apprenticeship and Didactic-Experiential Training for Paraprofessional Telephone Crisis Counselors.

Carol Rae Cohen

Louisiana State University and Agricultural & Mechanical College

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APPRENTICESHIP AND DIDACTIC-EXPERIENTIAL TRAINING FOR PARAPROFESSIONAL TELEPHONE CRISIS COUNSELORS

The Louisiana State University and Agricultural and Mechanical Col. Ph.D. 1982

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APPRENTICESHIP AND DIDACTIC-EXPERIENTIAL TRAINING FOR PARAPROFESSIONAL TELEPHONE CRISIS COUNSELORS

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Psychology

by

Carol Rae Cohen
B.A., Boston University, 1972
M.S., University of Georgia, 1976
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Abstract

Level of accurate empathy of 19 paraprofessional telephone crisis counselors was examined following participation in either an apprenticeship or didactic-experiential training program. The apprenticeship program consisted of 32 hours of on-the-job experience supervised by an experienced volunteer counselor and 28 hours of training provided by crisis center staff members. The didactic-experiential program consisted of 60 hours of preservice training provided by the center's staff.

Prior to training, participants in both groups were administered the Short Dogmatism Scale and the Adult Self Expression Scale, a measure of assertiveness, as well as questionnaires to assess demographic variables, knowledge of crisis theory and Center procedures, and empathy skills. Following training, pseudocalls were administered; trainees' responses to three test statements included in the pseudocall were scored on the basis of the Truax and Carkhuff Accurate Empathy Scale. Also eight experienced counselors who served as "apprentice-helpers" completed the Attitude Toward Any Occupation Questionnaire before and after their participation as apprentice-helpers. Further, emotional intensity of rehearsal tapes of the three individuals who made the pseudocalls was rated by 10 mental health professionals.

Results of pre-training measures indicated that the apprenticeship group had significantly more males, was significantly more knowledgeable of crisis theory and Center procedures, and was significantly more assertive. Also, a post facto comparison of individuals who completed training with
those who dropped out showed that "completers" scored significantly higher on the pre-training knowledge of Center procedures measure. Importantly, post-training results indicated no significant difference between accurate empathy level of individuals who completed apprenticeship or didactic-experiential training; also, no interactions between levels of dogmatism, and assertiveness, and type of training were obtained. Additionally, no significant difference between pre- and post-apprentice-helper satisfaction scores was obtained. Finally, one of the "pseudocallers" was rated as significantly more sad, depressed, and lonely than the other two. However, raters' perceptions of emotional intensity expressed by pseudocallers varied significantly on the following dimensions: Sadness, frustration, loneliness, depression, and hopelessness.
INTRODUCTION

Training of paraprofessional counselors has varied considerably among service agencies. Indeed, as will be documented later, training and degree of effectiveness of paraprofessional counselors is often a source of contention among the traditional mental health disciplines. Unfortunately, however, little research aimed at understanding and improving paraprofessional counselor training has been undertaken. Consequently, when community psychologists have addressed training needs of paraprofessionals, they have generally based their comments on observational and experiential information.

For example, Riessman (1967) offered no data to support his claim that the majority of learning by paraprofessionals takes place on the job rather than during prejob training. This situation, in which little empirical evidence is available to substantiate conclusions, is true of the mental health field in general, and is particularly prevalent in the area of crisis intervention. Thus, this study was designed to provide experimental data on the training of paraprofessionals in crisis intervention.

In order that the reader better understand the basis on which this study was conceived, a background in crisis theory, paraprofessional training programs, and telephone crisis centers is provided. For purposes of this study, the term paraprofessional signifies both volunteer and paid nonprofessional and paraprofessional workers.
Crisis Theory and Paraprofessional Training

The following discussion is intended as an abbreviated introduction to crisis theory. Additional background information is available in books by Caplan (1964) and McGec (1974).

Caplan (1964) defined a crisis as a transitional period or turning point in life during which an individual's familiar resources and past experiences may be inadequate to meet the demands of the situation. Thus, in as much as crises are transient episodes in an individual's life, crisis counselors provide focused, short-term help. Also, in general, crisis counselors are paraprofessionals who were selected for their roles because of personal characteristics such as ability to empathize. Still, the relative effectiveness of paraprofessional and professional counselors continues to be of concern to community psychologists and other mental health professionals.

Durlak (1979) reviewed 42 studies comparing the effectiveness of paraprofessionals and professionals, and found that level of paraprofessional training varies from program to program. Some paraprofessionals receive no training except a brief program orientation, some receive brief (up to 15 hours) training, and a few participate in intensive programs approximating the training provided to professionals. For example, Rioch, Elkes, Flint, Usdansky, Newman, and Silver (1963), through the National Institutes of Health, offered their psychotherapy trainees an intensive 2 year, 20 hour per week training program. By contrast, Poser's (1966) project using female college students as therapists is an example of a program that offered its paraprofessionals no training, and obtained positive results.
A survey of 185 NIMH-sponsored programs (Sobey, 1970) demonstrated that the most widely used paraprofessional training model combines supervised on-the-job experience with didactic training. Although this dual approach to training is common, the relative amount of each component necessary for maximal results is unclear at this time. Riessman (1967), argued that the most effective training program involves the paraprofessional's rapid introduction into the work situation, following a minimal degree of didactic training.

**Telephone Crisis Centers**

Telephone crisis programs, which are usually staffed primarily by paraprofessionals, provide a unique form of crisis intervention. Indeed, Rosenbaum and Calhoun (1977) noted that between 1967 and 1977 the number of telephone crisis programs in the United States grew from 0 to over 600, and estimated that 10 to 12 million Americans call telephone crisis centers each year.

The telephone crisis center, which traces its roots to the suicide prevention service (Forsman, 1972), developed in response to the fact that over 78% of the calls to suicidal prevention programs were for nonsuicidal crises. By broadening its scope to become the telephone crisis service, the suicide prevention center enabled itself to accommodate a larger proportion of the community (Pederson & Babigan, 1972). Specifically, telephone crisis programs typically operate during times when traditional helping services are not readily available, accept calls from anyone in the community on any topic the caller presents, offer advice, information, and referral services,
and, as noted above, are staffed by paraprofessional workers (Bleach & Claiborn, 1974).

Training programs for telephone crisis counselors, like paraprofessional training programs in general, vary from agency to agency. Although the American Association of Suicidology (1976) developed guidelines for training in 1976, only a small percentage of crisis intervention centers in the United States provide training programs which fulfill the AAS guidelines: A minimum of 32 hours of formal training plus 8 hours of co-worker experience prior to independent assignment.

Several authors have attempted to describe effective telephone crisis training programs. Brockopp (1973) described a training program which combined didactic and experiential elements, and included much role-playing. In contrast, Berman, Davis, and Phillips (1973) described a training approach composed almost entirely of experiential-sensitivity training. Relevant to this type of training is McGee's (1974) view that didactic training such as assigned readings and lectures is probably useless during preservice training. McGee (1974) stated that didactic training could be valuable for in-service training; for preservice training he favored an experiential approach which included role-playing and opportunities for self-awareness.

Additionally, Mohr (Note 1) found that paraprofessional telephone crisis volunteers who had received human relations training were seen as more helpful, more empathetic, and as better listeners than a similar group who had been trained under a traditional teaching program. Also, Evans, Uhlemann, and Hearn (1978) compared telephone crisis trainees who had
participated in microcounseling training — training in the use of attending behavior, paraphrasing, and reflection of feeling — with trainees who had been exposed to an unstructured weekend sensitivity experience; microcounseling was found to be superior to sensitivity training with regard to "good" empathetic responses. Further, Teevan and Gabel (1978) found that a modeling-role-playing program was more effective than lecture-discussion training. Relevant to these findings is Bleach and Claiborn's (1974) observation that the telephone crisis program which did consistently better than other programs offered more role-playing and training in listening skills.

In sum, from these and other studies, it appears that modeling and role-playing are important elements in the development of telephone crisis counseling skills. Additionally, we may note that most of the training programs cited involved preservice rather than on-the-job training, as advocated by Riessman (1967). The training program offered by the Los Angeles Suicide Prevention Center is a notable exception: Sixty-four hours of training followed by one year of apprenticeship and continued supervision (Farberow, 1969).

**Apprenticeship Versus Didactic-Experiential Training**

This study, conducted at a telephone crisis service, was designed to assess the relative effectiveness of two types of paraprofessional counselor training programs — apprenticeship (on-the-job) and didactic-experiential (prejob). Apprenticeship training, which has its roots in the skilled trades, is a system of providing skills through working on the job while taking related supplemental instruction (Marshall & Briggs, 1968). Apprenticeship training frequently offers opportunities for observing and imitating experienced
workers performing the same job (Landy & Trumbo, 1976). In contrast, didactic-experiential training usually relies more heavily on lecture, discussion and roleplay methods with little or no on-the-job experience. Additionally, didactic-experiential programs allow a number of people to be trained at once and avoid the difficulties of coordinating the schedules of experienced workers with those of trainees.

Although both apprenticeship and didactic-experiential approaches may be evaluated by means of some generally-accepted principles of learning, first it may be instructive to call attention to training in the business world, wherein specific techniques may be preferred. For example, Carroll, Paine, and Ivancevich (1972) found that 117 training directors rated the discussion method as significantly better than lecture and role-play techniques in terms of knowledge acquisition. A category for the apprenticeship approach was not included in their survey. In fact, the present author was unable to locate any research comparing the relative efficacy of apprenticeship training to other training procedures. However, writers in the area generally maintain a positive stance towards apprenticeship training. For example, McDonald's (1940) address to the American Management Association, although made many years ago, is relevant in that he expresses well the current positive attitude towards apprenticeship training within industry:

There is no doubt that an apprentice training program costs money....We have tried to do some careful cost accounting with respect to our apprenticeship training plan — and statistically we can't make it come out even. On the minus side of the ledger, we know that for a certain
period of time our apprentices simply do not succeed in paying for themselves....But you cannot balance the books on apprentice training by simply figuring up what happens while these boys are still being trained. The important half of the story has to do with what happens after they have taken their places in the organization and the personnel setup of the company. On this basis of reckoning, the records of our company show overwhelming evidence of the value of apprentice training. (p.10)

Clearly, then, McDonald (1940) believes an apprenticeship program effectively trains new workers. Additionally, the present author suggests that apprenticeship training benefits experienced workers as well. For example, the process of teaching trainees — explaining concepts, demonstrating specialized techniques, answering questions, etc. — may provide a form of continuing education for experienced workers. Indeed, Riessman (1967) labeled this process in which the more advanced paraprofessional learns from imparting information to the trainee the "helper principle."

Further, the current author notes that the role of teacher/trainer, a position of increased status highlighting competence, might augment experienced workers' job satisfaction level. Thus, apprenticeship training might benefit both new and experienced workers.

Indeed, as noted above, entry into a number of the skilled trades is routinely accomplished by means of apprenticeship training. But, although apprenticeship training might especially benefit workers in the skilled trades, the following question must still be answered: How effective is an apprenticeship program in training paraprofessionals in counseling skills or, more speci-
fically, in training communication of empathetic responses?

Potential Superiority of Apprenticeship over Didactic-Experiential Training

Topics in learning. According to Landy and Trumbo (1976), "Training is the planned activities on the part of an organization to increase the job knowledge and skills, or to modify the attitudes and social behavior of its members in ways consistent with the goals of the organization and the requirements of the job" (p. 222). Borrowing heavily from the work of Campbell, Dunnette, Lawler, and Weick (1970), they list some generally accepted topics in learning which include transfer of training, reinforcement, feedback, and practice.

Specifically, how do apprenticeship and didactic-experiential training programs compare with regard to these aforementioned topics? First, and most importantly, with regard to the present study, on-the-job training methods (i.e., apprenticeship) avoid the problem of transfer of training from a separate training setting to the job setting (Landy & Trumbo, 1976). Further, apprenticeship training programs with their dyadic relationship between trainer and trainee probably offer more reinforcement, feedback, and practice than didactic-experiential programs. Thus, with regard to these learning principles, apprenticeship training is probably superior to didactic-experiential training.

Group size factors and individual differences. As already noted, apprenticeship and didactic-experiential training differ in the number of individuals involved (a two-person "group" versus a group of at least several, respectively). Davis (1969) noted that as group size increases, "more persons are available for acquiring, processing or recalling task-related information,
and for developing ever more complex patterns of interpersonal relations" (p.71). He also pointed out that an individual's opportunities for meeting an attractive companion with whom interaction is rewarding is greater in a larger group, thus serving to keep him/her working in the group. Thus, one might conclude that larger groups bring with them increases in resources and, perhaps, motivation.

However, these possible increases may be offset by other factors. For example, as group size increases while time for work is held constant, there is progressively less opportunity per person to discuss one's ideas (Davis, 1969). This suggests that less learning might occur in large groups, i.e., didactic-experiential approaches as opposed to apprenticeship programs.

Yet individual differences also influence one's reactions to various types of groups and learning situations. Stogdill (1959) stated that individuals differ in their inclination to enter into and capacity to maintain interaction with others. He noted that some individuals interact effectively in pair relationships, while others are effective in small groups or are more comfortable in large groups. Indeed, a study of leadership and isolation by Jennings (1950) indicated that the capacity of the individual to maintain personal, reciprocal relationships is stable. Thus, Jennings' (1950) research supported Stogdill's (1959) conclusion that "although a group may present equal opportunities for interaction to each member, the opportunity is not utilized equally by the members" (p.38).

Stogdill (1959) also cited a research project, conducted by Stogdill, Shartle, Scott, Coons, and Jaynes (1956), in which naval officers were studied in positions they had occupied for some time and then, six months later,
restudied in different positions. Stogdill's (1959) conclusion, based on results of this study, was that "patterns of interaction with other persons tend to be carried from one position to another, while patterns of individual performance tend to change in conformity to the demands of the new position" (p.38). Thus, in summary, evidence suggests that individuals differ in their capacity to interact and that this individual characteristic is stable over time. Hence, perhaps the better the fit between individual and type and amount of group interaction required — in this case, between the individual and an apprenticeship vs. didactic-experiential training program — the greater would be the individual's degree of learning.

Indeed, educators have long been aware that changes in the classroom environment differentially affect individual students' levels of performance. For example, a study by Grace (1948) suggested that well-adjusted students performed best under positive and neutral incentive conditions while poorly adjusted students did best under negative (criticism) conditions. Additionally, results of a study by Mandler and Sarason (1952) indicated that individuals high in test anxiety performed best when nothing was said to them, and less well when praised or criticized. And results of an investigation by French (1958) showed that persons having a high affiliation need performed significantly better on a problem-solving task with feeling-oriented rather than task-oriented feedback. Conversely, individuals having a high achievement need performed significantly better under conditions of task-oriented feedback. Finally, a study by Washburne and Heil (1960) further emphasized the concept of interactions between individuals and educational environments. Their results, although not statistically significant, suggested that opposi-
tional students obtained more gain in academic achievement with teachers classified as self-controlling than turbulent, while the opposite appeared to be the case for students classified as strivers.

These aforementioned findings regarding individual-learning environment interactions highlight a generally-accepted psychological concept — that the same situation will not necessarily have the same effect on different individuals. Certainly, then, one could argue that many personality factors might interact with one’s ability to learn in either or both the apprenticeship and didactic-experiential training programs. In this study, however, the author focused only on the variables of dogmatism and assertiveness: the variable of dogmatism was chosen for inclusion in this study because of its well-documented relationship with counselor effectiveness; assertiveness was included as a variable because of the author’s interest in this area and her suspicion that an individual's level of assertiveness would interact with his/her degree of learning in different educational environments.

Major Variables of the Present Study

Dogmatism. One of the independent variables of the current study, the construct of dogmatism includes three sets of variables — closed cognitive systems, general authoritarianism, and general intolerance (Rokeach, 1956). Thus, in light of these factors, the relationship between dogmatism and counselor effectiveness has been examined. For example, Wright (1975) found that low-dogmatic counselors showed higher levels of insight during counseling, as judged by their clients, than high-dogmatic counselors. Low dogmatism has also been related to counselor effectiveness as evaluated by peers (Steffire, King, & Leafgren, 1962) and as determined by expert
judges (Russo, Kelz, & Hudson, 1964). Further, Montgomery and Jordan (1978) reviewed research on dogmatism as it relates to counselor training and effectiveness, and concluded that, "though the results to date are mixed, there seem to be substantial data to support the contention that high dogmatism is a contraindicator of ability to perform the tasks required of an effective humanistic counselor" (p.8).

Moreover, specifically relevant to the present study was Elkins and Cohen's (in press) finding that less dogmatic didactically-experientially trained telephone crisis counselors demonstrated a higher level of empathy than their more dogmatic counterparts. Additionally, Elkins and Cohen's (in press) results indicated that participation in didactic-experiential training had no significant effect on an individual's level of dogmatism. However, participation in a different training program, i.e., apprenticeship, would not necessarily influence an individual's level of dogmatism either. Indeed, the construct of dogmatism represents a relatively enduring cognitive style (Rokeach, 1956); hence, regardless of most experimental interventions, level of dogmatism would not be expected to change significantly.

Still, although an individual's level of dogmatism would not be expected to change, highly dogmatic individuals might benefit more from apprenticeship than from didactic-experiential training. Specifically, highly dogmatic individuals could be in greater need of opportunities to model the empathetic responses of experienced, presumably nonjudgemental, counselors; these opportunities would occur more often during apprenticeship than didactic-experiential training.

**Assertiveness.** Might one also expect an interaction between type
of training and an individual's level of assertiveness? First, however, before addressing this question, one must understand what the term "assertiveness" denotes.

According to Lange and Jakubowski (1976), assertiveness "involves standing up for personal rights and expressing thoughts, feelings, and beliefs in direct, honest, and appropriate ways which do not violate another person's rights" (p.7). They state that acting assertively increases one's control over oneself; results in greater feelings of self-confidence; results in more emotionally satisfying relationships with others; and maximizes the possibility that both parties at least partially achieve their goals and get their needs met.

In contrast, Lange and Jakubowski (1976) define nonassertiveness as follows: "Violating one's own rights by failing to express honest feelings, thoughts, and beliefs and consequently permitting others to violate oneself, or expressing one's thoughts and feelings in such an apologetic, diffident, self-effacing manner that others can easily disregard them" (p.9).

Differences between assertive and nonassertive behaviors have engendered research on assertiveness training techniques and on assertiveness as a psychological construct. But no reports on assertiveness in relation to degree of learning in various educational environments have been published. Indeed, one of the developers of the Adult Self Expression Scale, a measure of assertiveness, knew of no studies which dealt with this issue (Gay, Note 2). Still, based on intuition rather than empirical evidence, it may be predicted that an interaction between assertiveness level and type of training would cause highly assertive individuals to gain more from
apprenticeship training; nonassertive individuals, on the other hand, might benefit more from didactic-experiential training. For example, a more assertive person might make better use of the opportunity to ask questions, request information as needed, etc., provided by apprenticeship training; in contrast, a less assertive individual might profit more in a didactic-experiential program in which he/she could learn from the questions and participation of others.

Accurate empathy. In the section on dogmatism, the phrase "counselor effectiveness" was used. In as much as this is the major dependent variable in this study, it is necessary to focus on what is meant by effectiveness and how it has been assessed.

Frequently, professionals, following Roger's (1957) declaration concerning the necessity for therapist empathy, warmth, and genuineness, assert that communication of accurate empathy is an important aspect of counselor effectiveness. An early study by Truax (1961), cited in Truax and Carkhuff (1967), compared the levels of accurate empathy demonstrated by therapists of hospitalized patients who either improved or deteriorated; results indicated that therapists whose patients improved rated consistently higher on accurate empathy than therapists whose patients deteriorated (as measured by patients' test scores). These findings were replicated on therapists working with improved and deteriorated college outpatients (Truax & Carkhuff, 1967). Additionally, according to Truax and Carkhuff (1967), Bergin and Solomon (1963), showed that the level of accurate empathy of clinical psychology graduate students was significantly related to ability to produce therapeutic outcome. In all, Truax and Carkhuff (1967) presented findings from 10
studies which supported the principle of therapeutic effectiveness of accurate empathy.

Additionally, with relevance to the present study, Truax and Carkhuff (1967) reviewed results of studies which indicated that accurate empathy could be successfully taught to lay persons as well as professionals. (Truax, Carkhuff, & Douds, 1964; Carkhuff & Truax, 1965; Berenson, Carkhuff, & Myrus, 1966). Indeed, Truax and Carkhuff's work strengthened the movement to train and use paraprofessional counselors, and to evaluate their performance. Further, their methods of studying the process and outcome of psychotherapy have been used by researchers to assess professional as well as paraprofessional counselors. Specifically, with regard to the present study, numerous investigators have used the Truax and Carkhuff (1967) concept of accurate empathy as a yardstick by which to measure counselor effectiveness. Thus, the present author chose to evaluate paraprofessional counselor performance by assessment of accurate empathy skills.

Hypotheses

It was hypothesized that paraprofessional telephone counselors would demonstrate higher levels of accurate empathy following apprenticeship than didactic-experiential training. Additionally, it was hypothesized that high-dogmatic individuals would show greater levels of accurate empathy following apprenticeship than didactic-experiential training. It was also predicted that high-assertive individuals would, in terms of expression of accurate empathy, benefit more from apprenticeship than didactic-experiential training. While low-assertive individuals would profit more from didactic-experiential training. Finally, in accord with the author's belief that the
increased status role of teacher/trainer would satisfy advanced paraprofessionals, it was hypothesized that the satisfaction level of experienced counselors would increase following their participation as "apprentice-helpers."
METHOD

Two groups of paraprofessional telephone counselor trainees — one trained by the apprenticeship method and one trained using the didactic-experiential approach — were compared on a number of variables including pre-training measures of dogmatism and assertiveness and a post-training measure of accurate empathy. Additionally, experienced paraprofessional counselors who had helped train apprenticeship group trainees were assessed for level of satisfaction prior to and after participation as apprentice-helpers. Thus, the present study included related, yet distinct, sub-investigations. As such, the method of each is presented separately under the headings Trainees, Apprentice-Helpers, and Pseudocallers.

Part I. Trainees

Subjects

Thirty-five (7 males and 28 females; M age, 29.74) paraprofessional telephone counselor trainees at the Baton Rouge Crisis Intervention Center participated in this study. These individuals, who participated in either the November 1980, January 1981, or February 1981 Center training classes, were recruited for the study by a Center training staff member; later, a research assistant further discussed the project with them.

Instruments

Pre-training measures

1. Demographics Sheet. This questionnaire ascertained information
regarding subject's age, sex, previous experience in counseling or volunteer work, as well as related information. (See Appendix A.)

2. **Short Dogmatism Scale** (Schulze, 1962). This 10-item scale was designed to measure dogmatism as conceived by Rokeach (1956) with fewer items than appear in the original scale (40). In developing the scale, Schulze (1962) used Guttman's scalogram analysis to select the ten items from Rokeach's Dogmatism Scale (D-Scale, 1956) which best met the criteria of unidimensionality, item consistency, and reproducibility (Stouffer, 1950). Two college student samples were used to test the validity of the resulting 10-item scale ($D_{10}$ Scale). In the first sample, $D$ and $D_{10}$ correlated .76. In the second sample, $D$ and $D_{10}$ correlated .73, but when the overlapping items were removed from $D$ this fell to .46.

Instructions and scoring for the $D_{10}$ are like those of the D-Scale: For each item/statement, subjects indicate disagreement or agreement on a scale from -3 to +3, with the 0 point excluded, according to Rokeach (1956), in order to force responses toward one direction or the other; for scoring purposes, items are converted to a 1 to 7 scale by adding a constant of 4 to each item score. Thus, total scores on the 10-item Short Dogmatism Scale may range from 10 to 70. (See Appendix B.)

3. **Knowledge of Crisis Theory Inventory.** This six-item inventory was developed by Elkins and Cohen (in press) for use with telephone crisis counselors. Designed to measure general knowledge of crisis intervention theory, the inventory was administered to three groups of paraprofessional counselors at the Center where the present study was conducted: (a) One group that was measured immediately before and after paraprofessional
training, (b) another group that had just completed training, and (c) a group that had participated in training and five months of telephone counseling.

Data from individuals in all the groups (N = 34) were used to compute item-total score correlation coefficients. Item-total score correlations on this six-item scale ranged from .18 to .75, with four of .59 or above and five of .40 or above. The scale's validity was demonstrated by the fact that the mean score for the pre-training sample was significantly below that of the other samples. Also, the scores of individuals tested pre- and post-training increased significantly as a function of training. The range of possible scores on this inventory was from 0 to 59. (See Appendix C.)

4. Knowledge of Specific Center Procedures Inventory. This four-item inventory was developed by Elkins and Cohen (in press) for use with Center telephone crisis counselors. Designed to measure knowledge of operational procedures specific to the Center, the inventory was administered to the same paraprofessional counselors (N = 34) who provided the aforementioned data on the Knowledge of Crisis Theory Inventory (Elkins & Cohen, in press). Item-total score correlation coefficients ranged from .61 to .86, with three of .76 or above. With regard to scale validity, it was found that the mean score for the pre-training sample was significantly below that of the other samples. Additionally, as expected, the scores of individuals tested pre- and post-training increased significantly as a function of training. The range of possible scores on this scale was from 0 to 27. (See Appendix D.)

5. Original Empathy Measure. This scale, developed by Elkins and Cohen (in press), was modified from a similar scale used to assess counselor
empathy in a graduate level Louisiana State University counseling course. The scale consisted of six possible caller situations/statements with which counselors might be confronted. Subjects were asked to respond to each statement as if they were counseling the person who made the statement. Subjects' responses were scored on the basis of the Accurate Empathy Scale (Truax & Carkhuff, 1967) as described below. Thus, possible scores on each item ranged from 1 to 9, and possible total Original Empathy scores ranged from 6 to 54. (See Appendix E.)

6. The Adult Self Expression Scale (ASES) (Gay, Hollandsworth, & Galassi, 1975). This 48-item self-report measure of assertiveness was designed for use with adults in general. When administered to 464 subjects at a large community college, the test was found to have test-retest reliability of .88 (2 weeks) and .91 (5 weeks). With regard to validity, the ASES correlated positively at the p < .001 level with the Self-Confidence, Achievement, Dominance, Affiliation, Autonomy, and Aggression scales, among others, of the Adjective Check List (Gough & Heilbrun, 1965). The scale was found to correlate negatively at the p < .001 level with the Succorance, Abasement, and Deference scales of the Adjective Check List. A discriminant analysis procedure further established moderate-to-high scale construct validity.

ASES item scores can vary from 0 to 4; thus, a total score for the ASES can range from 0 to 192. Also, note that the mean ASES total score obtained from 640 adults ranging in age from 18 to 60 was approximately 115 with a standard deviation of approximately 20. (See Appendix F.)

Post-training measures

1. Pseudocall A. Pseudocalls -- from the counselor's perspective, actual
client calls -- permit collection of data on counselor effectiveness without invading the privacy of the caller or damaging the credibility of the crisis center (Bleach & Claiborn, 1974). Pseudocall A, developed for use in the present study, was conceived as a "loneliness/depression" call. Supposedly, the call was from a 25-year-old woman whose boyfriend had recently ended their relationship.

Three test statements, counselor responses to which were scored on the basis of the Accurate Empathy Scale (Truax & Carkhuff, 1967) as described below, were included in the pseudocall. These statements were chosen for inclusion by means of ratings made by seven Baylor College of Medicine clinical psychology interns: These raters, uninformed about why their responses were being gathered, were asked to write the "feeling word" elicited by six possible pseudocall statements (two statements in each of three content areas). Then, the statement in each content area that more consistently elicited the same or similar feeling words from raters was included as a test statement in the pseudocall script. Test statements included in Pseudocall A are presented in Appendix G.

2. Pseudocall B. Pseudocall B, also a "loneliness/depression" call, was supposedly from a 25-year-old woman who had recently moved to Baton Rouge, where she knew no one. Like Pseudocall A, Pseudocall B included three test statements that had been chosen for inclusion because of their ability to consistently elicit the same or similar feeling words from raters as described above. (See Appendix H for the combined list of possible Pseudocall A and Pseudocall B statements [listed in a randomly-determined order] to which raters responded.) Test statements included in Pseudocall B are
3. **Accurate Empathy Scale** (Truax & Carkhuff, 1967). This nine-point scale serves as a means of assessing counselor level of accurate empathy, which "involves both the therapist's sensitivity to current feelings and his verbal facility to communicate this understanding in a language attuned to the client's current feelings" (Truax & Carkhuff, 1967, p.46). Thus, at a low level of accurate empathy the therapist might ignore or misunderstand the client's current feelings and experiences; in contrast, at a high level, the therapist's responses would indicate sensitive understanding of the obvious feelings, and serve to clarify and expand the client's awareness of his own feelings or experiences (Truax & Carkhuff, 1967). Guidelines for use of the Scale, as well as the present author's guidelines for use with single counselor responses, are presented in Appendix I.

**Procedure**

Shortly before beginning training, in either November 1980, January 1981, or February 1981, subjects were individually administered the demographics sheet and measures of dogmatism, knowledge of crisis theory, knowledge of Center procedures, and original empathy as described above; also prior to training, at a meeting with other members of their training program, subjects completed the aforementioned measure of assertiveness.

Subjects then participated in one of two training programs, both of which were 60 hours in length and met American Association of Suicidology (1976) guidelines. Due to Center considerations, subjects were assigned to type of program on the basis of when they began training rather than
on a random basis. Thus, November 1980 and January 1981 trainees \((N = 15)\) participated in apprenticeship training and February 1981 trainees \((N = 20)\) participated in didactic-experiential training. Following completion of the project, subjects were given feedback on the purpose and results of the study.

**Apprenticeship Program.** This program, developed by the author and her assistant in conjunction with Center training staff, consisted of 28 hours of training provided by Center staff members and 32 hours of on-the-job training; on-the-job training was provided by Center paraprofessional counselors, referred to as "apprentice-helpers", with a minimum of six months' experience as a Center counselor.

Center staff members provided individual and group screening, a role-play session, two tape reviews, and four didactic sessions which covered active listening, information about the crisis model, suicidology, and information about types of calls and ways of handling them. On-the-job training, provided by apprentice-helpers, consisted of a tour of Center facilities, information about completing call sheets, review of suicidology, observation of counselors answering crisis calls, and practice in handling crisis calls. Note that during apprenticeship training, each trainee was paired with several experienced counselors. (See Appendix K for Apprentice Training Program, October 1980 Schedule and Appendix L for Guidelines for Apprentice Sessions.)

**Didactic-Experiential Program.** This program, traditionally offered at the Center, had been shown to increase the knowledge and empathy skills of trainees significantly (Elkins & Cohen, in press). Consisting of 60 hours
of prejob training provided by Center training staff members, this method combined a primarily didactic approach with individual and group screening, sensitivity sessions, two observational sessions, role-playing, and a supervised on-the-telephone session. Although more detail was provided, didactic information was offered on topic areas similar to those presented during the Apprenticeship Training Program. (See Appendix M.)

**Pseudocalls.** After completion of either apprenticeship or didactic-experiential training, subjects received Pseudocalls A and B. Although subjects knew they would receive pseudocalls which would be taped, they were not aware of when to expect such calls. Randomized for order of presentation, the first pseudocall was administered after subjects had provided between 8 and 19 hours of telephone crisis counseling; the second pseudocall was administered after provision of between 36 and 55 hours of service. Immediately after reception of each pseudocall, subjects were informed they had received a pseudocall, debriefed, and asked not to discuss the pseudocall with other counselors.

Subsequent to collection of all pseudocall tapes, the researcher -- without knowledge of subject's training group or time at which pseudocall was made -- transcribed subjects' responses to test statements on the tapes. Subjects' transcribed responses were then scored independently by the researcher (Judge 1) and a PhD psychologist (Judge 2) on the basis of the Accurate Empathy Scale (Truax & Carkhuff, 1967).

Unfortunately, a number of inaudible tapes were discovered during tape transcription. Later, an investigation indicated that most of these
tapes were recorded by one of the three "pseudocallers" who, during her period of employment, had randomly administered the pseudocalls. Thus, due to this individual's term of employment, the majority of these tapes contained second pseudocall data; additionally, some of the didactic-experiential group's first pseudocall tapes were affected. Accordingly, the validity of statistical comparisons between the pseudocall empathy scores from the Apprenticeship group-Time 1 (between 8 and 19 hours), Apprenticeship group-Time 2 (between 36 and 55 hours), Didactic-Experiential group-Time 1, and Didactic-Experiential group-Time 2 was reduced to an unknown degree. Therefore, a decision was made to compare pseudocall empathy score means at Time 1 and Time 2 for each of the groups and, if no significant difference was found between scores obtained at the two time periods, to pool this data.

A t-test was then performed which indicated no significant difference between scores obtained at Time 1 and Time 2 for either of the groups. (See Appendix N.) Thus, it was concluded that post-training data on all subjects, regardless of whether from Time 1 or Time 2, could be included in the data analysis; also, if data from both time periods was available for a subject, as was the case for two individuals, then the mean of their two pseudocall empathy scores would be used in the analysis of pseudocall empathy scores as described below.

**Statistical Analyses**

Pre-training measures. Data on premeasures of age, knowledge of crisis theory, knowledge of Center procedures, original empathy, dogmatism,
and assertiveness were analyzed in separate analyses of variance with type of group (apprenticeship vs. didactic-experiential) and sex (male vs. female) as the variables.

A comparison of the sex composition of the groups was made using Fisher's Exact Test, 2-tail; the comparison of the prior experience level of the two groups was calculated by means of the $\chi^2$ statistic.

Additionally, after collection of all data, when it was noted that 10 of the 35 subjects had not completed their training, a comparison of premeasures between individuals who had completed training and those who had not was made. Similar to the analyses described above, data on premeasures of age, knowledge of crisis theory, knowledge of Center procedures, original empathy, dogmatism, and assertiveness were analyzed in separate one-way analyses of variance with program completion (finished vs. quit) as the variable. A comparison of the sex composition of the group that completed training and the one that did not was made using Fisher's Exact Test, 2-tail; the comparison of the prior experience level of these two groups was made with the $\chi^2$ statistic.

Post-training measure. The Pearson Product-Moment Correlation Coefficient was used to determine inter-rater reliability (Judge 1 vs. Judge 2) on pseudocall empathy scores.

Pseudocall empathy scores, as determined by Judge 1, the more experienced rater, were analyzed in an analysis of covariance (See Appendix O for formula) with dogmatism and assertiveness as covariates. Use of this analysis enabled determination of whether level of empathy was affected
by a subject's (a) participation in a particular type of training program (apprenticeship vs. didactic-experiential), (b) level of dogmatism, and (c) level of assertiveness. Additionally, this analysis checked for an interaction between an individual's level of dogmatism and participation in one or the other types of training in terms of pseudocall empathy score; individual level of assertiveness by group interaction was also assessed.

**Part II. Apprentice-Helpers**

**Subjects**

Eight paraprofessional counselors who had worked at the Center a minimum of six months volunteered to help train subjects in the apprenticeship training program. These individuals, referred to as apprentice-helpers, were originally recruited for the study by a research assistant. In return for their participation, apprentice-helpers were offered two "in-service" Center credits (one credit per month was required of all Center counselors).

**Instrument**

**Attitude Toward Any Occupation Scale** (Remmers, 1960). This 17-item scale, used in this study to measure attitudes towards the crisis center, was shortened from Miller's (1934) 45-item Attitude Toward Any Occupation Scale. Available in two equivalent forms, A and B, Remmers (1960) reported reliability coefficients (Form A vs. Form B) ranging from .71 to .92. Additionally, with regard to validity, the scale was shown to discriminate between groups expected to differ in attitudes towards the ministry and towards engineering (Remmers, 1960). Further, the scale adequately demonstrated
face and content validity.

Development of the scale was based on the Thurstone method of equal-appearing intervals. Scale values of statements on both Forms A and B range from 1.0 to 10.3. Total attitude score is determined by the median scale value of statements endorsed by the respondent. The indifference point on all scales is 6.0. Scores above 6.0 indicate a favorable attitude, and scores below 6.0, an unfavorable attitude. (See Appendices P and Q.)

Procedure

At the beginning of their first orientation session, apprentice-helpers completed The Attitude Toward Any Occupation Scale, Form A (Remmers, 1960). Apprentice-helpers then participated in two 2-hour "refresher" sessions, provided by the Center training coordinator, during which crisis intervention theory, suicidology, and Center operational procedures were reviewed. At these sessions, apprentice-helpers also explored trainee needs and ways of fulfilling the apprentice-helper role.

Meanwhile, apprentice-helpers continued to work their scheduled Center telephone shifts. Then, subsequent to participation in the first orientation session, apprentice-helpers were paired with apprentice-trainees during regularly-scheduled shifts; during his/her term, each apprentice-helper worked with a number of different trainees.

Later, after termination of the apprenticeship training program, apprentice-helpers individually self-administered Form B of the Attitude Toward Any Occupation Scale (Remmers, 1960). Following completion of the project, apprentice-helpers were debriefed as to the purpose and results of the study.
Statistical Analysis

A repeated measures analysis of variance on pre- and post-apprentice-helper satisfaction scores was performed to determine if experienced counselors' attitudes toward the telephone crisis center were affected by their participation as apprentice-helpers.

Part III. Pseudocallers

Designed to assess inter-caller reliability, this portion of the present study was initiated when Pseudocaller A — who originally intended to administer all pseudocalls — unexpectedly resigned, and Pseudocallers B and C were hired. Pseudocallers were paid $2.00 per call, each of which lasted between 15 and 20 minutes.

Subjects

Ten mental health professionals (2 PhD psychologists, 7 clinical psychology PhD candidates, 1 MSW) were recruited by the researcher to participate voluntarily in this reliability study. Subjects were informed that participation would occupy about 45 to 60 minutes of their time, but were given no information about the purpose of the investigation.

Instruments

Pseudocall Rehearsal Tapes. Tape recordings were made when, prior to employment, pseudocallers rehearsed pseudocall characters A and B (described earlier). Counselor roles in rehearsal pseudocalls A and B were performed by the researcher and research assistant, respectively. In all, six rehearsal tapes (3 pseudocallers × 2 pseudocall characters), numbered randomly from one to six, were available.
The Perception of Emotions Scale. This 6-item scale, in a sense, six different scales, was developed by the researcher to measure perceived degree of sadness, frustration, depression, loneliness, anxiety, and hopelessness. Specifically, subjects rate their perceptions of each of the aforementioned emotional dimensions on a 1 to 7 scale ranging from "not at all" to "extremely", e.g., ranging from "not at all sad" to "extremely sad". Raters provided six different scores, one for each emotional dimension rated. (See Appendix R.)

Procedure

Subjects listened to either Pseudocall A or Pseudocall B rehearsal tapes and rated each tape, immediately after hearing it, on The Perception of Emotions Scale. One-half the subjects had been randomly assigned to rate Pseudocall A rehearsal tapes, which were randomized for order of pseudocaller; the remaining subjects rated randomly ordered Pseudocall B rehearsal tapes. After completion of ratings on all three tapes, subjects were asked if they had any thoughts about why the tapes were rated and any idea of what the experimenter hoped to find. (See Appendix S.) Subjects were later debriefed as to the purpose of their ratings.

Statistical Analyses

Ratings of both rehearsal tapes made by each pseudocaller were pooled. Then, separate 3 X 10 (pseudocallers X raters) analyses of variance on the dimensions of sadness, frustration, depression, loneliness, anxiety, and hopelessness were performed.
RESULTS

Part I. Trainees

Pre-training Measures

Individuals in the apprenticeship and didactic-experiential groups did not differ significantly on the variables of age, prior experience, dogmatism, and original empathy. A summary of specific information regarding these variables is presented in Appendix T.

Trainees did, however, differ significantly on the variables of sex, knowledge of crisis theory, knowledge of Center procedures, and assertiveness. Specific statistical information on these variables is presented below:

Sex. The apprenticeship group, with 5 males and 10 females, had significantly ($p < .05$) more males than the didactic-experiential group, which was composed of 2 males and 18 females.

Knowledge of crisis theory. The apprenticeship group, with a mean knowledge of crisis theory score of 37.20 was significantly ($p < .01$) more knowledgeable of crisis theory than the didactic-experiential group, which had a mean score of 29.45 on this measure. There was no significant difference between the sexes or no significant group by sex interaction. Note that the range of possible scores on this measure was from 0 to 59; thus, although the groups differed on this variable, prior to training, members of both groups correctly answered less than two-thirds of this material.

Knowledge of center procedures. The apprenticeship group, with a mean knowledge of Center procedures score of 14.06 was significantly
(p < .001) more knowledgeable about Center procedures than the didactic-experiential group, which had a mean score of 9.2 on this measure. Additionally, although there was no significant difference between the sexes on this variable, there was a significant group by sex interaction: Females in the apprenticeship group, with a mean score of 15.8, were significantly (p < .01) more knowledgeable about Center procedures than males in the apprenticeship group, who had a mean score of 10.6. In contrast, for the didactic-experiential group, the mean scores for females and males on this measure were 9.22 and 9.0, respectively. Note that the highest possible score on this instrument was 27. Thus, prior to training, members of both groups correctly answered less than approximately one-half of this material.

**Assertiveness.** Members of the apprenticeship group, with a mean assertiveness score of 130.07 were significantly (p < .05) more assertive than members of the didactic-experiential group, who had a mean score of 115.21 on this variable.

**Comparison of premeasure data on individuals who completed training with those who did not.** Individuals who finished training and those who quit did not differ significantly on the variables of age, sex, prior experience, knowledge of crisis theory, original empathy, dogmatism, and assertiveness. The only variable on which these groups differed significantly was knowledge of Center procedures; the group that completed training, was significantly (p < .05) more knowledgeable about Center procedures (M, 12.35) than the group that quit, (M, 9.25).
Post-Training Results

The correlation coefficient between empathy scores on pseudocalls determined by Judges 1 and 2 was .75. As noted earlier, the following results were based on pseudocall empathy scores as determined by Judge 1, the more experienced rater. (Note that as one of the raters was significantly more experienced than the other, results of both raters were not pooled for this analysis.) Further information regarding inter-rater reliability is presented in Appendix U.

Empathy scores on pseudocalls for all trainees ranged from 4 to 14.5, with a mean of 9.95. Empathy scores on apprenticeship group trainees ranged from 4 to 14.5, with a mean of 10.5; empathy scores on didactic-experiential trainees ranged from 6 to 12, with a mean of 8.81. As previously noted, the range of empathy scores possible was from 3 to 27.

Analysis of Covariance of Empathy Scores on Pseudocalls: When empathy scores on pseudocalls were subjected to an analysis of covariance with dogmatism and assertiveness as covariates, no significant differences were found. Thus, there were no significant differences on empathy scores as related to type of training (apprenticeship vs. didactic-experiential), level of dogmatism, and level of assertiveness. Additionally, there were no significant dogmatism by group or assertiveness by group interactions suggested by this analysis. A summary of this analysis is presented in Table 1.
Table 1

Analysis of Covariance of Empathy Scores on Pseudocalls

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Adjusted Sum of Squares</th>
<th>F Value</th>
<th>PR &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>6.67</td>
<td>.69</td>
<td>.42</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>1</td>
<td>7.42</td>
<td>.77</td>
<td>.40</td>
</tr>
<tr>
<td>Dogmatism</td>
<td>1</td>
<td>6.10</td>
<td>.63</td>
<td>.44</td>
</tr>
<tr>
<td>Assert.*Group</td>
<td>1</td>
<td>.32</td>
<td>.03</td>
<td>.86</td>
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<tr>
<td>Dogmat.*Group</td>
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<td>20.51</td>
<td>2.12</td>
<td>.17</td>
</tr>
<tr>
<td>Error</td>
<td>13</td>
<td>126.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. This analysis was based on data from 11 apprenticeship group trainees and 8 didactic-experiential group trainees. Of the 35 individuals who began either apprenticeship or didactic-experiential training, 10 individuals quit prior to completing training, and 2 were deselected by the Center staff. Pseudocall data on the remaining 4 individuals was unavailable.
Part II. Apprentice-Helpers

No significant difference was obtained between measures of satisfaction with the Center made prior to (M, 7.73) and after (M, 8.20) a counselor's experience as an apprentice-helper. However, the Pearson Product-Moment correlation between scores on these measures was only .33; a perusal of these scores indicates that scores of some of the apprentice-helpers increased while some decreased. (See Table 2.) Note also that the range of scores across both administrations was limited -- from 6.0 to 9.1.

Part III. Pseudocallers

Based on rehearsal tape recordings, pseudocaller B was rated as significantly different from pseudocallers A and C on the following dimensions: Sadness (p < .001], M of B, 5.4, M of A, 3.5, M of C, 4.1); depression (p < .01], M of B, 5.4, M of A, 4.1, M of C, 4.1); and loneliness (p < .05], M of B, 5.9, M of A, 4.9, M of C, 5.2). No significant differences between pseudocaller rehearsal tapes in terms of frustration, anxiety, and hopelessness were found.

Interestingly, the individuals who rated the pseudocallers' rehearsal tapes differed significantly from each other in their perceptions of how sad (p < .05), depressed (p < .05), frustrated (p < .05), lonely (p < .001), and hopeless (p < .05) pseudocallers sounded. For example, ratings of sadness ranged from 1 to 6 on pseudocaller A, from 4 to 7 on pseudocaller B, and
Table 2

Pre- and Post- Apprentice-Helper Satisfaction Scores

<table>
<thead>
<tr>
<th>Apprentice-Helper</th>
<th>Pre-measure score</th>
<th>Post-measure score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8.1</td>
<td>6.9</td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>3</td>
<td>7.7</td>
<td>9.1</td>
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<td>8.5</td>
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<td>7</td>
<td>7.9</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>6.0</td>
<td></td>
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</tbody>
</table>
from 2 to 5 on pseudocaller C. Raters did not differ significantly from
one another in their perceptions of how anxious pseudocallers sounded.
DISCUSSION

Based on assessment of accurate empathy skills, apprenticeship training was not superior to didactic-experiential training for paraprofessional telephone crisis counselors. This finding supports the relative efficacy of didactic-experiential training programs, and contradicts the opinion of community psychologists as well as the prediction made for this study. Thus, if the results of this investigation can be generalized, it appears that sufficiently strong didactic-experiential programs are as effective as apprenticeship programs. Moreover, didactic-experiential programs, which allow a number of people to be trained at once, are more cost-effective than apprenticeship programs. Didactic-experiential training, in addition, avoids the difficulties of coordinating schedules of experienced counselors or staff members with those of trainees. Indeed, one of the qualitative observations of the present study was the frustrating experience of Center staff members involved in coordination of schedules. In sum, the aforementioned results are hopeful with regard to limited-budget paraprofessional training program development.

On a theoretical level, however, one wonders whether these findings, so easily accepted in the applied world, can be understood in terms of commonly-accepted learning principles. Indeed, one possibility is that didactic-experiential programs with high levels of reinforcement, feedback and practice compare favorably with apprenticeship programs. But, even so, apprenticeship programs avoid possible transfer of training difficulties whereas didactic-experiential
and other prejob programs do not. Perhaps, then, this study suggests that transfer of training problems are less relevant to the training of crisis counselors than tradespeople. For example, it may be that crisis counseling skills learned in one environment are easily transferred to another setting whereas knowledge of a skilled trade is not.

Indeed, as noted above, both apprenticeship and didactic-experiential programs yielded essentially equivalent trainee levels of accurate empathy. Across groups, on a scale ranging from one to nine, level of accurate empathy per pseudocall test statement was 3.3. As Carkhuff and Truax (1965) reported mean accurate empathy levels of 4.6 for paraprofessional counselors who had received approximately 100 hours of training, a score of 3.3 is surprisingly low. However, note that subjects in the Carkhuff and Truax (1965) study received approximately 66% more training than subjects in the present investigation, and that their accurate empathy scores were based on segments of psychotherapy sessions rather than on responses to specific test statements.

Still, if the presently-obtained mean accurate empathy score of 3.3 — based on the judgement of one rater, and therefore particularly subject to error — actually reflects overall counselor level of accurate empathy as conceived by Truax and Carkhuff (1967), then the following statement may be made: Paraprofessional counselors in this study expressed some empathy with regard to obvious feelings, but showed little understanding of deeper feelings. Perhaps, then, this level of accurate empathy, though probably too low to produce positive outcome in long-term psychotherapy, is sufficient to help individuals in crisis. Note, however, that as it is not known whether this level of accurate empathy actually helps individuals
in crisis, this idea is clearly speculative.

The present study also investigated the variables of dogmatism and assertiveness and their possible interactions with type of training program. Levels of dogmatism and assertiveness did not affect post-training accurate empathy levels across the two training programs, nor did they interact with the type of training. Thus, although it was predicted that high-dogmatic individuals would benefit more from apprenticeship than didactic-experiential training, this was not found to be the case. Failure to produce this finding, as well as the dogmatism main effect, may have been due to the fact that highly dogmatic subjects in the present sample were average or low dogmatic when compared to the general population. Or, perhaps, no interaction between dogmatism and type of training, in terms of accurate empathy, exists.

As noted above, the prediction that high-assertive individuals would profit more from apprenticeship training, and low-assertive individuals from didactic-experiential training, was not borne out. Perhaps the two training types were equally sensitive to differential levels of assertiveness among trainees. But, since this assertiveness prediction was not grounded in empirical evidence, it seems more likely that, in terms of accurate empathy, assertiveness level truly does not interact with these two types of training programs.

Finally, note that the obtained premeasure differences between the apprenticeship and didactic-experiential groups were a function of subjects as they entered the study. Thus, for example, apprenticeship-group women happened to be significantly more knowledgeable than men in their program, while this was not the case for women in the didactic-experiential group.
Fortunately, though, statistical control of premeasure differences that might affect post-training scores was possible. Thus, the unexpected premeasure difference between groups on assertiveness, a variable predicted to interact with training type, was adjusted for in the post-training analysis of empathy scores; in this analysis, assertiveness, along with dogmatism, was a covariate.

Premeasure analyses also revealed significant differences between training groups on the variables of sex, knowledge of crisis theory, and knowledge of Center procedures. Evidence did not indicate that accurate empathy level was related to sex, and both groups scored relatively low on the knowledge scales. Therefore, these variables were not expected to affect significantly post-training empathy level. As such, they were not, after the fact, included as covariates in the post-training analysis of empathy scores.

Additionally, the post facto comparison of individuals who completed training with those who did not deserves mention. Indeed, the only variable on which "finishers" differed significantly from "quitters" was pre-training knowledge of Center procedures. Thus, individuals who knew more about what they were getting involved in may have been more committed to becoming crisis counselors than those who had less knowledge about what was in store for them.

Apprentice-helpers. Contrary to what was predicted, the satisfaction level of experienced counselors did not increase following their participation as apprentice-helpers. This was probably due to the fact that apprentice-helpers entered the study with high levels of satisfaction. Therefore, as
their scores on the first test administration were near the scale's upper limit, a further increase in level of satisfaction would have been difficult to detect.

However, though the satisfaction scores of apprentice-helpers did not increase, they did not decrease either. Thus, at least, experienced counselors maintained their high level of satisfaction subsequent to service as an apprentice-helper. But, as less satisfied experienced counselors did not participate in the present study, one cannot rule out the possibility that their level of satisfaction would have, as predicted, increased as a function of participation as an apprentice-helper. Note, however, that less satisfied volunteer counselors probably do not continue to work at the Center.

Finally, a low correlation was obtained between scores on the pre- and post-test administrations of the apprentice-helper satisfaction scale. This low correlation was probably due to the restricted range of scores, in combination with the small sample size; relatively small increases and decreases from Time 1 to Time 2, expected on multiple administrations of any instrument, may have seriously affected degree of correlation.

**Pseudocalls.** The fact that rehearsal tapes and not actual pseudocalls were used to assess pseudocaller emotions is important, for rehearsal tapes probably do not represent actual pseudocalls. Indeed, in listening to actual pseudocall tapes, the researcher noted variability in calls made by each of the pseudocallers. Thus, the finding that one of the pseudocallers was rated significantly different from the other two pseudocallers on the dimensions of sadness, depression, and loneliness is difficult to interpret. Further,
differences between pseudocallers on the rehearsal tapes may be confounded with the significant differences between raters on perception of emotional dimensions.

The finding that raters differed significantly from one another on perceptions of sadness, depression, frustration, loneliness, and hopelessness was unexpected in that all raters were trained mental health professionals. This inter-rater variability was probably partially a function of the pseudocaller tapes in that they may have seemed ambiguous and were presented without benefit of contextual cues. Furthermore, biases within the raters themselves probably contributed to inter-rater variability.

Conclusions

Results indicated that apprenticeship was not superior to didactic-experiential training with regard to counselor accurate empathy level. Further, level of satisfaction of experienced counselors was not increased by participation as an apprentice-helper. Also, the personality variables of dogmatism and assertiveness failed to interact with type of training.

The possibility exists, however, that apprenticeship training was actually superior to didactic-experiential training, but in ways not reflected in the post-training measure of accurate empathy. Further research in this area, using dependent measures other than accurate empathy, is needed.

Finally, the author is hesitant to generalize these findings, obtained on a relatively small sample, to other paraprofessional settings. Indeed, research is needed to replicate these results at other telephone crisis centers and in other paraprofessional training settings. Additionally, research regard-
ing the unexpected finding that mental health professionals differed significantly in their perceptions of emotions is recommended.
Reference Notes


2. Gay, M. Personal communication, October 1980.
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McDonald, L.D. Adapting training courses to meet the present special needs. In L. McDonald (Ed.), *Practical techniques of industrial training*. New York: American Management Association, 1940.


Pederson, A.M., & Babigian, H.M. Providing mental health information through a 24-hour telephone service. *Hospital and Community Psychiatry*, 1972, 23, 139-141.


Teevan, K.G., & Gabel, H. Evaluation of modeling-role-playing and lecture-discussion training techniques for college student mental health


APPENDICES
Appendix A
(Demographics Sheet)

PHONE Training Evaluation Project
Demographics Sheet

Name ______________________________________________

Address _______________________________________________________

Telephone number _______________________________

Age_________________________ Sex _______________

Marital Status________________________

Occupation______________________________________________

If your occupation is student please give:

*major _____________________________________

*minor _____________________________________

*classification______________________________________

Have you had any previous experiences in this type of counseling
or volunteer work? ____________________________

If so, where did you work and for how long? ____________________________

Where did you learn about the existence and operations of the
PHONE? _________________________________________

How long have you been participating in any phase of the PHONE
operation? _________________________________________

Previous training or experience in Psychology, Social Welfare, or Counseling.
(Please list courses taken or workshops attended in which you practiced
counseling techniques):
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

(Appendix B Page 54) Short Dogmatism Scale
(Appendix F Pages 59-62) The Adult Self Expression Scale
(Appendix J Page 67) Accurate Empathy Scale Guidelines
(Appendix P Pages 75-76) Attitude Toward Any Occupation Scale Form-A

University Microfilms International
300 N Zeeb Rd., Ann Arbor, MI 48106 (313) 761-4700
Appendix C
(Knowledge of Crisis Theory Inventory)

List some of the central feelings of a person in crisis.

Mark true or false by each statement.

_____ Suicide usually happens with only limited warning.

_____ Suicide often occurs after it appears that the bottom of the depression has passed and the person is improving.

_____ Suicidal people are that way only for a limited period of time.

_____ Most suicidal people display signs suggesting that they want to live.

_____ Suicide runs in families.

Briefly outline some steps leading to an emotional crisis.

Put a "T" next to the techniques which cut off the caller's expressions of feelings and emotions.

_____ Give person prompt advice.

_____ Ask the person to focus on complaining less.

_____ Tell the person when his/her feelings are inappropriate.

_____ Agree vigorously with the person.

_____ Provide quick reassurance.

You feel that a suicide caller will probably not attempt suicide. List some of the clues you used to arrive at this conclusion.
Appendix C (cont.)

Put a "T" next to the necessary components of active listening with callers.

____ Discourage suicidal statements.

____ Tell the caller what you perceive his feelings to be.

____ Restate key statements the person makes.

____ "Explain" the person's problem to them after you have listened for an extended period of time.
Appendix D
(Knowledge of Specific Center Procedures Inventory)

A caller has taken a prescription drug which you are not familiar with. Where can you get information on this drug?

Your caller reports that he has called the Phone before. List the files which are available to you in reviewing this person's past calls.

A sixteen year old caller thinks she is pregnant. Where can you get information about places she can get a pregnancy test?

Your caller admits that he is taking a lot of drugs he has stolen. Would you report him to the police? Why or why not?
Appendix E
(Original Empathy Measure)

Please write your response to each statement as if you were counseling with the person who made the statement.

1. My father comes in drunk and my mother never says a word. But, today, he went too far. My mother's favorite cat begged him for food and without a word he just upped and shot it.

2. I never felt this way before. I really thought that the first time was the real thing. I slept with my last boyfriend, Mark, because I thought he was kind and sweet but no one has ever turned me on like Gary does. I don't even have to touch him to get turned on.

3. My brother and I were drinking last night at a bar and after we left some guy came up and smarted off. I kicked him and he hit his head against the side of the building. I think I killed him.

4. I really pulled it this time—my husband caught me in a motel room with another man and I was freaking out on drugs—you won't turn me in, will you?

5. I'd like to see you socially—not get in bed or anything like that but you've been so helpful that I'd like for you to have lunch with me so I can show you how I feel.

6. I often feel so desperate—so horribly worthless that I don't care—I'd kill myself but I'm not even worth the energy and you don't give a damn.
Appendix G
Pseudocall A Test Statements

1. I really didn't want to go to the party, but I figured it would be a good thing to do, so I went. And when I got there, I didn't know hardly anyone.

2. I kept thinking about my old boyfriend, about how different things would be if we were still together. I guess I haven't gotten over him.

3. I know our relationship wasn't perfect, but sometimes I feel like I'm not going to meet anyone else.
Appendix H
(Possible Test Statements for Pseudocalls A and B)

Please complete the feeling responses following each of these statements. Do not change a feeling response once you have moved on to the next one. Please work independently.

1. It's hard for me to meet people here, especially guys. I never know what to say—the words just get stuck in my throat.
You feel __________________________

2. I kept thinking about my old boyfriend, about how different things would be if we were still together. I guess I haven't gotten over him.
You feel __________________________

3. This was my first birthday that I wasn't with friends or with my old boyfriend. I didn't really know what to do.
You feel __________________________

4. Even though there were a lot of problems in our relationship, at least there was someone in my life. Now I wonder if I'll always be alone.
You feel __________________________

5. I think about my old boyfriend a lot—about what my life was like when we were together. I can't seem to let go of him.
You feel __________________________

6. I know our relationship wasn't perfect, but sometimes I feel like I'm not going to meet anyone else.
You feel __________________________

7. It seems like other people are moving on with their lives, like my old boyfriend—he's getting married this spring—and my life is the same as ever. Nothing ever seems to change.
You feel __________________________
Appendix H (cont.)

8. It seems like everybody else's life keeps getting better—like my old boyfriend—he's engaged now. But things always stay the same for me.
   You feel __________________________

9. I'm so used to being with my old boyfriend or friends on my birthday...this year was so different. I didn't really even care about celebrating my birthday.
   You feel __________________________

10. I really didn't want to go to the party, but I figured it would be a good thing to do, so I went. And when I got there, I didn't know hardly anyone.
   You felt __________________________

11. Since I got here, I haven't met hardly anyone. When I'm around people I don't know, especially guys, I clam up.
   You feel __________________________

12. I went to the party, but I didn't know hardly anyone there...I wanted to shrink into the corner.
   You felt __________________________
Appendix I
Pseudocall B Test Statements

1. This was the first birthday that I wasn't with friends or with my boyfriend. I didn't really know what to do.

2. Since I got here, I haven't met hardly anyone. When I'm around people I don't know, I just clam up.

3. It seems like everybody else's life keeps getting better. But things always stay the same for me.
Appendix J (cont.)
Present Author's Adaptation of Truax & Carkhuff Accurate Empathy Scale

<table>
<thead>
<tr>
<th>Scale Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Completely unaware of feeling. Essentially no empathy; inability to understand. Response not appropriate to mood and content. Counselor may be bored, disinterested, or give advice.</td>
</tr>
<tr>
<td>2</td>
<td>Misunderstands real message. Negligible degree of accuracy. Ignores feeling rather than inability to understand.</td>
</tr>
<tr>
<td>3</td>
<td>Accurate to client's more exposed feeling. Displays concern with deeper feelings yet doesn't understand nature, meaning to client.</td>
</tr>
<tr>
<td>4</td>
<td>Responds accurately to obvious feeling. May recognize less obvious feeling, but misinterprets some.</td>
</tr>
<tr>
<td>5</td>
<td>Accurate response to obvious feeling. Aware of less evident feelings yet somewhat inaccurate in understanding; but lack of understanding not disruptive.</td>
</tr>
<tr>
<td>6</td>
<td>Recognizes present obvious, including less apparent, feelings. Understands content, misjudges intensity of veiled feelings.</td>
</tr>
<tr>
<td>7</td>
<td>Responds accurately to present feeling. Aware of intensity of most underlying feelings. Points toward emotional material, but may go too far in direction of depth.</td>
</tr>
<tr>
<td>8</td>
<td>Accurate toward obvious feeling. Accurate to deeper feelings with respect to content and intensity. May hesitate or err but corrects quickly and accurately.</td>
</tr>
<tr>
<td>9</td>
<td>Accurate toward obvious feeling and unerringly accurate and unhesitant toward deeper feelings with regard to content and intensity.</td>
</tr>
<tr>
<td>Event</td>
<td>Time</td>
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<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>Group Screening</td>
<td>6-9 p.m.</td>
</tr>
<tr>
<td>Didactic Session I</td>
<td>6-10 p.m.</td>
</tr>
<tr>
<td>Apprentice Session I &amp; II</td>
<td>4 hours each</td>
</tr>
<tr>
<td>Didactic Session II</td>
<td>6-9 p.m.</td>
</tr>
<tr>
<td>Apprentice Session III</td>
<td>4 hours</td>
</tr>
<tr>
<td>Role Play</td>
<td>6-9 p.m.</td>
</tr>
<tr>
<td>Tape Review</td>
<td>2 hours</td>
</tr>
<tr>
<td>Apprentice Sessions IV &amp; V</td>
<td>4 hours each</td>
</tr>
<tr>
<td>Didactic Session III</td>
<td>6-9 p.m.</td>
</tr>
<tr>
<td>Apprentice Sessions VI &amp; VII</td>
<td>2 hours each</td>
</tr>
<tr>
<td>Tape Review</td>
<td>2 hours</td>
</tr>
<tr>
<td>Apprentice Session VIII</td>
<td>4 hours</td>
</tr>
<tr>
<td>Didactic Session IV</td>
<td>6-9 p.m.</td>
</tr>
</tbody>
</table>
Appendix L
Guidelines for Apprentice Sessions

I. Orientation to the PHONE Rooms - 4 hours
(Session starts one hour before Helper goes on the lines.)
A. Before the shift, the Helper provides a brief overview
of the PHONE rooms which includes:
   1. Telephones - PA and MHC lines, how to listen to calls;
   2. How to use the Log Book;
   3. Call Sheets - different types and when to use them;
   4. Filing procedure for call sheets, including consistent
      files;
   5. Location for resource materials;
   6. Bulletin boards - Weekly White pages, notes on
      recallers, newspaper clippings, follow-up calls.
B. During the shift:
   1. Apprentice listens to incoming calls and discusses
      them with Helper.
   2. When not listening to calls or debriefing, the
      Apprentice actively explores the PHONE rooms and reads
      call sheets, especially for the calls they observed.
      It may be helpful to write down the names of callers so
      that you can locate the call sheets on later shifts. Place
      the list on your PHONE // on the bulletin board as they
      are confidential.
   3. Worksheet #1 may be used to provide structure for
      discussion of the PHONE room and procedures.

II. The Crisis Model - 4 hours
(Session starts one hour before Helper goes on the lines.)
A. Before the Shift:
   1. Continue orientation to the PHONE rooms and
      discussion of Worksheet #1.
   2. Discuss call sheets in greater detail, focusing on
      use of the crisis model for the first time callers
      as well as recallers and consistent callers.
B. During the Shift:
   1. Apprentice continues exploration of the PHONE rooms,
      especially resource materials and consistent files.
   2. Debriefing after calls focuses on the mechanics of
      the crisis model. The Apprentice fills out call
      sheets on calls they observed for review with Helper and
      as a record of progress. These call sheets go in the
      green file labeled "Practice Call Sheets" on the inner
      PHONE room wall.
Appendix L (cont.)

III. Suicidal Assessment - 4 hours
1. Review of Worksheet #2 with Helper.
2. Discuss Suicidal Assessment Sheets.
3. Apprentice continues to observe calls and fill out practice call sheets.
4. Debriefing after calls focuses on mechanics of crisis model as well as the feelings and concerns of both Apprentice and Helper.

IV. The First Call - 4 hours
1. Complete review of Worksheet #2 if necessary.
2. Apprentice continues to write practice call sheets for calls they observed.
3. Focus on feelings and concerns of Apprentice regarding Role Play and going on the lines.
4. Apprentice takes one call or more. Call sheets for these calls are filed in the "Daily Call Sheets" in the black rolling file, or in the "Uncommented Consistent Caller File" if appropriate.

V. Taking More Calls - 4 hours
1. This session is a continuation of session IV, with the Apprentice taking as many calls as possible with active support and careful debriefing by the Helper.
2. Discussion may include upcoming tape review.

VI. Taping: Your Chance to Get Feedback - 2 hours
1. Trainee takes all calls during the session.
2. All calls are taped on this shift for review.
3. Helper provides feedback and support and focuses on the feelings and concerns of the trainee.

VII. Taping: Your Chance to Get Feedback II - 2 hours
1. Trainee takes all calls; continuation of above.
2. This shift is also taped for review.

VIII. The Final Apprentice Shift - 4 hours
1. Discuss tape review, address relevant questions or concerns of trainee.
2. Trainee takes all calls with Helper observing calls and providing feedback and support.
3. Begin process of reviewing training experience and progress; explore feelings about going on the lines.
Appendix M

February 1981 Didactic-Experiential Training Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Group Screening</td>
<td>6-9 p.m.</td>
<td>Tues., Jan. 20 or Thur., Jan. 22</td>
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<tr>
<td>Session I</td>
<td>6-9 p.m.</td>
<td>Mon., Jan. 26</td>
</tr>
<tr>
<td>Session II</td>
<td>10 a.m. - 4 p.m.</td>
<td>Sat., Jan. 31</td>
</tr>
<tr>
<td>Session III</td>
<td>1-5 p.m.</td>
<td>Sun., Feb. 1</td>
</tr>
<tr>
<td>Role Play I</td>
<td>6-9 p.m.</td>
<td>Tues., Wed., or Thur., Feb. 3-5</td>
</tr>
<tr>
<td>Session IV</td>
<td>6-9 p.m.</td>
<td>Mon., Feb. 9</td>
</tr>
<tr>
<td>Session V</td>
<td>6-9 p.m.</td>
<td>Thur., Feb. 12</td>
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<tr>
<td>Session VI</td>
<td>6-9 p.m.</td>
<td>Mon., Feb. 16</td>
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<tr>
<td>Session VII</td>
<td>6-9 p.m.</td>
<td>Thur., Feb. 19</td>
</tr>
<tr>
<td>Session VIII</td>
<td>6-9 p.m.</td>
<td>Mon., Feb. 23</td>
</tr>
<tr>
<td>Role Play II</td>
<td>6-9 p.m.</td>
<td>Thur., Feb. 26, Wed., Mar. 4, or Thur., Mar. 5</td>
</tr>
<tr>
<td>Observation I</td>
<td></td>
<td>4 hour shift</td>
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<tr>
<td>Observation II</td>
<td></td>
<td>4 hour shift</td>
</tr>
<tr>
<td>Observation III (on the telephone)</td>
<td></td>
<td>4 hour shift</td>
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Appendix N

_t-Test Procedure_

Empathy Score Means at Time 1 and Time 2

**Apprenticeship Group**

<table>
<thead>
<tr>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>t-Value</th>
<th>DF</th>
<th>Prob. &gt; t</th>
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**Didactic-Experiential Group**

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<th>Std. Dev.</th>
<th>t-Value</th>
<th>DF</th>
<th>Prob. &gt; t</th>
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<td>.50</td>
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Appendix O

Analysis of Covariance Formula

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 X_2 + \beta_5 X_1 X_3 + \epsilon \]

where \( Y \) = dependent variable (empathy)

\( \beta_0 \) = \( Y \) - intercept

\( \beta_1 \) through \( \beta_5 \) = regression weights (slopes)

\( X_1 = 1 \) if group is didactic-experiential
\( X_1 = 0 \) if group is apprenticeship

\( X_2 \) = degree of dogmatism

\( X_3 \) = degree of assertiveness

\( \epsilon \) = random error
Appendix R
(The Perception of Emotions Scale)

Tape #:____

Please rate the individual you heard on the tape in terms of the following dimensions:

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<td>7</td>
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<tr>
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<td>extremely sad</td>
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<tr>
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Appendix R (cont.)

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<td>lonely</td>
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<td>lonely</td>
<td>extremely</td>
<td>lonely</td>
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<td>not at all</td>
<td>hopeless</td>
<td>extremely</td>
<td>hopeless</td>
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</tbody>
</table>
Appendix S

Questionnaire Administered Following Perception of Emotions Scale

Do you have any thoughts about why these tapes were rated?

Do you have any idea of what the experimenter hoped to find?
Appendix T

Summary of Premasure Data on Age, Prior Experience, Dogmatism, and Original Empathy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Apprenticeship Group</th>
<th>Didactic-Experiential Group</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
<td>M, 29.40</td>
<td>M, 30.00</td>
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<tr>
<td>Prior Experience</td>
<td>3 yes, 12 no</td>
<td>3 yes, 17 no</td>
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<tr>
<td>Dogmatism</td>
<td>M, 29.80</td>
<td>M, 30.56</td>
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<tr>
<td>Original Empathy</td>
<td>M, 19.73</td>
<td>M, 16.80</td>
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</tbody>
</table>
Appendix U

Judge 1 and 2 Pseudocall Empathy Scores

Inter-Rater Reliability

<table>
<thead>
<tr>
<th>Observation (Pseudocall)</th>
<th>Judge 1 Empathy Score</th>
<th>Judge 2 Empathy Score</th>
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</tbody>
</table>

Judge 1: $M$, 9.95, std. dev. = 3.15
Judge 2: $M$, 9.48, std. dev. = 2.54

Pearson Product-Moment Correlation Coefficient = .75
VITA

Carol Rae Cohen was born in Atlanta, Georgia in 1950. She attended public schools in Atlanta, after which she began college at the University of Florida in Gainesville. She later transferred to Boston University from which she graduated Cum Laude in May 1972. Then, after one year's employment as an adolescent counselor for the Massachusetts Division of Youth Services, she entered graduate school in Social Psychology at the University of Georgia, where she obtained her Master of Science degree. Subsequently, she was employed for one year by the Georgia Department of Human Resources as a counselor for developmentally-disabled adults. Then, she travelled extensively throughout the United States and Central America until August 1977 when she began her doctoral training in Clinical and Community Psychology at Louisiana State University; in 1980-1981, she served as a clinical psychology intern at the Baylor College of Medicine in Houston, Texas. Currently, she is living in Cambridge, Massachusetts.
EXAMINATION AND THESIS REPORT

Candidate: Carol Rae Cohen

Major Field: Psychology

Title of Thesis: Apprenticeship and Didactic-Experiential Training for Paraprofessional Telephone Crisis Counselors

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signature]
[Signature]
[Signature]
[Signature]

Date of Examination: July 12, 1982